Eesti Pank

FINANCIAL STABILITY REVIEW

2/2012

The Financial Stability Review is published twice a year by Eesti Pank. Each issue of the Review refers to the time the analysis was completed, not to the period it handled. The Review includes the latest available data at the time of each issue's preparation.

The Review is available at: http://www.bankofestonia.ee.

Information about publications by phone +372 668 0998.

Subscriptions of printed versions by
Fax: +372 668 0954
E-mail: publications@eestipank.ee
Mail: Eesti Pank
Language Services and Publications Division
Estonia pst 13
15095 Tallinn
Estonia

The Review is free of charge to subscribers.

ISSN 1736-1281
Editor Mare Koit
Layout Urmas Raidma
Printed in Folger Art

CONTENTS

FINANCIAL STABILITY ASSESSMENT

The international financial environment

The international financial environment was still being affected by the sovereign debt crisis in the euro area in the past six months. The positive impact of the Eurosystem's three-year monetary policy loans, which were offered to euro area banks at the beginning of 2012, started to abate in spring. Consequently, risk aversion picked up among investors, boosting demand for safer investment and further fragmenting the markets in Europe. The weak public finances in some euro area countries has aggravated their banking sector funding, meaning that it became more difficult for respective banks to obtain market-based funding or to raise additional capital if needed.

The European Council's decisions from end-June to establish common banking supervision and to recapitalise banks through the European Stability Mechanism (ESM) gave a signal to the markets that these measures could help restrain the adverse feed-back effects between the public and the banking sector. The Eurosystem took some robust measures by lowering the monetary policy interest rates in July and by announcing a new monetary policy instrument for purchasing government bonds in the secondary market in September. These measures improved considerably the overall sentiment on the bond and stock markets, but uncertainties persist. The general situation in the financial markets and the euro area monetary system may worsen rapidly, if the countries in sovereign debt crisis fail to implement the agreed policies, and if the measures proposed at the EU level do not produce the desired results.

Aside from the complicated situation in financial markets, banks in various European countries are facing deteriorating loan quality, a result of the recession or slowdown in economic growth. Potential loan losses have put pressure on banks' capital, thus adding to market tensions. This is a risk for recovering countries, whose banks may not be able to provide sufficient financing to the economy.

The real economy and loan quality

The risks related to the financing of the Estonian economy have been constrained by rapid deposit growth and the high capitalisation and liquidity of banks, which predominantly belong to Nordic banking groups. Loan and leasing portfolios started to grow in April 2012 after a three-and-a-half-year long fall. Loan demand in Estonia is now slightly stronger than expected due to the relatively high domestic economic activity, recovery of the real estate market and low interest rates. Although the external environment is projected to remain weak, the lending market continues on a moderate growth path.

The loan repayment ability of the Estonian corporate and household sector has improved as a result of income growth and reduced labour market risks. In addition, the very low levels of the Euribor have contributed to lower loan interest payments. Recent years' changes in the Estonian economic structure have been accompanied by a strengthening of balance sheets, which is reflected in significantly lower private sector indebtedness and financial leverage, as well as in an increase in the financial buffers. As a result, the economy has become more resistant to potential external shocks and has gained a solid ground for future credit growth. Apparently, there are also companies and households that are more vulnerable due to the weaker growth outlook for Europe, and that must be prepared for deterioration in their loan repayment ability.

The quality of banks' loan portfolios continued to improve in 2012. Presuming that the loan repayment ability of the non-financial sector will not decrease, the share of loans overdue by more than 60 days will drop to 4.2% of the total loan portfolio in the fourth quarter of 2012. A modest fall in the ratio of long-term overdue loans is expected also for 2013. The pace of the drop depends mostly on the pace of loan write-offs, and it is more and more unlikely that some of the non-performing loans will start to perform again.

The strength of financial institutions

Along with the declining credit risk, banks have continued to reduce the provisions they had established in previous years. Consequently, the profitability of banks grew in the first half of 2012. Banks may continue to curb provisions in the future when risks to the loan repayment ability will ease, but the resulting impact on the banking sector profitability will be lower.

Profits will be primarily shaped by changes in banks' interest incomes, which respond to the dynamics of market interest rates. The Euribor, the key interest rate for a majority of the loans, has fallen to a very low level. Even though banks have managed to retain the average funding cost thanks to the high share of demand deposits in their portfolios, their net interest income will inevitably shrink. Thus, banks' net profit with respect to their assets is expected to decline somewhat but it will nevertheless remain high, close to its long-term historical average.

In recent years, international investors have been increasingly differentiating the financial markets of the European Union in their risk behaviour and assessments. Thus, the euro area sovereign debt crisis has not much damaged the market-based financing of the banking groups operating in Estonia, owing to the solid macroeconomic and fiscal position and the strong banking sectors of the Nordic countries. Moreover, local banks have been enjoying strong deposit growth, so the need for parent-bank financing has declined due to the moderate growth of the loan portfolio. The continuous high level of banks' liquidity buffers also confirms lower liquidity risk. It is noteworthy that aside from domestic deposits, also non-residents' deposits have grown rapidly in the past two years. Although at this point the deposits of foreign companies and households form only 22% of total banking sector deposits, they may be more volatile than the domestic ones.

The capitalisation of the Estonian banking sector has improved further owing to the profits earned in 2011. At the end of June, all banks were fulfilling the 10% minimum capital adequacy requirement, even when considering only the higher-quality Tier 1 own funds. Given the forecast for overdue loans and profitability, and presuming that banks will not pay dividends in 2012, their capitalisation will enhance even more. Banks' current capital buffers are strong enough to ensure their solvency even in the case of events like those leading to a recession in 2009.

The capitalisation of insurance companies operating in Estonia remained high too in the past six months, and so did their profitability. Low interest rates, however, are increasingly undermining the profitability of life insurance companies due to the structure of investments.

Settlement systems

Important settlement systems have been functioning smoothly without any interruptions in 2012. Although the liquidity buffer available for the settlement of payments decreased at the beginning of the year due to the lowering of the minimum reserve requirement, this did not cause problems with liquidity. Neither did the rapidly growing turnover of payments. This was so regardless of lower than expected use of the collateral pool in managing short-term liquidity problems.

The availability of liquidity is important because banks can then make collateral transfers to the ESTA in order to be able to use the ESTA. There have been only a few cases when some banks have failed to do so because of no available liquidity, but such short-term liquidity problems have arisen from the materialisation of operational risks.

The overseer's earlier recommendations to work out measures to keep the ESTA and the securities settlement system of the Estonian Central Securities Depository functioning in the case of failures or holidays of the single technical platform of the TARGET2 are currently being followed. More precisely, the measures to start an ESTA day when the single technical platform of the TARGET2 is malfunctioning have been prepared. The proposed solution is based on securities collaterals. For the solution to be successful, the overseer recommends banks to make more use of the collateral pool.

Conclusions

The international financial environment is still surrounded by considerable uncertainties because of the sovereign debt crisis in the euro area. Risks to the financial markets are further aggravated by the slowdown in global growth. The European Council decisions from end-June to establish common banking supervision and to recapitalise banks through the European Stability Mechanism (ESM), and the Eurosystem's measures to boost the markets should mitigate the effects of the crisis. To solve the crisis and retain market confidence in the effectiveness of policy measures, the rapid implementation of these measures has to produce tangible and objectively measurable results. First and foremost, the crisis-stricken countries should meet the agreed budget targets and carry out structural reforms. Secondly, the ESM and common banking supervision should be effectively launched.

The risks to financial stability in Estonia are primarily related to uncertainty stemming from the euro area debt crisis and the resulting poor growth outlook for Europe. The crisis-induced funding risks are lower for the Estonian banking sector due to its close ties with Nordic banking groups. Nevertheless, external demand is weakening because of the poor economic situation in the euro area, and this may affect income streams in the entire Nordic region. The diminishing indebtedness of the Estonian companies and households has eased the risks to their loan repayment ability. In addition, financial buffers have grown, which means that the Estonian business and household sector are much stronger that before the start of the recession in 2009.

The loan repayment ability is supported also by the low level of interest rates. However, the latter have encouraged banks and other financial institutions investing actively in global financial markets to prefer higher-risk instruments to retain their profits. Even if these financial institutions are not systemically important market participants, it is necessary that they understand the potential impact of high risks on their financial results.

Strong deposit growth has made the Estonian banking sector less reliant on parent-bank funding. The liquidity and capital of major banks are still managed more or less centrally by their parent banks, which is why the financial situation and growth opportunities of the banks operating in Estonia are shaped by the risk assessments issued to their parent banks and the changing regulatory capital and liquidity requirements. The conservative approach taken by the Swedish authorities to impose higher capital requirements on systemically important banks and to establish liquidity requirements is a relevant measure to maintain the confidence of financial markets. The step is necessary, since the Swedish banking sector is characterised by high financial leverage and openness to risks from the external environment. In addition, the assets of banks are relatively large compared to the size of the economy.

The operating environment of banks will be significantly affected by the new capital regulation, which should enter into force in the European Union at the start of 2013. Unfortunately, it is still being negotiated. At the same time, the proposal to launch common banking supervision is adding new facets to it. From the viewpoint of ensuring financial stability and shaping an appropriate operating environment for market participants, it is important that the schedule of effecting changes be realistic, providing sufficient time to implement them. In addition, the goals and the core of the changes must be clear and comprehensible and rights and obligations in balance.

I. FINANCIAL MARKETS

GLOBAL FINANCIAL MARKETS[1]

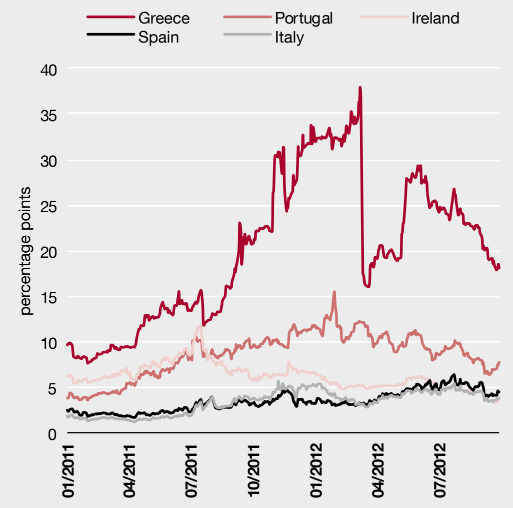
The situation in the European financial markets remained tense against the backdrop of the debt crisis. The risk appetite of the markets decreased in spring. The interest rates in the US and German **sovereign bond markets** – generally considered less risky – dropped, and the yield curves flattened. This was mainly due to the diminishing impact of the ECB's three-year liquidity operations (LTRO) as well as due to fears of a spill-over of the crisis to core euro area countries.

The principal focus lay on the additional capital needs of Spanish banks. In summer, the Eurogroup announced its willingness to lend up to 100 billion euros to Spanish banks, while the rating agency Moody's lowered the Spanish rating by three notches to Baa3. Within a month, the interest rate on the Spanish ten-year bond had risen beyond 7%, which is considered a limit beyond which sustainable financing could be jeopardised (see Figure 1). The interest rate on German ten-year bonds, on the other hand, dropped to 1.16% (an all-time low) at the end of July, with the two-year interest rate being negative, for the most part (see Figure 2). The solutions agreed at the euro area summit failed to alleviate the situation. Neither did the measures taken for bolstering economic growth – markets clearly had doubts with respect to the sufficiency and swift implementation of such measures. Moody's gave a negative outlook to Germany and some other euro area AAA-rated countries, and lowered Italy's rating by two notches to Baa2.

According to the European Central Bank, the bond risk premia of some euro area countries are too high, considering the economic situation, reflecting investors' fears over the possible exit of these countries from the euro area. As the sit-

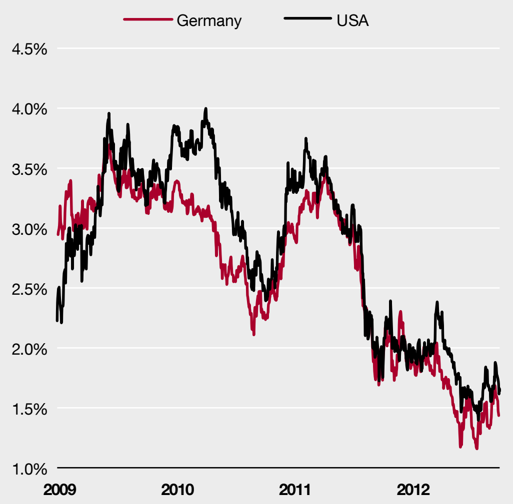
1 The Financial Stability Review covers market developments from the end of March to the end of September.

Figure 1. Spread between 10-year bonds of Greece, Portugal, Ireland, Italy and Spain with Germany



Source: EcoWin

Figure 2. Interest rates on ten-year government bonds of Germany and the USA

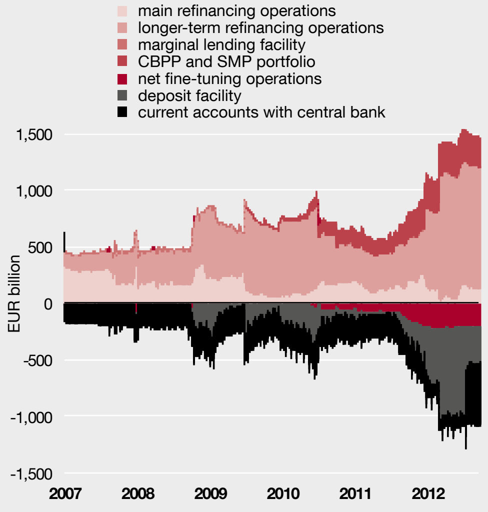


Source: EcoWin

uation hindered the implementation of the single monetary policy, a new programme (OMT) was introduced with the aim of buying an unlimited amount of bonds of such countries in order to ensure smooth functioning of the markets. The precondition for the purchase of bonds is the submission of a request for assistance to the EFSF or the ESM, and adherence to the terms and conditions of the agreed economic programme. In addition to conditionality, the new ECB programme is significantly different from the previous bond-buying programme (SMP) in that the ECB has abandoned the status of the preferred creditor. In the middle of September, expectations of the new bond purchase programme lowered the interest rates of peripheral countries and enhanced investors' risk appetite, prompting a rise in the German interest rates. Despite the measures taken by European governments and the Eurosystem, market participants remain sensitive to any negative news.

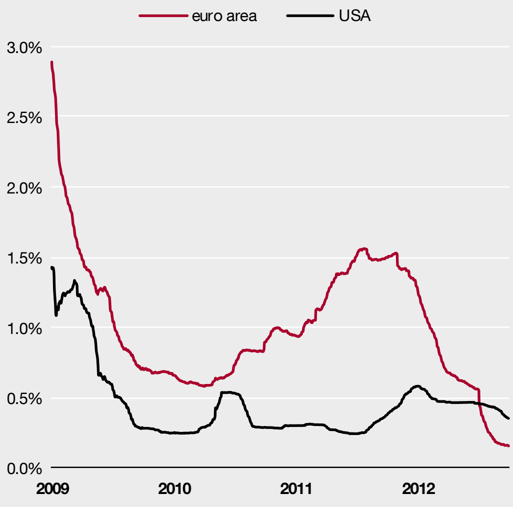
In **money markets**, the interest rates of euro area countries saw a greater decline than those of the United States. As expected, the US Federal Reserve did not change the federal funds rate, pledging to keep the 0–0.25 level until the end of 2014. In addition, the bond purchase programme was extended. The Eurosystem, on the other hand, responded much more aggressively to the sovereign debt crisis and to the decline in economic activity. In July, the key policy rate was lowered by 25 basis points to 0.75%, with the deposit facility interest rate reduced to 0% in order to boost lending to the non-financial sector and lower the stock of deposits with the central bank. Albeit this reduced the use of the deposit facility, the funds kept by banks in the current account increased. All in all, the economic impact of the lowering of the interest rate remained modest (see Figure 3 and 4). Major commercial banks suspended the engagement of new investors in money market funds, since lower interest rates complicate revenue generation.

Figure 3. Eurosystem's monetary policy operations and current accounts with central bank



Source: European Central Bank

Figure 4. Three-month interbank money market rates in the euro area and the USA



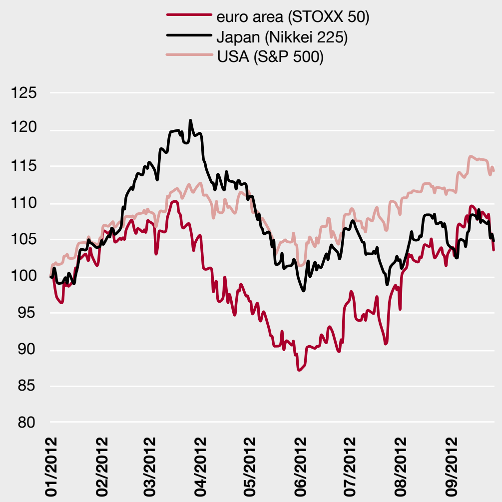
Source: EcoWin

In **currency markets**, the euro weakened against other base currencies. This can mainly be attributed to the ongoing debt crisis. Insecurity about the Greek elections in May fuelled speculations over the country leaving the euro area. The lowering of the Spanish rating also added to the general risks in the euro area. At the end of July, the euro started to strengthen against the US dollar, as the pledge made by the European Central Bank to take action instilled confidence in the market.

In the conditions of the ongoing debt crisis in the euro area, major **stock markets** fell from the end of March to the beginning of June. The weaker-than-expected economic activity in the euro area and the deceleration in the growth of employment in the United States also proved a disappointment. Still, market sentiment picked up after the elections in Greece and the recapitalisation of Spanish banks, with the stock indices starting to rise (see Figure 5). The Federal Reserve calmed the markets by extending the bond-buying programme. The ECB announced its bond purchase programme in September. These steps helped to enhance investor risk appetite.

The **key risks** revolve around the euro area debt crisis, which has triggered deterioration in the economic situation and outlook, and has dampened investor confidence. Despite the measures taken, there is still a risk of mutual amplification of unfavourable developments in the financial sector and macro economy. Banks will continue to reorganise their balance sheets and cut lending in the near future. At the same time, loan demand will remain low, with the economic growth slowing down. The IMF has forecasted a global economic growth of 3.3% for 2012, and 3.6% for 2013. This forecast is, respectively, 0.2 and 0.5 percentage points lower than the forecast made in April. The growth outlook for both advanced and emerging economies has been cut. In turn, the deterioration of the economic situation may result in a weaker ability to service loans, thus adding to credit risk.

Figure 5. Stock indices in the euro area, Japan and the USA (2 Jan 2011 = 100)



Source: EcoWin

The primary risk to the banking sector revolves around asset quality and funding. In the complicated economic environment, the quality of assets has started to deteriorate and the share of higher-risk assets has increased. The decrease in profits, triggered by a growth in the level of non-performing loans, combined with negative stock market developments complicate the raising of capital. Albeit the liquidity measures adopted by the European Central Bank have helped to alleviate funding problems, market-based funding has yet to make a full recovery. The implementation of the proposed measures – the ECB's bond purchase programme, the European banking supervision and banking union – is thus crucial. A single supervisory framework would allow the ESM to directly support banks, if necessary, without adding to the country's debt burden. In order for the measures to be successful, the peripheral countries must make an effort to pursue budget balance and to achieve sustainable economic growth.

ESTONIA'S FINANCIAL MARKETS

Bond and stock markets

The Estonian bond market has contracted by nearly a half compared to the period before the global financial crisis (see Figure 6). The activity in both the primary and secondary market has dropped by nearly 95%, compared to the peak in 2008. At the end of August 2012, the total volume of bonds issued in Estonia amounted to 518 million euros, that is, 3.2% of GDP.

Only a handful of companies issued bonds in the first half of 2012, most of them being residents. A monthly average of 2 million euros worth of new bonds was issued, with the secondary market generating a monthly average turnover of 1.7 million euros. The structure of bond investors has seen no major changes from the beginning of 2012. At the end of August, credit institutions and financial institutions held 63% and non-financial companies 32% of the bonds issued. The share of resident investors stood at 73%.

The share of the local bond market in the Estonian financial sector is expected to remain marginal. Similarly, we do not expect a significant increase in the activity of the secondary bond market. The financial stability risks associated with the development of the local bond market will thus remain low.

The waning confidence of major stock markets spread to the Tallinn Stock Exchange by the start of May (see Figure 7). Nonetheless, the drop in stock prices was much smaller on the Tallinn Stock Exchange than on any other stock exchange. Investors' risk appetite was enhanced at the beginning of June, with the stock prices starting to rise. By the end of August, the OMXT index had advanced by nearly 28%, compared to the level of the beginning of the year. Fuelled by the rise in stock prices, the capitalisation of the Tallinn Stock Exchange amounted to 1.5 billion euros – i.e. 9.4% of the GDP – by the end of August.

Figure 6. Ratio of bonds to GDP and quarterly new bonds issuance

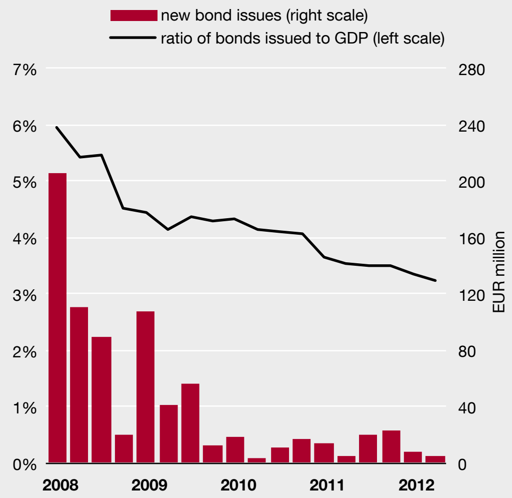
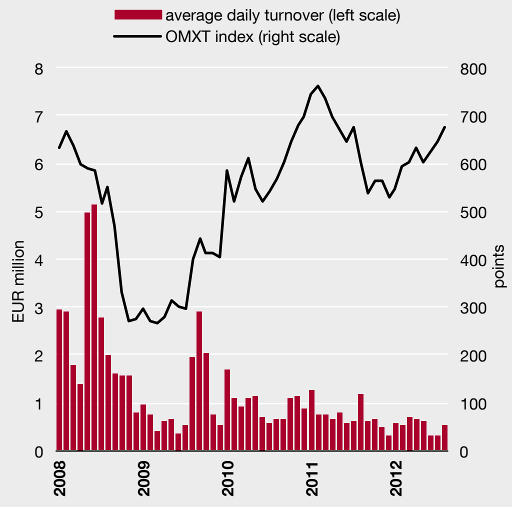


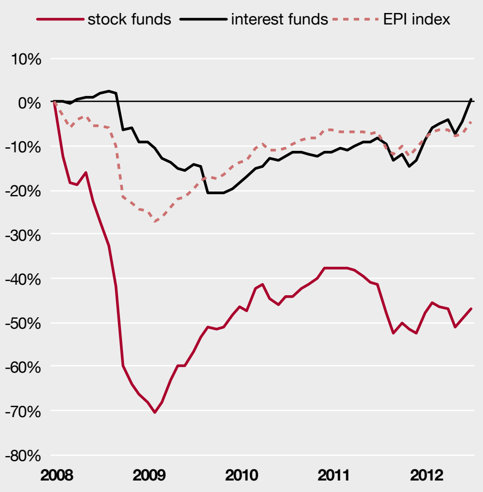
Figure 7. Average daily turnover of the Tallinn Stock Exchange and the OMXT index



The transaction volume on the Tallinn Stock Exchange has remained low. The average monthly turnover for the first eight months of 2012 amounted to 12 million euros – a third lower that in the same period last year.

The structure of the investors of listed companies has seen no major changes in the last two years. Estonian investors make up the bulk of the investors, holding 63% of the shares as at the end of August 2012. Among non-resident investors, Luxembourg has taken the lead (with 8%), followed by USA (4%), Finland (4%) and the Netherlands (4%).

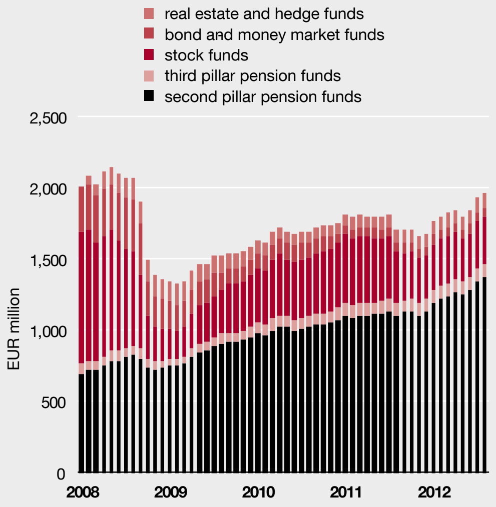
Figure 8. Changes in the net asset value of investment fund units and in the EPI (Estonian Pension Fund) index



Investment funds

Despite unfavourable market developments in April and May, which curbed the yield of investment and pension funds, the funds still generated a positive yield by the end of August (see Figure 8). Within eight months, the net asset value of stock and interest funds increased by an average of 12% and 15%, respectively. The EPI index, which reflects the average yield of second-pillar funds, advanced by 7%, compared to the beginning of the year.

Figure 9. Investment and pension funds' assets (month-end)



The total assets of investment funds amounted to 492 million euros at the end of August 2012, having increased by 7% from the beginning of the year. This growth relied on the increase in the value of investments, as the outflow of capital from the funds reduced total assets. The total assets of pension funds grew by a fifth from the beginning of the year, amounting to nearly 1,470 million euros at the end of July 2012 (see Figure 9).

By asset categories, the share of cash and deposits has increased in investment and pension funds (compared to the same period last year). By the end of August 2012, the share of cash and deposits made up 6% of total investment fund assets and 15% of the total assets of pension funds. While the share of stock investment in investment funds remained on par with the level achieved last year, that of pension funds dropped by 1 percentage point to 34%. At the end of August, the share of bond investment amounted to 21% in investment funds and 50% in pension funds. The structure of investments has partially been affected by differences in the price dynamics of the instruments.

The share of non-resident securities dropped to 77% in investment funds and to 76% in pension funds by the end of the year (see Figure 10 and 11). The share of investment made in securities registered in the distressed euro area countries amounted to 17% in investment and pension funds at the end of August, with investment in fund shares registered in Ireland making up the bulk of the investment. The share of bonds issued by governments of euro area countries with a distressed public finance and fiscal situation amounted to 0.3% in total investment at the end of July, with the direct impact of the euro area debt crisis on Estonian investment and pension funds being minor. The share of sovereign bonds in investment and pension funds stood at 14% at the end of August, with the sovereign bonds of Germany, the Netherlands, Poland and Lithuania making up the majority.

MARKET-BASED FINANCING OF BANKING GROUPS

Financial strength of the groups of parent banks

Despite uncertainties in the European macroeconomic and financial environment, parent bank groups produced good results in the first two quarters of 2012 (see Figure 12). Year-on-year, the profit for the first half of the year, before loan losses, grew in all the four banking groups. The increase in revenue was fuelled by the credit portfolio, on the one hand, and the growth in loan margins, on the other. In addition, banking

Figure 10. Structure of investment fund assets and the share of foreign assets

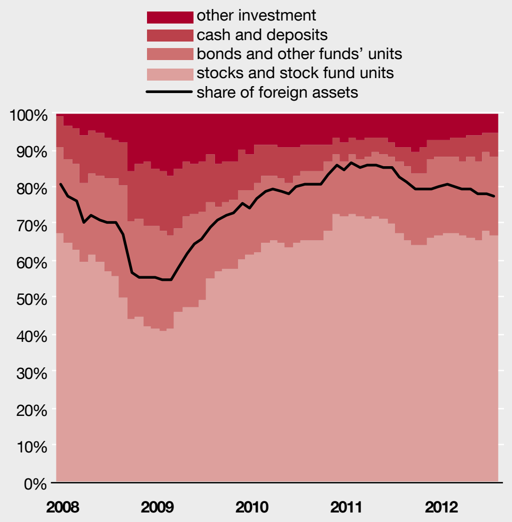
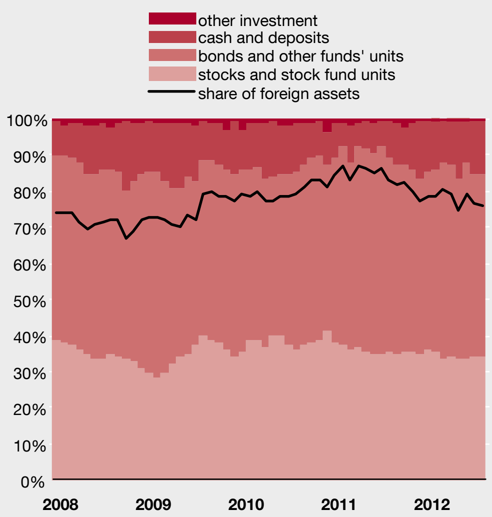


Figure 11. Structure of pension fund assets and the share of foreign assets



groups paid special attention to their operating expenses. The change in operating expenses still varied by groups.

The change in the quality of loans also varied by groups. Overall, the stock of non-performing loans contracted in the first half of the year. Still, the quality of the credit portfolio somewhat weakened as a consequence of the deterioration in the Danish credit portfolio and the credit portfolios of the maritime transport sector in general.

The capitalisation of banking groups has remained high in the last half-year. The Core Tier 1 ratio exceeded 12% for all banking groups at the end of June 2012 (see Figure 13[2]).

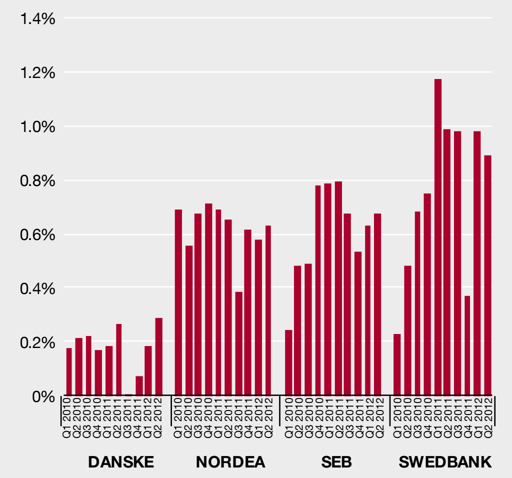
The capital ratios of larger Swedish banks have remained high compared to other European banks. This is partly due to the very low risk weights on mortgage loans. The low risk weights in the internal rating methods of banks' capital calculation result from the historically low level of loan losses for Swedish mortgage loans. Despite the fact that the risk level of housing loans will remain low, supported by the strong Swedish social insurance system, we must take into account that the risk weights are based on ex post evaluations and do not consider potential risks related to loan repayment in the future. With the aim of enhancing the capitalisation of Swedish banks with regard to mortgage loans, the central bank and the financial supervision authority of Sweden are currently investigating into the option of raising the risk weights.

Funding and liquidity of parent banks

The funding of parent banks is largely market-based. Nearly half of the funding need is covered by the issue of bonds, with covered bonds contributing almost 50% (see Figure 14). In inter-

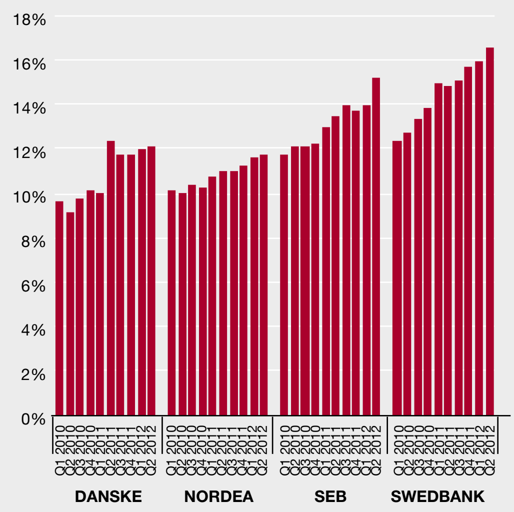
2 According to Basel 2 transition rules, the Core Tier 1 ratio was 9.6% for Nordea, 11.1% for SEB and 10.5% for Swedbank at the end of June 2012.

Figure 12. Ratio of banking groups' operating profit to assets



Sources: public reports of banks

Figure 13. Banking groups' Core Tier 1 ratio as defined by Basel 2



Sources: public reports of banks

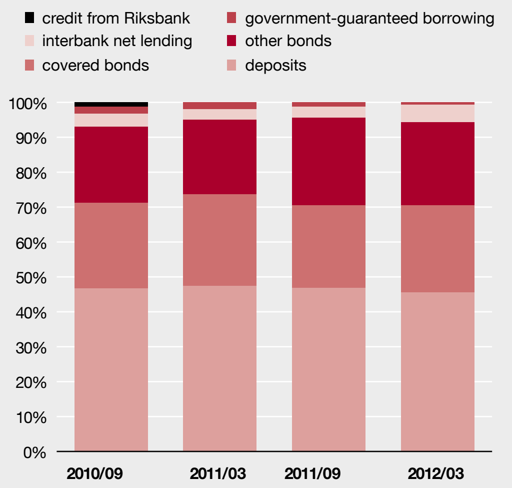
national comparison, the stock of deposits of Swedish banking groups is relatively small, compared to the stock of loans. This is due to the popularity of investment and pension funds in Sweden, with a relatively small portion of household savings actually deposited in banks. The banking groups thus remain vulnerable to the risks inherent in the financial markets, as well as to any risks stemming from differences between loan and bond maturities.

Albeit the sovereign debt crisis in the euro area has strongly affected the funding of euro area banks, market participants consider Nordic banks to be safer than others. In the last two years, the credit default swap (CDS) spreads of Nordic banks and European banks has ranged from 50 to 100 basis points (see Figure 15). By the end of August 2012, the CDSs of Nordic banks stood 95 basis points lower than the average for European banks.

The relative popularity of Swedish banks among market participants as well as the lowering of the key policy rate has helped to keep the cost of market-based funding relatively low. The yield-to-maturity of covered bonds – the key instrument for market-based funding – has dropped in Swedish banking groups, compared to last year (see Figure 16).

Published at the end of June, Riksbank's financial stability review reveals that major banking groups have consistently enhanced the share of long-term bonds in their funding structure in recent years, thus hedging their liquidity risk. Due to the relatively large share of market-based funding in Swedish banks, Riksbank advises to maintain higher liquidity buffers in order to overcome any difficulties in engaging funds from financial markets. From the perspective of short-term liquidity, the position of Swedish banks remains satisfactory. In the long term, however, the weakness of the Swedish banking sector lies in the relatively large maturity gap between assets and liabilities.

Figure 14. Major Swedish banks' funding structure



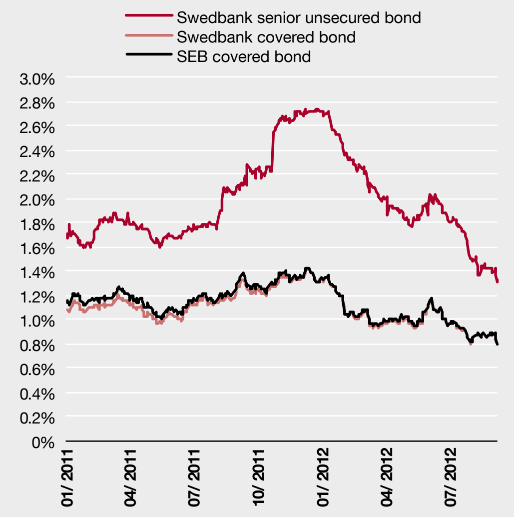
Source: Riksbank's Financial Stability Reviews

Figure 15. CDS premia of Nordic and European banks

Source: Bloomberg
* Nordic banks: Swedbank, SEB, Nordea, Handelsbanken, Danske Bank; arithmetic average

The key risks for parent bank groups include unfavourable developments in the euro area. The increasing uncertainties in the euro area may hinder the availability of the principal source of funding – market-based funding. Furthermore, adverse macroeconomic developments may affect the loan repayment ability and thus add to the materialisation of the credit risk.

Figure 16. Banks' 2-year bond spreads against Swedish government bond



Source: Bloomberg

II. REAL ECONOMY AND LOAN QUALITY

CREDIT PORTFOLIO OF BANKS[1]

In all probability, the credit portfolio has ceased to contract against enhanced loan activity of companies and households. All in all, the credit portfolio shrank by more than 17% over the course of three and a half years (see Figure 1).

Loans and leasing issued by banks to the non-financial sector totalled 14.9 billion euros at the end of August 2012[2]. The aggregate credit portfolio of the non-financial sector was 0.2% smaller than in the same period last year. Still, the portfolio has grown by 1% from the beginning of 2012. The contraction in the credit portfolio was inhibited by the 2.2% annual growth in the corporate credit portfolio. Loans to the logistics, agricultural and commercial sector showed the greatest increase, while the stock of household loans continued to shrink.

One of the factors contributing to the decline in the credit portfolio was the write-off of uncollectible receivables. In the first half of 2012, a total of 53 million euros worth of uncollectible receivables – that is, 0.4% of the aggregate portfolio of banks – were written off. Corporate loans made up 70% of the write-off. The write-off of uncollectible receivables is expected to continue in the forthcoming years, albeit at a slower pace.

The **structure** of the credit portfolio was mainly affected by the rise in corporate borrowing, while the stock of household loans continued to shrink. Changes in the structure of the household credit portfolio can be attributable both to the different depreciation rates for loan categories and to the increase in the share of housing loans in household financing. Car leasing was the only growing (1.9%) segment of the household credit portfolio. The stock of other loans to households decreased, along with their share in the total credit portfolio (see Figure 2).

1 Includes loans, leasing and factoring.

2 Includes also loans and leasing issued to non-residents in the amount of 0.3 billion euros.

Figure 1. Corporate and household loan stock

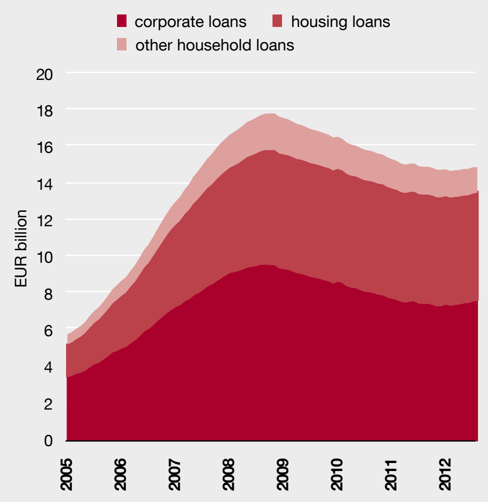
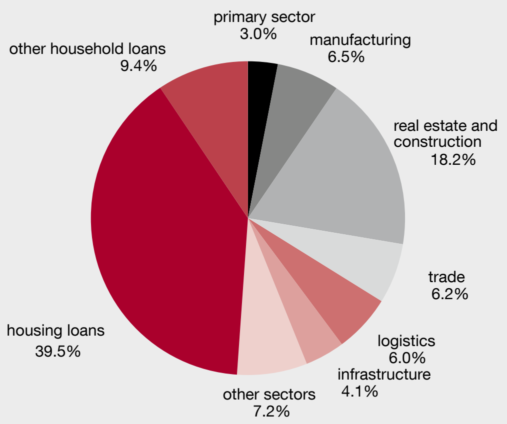


Figure 2. Structure of banks' credit portfolio as at 31/8/2012



Against the backdrop of moderate economic activity in 2012, the contraction in the household credit portfolio is expected to slow down, with the corporate credit portfolio continuing to grow. In 2013, we expect the household credit portfolio to show a modest growth, with the stock of consumption loans expected to shrink and the stock of corporate loans to grow similarly to 2010. Uncertainties about the external environment have hampered the growth of the credit portfolio. The global economic slowdown remains as a risk that may dampen loan activity.

LOAN REPAYMENT ABILITY OF COMPANIES

Against relentless uncertainties stemming from the slowdown of economic growth and the debt crisis in the euro area, the improvement in the economic performance indicators of the Estonian companies has abated and confidence is waning. Nevertheless, a majority of the sectors showed good results in the first half of the year. The payment behaviour of companies has improved, along with their ability to cope with potentially negative developments.

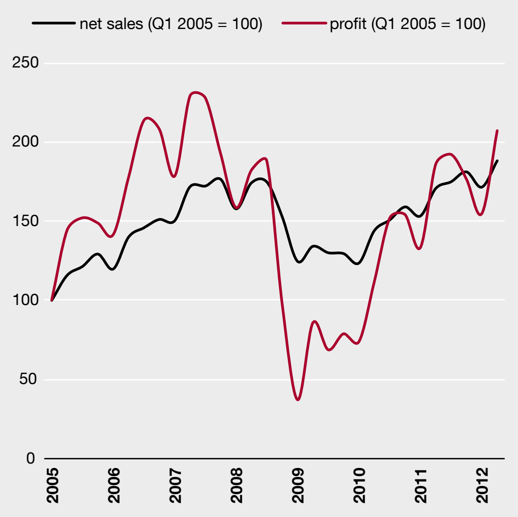
Economic performance indicators

Upon recovery from the crisis of 2008 and 2009, companies showed a quick growth in **sales revenue**. By the end of 2010 and the beginning of 2011, the annual growth in revenue amounted to 20%. This growth has lost pace in the first half of 2012 but is still roughly 10%[3] – the average for the past decade (see Figure 3).

Profit figures have increased somewhat faster – nearly 16% in the first quarter, and 10% in the second quarter. Albeit these figures fall short of the mark for 2010 and 2011, the previous figures were built on a very low base upon recovery from the economic crisis. Due to the relatively quick

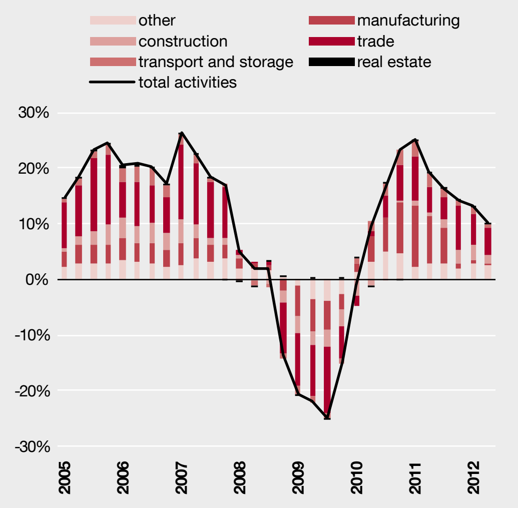
3 The increase in the revenue of retail trade companies has also continued at the beginning of the third quarter. In July and August, revenue increased by 11%, year-on-year.

Figure 3. Corporate sector's financial results



Source: Statistics Estonia

Figure 4. Sales revenue growth by sectors



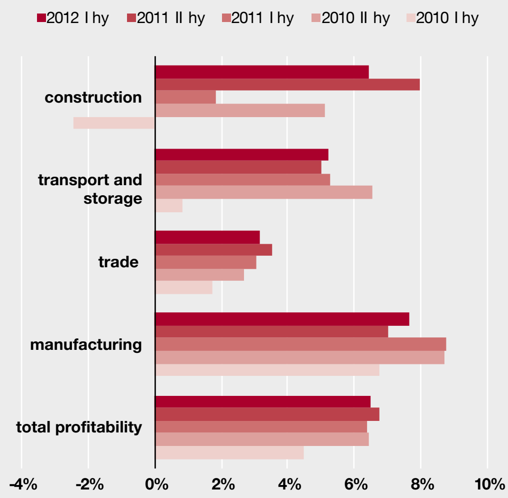
Source: Statistics Estonia

growth in profit, profitability remains high – more or less on par with last year (see Figure 4).

The trade and construction sector have been the biggest contributors to growth in sales revenue and profit. Construction sector revenues grew by nearly 30% last year, generating a three-digit growth in profit. Albeit the annual growth in the revenue generated by the manufacturing industry is merely 2%, with the profit shrinking by nearly 11%, this mainly reflects the dynamics of the electronics industry. Without the impact of the particular sector, the revenue of the manufacturing industry would have grown by nearly 6% and the profit by 11% (see Figure 5).

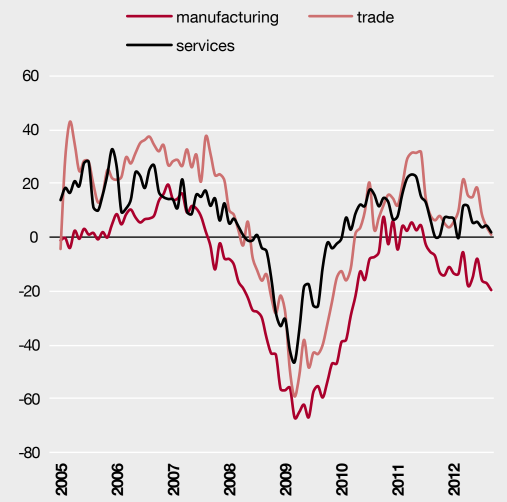
Growth in industrial output has lost pace in recent months. The production volume for July fell short of the last year's mark in half of the branches of industry. Furthermore, the retail trade, service and industrial enterprises' expectations of the demand for goods in the forthcoming months have become more pessimistic since the beginning of the second quarter (see Figure 6). This means that the economic performance indicators of companies for the second half of the year may prove more modest than in the first half of the year, or last year.

Figure 5. Profitability by sectors



Source: Statistics Estonia

Figure 6. Demand expectations

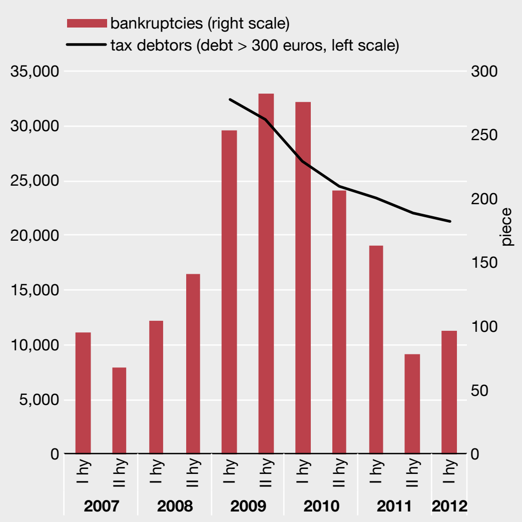


Source: Estonian Institute of Economic Research

Payment behaviour and bankruptcies

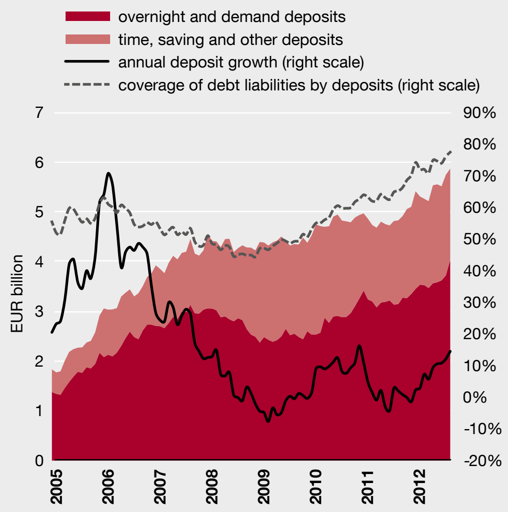
Good financial results have also improved the payment behaviour of companies. According to the statistics of the register of payment defaults, the number of companies with **payment defaults** has fallen by 2% in the first half-year and the number of companies with **tax arrears** by nearly 9%, year on-year. The stock of corporate overdue loans has also decreased (see "Quality of assets"). Similarly, the number of **bankruptcies** continues to drop sharply: by nearly 40%, year-on-year (see Figure 7). The number of liquidations in the first half of the year is on par with last year. The establishment of new companies remains high. A total of 8,434 new companies were regis-

Figure 7. Companies' tax debtors and bankruptcies



Source: Estonian Tax and Customs Board, Central Commercial Register

Figure 8. Volume and growth of corporate deposits



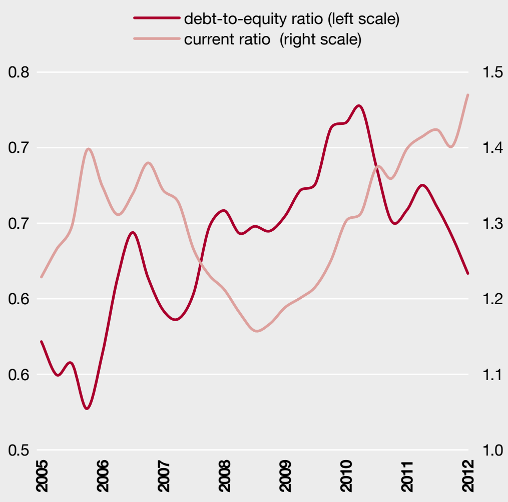
tered in the first half of the year – a 6% increase from the same period last year.

Financial assets and liabilities of companies

Good financial results have allowed companies to enhance their financial buffers, and to raise funds for investment. **Deposits** with domestic banks grew fast in the first eight months of 2012. Demand deposits show the greatest increase, along with time and savings deposits. Due to the faster growth in deposits, compared to corporate borrowing, deposits with banks already make up nearly three-fourths of the corporate borrowings from domestic banks (see Figure 8).

The capitalisation of companies has improved, along with the decrease in financial leverage. This indicates a better ability to cope with potential negative developments. The **current ratio** of companies (coverage of short-term debt by liquid financial assets) thus already significantly

Figure 9. Indicators of companies' loan repayment ability

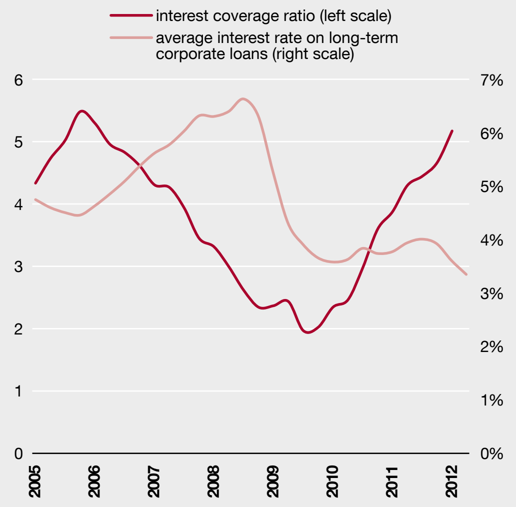


exceeds the pre-crisis level. Due to the quick growth in equity, the **debt to equity ratio** of companies has dropped significantly since the second half of 2010 (see Figure 9).

The loan repayment ability of companies has also been supported by extremely low key interest rates, which have significantly lowered the **interest burden** (see Figure 10). This means that it is easier for companies to make interest payments from the operating profit generated, and raise additional funds for investment and financial buffers.

The key interest rates are not expected to climb fast in the near future. Any risks to the loan repayment ability of households thus revolve, above all, around the potential decrease in demand and profitability. If the uncertainties over the sovereign debt crisis in the euro area persist, this may reduce the demand for Estonian products and curb the growth in revenue. The wage pressures on the labour market are increasing, and may also have a negative impact on profitability.

Figure 10. Interest coverage ratio and average interest rate on long-term corporate loans

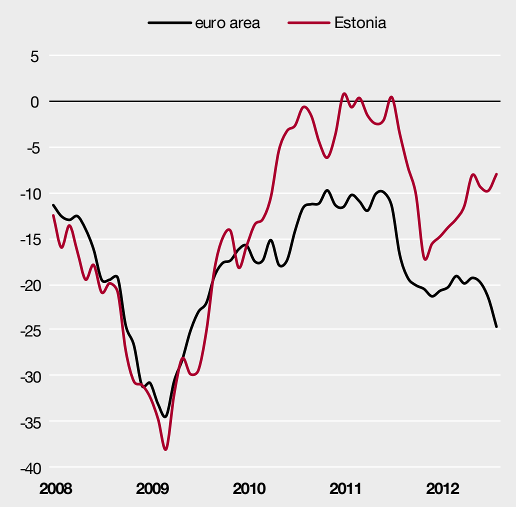


Source: Statistics Estonia, Eesti Pank

LOAN REPAYMENT ABILITY OF HOUSEHOLDS

Unlike the aggregate indicator for the euro area, the Estonian consumer **confidence** indicator has advanced in recent months, standing higher than the long-term average (see Figure 11). The expectations of households for the economic situation and the ability to save are still quite low, while the outlook for the country's economic situation in general has become more optimistic. Confidence is dampened by consumer price hikes and higher inflation expectations.

Figure 11. Consumer confidence indicator



Sources: Estonian Institute of Economic Research, European Commission

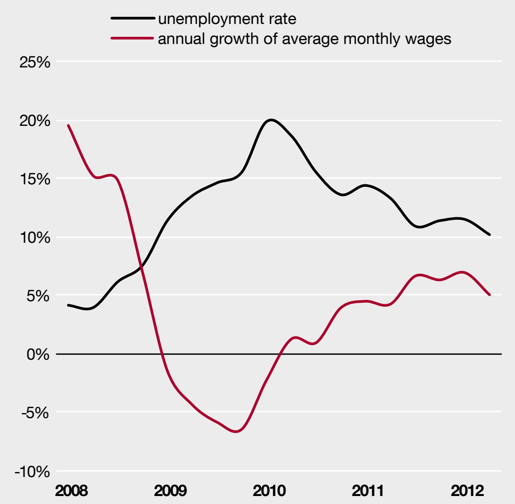
The risks related to household income have been reduced by favourable developments in the labour and wage market (see Figure 12). **Employment** rose to 61% of the working-age population in the second quarter of 2012, fuelled by a drop in unemployment and inactivity. Despite the slowdown in economic growth in the second quarter, the **unemployment** rate has retreated to 10.2% – a rate last witnessed at the beginning of 2009. Considering the time lag in the labour market's response to changes in real economy, the drop in the unemployment rate may lose pace in the forthcoming months against the reversal of the growth in employment. However, this is not expected to pose any real threat to financial stability.

Average **gross monthly wages** rose by an annual 5% in the second quarter of 2012 to 900 euros, surpassing the pre-crisis level. **Real wages**, which also consider the impact of consumer price changes on purchasing power, rose for the fourth quarter in a row, with the annual growth being 1.1%.

Based on financial account data, the improvement in the capital buffers and financial position of households, which started in the middle of 2010, continued in the first quarter of the year, supported by both growth in financial assets and decline in financial liabilities (see Figure 13). The annual growth in the **financial assets** of households has been quicker than last year (8% in the first quarter), while liabilities have shrank at a slowing speed (–2%). Cash and deposits of households covered 65% of the total debt in the first quarter of the year. This ratio has advanced by a remarkable 10 percentage points from last year, breaking the all-time record.

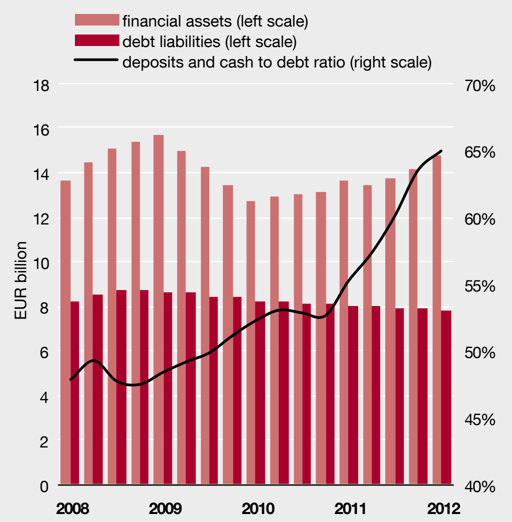
Year-on-year, growth in household **deposits** with banks operating in Estonia has slowed down, but it was nevertheless relatively strong at 9%, despite low interest rates (see Figure 14). Demand deposits and overnight deposits grew by 13%, year-on-year, with their share in total deposits continually growing in recent years. The growth in time and savings deposits has slowed down from the beginning of the year, with an annual growth of 5% as at July. Other deposits, consisting of investment deposits tied to the securities market yield, shrank by 9%.

Figure 12. Unemployment rate and average gross wage growth



Source: Statistics Estonia

Figure 13. Financial position of households



The household **debt** contracted further in the first half of 2012 (see Figure 15). At the end of the first quarter, the debt constituted 48% of GDP and 91% of disposable income, having decreased by 5 and 9 percentage points, respectively, year-on-year. During the years of rapid economic growth, the household debt burden grew faster than nominal GDP, accumulating an ever-increasing debt. The debt ceased to increase during the crisis, while the debt burden continued to grow due to the drop in GDP. The fast growth in GDP during the recovery period lowered the debt burden relatively quickly, while the debt continued to contract slowly.

The household **interest burden** (the ratio of annual interest expenditure to disposable income) stood at 3.1% in the second quarter of 2012, being nearly two times lower than during the economic boom (see Figure 16). The spring forecast of Eesti Pank expects a slowdown in the growth of disposable income in the forthcoming quarters, with the loan stock somewhat increasing in foresight. Still, interest rates will remain relatively low, with no expectations of a significant increase in the household interest burden or of a marked deterioration in their loan repayment ability.

Figure 15. Household indebtedness

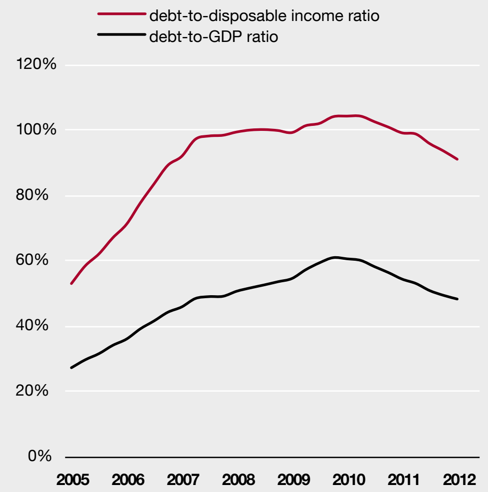


Figure 14. Household deposits

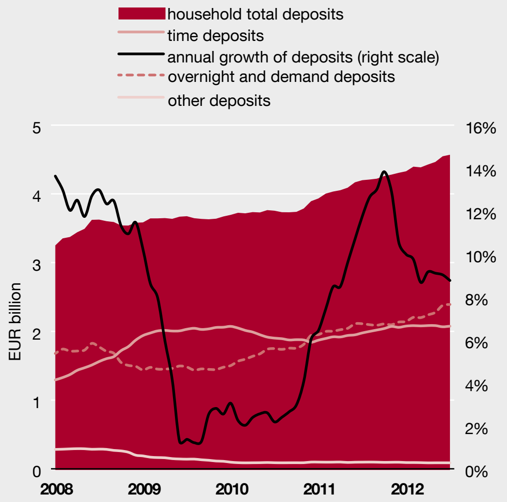
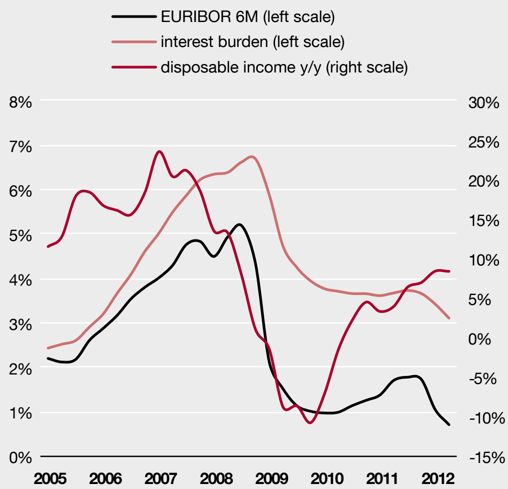


Figure 16. Household interest burden and disposable income



Source: Statistics Estonia, Eesti Pank

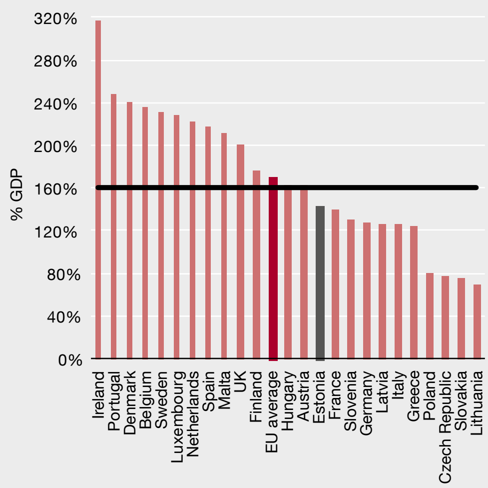
PRIVATE SECTOR INDEBTEDNESS IN ESTONIA

The global economic and financial crisis, which started in 2008, revealed that excessive private sector indebtedness may jeopardise financial stability and economic growth. With the introduction of the new macroeconomic imbalance procedure, the European Commission thus decided to pay more attention to the indebtedness indicator. The private sector indebtedness was added to the MIP Scoreboard as one of ten internal and external balance and competitiveness indicators. The scoreboard specifies the indicative thresholds beyond which macroeconomic problems are liable to occur. However, exceeding the criteria does not always signify macroeconomic imbalance. Any economic analysis should thus consider the internal connections of economic indicators, structural changes, and so on.

According to the report prepared at the beginning of the year on all EU Member States, Estonia exceeded the thresholds established for the international investment position, unemployment and private sector indebtedness[4]. Considering recent changes in the above indicators and the peculiarities of Estonia as a small transition economy, the European Commission found no need for Estonia to be subjected to an in-depth macroeconomic imbalance analysis or policy recommendations.

Under the private sector indebtedness criteria, the indebtedness of the private sector (non-financial companies and households) must not exceed 160% of GDP[5]. There is no consensus in economic literature on the optimum debt level and the threshold for excessive indebtedness. The value of the criteria has thus been established based on the private sector indebtedness indicators of EU Member States in the reference period (1995–2007).

Figure 17. Private sector indebtedness in EU member states



Source: European Central Bank

In comparison with the private sector indebtedness of other EU Member States, Estonia ranked average as at the end of 2011 (see Figure 17). Considering the relatively modest wealth level of Estonia, the country's private sector debt is rather big, compared to other countries (see Figure 18).

Growth in indebtedness in 2005–2008

The indebtedness of the Estonian private sector (households and companies) was mainly accumulated in 2004-2008. There were many likely reasons for the increase in indebtedness.

4 The report is based on the data for 2010.

5 According to Eurostat, the corresponding indicator for Estonia was nearly 177% of GDP in 2010.

The global environment with its abundant liquidity and low risk aversion contributed to capital inflow into Estonia and other Baltic States. The development in the region gave all the reason to be optimistic, with expectations of a quick levelling of income and prices with Western Europe. The accession to the European Union instilled confidence and lowered risk assessments. Foreign banks fighting over the market share brought down the interest margins and relaxed borrowing conditions. The loan-to-value ratio for real estate loans was thus significantly increased, maturity terms were extended, and the minimum requirements for income were lowered (see Figure 19).

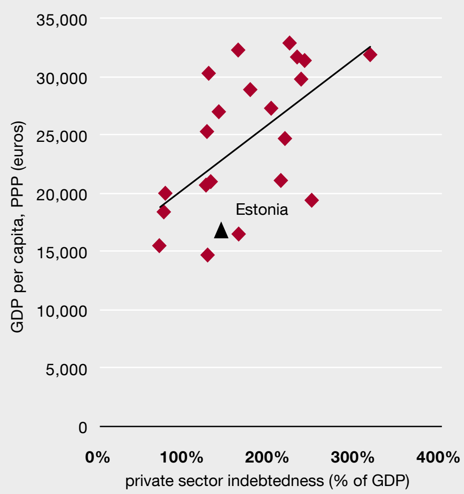
On the demand side, borrowing was supported by the quick growth in income and profit, as well as by the real interest rates that had turned negative against declining interest rates and rising inflation. All of this made loans available to a wider range of households and companies. The loan market was also supported by the quick rise in real estate prices. This enhanced the attractiveness of real estate and raised the value of loan collaterals.

The indebtedness of households and companies grew mainly at the expense of domestic bank loans. While for households, other sources of borrowing were trivial[6], corporate borrowings from foreign residents started to grow in 2009 against the shrinking of the stock of domestic bank loans. Corporate debt also contains sector-specific debt. This means that the ratio of the consolidated indebtedness of the Estonian companies to GDP would be nearly 15 percentage points lower[7] (see Figure 20).

6 Over 97% of the debt of Estonian households and non-profit institutions serving the households originates from the domestic financial sector.

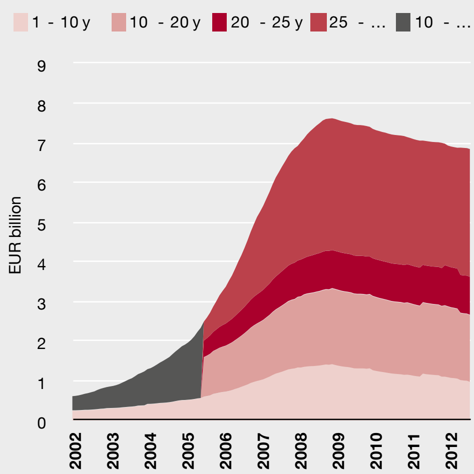
7 The scoreboard of the European Commission is based on non-consolidated data, as consolidated data are unavailable in some countries.

Figure 18. Private sector indebtedness and GDP per capita in EU member states



Source: European Central Bank, Eurostat

Figure 19. Households' debt stock by maturityv



Dynamics in indebtedness from the end of 2008

By the mid- 2012, the stock of household loans, which peaked at the end of 2008, had contracted by 9.5 million euros (11.7%). The stock of short-term (with a maturity of less than ten years) loans has decreased the most – by a remarkable 30%. The stock of long-term loans (with a maturity of over 10 years) – mostly long-term housing loans – has shrank by 6% from its peak. Due to the huge share of long-term loans in the credit portfolio of households, indebtedness is expected to remain at a relatively high level. The increase in savings and the decrease in borrowings after the crisis have still significantly improved the financial position of households, reducing vulnerability to external risks. Favourable interest rates, recovery of the real estate market and increase in income has raised the stock of long-term housing loans in recent months.

The dynamics of the stock of corporate loans are similar to the household sector. After the quick growth, companies and banks have reorganised their balance sheets, with the loan stock showing a constant decline from 2008 to the end of the first quarter of 2012 (see Figure 21). The loan stock has ceased to decline in recent months – loan turnover has increased and the loan stock has remained more or less at the level achieved at the end of the first quarter.

Considering the structure of the credit portfolio and the transition economy's huge need for investment, the ratio between private sector indebtedness and GDP is not expected to continue descending at the same pace as in recent years in the forthcoming years. Similarly, there are no expectations of a quick growth in indebtedness – financial deepening

Figure 20. Non-financial enterprises' debt by sources

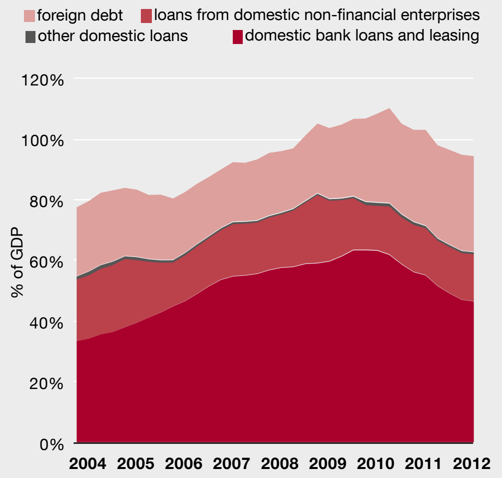
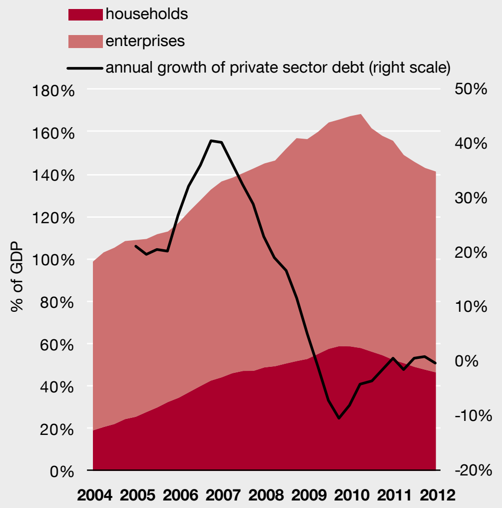


Figure 21. Private sector indebtedness in Estonia



has already taken place, while many structural factors evident in the years of quick growth were one-off. Rather, we expect a modest growth in loan balance.

The risks associated with the current indebtedness of the Estonian private sector are reduced by several factors. Firstly, the financial position of the private sector and the ability to serve loans has improved in recent years, while financial buffers have grown. Secondly, the total indebtedness of the Estonian economy is reduced by a very low government debt. According to Statistics Estonia, the government debt amounted to approximately 6% of the GDP at the end of 2011 – the lowest among EU Member States. Thirdly, a relatively high private sector indebtedness alone is not likely to curb economic growth in the future. Randveer, et al have found that the potential impact of the private sector loan burden on GDP is small and that nations showing a quick growth before the crisis are likely to continue growing after the crisis.[8]

8 Randveer, Uusküla and Kulu. "The Impact of Private Debt on Economic Growth", Eesti Pank Working Papers, 10/2011.

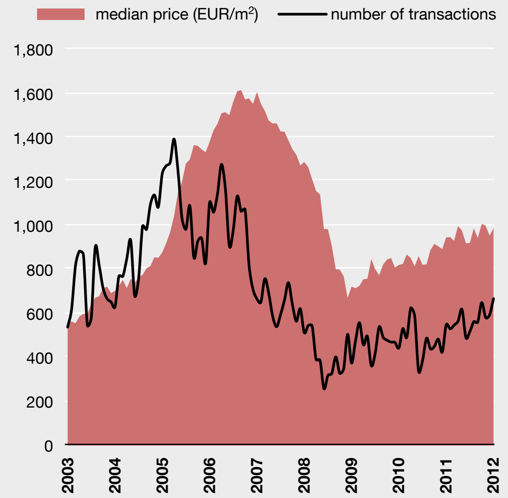
Real estate market

Housing market

The impact of the local real estate-related risks on the Estonian financial system has decreased. In the last two and a half years, the liquidity of the residential market has been improving and the prices have been steadily rising. Albeit the rise in transaction and price figures indicates enhanced market activity, this can be mainly attributed to the post-crisis decline. The residential market still operates at the level of 2004-2005, that is, at a level which is approximately 40% lower than at the peak of the real estate boom (see Figure 22).

The **number of transactions** concluded in the apartment market of Tallinn in August was the highest in the last four years – 22% more transactions were concluded, compared to the same period in 2011. The **median price** per square metre of an apartment increased by 4%, still falling short of the annual average for the last 12 months (11%). The gap between the median price and the average market

Figure 22. Number of transactions with apartments in Tallinn and median price



Source: Estonian Land Board

price has widened in the last few years, signifying an increase in the share of more expensive property in the transactions.

According to the statistics gathered by the Estonian Land Board, nearly two-thirds of the transactions concluded in Tallinn involved real estate in three districts: Lasnamäe, Kesklinn and Põhja-Tallinn (see Figure 23). Valued for their new developments, there is great demand for the last two districts, with the average price per square metre being the highest in the capital. This, in turn, has affected the average price in the market. Transactions with new apartments made up an average of 16% of all apartment transactions[9].

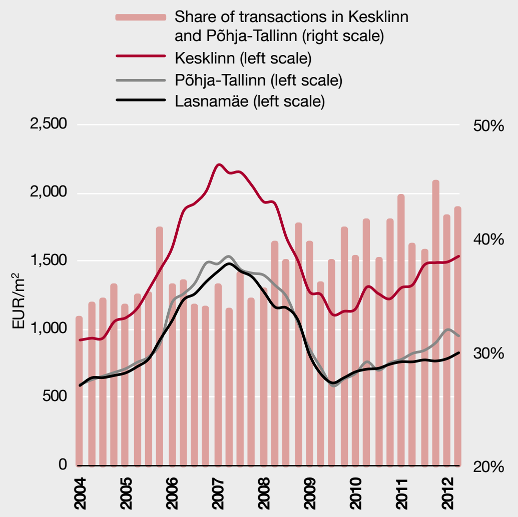
Contributors to the change in the structure of the transactions include improved financial positions, positive labour market dynamics, as well as low interest rates and favourable bank loan conditions. Though the rise in real estate prices has been somewhat faster than the increase in household income and savings, the change in prices is still consistent with the change in income. According to the **affordability** indicator[10] used for analysing the overpricing of the residential market, real estate was still affordable for a Tallinner earning average wages (see Figure 24).

In addition to demand factors, the structural change of the market has also been affected by the active construction market. Albeit the current situation, where the sales price of real estate has risen more quickly than the cost of construction, a further growth in construction activity is hampered by uncertainty due to the sovereign debt crisis in the euro area. From the end of 2011, we have thus witnessed a drop in

9 Domus Kinnisvara

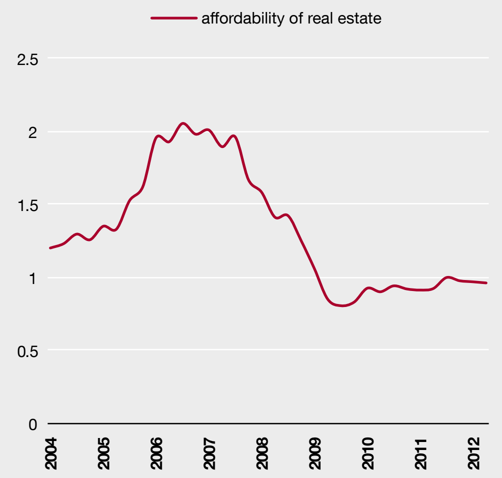
10 The ratio between the median price per square metre of an apartment in Tallinn and the average gross wages, which amounted to 0.96 in the second quarter of 2012.

Figure 23. The median price of apartments in districts of Tallinn



Source: EstonianLand Board

Figure 24. Affordability of real estate in light of average wages in Tallinn



Source: Statistics Estonia, Land Board, Eesti Pank supply. **Real estate supply** has decreased by nearly 10%. Almost 50% less building permits for the construction of residential space were issued in the first two quarters of 2012 compared to the same period last year (see Figure 25). This is still more than in 2009 and 2010, with no expectations of price pressures stemming from the decrease in supply. Rather, the market is expected to retain its current level in the next six months.

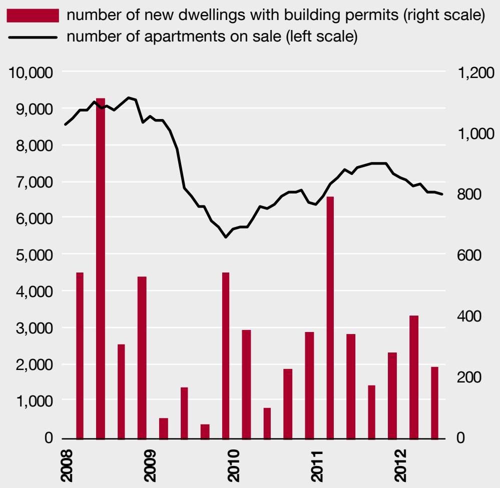
Office and commercial/retail premises market

The domestic economic recovery has breathed new life into the market for **office premises**. There is high demand for first-rate commercial space with a good location in the office space sector of Tallinn, with not many new additions in recent years. Construction activity waned during the crisis, with only a handful of permits of use issued for business premises in 2011 (see Figure 26). Indeed, building permits were issued for a many times higher construction volume, but this was mainly for a specific contracting authority – the public sector. In the office premises market in general, the fall in the vacancy rate, which started in 2010, has been halted, with the vacancy rate hovering around 8% in the last six months[11].

Rental prices have shown no significant changes (see Figure 27). The ever-increasing deficit for first-rate office space has raised the price of the premises, but the price hike is bound to be limited by the solvency of companies, the need for cost-efficiency, and growing uncertainty in the euro area.

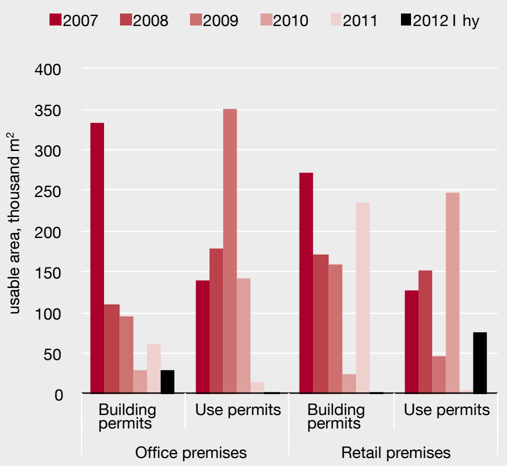
11 Colliers International, Real Estate Market Review, March 2012.

Figure 25. Supply in real estate market in Tallinn



Source: register of construction works, Statistics Estonia, spot.city24.ee"

Figure 26. Expanded or new commercial real estate with building and use permits in Tallinn



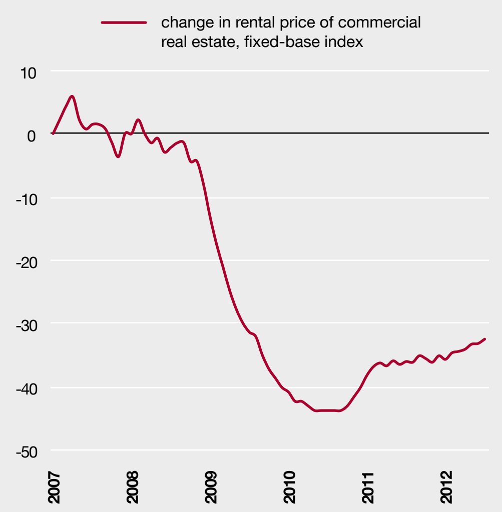
Source: Statistics Estonia

The demand will fuel new developments, while the rise in construction prices is bound to serve as a balancing factor, preventing initiation of rash developments. Approximately 10,000 m2 of category A business premises will be added in 2013[12]. This is not considered a volume which would jeopardise the occupancy rate of existing buildings, exerting downward pressure on the market price.

Considering the expansion, new developments and investment, the market for **retail premises** was the most active commercial real estate sector in Estonia in 2011. Against the backdrop of rising retail sales figures and growth in consumption, the market for retail space remains optimistic. Extensive development is not only fuelled by a rise in domestic demand, but also by tight competition and the efforts made by the retail chains to maintain their market share. The vacancy rate of large shopping centres is non-existent. Demand is greater than supply, and rental prices have went up a bit.

Investors continue showing great interest in retail space with sustainable cash flows.

Figure 27. Tender price of commercial real estate in Tallinn (1 Jan 2007 = 100)



Source: spot.city24.ee, Eesti Pank

Several major investment transactions were concluded in the summer of 2012. In addition to a higher return on investment, the investment market has also been supported by the relaxation of the lending policy of banks.

12 Colliers International

QUALITY OF ASSETS

The asset quality of banks largely depends on the quality of the credit portfolio[13], with loans constituting 80% of the assets. At the end of August, the stock of loans overdue for more than 60 days amounted to 556 million euros, or 4.3% of total loans granted to companies and households. Two thirds of **overdue loans** consist of loans to the real estate sector, e.g. loans to real estate and construction companies and household housing loans (see Figure 28).

The quality of the credit portfolio has improved, albeit the decrease in the balance of overdue loans and the write-off of uncollectible receivables was much more modest in the first half-year than in the last quarters of 2011, as was expected (see Figure 29). The stock of loans overdue by more than 60 days shrank by 67 million euros in the first half of 2012. Nearly 80% of the decrease in overdue loans may be attributable to the **write-off** of uncollectible receivables. Similarly to previous quarters, a significant improvement can be seen in the quality of the credit portfolio for the manufacturing, real estate and construction sector.

The balance of corporate overdue loans decreased by 46 million euros in the first half-year. A total of 38 million euros worth of overdue loans were written off, including 13 million euros in the real estate and construction sector. The balance of households' overdue loans decreased by 21 million euros in the same period. A total of 15 million euros worth of loans were written off, including 9 million euros worth of non-performing housing loans. The non-performing loans of real estate-related sectors thus contributed nearly 40% of the total write-off.

13 This chapter only considers bank loans without leasing and factoring, which make up over 90% of the aggregate credit portfolio.

Figure 28. Loans overdue by more than 60 days and the share of respective sector's portfolio as at 31/8/2012

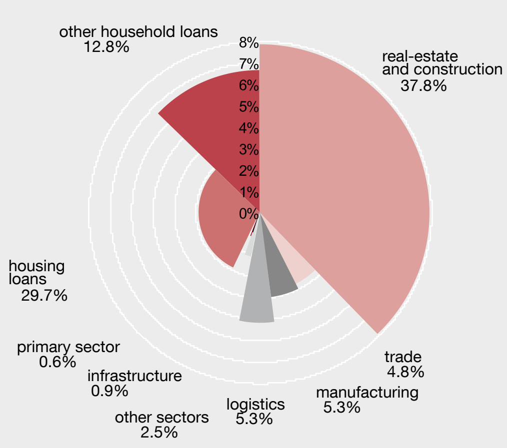
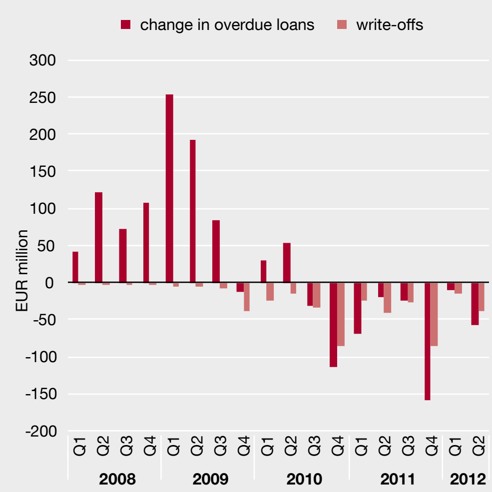


Figure 29. Quarterly change in loans overdue by more than 60 days and write-offs

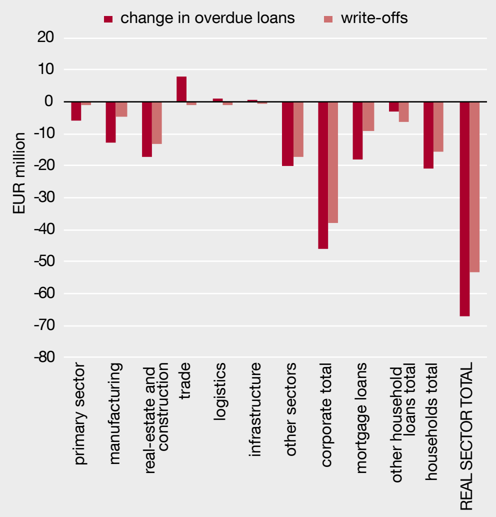


In almost all sectors, the decrease in the stock of overdue loans was greater than the write-off of uncollectible receivables in the same sector in the first half-year (see Figure 30). Among corporate loans, loans granted to the commercial, logistics and infrastructure sector constituted an exception, although their share in both overdue loans and write-off was comparatively small and had no major impact. As regards households' loans, consumer credit proved an exception, as was anticipated. Without write-off, the balance of overdue consumption loans would have increased. Similarly, the share of overdue loans in the loan portfolio has decreased in all banks, compared to the beginning of the year.

The **provisions** for contingent loan losses declined by 86 million euros in the first half of 2012, with 60% of the decline attributable to the write-off of uncollectible receivables. Albeit the provisions have been declining since August 2010, the ratio of provisions to overdue loans has remained conservative, as the stock of overdue loans has declined similarly to provisions. By the end of 2011, the ratio of provisions to loans overdue by more than 60 days had advanced to 84%, retreating to 79% by August 2012. This means that 3.4% of the total credit portfolio was charged to loan losses.

The **trading books** of banks operating in Estonia are relatively modest. Securities, a majority of which are debt instruments, made up 3.5% of the assets of banks in August 2012. The trading books have grown by 2% from the beginning of the year. The stock of bonds with a maturity of less than 12 months has decreased, while that of bonds with a maturity of 5-10 years has increased. In the first half of 2012, investment in the bonds of the so-called distressed countries has increased by over 80%, to 40 million euros. Italian bonds are the most popular, with the share of Spanish bonds showing a quick growth from the beginning of the year. A majority of the bonds are short-term, with bonds maturing in less than 12 months making up a half of the bond portfolio of the distressed countries. Sovereign bonds make up nearly 40% of the portfolio, with their share remaining unchanged from the beginning of the year.

Figure 30. Change in loans overdue by more than 60 days and write-offs



Only small banks have invested in the private and public sector bonds of distressed countries, with the corresponding bonds making up a considerable portion of Tier 1 own funds. While the bonds of the distressed countries make up a total of 1.9% of total Tier 1 own funds of the banking sector, the corresponding figure for small banks sometimes exceeds 40%. Negative scenarios could have a significant impact on some small banks – together with deterioration in loan quality, they are the factors that could jeopardise the capitalisation of such banks. Still, the bond positions pose no significant threat to the banking sector in general, as the small banks' ties with the rest of the sector are quite weak, with no expectations of a significant spill-over of the negative impact.

III. THE STRENGTH OF FINANCIAL INSTITUTIONS

BANKS

Liquidity and funding

The volume of **liquid assets** in the banking sector increased substantially in the middle of 2011 and has remained at around 4.5 million euros for more than a year. Other assets of banks did not change significantly over the year, either. Hence, the share of liquid assets in the banking sector total assets has remained at 24% (See Figure 1). The structure of liquid assets also remained fairly similar to the previous year. Claims on other banks, mainly on parent banks, constituted a substantial part, that is, around 80%, of the liquid assets. Despite the lowering of the Eurosystem monetary policy interest rates in July, the volume of assets held by banks with the central bank did not decrease significantly and their share in liquid assets remained at 12-13%.

The lowering of the interest rate on deposit facility to 0% stopped the use of the instrument on July 11, and the majority of the assets remained in the central bank account without the possibility of earning interest. At the same time, additional depositing through fine-tuning operations (see Figure 2) increased by more than 66%. After the long-term refinancing operations in spring, the banks operating in Estonia did not take any new monetary policy loans until the end of September.

The share of deposits continued to increase in the **structure of banks' liabilities**. At the end of August, deposits constituted 76% of total liabilities. In one year, the share of deposits in total liabilities increased by more than 7 percentage points (see Figure 3). While the volume of deposits increased by more than 1.3 billion euros in a year, the volume of funds from other banks and bonds issuances decreased by 1.2 billion euros, i.e. by 22%. Hence, dependence on market-based funding mediated by parent banks has further decreased over the year. At the same time, the volume of the loan portfolio has little changed. As a result, together with the increase in deposits, the **loan-to-deposit ratio**

Figure 1. Banks' liquid assets and their share in total assets

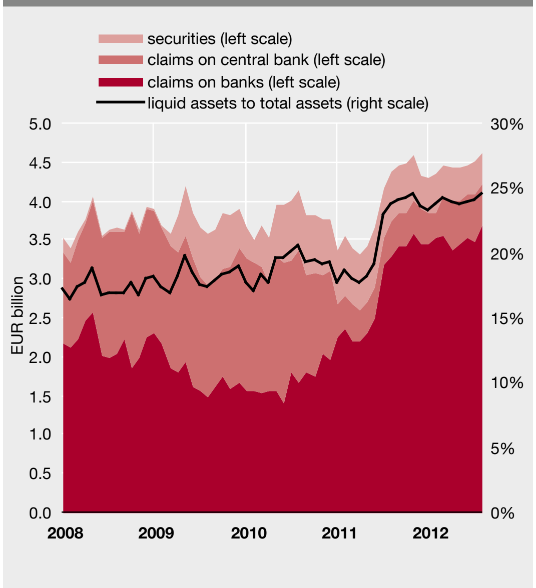


Figure 2. Assets and loans with the central bank

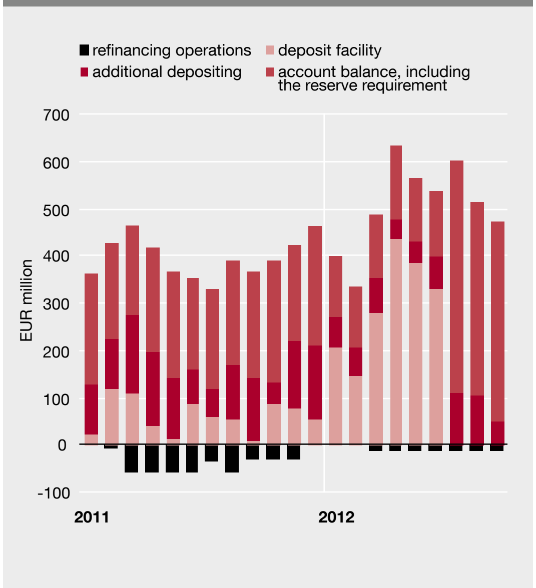


Figure 3. Structure of liabilities

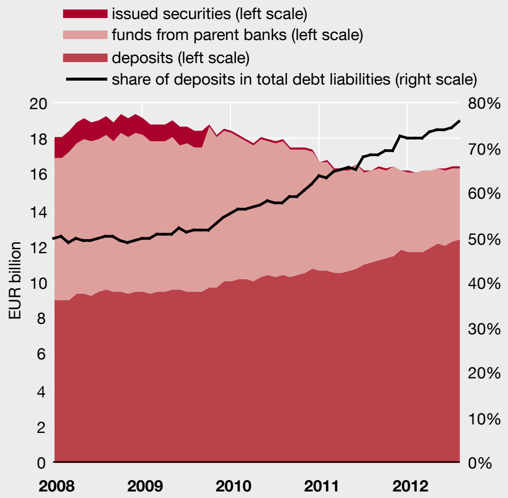
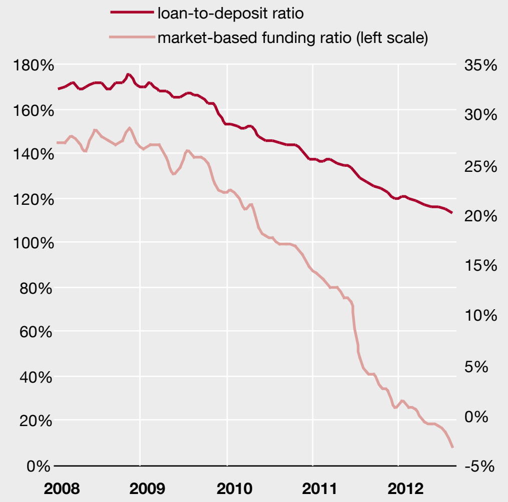


Figure 4. Loan-to-deposit ratio and market-based funding ratio



has improved. At the end of August, the loan-to-deposit ratio dropped to 113% (see Figure 4), when considering the whole sector.

Given that tensions in the external environment are still present, liquidity and funding risks can be reduced by improving the banks' funding structure as well as by high liquidity buffers. These developments are reflected in the **market-based funding** ratio[1] (see Figure 4) that shows a very low risk level for the entire banking sector as well as for most of the bigger foreign-owned banks. Hence, if banks should face temporary difficulties in obtaining funds from financial markets, they are able to cover the funds needed from their liquid assets.

1 Marekt-based funding ratio = (market-based funding - liquid assets) : total assets; both long and short-term wholesale fundings, including interbank loans, are considered under market-based funding.

The development of the deposits of non-residents

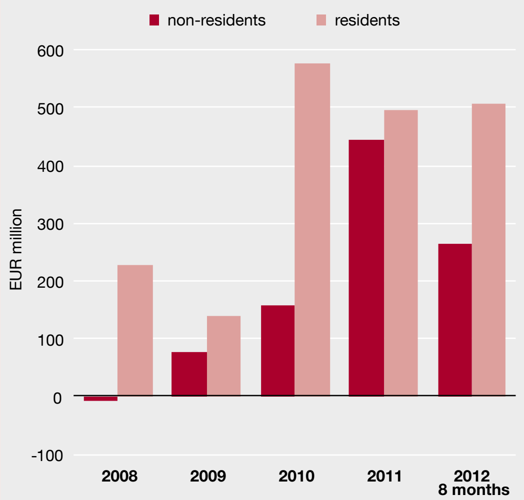
The balance sheet and profit figures of several banks operating in Estonia are substantially influenced by the activity of non-resident clients. Historically, in order to offer services mainly to foreign companies, specific niche banks have developed. At the same time, banks' expansion strategies and incentives to improve profitability in the context of low interest rates have also increased the interest of the rest of the banking sector in being more active in this segment. During the past five years, the share of non-residents in total deposits of the non-financial sector has been increasing steadily, reaching 22% in August. Even though when considering the entire banking sector, this share is not too high according to present assessments, it is important to monitor which risks the increasing use of the funds in question can entail for banks' liquidity and funding.

Since the last months of 2011, growth in foreign non-financial sector deposits has been very fast, exceeding that of domestic deposits by several times. Despite the fact that the annual growth of the deposits of non-residents has been relatively volatile for years, the accelerated growth rate that reached 38% by the end of August is still remarkable (see Figure 5). The volume of non-residents' deposits engaged in 2011 was only one tenth less of that of residents (see Figure 6). Due to rapid growth, the share of deposits of non-residents in the volume of deposits of companies and households increased by the end of August 2012 to 33% and 8%, respectively, (see Figure 7).

The rapid growth in foreign deposits can partly be explained by the relatively active external trade and by the increase in the business

Figure 5. Growth in real sector deposits by residency

Figure 6. Change in the real sector deposit stock during the past 5 years



activity of foreign companies. However, the activity of banks in offering various services and the more active use of off-shore regions are also important.

The deposits of non-resident companies mainly originate from off-shore countries: 62% of the deposits of foreign companies (see Figure 8), and compared to the period five years ago, no substantial structural changes have taken place. During that time, the share of deposits from companies based in Cyprus and the United Kingdom has somewhat increased, mainly at the expense of US and Scandinavian depositors.

When considering households, private persons of Russian origin have the biggest share of deposits: more than 40% of the deposits of non-residents (see Figure 9). In the past five years, the structure of households' deposits has considerably changed, depending on

Figure 8. Non-resident corporate deposits by countries

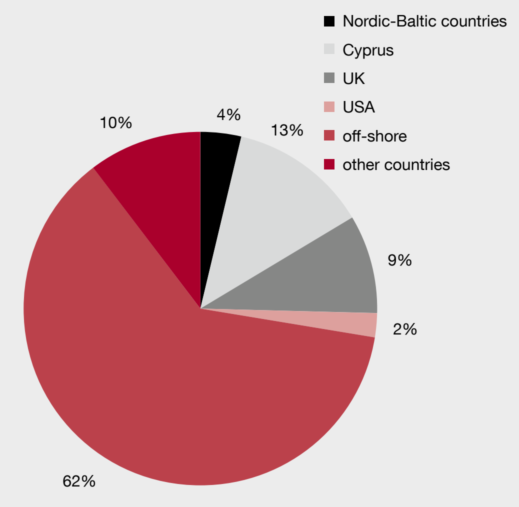


Figure 7. Share of non-resident deposits in corporate and household deposits

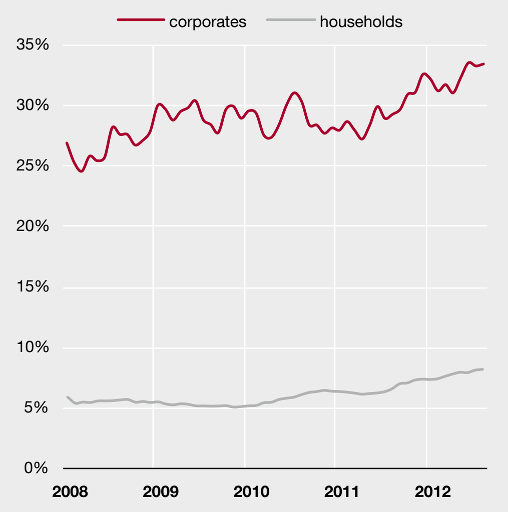
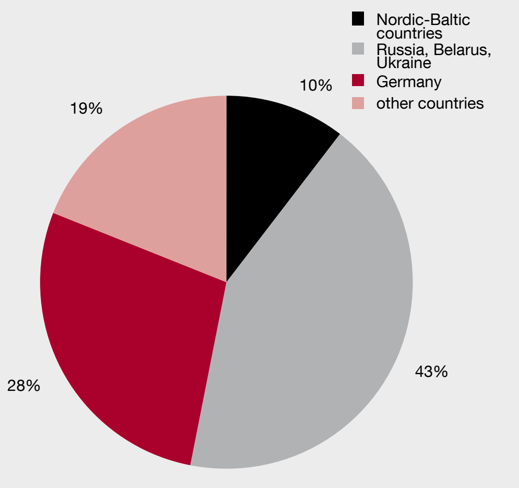


Figure 9. Non-resident household deposits by countries



the source country. Deposits from Germany started to rapidly increase already in 2010 and their share in the deposits of non-residents reached 28% by the end of August 2012 (2% at the end of August 2007). The share has mainly increased at the expense of Nordic and Baltic depositors, whose deposit volumes have remained almost at their 2007 level.

The increase in and the structure of the deposits of non-residents are currently not posing an important systemic risk to financial stability in Estonia. The deposits of non-residents are indeed showing a growing trend, but until now, they have been mainly important for the funding and liquidity management of niche banks. Based on the structure of the deposits of non-residents, it cannot be directly inferred as though these deposits were more risky in terms of liquidity compared to comparable domestic deposits, since some of these deposits are first and foremost related to the welfare of the Estonian economy. Although when considering the past two years, the volatility of the deposits of non-residents has not been significantly different from that of the Estonian companies, there have still occurred periods during the past ten years, when the volatility of off-shore deposits has been more than three times higher than that of the deposits of residents and the deposits in question have decreased by more than 20% in one month.

Thus, further changes in the deposits of non-residents must still be monitored and the stability of this funding source assessed both in the context of a sufficient liquidity buffer as well as in that of financing loan growth. For example, when leaving the deposits and the loans of such off-shore companies, for which it is more difficult to measure exposure to risk, out of the relevant aggregate indicators, the loan-to-deposit ratio was 125% at the end of August. This is more than ten percentage points higher than the traditionally estimated indicator. Furthermore, monitoring the development of the deposits of non-residents is also important in the context of deposit insurance.

Profitability

In the first half of 2012, banks posted a **total net profit** of 194 million euros (see Figure 10). The profitability of assets has continued to increase. At the end of the second quarter of 2012, it reached 2% y-o-y (without the one-off profit of Swedbank in the third quarter of 2011[2]).

Banks' profitability has largely been influenced by changes in credit risk assessments over the past two quarters. This has made it possible to annul previous write-offs and hence put the loans previously provisioned for (written off) back on the balance sheet as profit. **Changes in the value of assets** constituted nearly a fifth of the total net profit of the banks in the first two quarters of the year. However, changes in loan quality assessments have not been the same for all the banks: this can at least be partially explained by differences in credit portfolios, however, differences regarding conservatism in the banks' assessments cannot be ruled out, either. If the economic environment will not significantly deteriorate in the near future, given that the high provision for overdue loans still persists (close to 80%[3]), the persistence of the change in the value of banks' assets may be regarded in aggregate

2 The net profit of the third quarter of 2009 was largely influenced by the revenue from the sale of Swedbank's subsidiary banks in Latvia and Lithuania to the parent bank that constituted more than 50% of the annual net profit of the banking sector. See the Financial Stability Review 2/2011 box "The impact of changes in Swedbank's legal structure on the aggregate balance sheet and capital of the Estonian banking sector".

3 See also "Quality of assets".

Figure 10. Banks' net profit and net loan losses

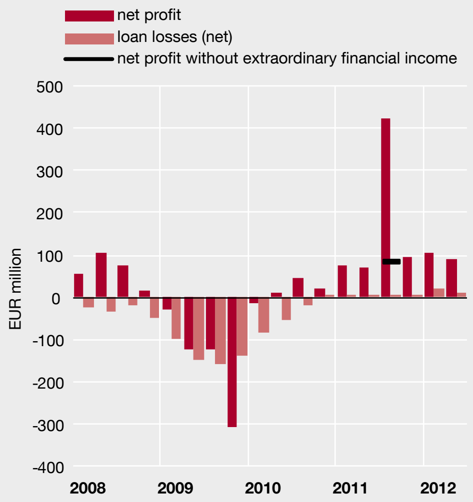
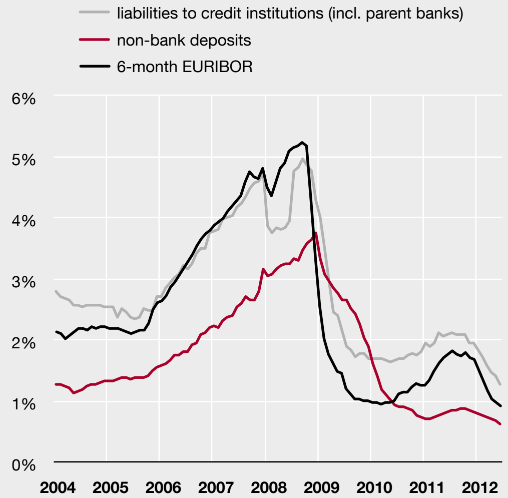


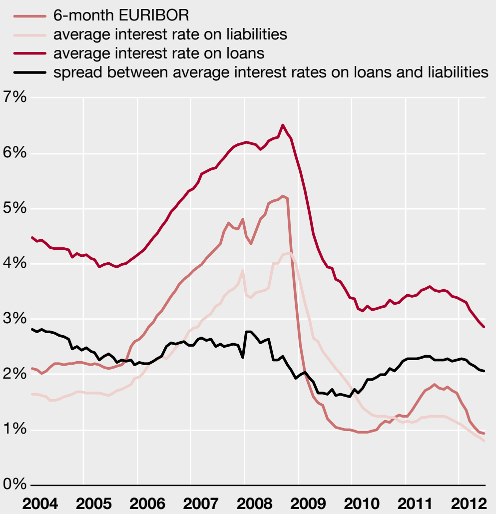
Figure 11. The price of funding for banks and 6-month EURIBOR



view rather as supporting profitability or neutral. The results may, however, differ by sector and market participants.

The other components of profitability have changed less during the past quarters. The decrease in interbank money market interest rates has reduced the **cost of funding** (see Figure 11). However, given that the vast majority of the loans issued in Estonia are indexed to Euribor (the share of loan agreements with the so-called floating interest rate exceeds 90% of the loans issued to the non-financial sector), the lower base interest rates are also starting to spill over to the banks' earnings on interest income (see Figure 12). When base interest rates are low, banks' profit margin is decreased by the reduction in demand deposits that have lower earnings and that of the gap between interest income and expenditure on the loans issued. In aggregate view, demand deposits constituted more than 25% of the banks' liabilities in the first half of the year.

Figure 12. Average interest rates on banks' liabilities and receivables (end month) and 6-month EURIBOR



Hence, under conditions of decreasing base interest rates, banks' funding cost is also decreasing. If the base interest rate remains low or drops even more, banks' net **interest income** will continue to decrease in the coming quarters.

The ratio between the banks' net **fee and commission income** and the assets has remained rather stable during the last quarters (see Figure 13). When the number and the volume of new loans issued by banks stabilises, the pricing of services has sometimes been reviewed. In the near future, however, competition will most probably not allow a substantial increase in the fee and commission income.

Structural changes, influencing **administrative and personnel costs**, accompanied by a decrease in demand and supply after a period of rapid growth in loan portfolios, have been largely completed by now. In the future, a pressure on the growth of nominal personnel costs may be expected.

In the coming quarters, net interest income is expected to decrease to some extent, while the fee and commission income and operating cost remain stable. The banks' profitability is an important component in the quality of the loan portfolio: given the high provision for overdue loans, banks will continue to annul write-offs to some extent.

Capitalisation

In Europe, banks are in general currently actively cleaning up and strengthening their balance sheets. The Estonian banking sector[4] has already adjusted to the changes in the operating environment and remains on a solid ground. Hence, there has been no need to make significant changes in the **structure of the balance**

4 In this chapter, banks are considered in consolidated view; the branches of foreign credit institutuions operating in Estonia are not considered.

Figure 13. Banks' income and expence items (% of average assets in a quarter * 4)

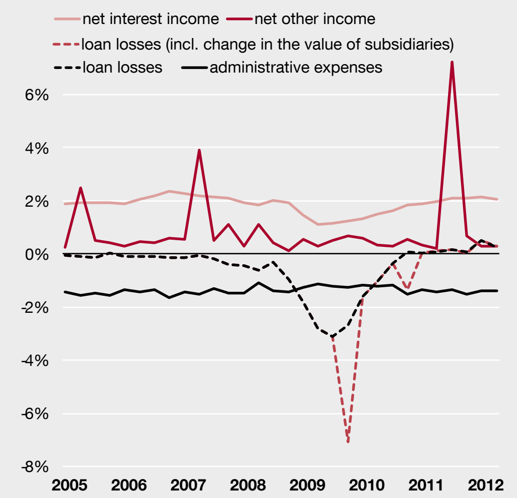
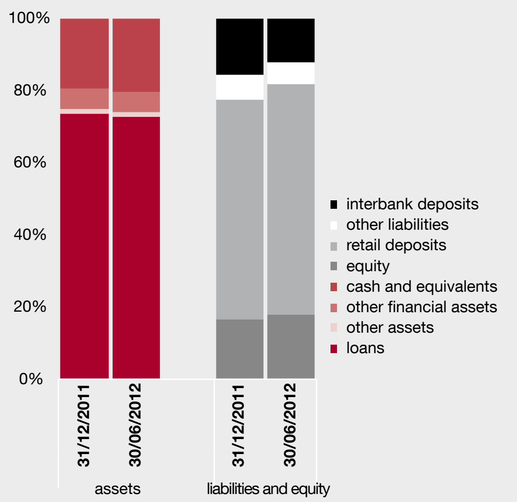


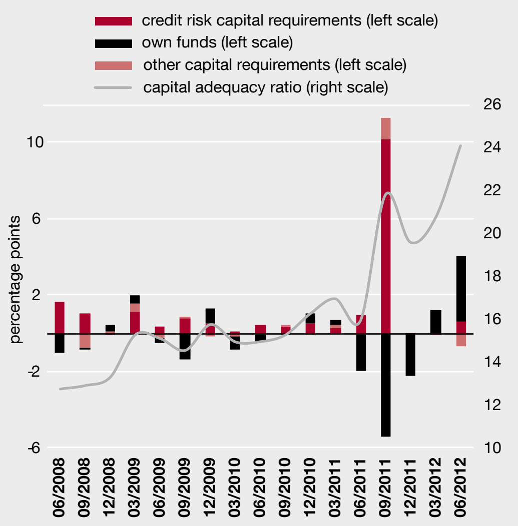
Figure 14. Aggragate balance sheet of the banking sector (consolidated)



sheet over the past half year (see Figure 14). All the banks have increased their own funds and because of vigorous growth in the deposits of non-financial sector, the funding of banks is more and more retail deposit based. The share of loans in banks' assets has somewhat decreased. Loans constitute 73% of total assets.

The Estonian banking sector is very well capitalised in the international comparison. Some of the banks exceed the minimum capital requirement of 10% established in the country by two times. The banking sector's capital adequacy ratio reached 24%[5] in the second quarter of 2012. This is the best result observed in the last four years. Capitalisation has mainly improved through capital increase (see Figure 15). Capital has been increased at the expense of unallocated profit of previous periods (561 million euros). In the second quarter of 2012, a remarkable 48 million euros of Tier 2 capital were reimbursed.

Figure 15. Quarterly change in capital adequacy ratio by components



As a result, the share of the Tier 1 capital (which has more loss-absorption capacity) in own funds increased to 99%, further improving the quality of own funds. The **core Tier 1 capital ratio**[6] of the local banking groups is extremely high. By the end of the second quarter, it reached 23.8%. All the banks fulfilled the minimum requirement of 10% with Tier 1 capital only. The interest of the bank groups in keeping such a high volume of own funds in Estonia is related to the favourable local income tax system, since from the group's point of view it is not important where the capital is located.

The improvement of capital adequacy was positively influenced by the decrease in risk assets. Although banks' credit portfolios have been steadily increasing since April, indicating that the more than three years long decrease in loan volume has probably stopped, banking sector's capital requirements to cover credit risk continued to decrease in the first half of 2012. Capitalisation was also positively influenced by the decline in capital requirements for coverage against other risks, except the currency risk.

5 Based on Basel II methodology.

6 Includes in own funds only share capital, reserves and unallocated profit.

Forecast for and stress test of the overdue loans of the banking sector

The quality of the banks' loan portfolio continued to improve in 2012. The share of loans overdue by more than 60 days in total loan portfolio decreased a little faster than expected, thanks to both a faster decline in overdue loans as well as the recovery of the credit market. Unlike in the second half of 2011, in the first half of 2012, overdue loans mainly decreased owing to write-off. It is expected that in the near future, a substantial part of the decrease in the stock of overdue loans will also be explained by write-off.

Henceforth, the decrease in overdue loans should slow down. However, loan portfolio stock will start to increase. Due to the combination of these two factors, the decrease in the share of loans overdue by more than 60 days in the loan portfolio will continue at a steady pace. **It is expected that in the last quarter of 2012, the share of overdue loans in loan portfolio will drop to 4.2% and by the last quarter of 2013 have further shrank to 3.8%.** Whether the actual share of overdue loans corresponds to the forecast, depends largely on banks' decisions on write-off (see Figure 16).

Provisions for loan losses are in decline due to write-offs. The reversion of provisions into profit will remain modest and the coverage of loans overdue by more than 60 days with loan-loss provisions will remain around 80%.

In the present distribution it is conservatively presumed that the banking sector will earn a profit of 300 million euros[7] in 2012. Since the loan portfolio will not increase significantly and base interest rates will decrease, banks' net interest income will also decline. Banks'

7 Since provisions will not increase in 2012, profits before and after write-off are equal, provided that provisions are not reversed into profit and the stock of provisions only decreases with write-offs.

Figure 16. Loans overdue by more than 60 days as percentage of the loan portfolio

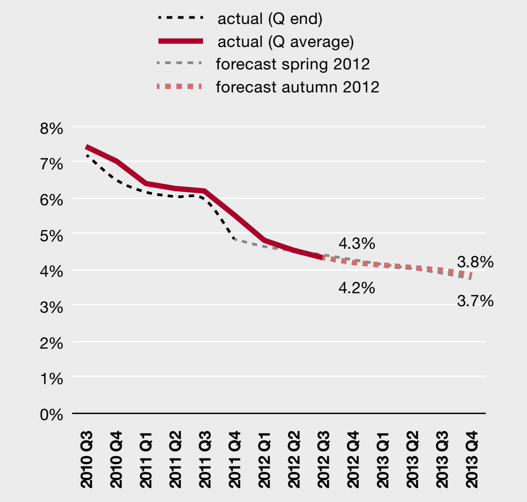
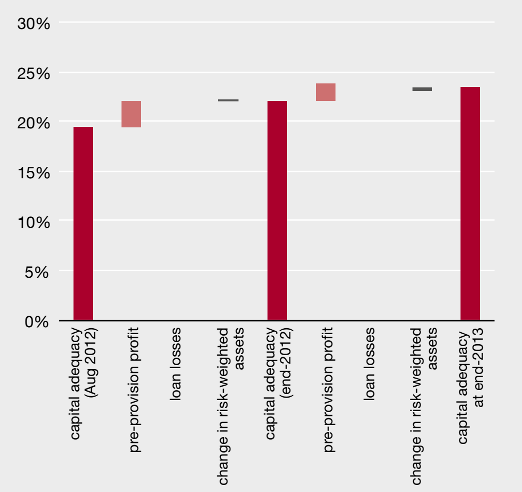


Figure 17. Projected change in capital adequacy ratio by components



profits before loan losses are expected to be 10% lower in 2012 compared to 2011.

Based on the assumptions of the forecast and provided that dividends will not be distributed, it is estimated that the capitalisation of the banking sector[8] may increase up to 22% by the end of this year and a further one and a half percentage points up to 23.5% in 2013. The continuing rise in the capital adequacy ratio is largely related to the profit earned by the banking sector (see Figure 17). The change in the loan portfolio volume has no significant effect on capitalisation during the period under review.

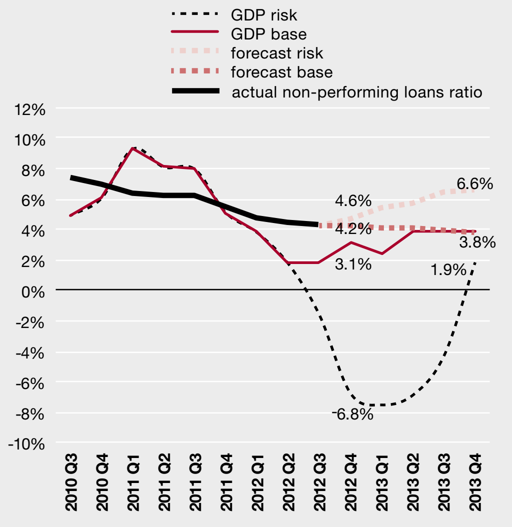
Stress tests

The risk scenario considers foreign demand shock that is modelled similarly to the autumn 2008 events. Hence, the current risk scenario is similar to the 2011 autumn forecast alternative scenario. GDP will decrease by 0.7% in 2012 and by 4.4% in 2013. At the lowest point of the decline, in the first quarter of 2013, the decrease will even reach 7.6%. GDP will start to recover in the last quarter of 2013. As a result of this shock, the loan repayment ability of companies and households will deteriorate. Furthermore, the share of overdue loans in the loan stock would reach 6.5% in the last quarter of 2013. Regarding consumer credit, the share of overdue loans would exceed the level of the last crisis. The ratio between companies' and households' overdue loans would remain below the highest level recorded in 2010. In the current economic environment, banks are less sensitive to such a shock (see Figure 18).

Despite lower sensibility, overdue loans will increase substantially. Hence, banks will have to make additional loan provisions. In order to achieve the 80% coverage of overdue loans

8 Credit instituions operating in Estonia on a solo basis.

Figure 18. Loans overdue by more than 60 days and GDP growth



Source: Eesti Pank

by loan-loss provisions, banks should raise provisions by 30%, that is, they should make additional provisions of 140 million euros from the second quarter of 2012 till the last quarter of 2013. Although banks' profits before write-offs will decrease as a result of such a shock, profits would remain more than one-and-a-half times higher than the additional provisions needed during the period under review. According to the model, the existing buffers would not decrease in case of the negative scenario.

If the stress test scenario materialises, it will have no significant effect on banking sector's capitalisation. The capital adequacy ratio will exceed 21% by the end of 2012 and banking sector's capitalisation will remain approximately at the same level, despite the fact that income will be considerably lower in 2013. This is due to the continuous increase in own funds at the expense of profit, while banks' capital requirements are lower due to a decrease in the loan portfolio.

Towards common banking supervision in Europe

At the end of June 2012, the European Council set the objective to strengthen the EU financial sector framework, or in other words, to move towards establishing a common banking union. The three pillars of the union would be a single supervisory authority, a resolution fund for the reorganisation of banks, and an EU-wide deposit guarantee scheme. Based on the Council's decision, the European Commission presented a draft regulation in September, which proposes new powers for the European Central Bank (ECB) for the supervision of credit institutions, and a single supervisory mechanism (SSM).

The draft sets out that the ECB will have direct responsibility for supervision and decision-making within the scope of EU regulations, and it will act as a consolidating supervisor for euro area banks. The ECB would become responsible for specific supervisory tasks such as authorising credit institutions; ensuring compliance with prudential requirements; assessing banks' risk profiles; and implementing capital buffers and macro-financial stability measures, to name a few. The ECB would also gain the right to collect and verify data, and to implement sanctions.

Practical supervision would be carried out jointly with national supervisors, who would continue to be responsible for day-to-day supervisory tasks and decisions. To separate supervision related and monetary policy decisions from each other, the draft sets out the establishment of separate decision making body – the supervisory board.

According to the draft proposal, the single supervisory mechanism will be launched on 1 January 2013. The role of the ECB is envisaged to grow gradually: banks of major systemic importance should be put under common supervision by mid-2013 at the latest, and by January 2014, all banks in the euro area would be covered by the SSM. Non-euro area countries may join the SSM on a voluntary basis by signing a cooperation agreement with the ECB.

Setting up an EU-wide banking union is an important step in preserving the integrity of the single market. The success of the banking union lies in the mutually supportive and efficient functioning of its three pillars: common supervision, the deposit guarantee scheme, and crisis management. Thus, besides setting up the SSM, the other components of the banking union need to be developed further, too.

In addition to responsibility for micro-prudential supervision, the draft foresees granting the ECB also the right of implementing macro-prudential measures, for instance, countercyclical capital buffers. Eesti Pank considers macro-prudential policies to be a significant component of the national economic-policy framework. That is why the legal and institutional structure of the common banking union should allow the member countries to continue using macro-prudential instruments in the future. As a banking supervisory authority, it is the task of the ECB to ensure banks' compliance with these requirements.

The Estonian banking sector largely consists of Nordic banking groups, which is why the scope of the banking union is significant for Estonia. It is important that setting up a euro-area wide supervisory authority would not hinder Estonia's cooperation with other Baltic and Nordic countries. Estonia supports establishing common banking supervision, crisis management and deposit guarantees for all EU banks inside the single market. For that reason, joining the SSM should be made attractive also for non-euro area EU members. Among other aspects, the practical implementation of supervision and collaboration with national supervisory bodies should be carefully considered.

INSURANCE COMPANIES

The euro area sovereign debt crisis, volatility of financial markets, low interest rates and recession are the main factors undermining the financial position of the European insurance sector. Last year, EIOPA[9] ordered a pan-European harmonised stress test for the insurance sector, with the aim to assess insurance companies' ability to cope in the environment of low interest rates. It was difficult to quantify the impact of different factors. However, according to EIOPA, the European Union insurance sector is in general resistant and well capitalised to cope with the crisis.

Likewise, the Estonian insurance market is also well-capitalised. In 2011, insurance companies' **own funds** exceeded the capital requirement norms by almost five times. Moreover, in the first half of 2012, the Estonian insurance market started to recover. The stabilisation of domestic economy allowed collecting more insurance premia, and the profitability of investment portfolios was high. The combined effect of the factors in question generated a substantial increase in profit[10] (see Figure 19).

Life insurance

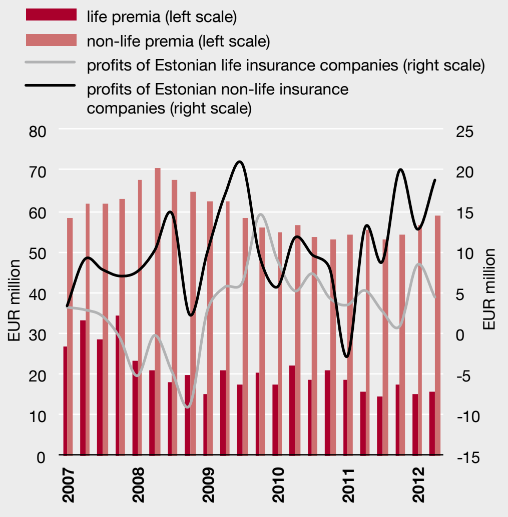
The start of 2012 was very profitable for life insurance companies, both thanks to successful investment activities as well as to a better insurance landscape (see Figure 20). During the first two quarters of 2012, life insurance companies registered in Estonia earned a **profit** of nearly 13 million euros (an increase of 47% compared to the same period last year). This even exceeds the profit earned during 2011[11]. The average profitability of assets was 1.9% from the second quarter of 2011 till the second quarter of 2012.

9 The European Insurance and Occupational Pensions Authority.

10 The volumes have also increased as a result of the merging of insurance companies.

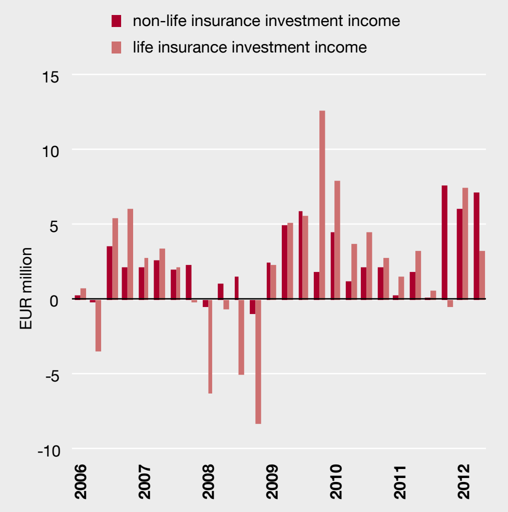
11 Since the beginning of 2011, data do not include figures from ERGO Life Insurance.

Figure 19. Profit of insurance companies and premiums from residents



Source: Statistics Estonia, Eesti Pank

Figure 20. Net investment income



In the first and second quarter of 2012, insurance companies collected 10% less of **life insurance premia** compared to the same period last year. Although the receipt of premia continued to decrease in yearly view, the decrease slowed down. Furthermore, **claim payments** were also only 5% higher than in the first half of 2011. As expected, pension insurance payments market grew the most, since more and more persons, investing in the mandatory second pension pillar, are reaching the age of retirement. The number of contracts annulled has not changed significantly.

Despite the somewhat better economic performance in the first half of 2012, there are high risks in life insurance. The share of insurance premia collected by insurance companies in unit-linked contracts cannot be compared to the share observed years ago (60% of the collected premia vs. the current 37%). The risk of a change in the profitability of investment in unit-linked contracts is borne by the insured. Hence, insurance companies have become more exposed to financial risks.

Market risk is the highest risk for life insurance companies. The financial positions of the companies are currently threatened by the extremely low long-term interest rates, since under these conditions, long-term obligations of life insurance insurers to policyholders have become significantly more expensive. The problem is even more serious, if insurers will have ensured a minimum guaranteed rate of return for the insured. The average guaranteed rate of return on insurance obligations of the local insurance companies is 3.5%. This is higher than the average profitability of the securities' portfolio of the insurance companies. In the first and the second quarter of 2012, investment profitability was a little higher than 2.5% in the current year comparison (see Figure 21). A number of contracts concluded earlier cannot be changed. Hence, if interest rates remain at low levels for a long

Figure 21. Difference between investment profitability of life-insurers and guaranteed returns to the insured

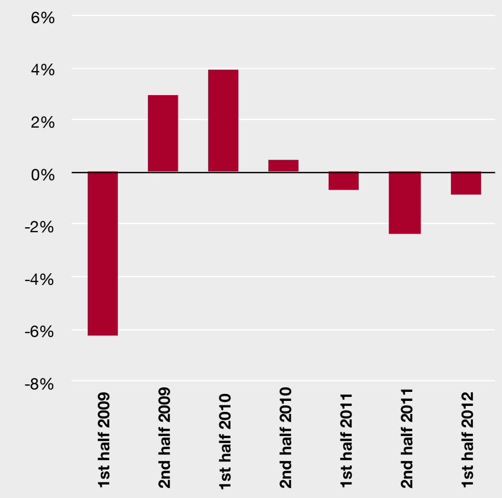
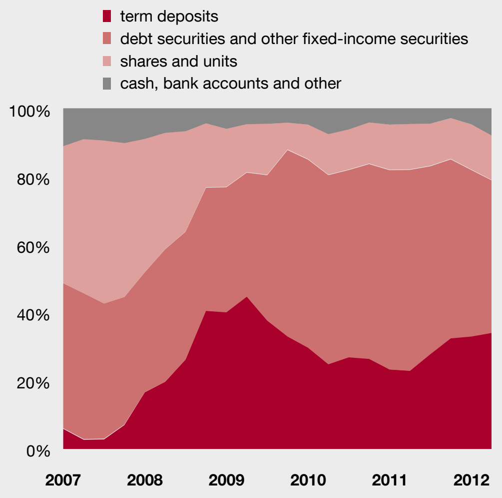


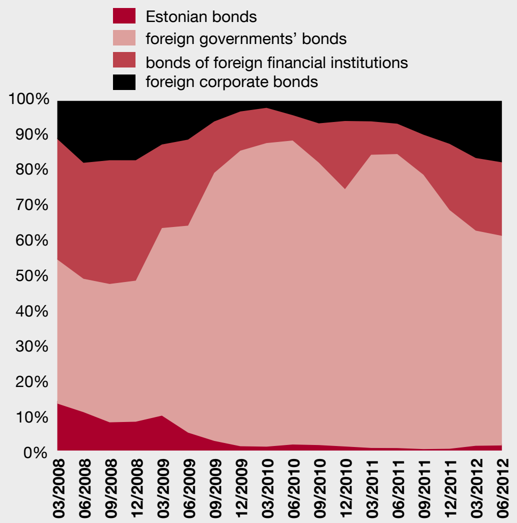
Figure 22. Investment of life-insurance companies



period, the sector is vulnerable. Obligations stemming from insurance contracts with a guaranteed rate of return constituted 45% of total liabilities at the end of the second quarter.

The largest part of the investment portfolio and the assets portfolio is constituted by bonds and other securities with a fixed rate of return (45%). During the last year, however, their volume has decreased (see Figure 22). The profitability of government bonds of European countries, where there are no problems with public finances (Germany, Finland, the Netherlands), has dropped to a record low. As a result, **investment** in government bonds have been somewhat cut down and money is instead invested into the bonds of non-financial companies having a high rating (see Figure 23). The share of bonds of the euro area governments facing problems in the total portfolio remains under 10%. Insurance companies also keep more liquid assets, cash for example, and prefer term deposits despite low deposit rates. Although the prices on the European equity market seem appealing, they remain very volatile and at a significantly lower level than before the 2008 crisis. Hence, investment in shares is instead kept at a neutral level.

Figure 23. Debt security investment of life insurance companies by issuer



Non-life insurance

The non-life insurance market continued growing owing to economic recovery and higher rates. In the second quarter of 2012, growth was even faster than before. In the first half of 2012, **premia** started to grow mostly thanks to the recovery of the vehicle insurance market. The structure of insurance premia has not changed. Property insurance has increased somewhat faster. Insurance premia collected in the first half of 2012 on the Estonian market exceeded those collected during the same period a year ago by 6%. However, revenue of non-life insurance companies registered in Estonia was only 1% higher than in the first half of 2011. The volume of **claim payments** in non-life insurance paid by Estonian insurance companies dropped at the same time by 12%. The net loss ratio[12] was at a very good level, at 50% (see Figure 24). The net loss ratio is expected to rise due to price pressure caused by strong competition.

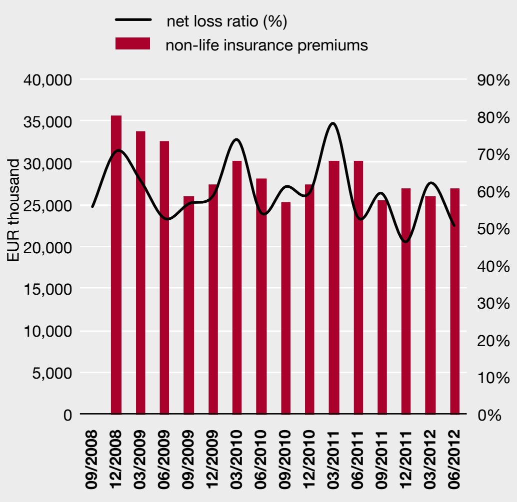
Despite the increased operating expenses (a growth of 18% compared to the same period last year), insurance companies' insurance technical result remained very good thanks to the lower claim payments in non-life insurance. At the end of the second quarter of 2012, revenue from insurance activities exceeded the expenses by 20 million euros, which is more than two times higher than during the same period last year. The **profit** of the Estonian non-life insurance companies also increased by the same proportion: 31 million euros in two quarters. In addition to the profit from insurance activities, this number also includes the 13 million euro profit from financial investments (see Figure 20). Investment earnings increased by several times. A larger

12 The occurred net claims from reinsurance / earned net premia from reinsurance.

volume of financial investments also contributed to the profit: a growth of 8% compared to the same period last year. The total financial assets of the non-life insurance companies amount to 413 million euros, exceeding the liabilities arising from the insurance contracts by 215 million euros. This provides the banks with an extensive liquidity buffer.

Due to uncertainty on securities' markets, conservative investment strategy was pursued. Money was mainly placed into bonds and term deposits. The share of bonds of the Euro area governments facing problems in total portfolio is close to zero. At the same time, similarly to life insurance providers, the trend is to increase **investments** in companies' bonds and shares. In the second quarter of 2012, the return on investment for the current year was 4.5%.

Figure 24. Claims and net loss ratio in non-life insurance



Source: Statistics Estonia, Eesti Pank

IV. SYSTEMATICALLY IMPORTANT PAYMENT AND SETTLEMENT SYSTEMS

PAYMENT AND SETTLEMENT SYSTEMS OF EESTI PANK

In the first half of 2012, 99.6% of the payments settled through the interbank payment and settlement systems managed by Eesti Pank were settled in the Settlement System of Ordinary Payments, the ESTA. Payments settled through TARGET2-Eesti constituted 93.7% of the total value of payments (see Figure 1).

In the first half of 2012, an average of 99,606 payments a day were settled in the **ESTA** at a total value of 128 million euros. The value of payments settled in the ESTA increased by 10% in the first half of 2012 compared to the same period in 2011 and the number of payments by 3%. The average size of a payment settled in the ESTA in the first half of 2012 was 1,284 euros. This figure was 6% lower a year earlier.

The value of payments settled in the ESTA reflects the general economic activity. In 2009, when GDP growth dropped nearly 15%, the value of payments settled in the ESTA also decreased by 17% in year-on-year comparison. When GDP growth recovered, the value of payments settled in the ESTA increased in comparable proportions. Today, after the exit from recession, the value of ESTA payments has once again reached the level of 2008 and even exceeded it (see Figure 2).

Around 374 payments a day were settled in the **TARGET2-Eesti** in the first half of the year at a total value of 1,897 million euros. The number of payments settled in the TARGET2-Eesti increased by 18% and the value by 69% compared to the same period last year. The growth in the value of payments in the TARGET2-Eesti resulted from the active use of the overnight deposit facility by banks. The average daily value of customer credit transfers settled in the TARGET2-Eesti in the first half of 2012 was 41 million euros. Customer credit transfers constituted 2.2% of the value of

Figure 1. Payments made in Eesti Pank's payment and settlement systems (daily averages)

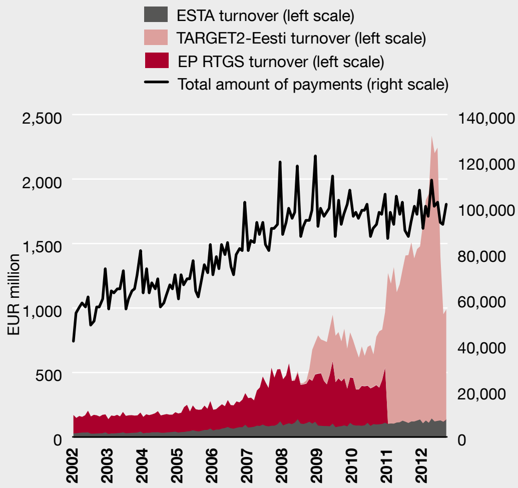
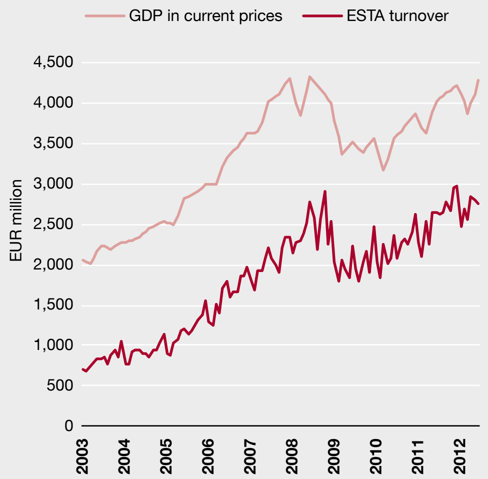


Figure 2. Comparison of ESTA turnover and GDP



payments settled in the TARGET2-Eesti and two thirds of the number of payments.

The reduction of the reserve requirement at the beginning of 2012 did not cause **liquidity risks** in banks. In the monetary policy operations carried out with the central bank today, four banks introduced at the start of the year the possibility to use the collateral pooling system (that is, to pool underlying assets)[1]. This is in addition to the earmarking collateral system that banks have been using for some time now. The reason for the little usage of the collateral pooling system is the sufficient liquidity buffer available for the settlement of payments.

On July 11, the European Central Bank decided to lower the interest rate on the deposit facility to 0.00%. As a result, banks have no longer used the overnight deposit facility in the central bank and the average daily value of payments settled in the TARGET2-Eesti has considerably decreased. The amount of money held by commercial banks in their accounts with Eesti Pank has tripled compared to the first half of the year (see Figure 3).

RISKS TO THE PAYMENT AND SETTLEMENT SYSTEMS AND THE OVERSIGHT ASSESSMENT

In the first half of 2012, there were no considerable incidents in the operation of the payment and settlement systems of Eesti Pank[2]. The **availability** of both the TARGET2-Eesti and the ESTA was 100% (see Figure 4).

1 In the pooling system, the monetary policy operation counterparty makes a pool of sufficient underlying assets available to the central bank to cover the related credits received from the central bank, thus implying that individual assets are not linked to specific credit operations. By contrast, in the earmarking collateral system, each credit operation is linked to a specific identifiable asset.

2 A failure qualifies as a considerable failure, when several participants in the payment and settlement system are affected by an incident or if measures to ensure the business continuity must be implemented or if the failure entails a decrease in the availability of the payments and settlement systems.

Figure 3. Average account balance compared with payments made in TARGET2-Eesti

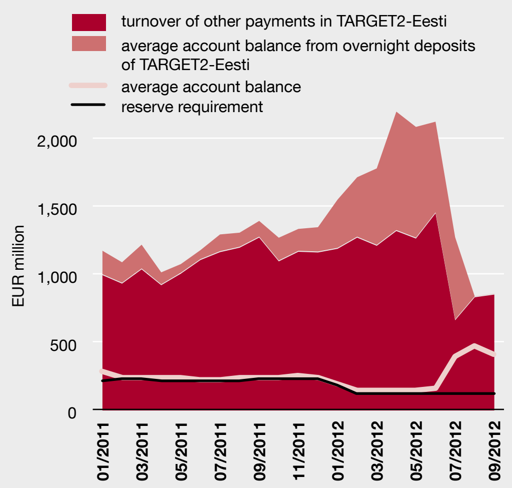
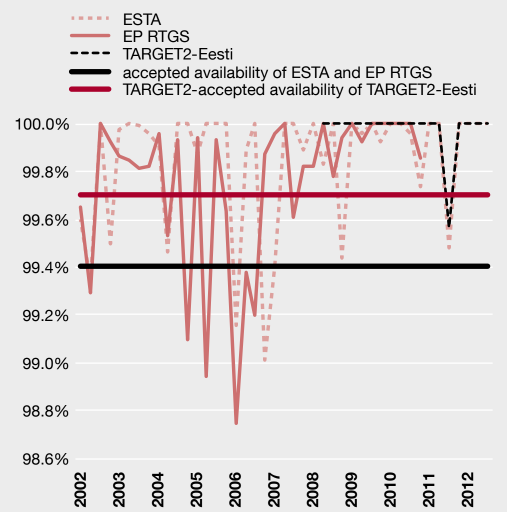


Figure 4. Availability of interbank settlement systems



Regarding the ESTA, there were some incidents in the information systems of the ESTA participants. These incidents, however, had no effect on the availability of the ESTA. The incidents were eliminated during the settlement day. There were three incidents that caused a delay in the start of the ESTA settlement day for the specific participant: twice, the reason was the materialisation of operational risks, and once, the bank did not have enough funds to make a collateral transfer to the ESTA. All the aforementioned incidents were quickly solved, they did not cause a systemic liquidity risk and by 10 o'clock at the latest, all ESTA participants were ready to participate in the work of ESTA. The ESTA has long working hours. It includes ten settlement periods, each an hour long. Hence, all in all, the above mentioned delays did not considerably hinder the settlement of payments.

In the first half of 2012, there was one significant incident in the **securities settlement system managed by the Estonian Central Securities Depository**. As a result, delivery versus payment securities transactions were disrupted for a short while in the first settlement cycle of the securities settlement system.

Regarding the problems pointed out by the oversight in its earlier assessments, it can be noted that Eesti Pank as the operator of the payment and settlement systems has implemented measures making it possible to start an ESTA day in case of a TARGET2 system failure. According to the oversight assessment, in order for the solution to function effectively, banks should start using the collateral pooling system more extensively. Attention is continually being paid to the recommendation to develop measures enabling the settlement of interbank payments on TARGET2 holidays coinciding with a domestic working day (Easter Monday).