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Bank of Estonia

Financial Stability Review

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SUMMARY

The robust economic growth witnessed in the last years slowed down to 9.8% in the first quarter of 2007. The smooth deceleration of growth is facilitated by the better than expected economic situation in Europe. Eesti Pank estimated the economic growth for 2007 to be 8.4%, and 6.5% and 5.6% in the following two years.

The external factors affecting Estonia's financial sector were relatively favourable international liquidity environment and strong growth in Estonia's main export markets. At the same time, both the financial and non-financial sector must still take into account any further increase in the Euribor.

Corporate financial behaviour and risks

Generally, Estonia's rapid economic expansion has been reflected in good financial results of local enterprises. However, the shortage of labour and raw materials together with the resulting growth in costs has started to have a negative effect on the **profitability** of some fields of activity. The confidence indicators of the corporate sector had improved even further by the beginning of 2007 owing to strong domestic and external demand. Nevertheless, the number of bankruptcies started to rise in the second half of 2006, whereas the number of new enterprises has been declining.

The good economic performance of companies has been accompanied by high investment activity, which is why the growth rate of corporate **debt** has remained fast as well. The level of indebtedness rose to 71% of GDP by the end of March 2007. Borrowing was as active at the beginning of 2007 as in 2006 but since March 2007 the growth rate of corporate debt has been slowing down.

The majority of corporate investment was still made in **real estate**. The rapid economic expansion brought about a strong demand for retail and office spaces. Thus, real estate developers are now also focusing on the office space market in addition to the housing market. In the coming years, the number of new spaces is expected to grow which means that vacancies are to increase, particularly in case the economic environment should change.

Financial behaviour of households and related risks

The rapid rise in net wages and employment rate improved the **economic situation** of households and shaped their future expectations. Although the growth of household financial assets and deposits remained fast, the borrowing activity has been even higher and the net financial position has considerably deteriorated. Consequently, households' shock-absorbing ability has diminished. Household **credit growth** has remained fast, even though the housing market has been cooling down and the number of housing loan customers has started to decrease. Rapid wage growth has boosted the volume of consumer credit.

While in recent years the terms and conditions of loans issued to households have been gradually loosened, by the beginning of 2007 this process had come to an end and the credit environment has become stricter. This is clearly expressed in the rise of average loan interest rates, which keeps adding to the interest burden of households. However, the rapid growth of net incomes has largely offset the impact of rising interest costs on households' financial situation. The growing share of fixed-rate housing loans shows that acknowledging the increase in interest rates has made households to be more risk-conscious. Nevertheless, this does not affect the total loan stock much. Households' loan portfolio is still exposed to interest rate risks, as loans with floating interest rate continue to hold the largest share in the total loan stock.

Since **real estate prices** are high, the number of potential borrowers has fallen. This has resulted in a decrease in the number of real estate transactions, a slowdown in price growth and an increase in supply. As the demand for older apartments is higher owing to their price advantage and fixed supply, then the main risks are related to the market of new dwellings. The poor sale and the pos-

sible price correction entail less resources for real estate developers to service the existing liabilities and finance new projects which depends on their financial leverage and liquidity buffers.

Banking market

Competition in the banking market has remained tough and the number of market participants has increased. The most important change is the transfer of the ownership of Sampo Pank – as from 1 February 2007, the bank belongs to the Denmark's largest banking group, the Danske Bank Group. The assets of branches of foreign credit institutions and credit institutions controlled by non-resident financial groups comprised 98% of the total assets of banks operating in Estonia.

The **quality of assets** has remained good during the past two quarters both in case of banks as well as banking groups. At the same time, given the further possible interest rate rise and a slowdown in economic growth the small share of loans overdue is likely to start growing in the near future.

As regards the regulatory amendments made in 2006, the commercial banks responded by including additional own funds, continuing their operations on quite the same scale as before. Since additional own funds predominantly consisted of subordinated liabilities (received from parent banks), the share of Tier II own funds grew significantly. Differences in the **capitalisation** of banks have increased as well. Some banks have started to keep their share of own funds close to the regulatory minimum requirement, i.e. 10% of risk weighted items. At the same time, the regulatory requirements valid in Estonia are more conservative than the minimum rates established for commercial banks in the EU. In Estonia, the capital adequacy ratio is 10% and the risk weighting on housing loans is 100%, whereas in Europe the respective figures are 8% and 50%. This ensures an additional capital buffer of approximately 3% compared to the EU minimum required rates. Therefore, it can be said that owing to the stricter regulatory requirements, banks have sufficient capital buffers to withstand the risks in the changing economic environment.

The share of **liquid assets** in the banking sector's total assets has not changed much over the last half-year. The higher reserve requirement valid from 1 September 2006 has contributed to the increasing share of highly liquid assets in banks' total assets. But since the growth rate of deposits has been lower than that of loans, the domestic banking sector has become even more dependent on financing by parent banks.

The **profitability** of banks has been supported by the rise in key interest rates. The increase in banks' interest expenses has been slower than the growth of interest income, as deposits are less affected by changes in the interest cycle while loan portfolios in Estonia mostly consist of floating rate loans. Low loan losses have also contributed to the profitability. However, income growth has been accompanied by an increase in operating expenses. The future profitability of banks depends, among other things, on the efficiency of their cost management.

Securities market and other financial intermediaries

The primary **bond market** and capitalisation grew in volume owing to the increase in the volume of issues by resident non-financial sector companies. The most significant events on the **Tallinn Stock Exchange** in the past half-year included the robust increase in stock prices, the following correction at the beginning of 2007, and the listing of shares of AS Ekspress Grupp on the stock exchange. Although the Tallinn Stock Exchange index OMXT reached a record level in February, by the end of May its annual growth had decreased to 49% owing to the falling stock prices.

Given the developments in the stock market, the growth of **investment fund** assets slowed down. The majority of new capital in investment funds was invested in stock funds, most of it being channelled to the EU stock markets. The growth of investment fund assets was boosted by the addition of five new funds in the list of funds registered in Estonia. The most popular investment region of the new funds is the Central and Eastern European market.

Pension funds have continued robust growth: the volume of second pillar pension funds has increased to 8.3 billion kroons and that of third pillar funds to 0.9 billion kroons. Growth stemmed primarily from the new capital invested in pension funds; the return on pension funds accounted for approximately a fifth of last year's growth in volume. Third pillar pension funds mainly comprise pension insurance; the share of pension funds in the third pillar accounted for about a third.

Both the **life and non-life insurance market** experienced balanced growth last year. The annual growth of collected gross premiums stood at 18% and 20%, respectively, which is comparable to last year's nominal GDP growth. Developments in the non-life insurance market are still driven by the favourable economic environment and credit growth. The life insurance market has been quite volatile. Growth has been primarily driven by unit-linked life insurance products.

Payment and settlement systems

According to the overseer, failures in the payment and settlement systems of Eesti Pank did not endanger the sustainable operation of the payment and settlement systems or the financial sector. Moreover, the overseer gave a positive assessment to the new service developed by the Estonian Central Register of Securities, which enables Delivery versus Payment (DvP) settlement for securities transactions in real time. The service is provided through the Real-Time Gross Settlement System of Eesti Pank (EP RTGS). One of the advantages of the new real-time service is that it helps reduce settlement risks.

The **connecting of the EP RTGS system with TARGET**, the payment system of the euro area, on 20 November 2006 extended the functionality of both the EP RTGS and the Settlement System of Ordinary Payments (ESTA). With longer operating time of the settlement system also customers' settlement opportunities increased. Moreover, the EP RTGS became a cross-border and multi-currency payment channel.

Conclusion and financial stability risks

According to the assessment of Eesti Pank, **risks to Estonia's financial stability are low**. The credit growth indicators for April and May signal a slightly more cautious credit behaviour of both borrowers and lenders. This means that risks to the functioning of the financial system, stemming from fast credit growth, are also diminishing. The recent strong investment activity has gained momentum from the rapidly increased borrowing by enterprises and households. The Estonian banking sector experienced even closer integration with Nordic banking groups, which ensures that our banks have sufficient capitalisation and liquidity, thus also contributing to the above development.

Meanwhile, the inflation pressures might start to weaken the competitiveness of enterprises. The real estate sector can be considered the most at risk, because its indebtedness is high and the strength of demand may have been overestimated during the period of rapid growth. The loan-servicing capability of households has remained good owing to the robust growth of wage income, but the risk of an abrupt decline in income growth has become more serious.

Owing to the more conservative attitude of banks and their owners, as well as to the stricter regulations that entered into force in 2006, the risk tolerance of the Estonian financial sector has improved. At the turning point of the economic and credit cycle, it is especially important to follow conservative credit standards and to be more careful when considering the borrowing ability and risk level of customers.

From the point of view of the further development of the financial sector, it is important whether banks' cost management is sufficiently flexible in order to maintain profitability in the changing environment.

According to Eesti Pank's assessment, financial stability is most threatened by the following risks: the growth of loan servicing costs and real estate prices exceeds income growth and earning ability; the real estate sector has overestimated the number of customers; a possible deterioration in the quality of banks' loan portfolio; slower growth of the income base. The materialisation of these risks may alter Eesti Pank's assessment in respect of financial stability.

I FINANCIAL BEHAVIOUR OF COMPANIES AND HOUSEHOLDS AND THEIR RISKS

COMPANIES[1]

Corporate business situation

Confidence

The **economic confidence indicator** calculated by the Estonian Institute of Economic Research indicated the persistence of a highly favourable situation also during the first months of 2007. In 2006, economic growth posted a record level in Estonia's history. The consumer confidence as well as the confidence indicators of construction, trading and manufacturing companies reached their historically highest levels (see Figure 1). The confidence of manufacturing companies improved as rapidly at the end of 2007 as the year before. The rise in the confidence of trading companies slightly slowed down and the indicators of construction companies remained somewhat more modest than a year ago.

The confidence of **manufacturing companies** improved during the first months of 2007 primarily owing to good expectations with regard to export orders (see Figure 2). The growth of production and sales also maintained the year-ago level as a result of strong domestic demand. In light of the high demand on the one hand, and the shortage of labour and raw materials on the other, the price growth in manufacturing accelerated to 7.5% in March 2007.

At the beginning of 2007, the **construction market's expectations towards the general economic situation** remained a bit more modest than a year ago. While in the first half of 2006 GDP growth was boosted mainly by construction and real estate development, in the second half of the year the growth decelerated precisely in these areas. Although demand in the construction market is still high, resource shortages do not promote

Figure 1. Confidence indicators of Estonian companies

Source: Estonian Institute of Economic Research

[1] In this chapter, "companies" refer to non-financial companies.

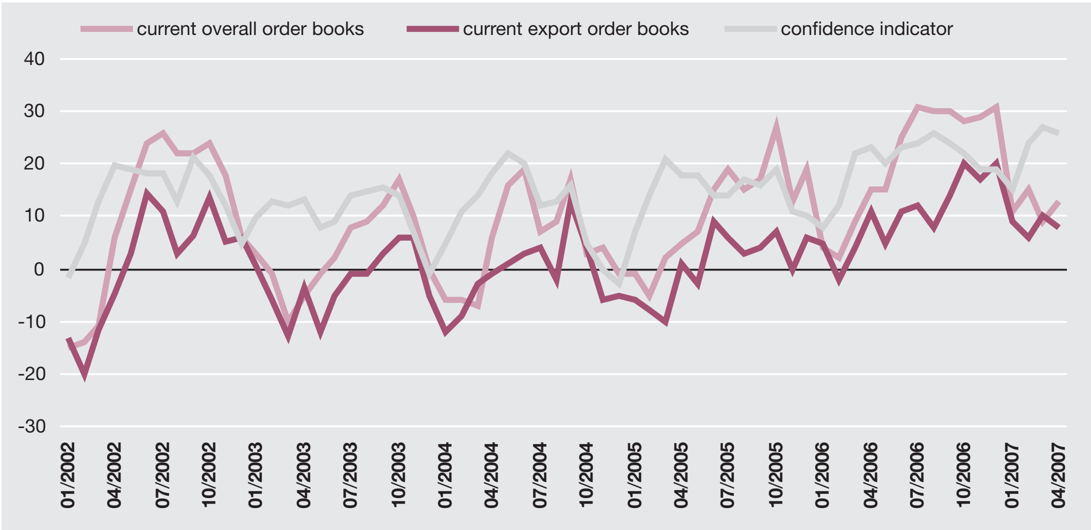


Figure 2. Demand for the production of manufacturing companies and confidence indicator

Source: Estonian Institute of Economic Research

growth but instead prolong the working period covered with concluded contracts.

Similarly to manufacturing, also the construction sector suffered from the shortage of labour and raw materials and the resulting faster growth of production costs. The construction price index reflecting the changes in production costs rose to 13.5% in the fourth quarter of 2006 and to 15.6% in the first quarter of 2007.

New companies and bankruptcies

The pace of establishing **new companies** started to abate in the second half of 2006. In 2006, 22% more companies were founded than in the previous year, whereas during the first four months of 2007 the number of companies established grew only by 6% (see Figure 3). Most of the new companies are real estate and construction firms. During the first four months of 2007, the share of real estate companies among all newly established companies even reached 40% (24% on average in 2006). Excluding these, the number of new companies has dropped by over 25% within the first four months of 2007. Fewer companies were established mainly in wholesale and retail trade, but also in agriculture, fishery and manufacturing.

Along with the declining number of new companies the number of **bankruptcies** started rising in the second half of 2006, exceeding the year-ago figure by 20%. From January to April 2007, 67 more companies went bankrupt, which is 50% more than during the same period the year before. 30% of the bankrupt companies were operating in the trade sector and slightly over 20% in manufacturing. The share of the latter among bankrupt companies has increased.

Corporate investment and economic indicators

The growth rate of corporate turnover remained slightly lower in 2006 compared to 2005. Nevertheless, the growth in total profits and in the value added reached the highest levels in recent years, amounting to 36% and 27%, respectively. Consequently, **profitability** increased (see Table 1).

An opposite trend could be noted in case of manufacturing companies: the growth of turnover accel-

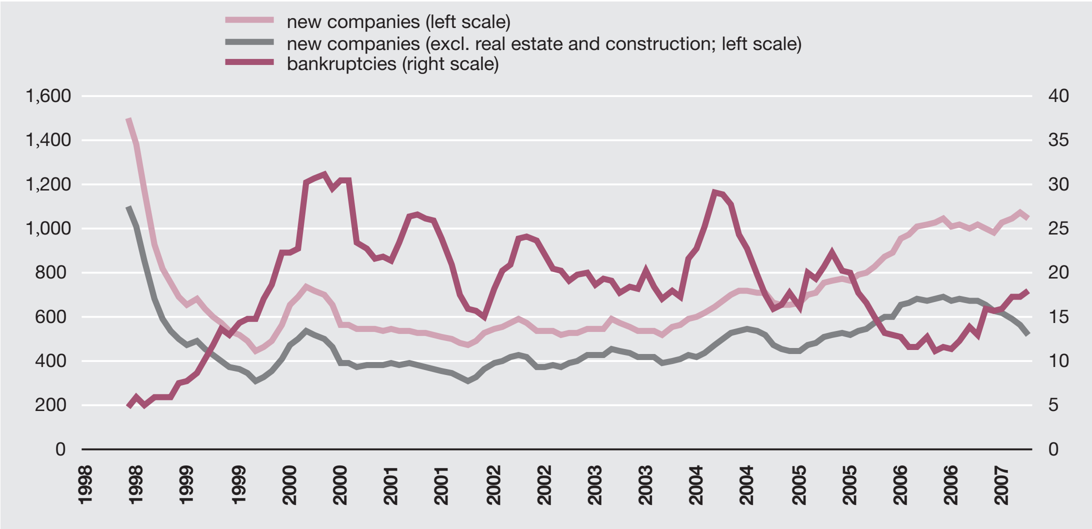


Figure 3. New enterprises entered in the commercial register within a month and bankrupt enterprises (6-months moving average)

Source: Estonian Enterprises Register

Table 1. Corporate indicators (%)

	All fields of activity			Manufacturing		
	2004	2005	2006	2004	2005	2006
Growth of net sales	13.7	20.3	19.5	13.8	15.3	17.3
Growth of total costs	14.8	19.4	18.1	15.1	14.3	17.8
Growth of total profit	0.1	32.8	35.9	0.6	27.0	12.3
Growth of value added	7.2	22.6	27.4	7.1	17.2	15.6
Total profit to net sales*	6.8	7.6	8.6	8.0	8.8	8.4

Source: Statistics Estonia

erated and that of profit slowed down. Though market conditions were favourable, the rapid growth of costs started to undermine profitability. Although total profitability declined slightly, the level achieved may still be considered good.

Investment growth was especially robust in 2006, having increased by 36% year-on-year (see Figure 4). The rapid growth continued in 2007 and a correction is expected no sooner than next year. Investment in fishing, agricultural, real estate, renting and business companies grew the most. The issue of investment structure raised in earlier forecasts, according to which the share of investment in machinery and equipment should start rising, has not found confirmation yet. On the whole, in 2006 the share of real estate investment in total corporate investment increased to over 60%, even reaching two thirds in the last quarter of the year. Investments were mainly channelled to the construction and renovation of buildings and facilities.

Corporate financial position and saving

In 2006, corporate financial liabilities increased more than financial assets. The negative volume of **net financial assets** rose by 29.6 billion kroons up to 232.4 billion (see Figure 5). However, as financial liabilities increased less than GDP, then

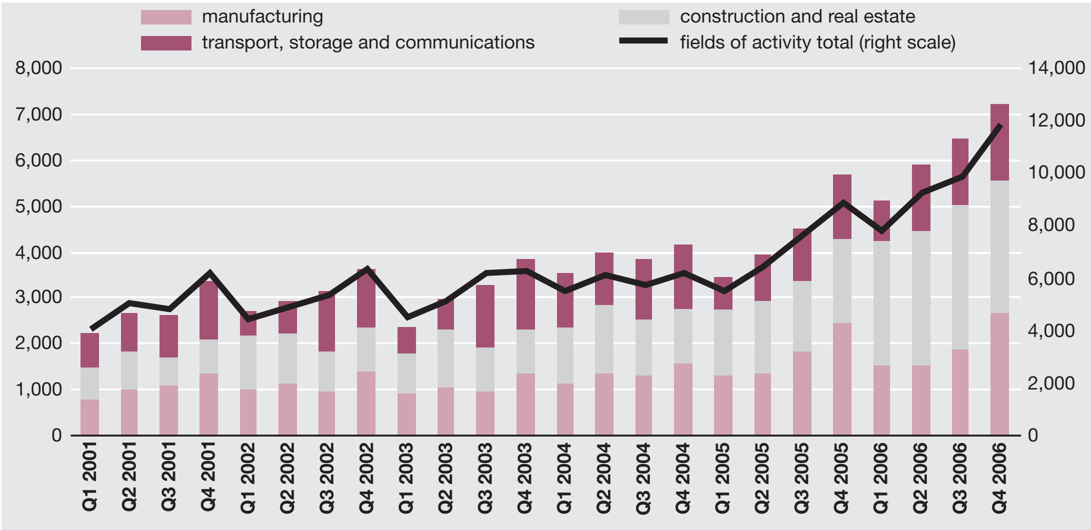


Figure 4. Corporate fixed investment (EEK m)

Source: Statistics Estonia

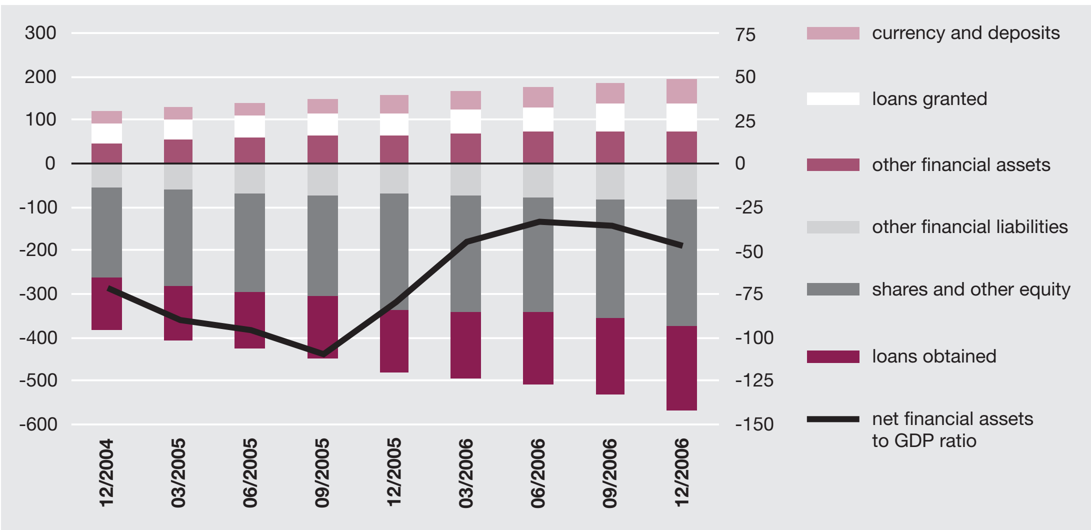


Figure 5. Corporate financial assets and liabilities (EEK bn; left scale) and net financial assets (% of GDP; right scale)

the negative net financial position decreased by 4 percentage points to 114% of GDP in 2006, i.e. to the level seen at the end of the fourth quarter of 2004.

The greatest share (slightly over 40%) of corporate **financial assets** consists of shares and other equity, which increased rapidly also in 2006 although not as fast as in 2005. The stock market correction in the second quarter of 2006 and the lower growth in the value of stocks compared to 2005 played an important part in this. In contrast, the volume of loans granted by the corporate sector increased considerably faster than in 2005. Their contribution reached 25% of the growth in total financial assets in 2006.

The year-on-year growth of **domestic corporate deposits** dropped since the fourth quarter of 2006 below 30%. This was mainly caused by the base effect deriving from the previous year's rapid deposit growth – actually, the monthly growth remained quite strong (see Figure 6). At end-March 2007, the share of time deposits in total deposits accounted for 30% like a year before. The volume of overnight deposits started increasing rapidly at the beginning of 2006 but subsided by the beginning of 2007.

Although the growth rate of **financial liabilities** remained slightly slower year-on-year (17% and 26%, respectively), the growth rate of corporate loans exceeded the previous year's indicator considerably (30% and 21%, respectively). The smaller growth of shares and other equity issued by companies compared to 2005 was partly caused by the impacts of the stock market correction in the second quarter of 2006 and a slower rise in the value of shares.

The strong growth of corporate loans and the modest increase in shares and other equity issued have caused a steep rise in financial leverage of the corporate sector. This is illustrated by a higher **debt-to-equity ratio**, which rose by 9 percentage points, year-on-year, to 67% by the end of 2006 (see Figure 7).

Corporate debt

As the investment demand continues to be strong, the corporate sector's demand for external funds remains high. In the second half of 2006, the **growth rate of corporate debt** started soaring again, after having slowed down at the beginning of the year, and reached 31% by the end of the year (see Figure 8). The corporate debt growth is primarily shaped by borrowing from domestic banks and leasing companies. By the year-end, the growth rate of lending from domestic banks and leasing companies totalled 47%. The share of foreign debt liabilities declined even further, reaching a quarter of the total debt at the end of 2006 (a third of the total debt the year before).

Although data on the external debt for the beginning of 2007 are not available yet, the growth rate of corporate loans issued by resident banks and leasing companies reached 47% also in the first quarter of 2007, like it did in the fourth quarter of 2006. Based on that, the total debt growth rate presumably remained at a level comparable with the end of 2006 also at the beginning of 2007.

As the growth of corporate debt picked up further, the level of **indebtedness** rose to 71% of GDP by the end of 2006, having grown by 7 percentage points within a year. Thus, the indebtedness of Estonian companies exceeded Finland's indicator for 2005 (68%) and also the aggregate euro area indicator for 2006 (69%).

In 2006, both domestic and foreign creditors increasingly financed real estate and construction companies who received almost 60% of the total external funds (43% a year ago; see Figure 9). As regards other sectors, transport, storage and communications companies received more funds than earlier, i.e. 11% of the external funds of the corporate sector in 2006 (2% in 2005). The financing of these fields of activity increased primarily owing to

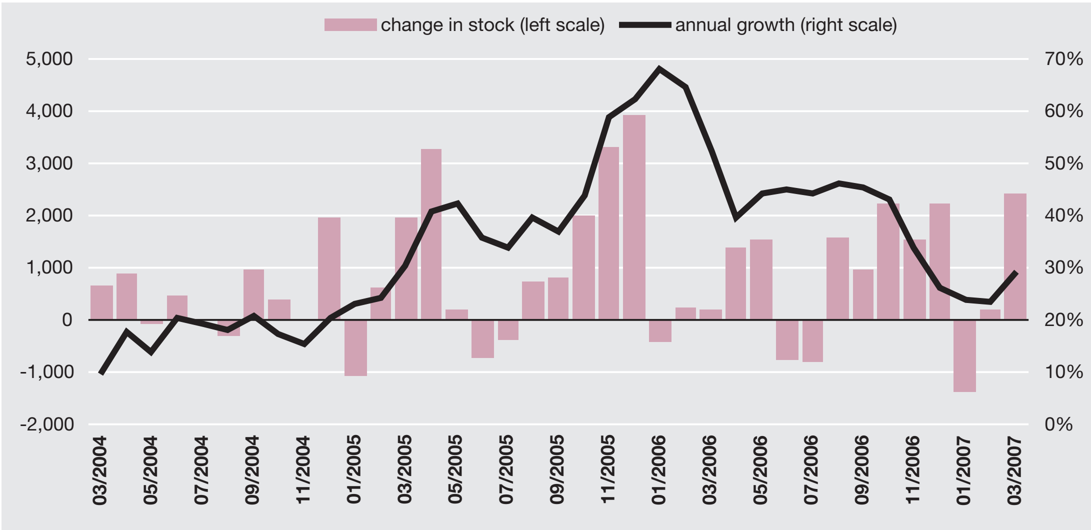


Figure 6. Growth dynamics of non-financial corporations' deposits

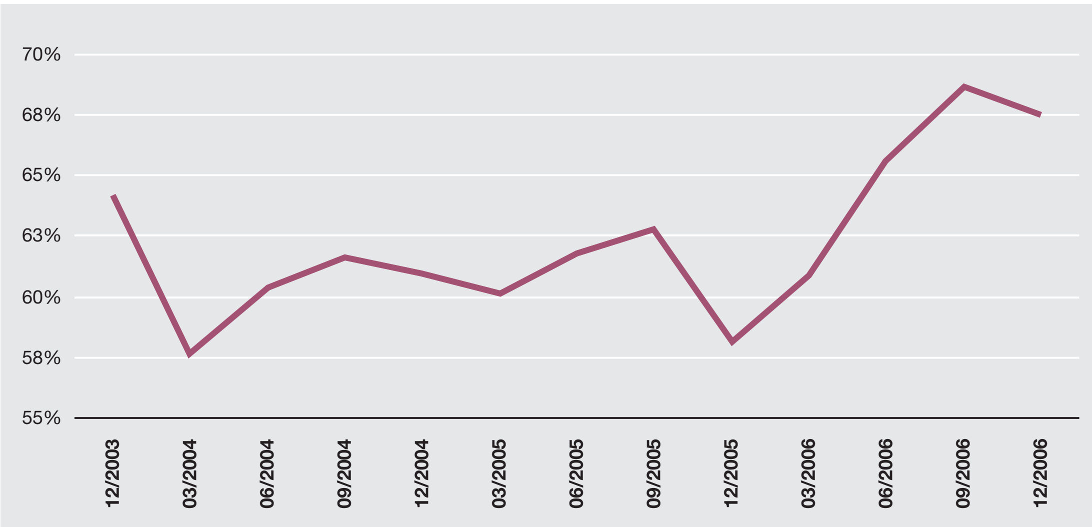


Figure 7. Corporate debt-to-equity ratio (%)

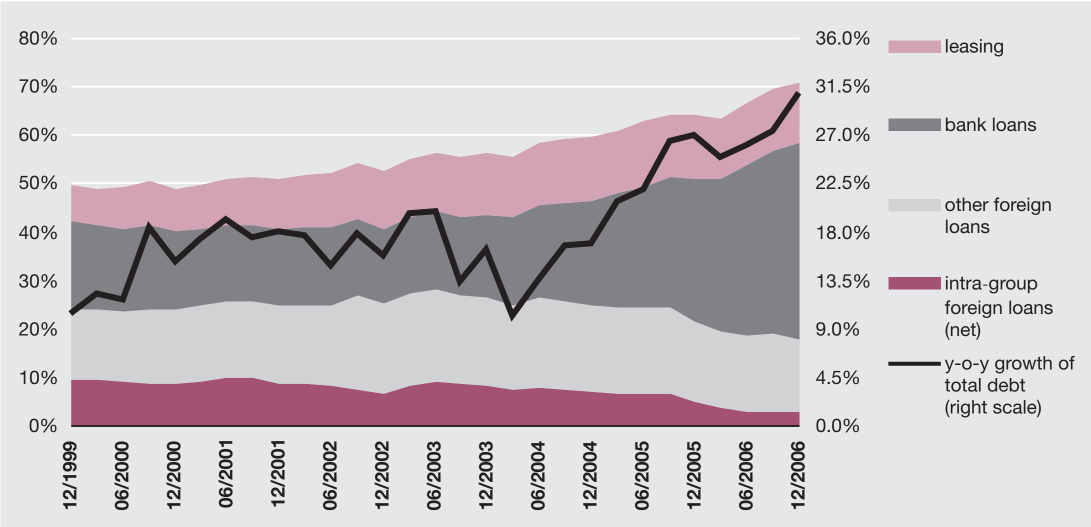


Figure 8. Corporate debt (% of GDP)

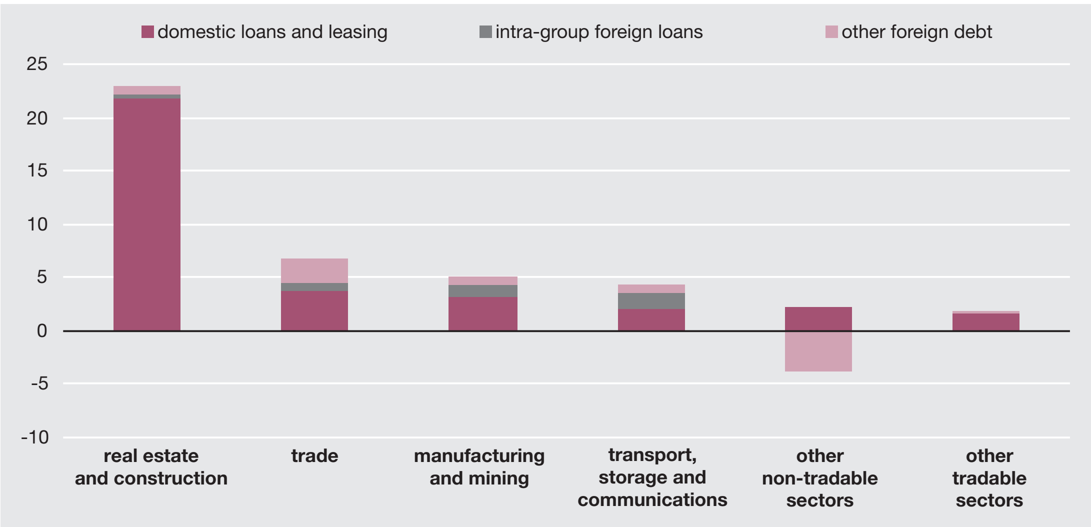


Figure 9. Corporate net borrowing in 2006 (EEK bn)

a decrease in the share of other non-tradable sectors as well as trade and manufacturing.

Real estate financing by domestic banks

Loans granted by domestic banks were again mostly used for acquiring real estate. At the end of March 2007, 60% (53.7 bn kroons) of funds taken from domestic banks was channelled into financing real estate (58% at the end of September 2006). The debt liabilities of real estate companies comprised 57% of this (56% in September 2006).

In other sectors (excluding real estate companies), borrowing to acquire real estate again increased faster than other loans (year-on-year growth reached 63% and 46%, respectively, at the end of March 2007). The total volume of real estate loans is 36 billion kroons, i.e. 44% of the debt liabilities of other companies (excluding real estate companies). Trade and construction firms and other business services companies were especially eager to borrow for real estate purposes from April 2006 to March 2007 (see Figure 10).

The **average interest rates on long-term corporate loans** have increased considerably as a result of higher key interest rates, reaching 5.7% in March 2007 (see Figure 11). The average interest margin, however, has not risen. Although banks have announced the application of stricter credit standards for real estate developers, statistics do not confirm this. The average interest margin on loans issued to real estate companies has not risen and is lower than the corporate average.

HOUSEHOLDS

Economic situation of households

Confidence and household budget surveys

According to the consumer survey compiled by the Estonian Institute of Economic Research, **household confidence** remained strong during the first months of 2007, though it no longer exceeded that much the estimates expressed a year earlier (see Figure 12). In 2006, the strengthening confidence of private consumers brought about higher con-

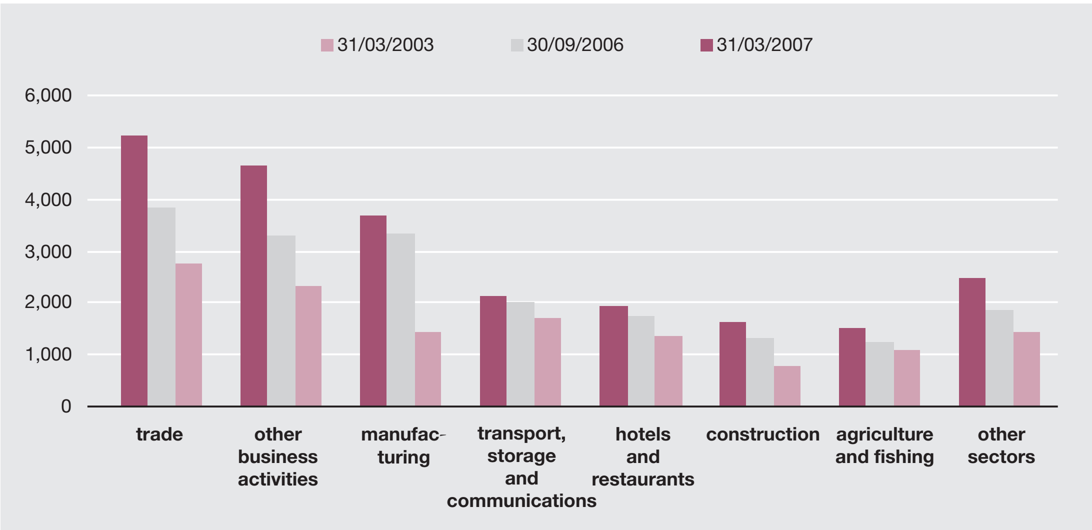


Figure 10. Bank loans taken by companies for acquiring real estate (EEK m)

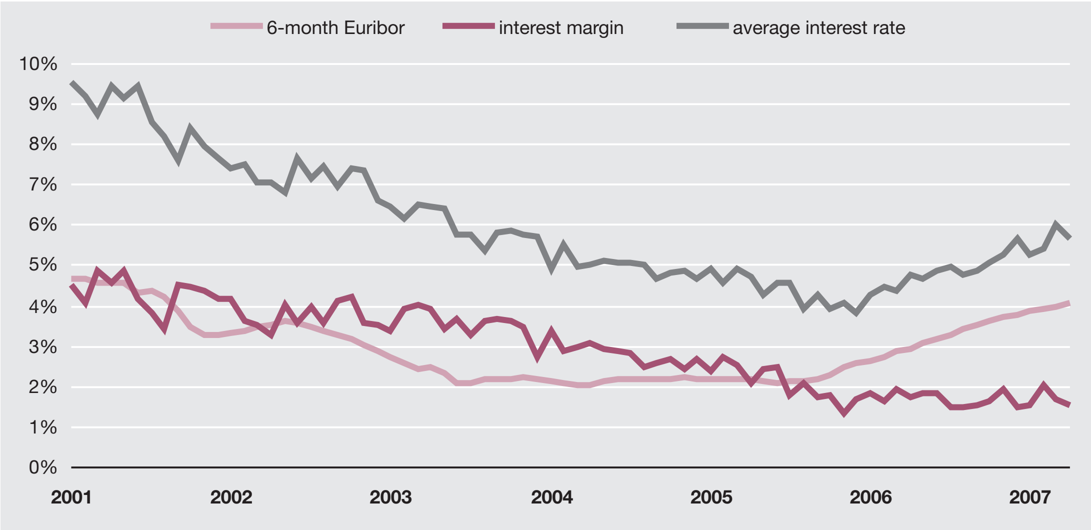


Figure 11. Average interest rate, key interest rate and average interest margin on long-term corporate loans (%)

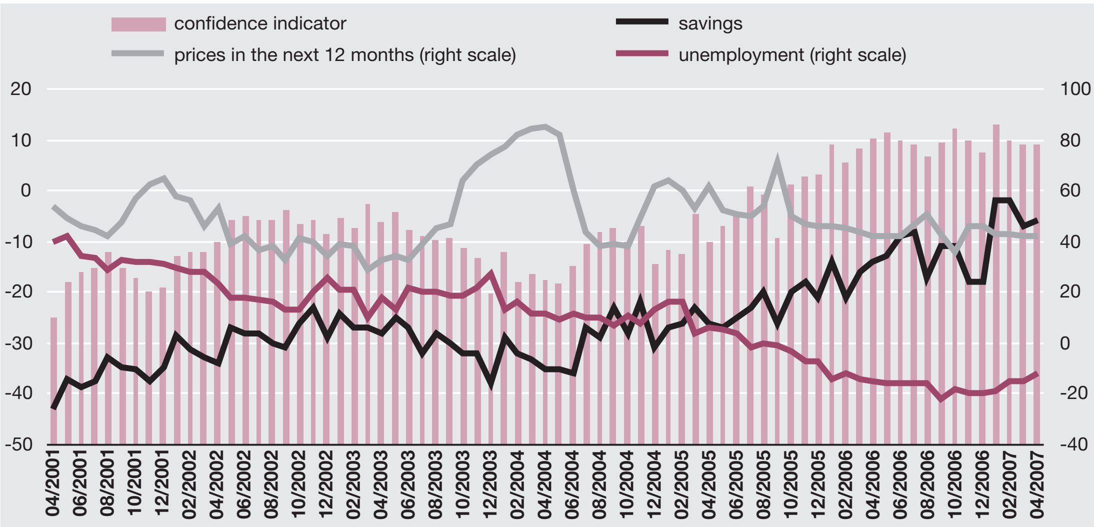


Figure 12. Consumer confidence indicators

Source: Estonian Institute of Economic Research sumption growth. The expectations of this year's first months indicate the persistence of growth. Consumers' expectations of their ability to save increased even further. In light of rapid wage growth it can be concluded that private consumers have not changed their saving habits significantly. The concerns of unemployment have stopped to decrease which is in line with the slowdown in the number of the registered unemployed.

Although consumer price inflation picked up in the first quarter of 2007, this has not affected households' future expectations. The inflation expectations for the next twelve months are still lower than one year ago.

Labour market

Rapid economic growth in 2006 influenced the labour market situation significantly: unemployment decreased, employment increased and wage growth accelerated (see Figure 13). Last year, the number of the employed rose by 6.4%. More jobs than on average were created in the services sector, whereas in manufacturing the number of jobs decreased. Compared to 2005, the **unemployment** rate dropped from 7.9% to 5.9%. Furthermore, the number of the long-term unemployed decreased substantially. Over two thirds of the employment growth can be attributed to the return of the former inactive to the labour market, which is why also the labour market participation rate increased considerably last year.

Wages

The number of the employed stabilised in the second half of 2006, since the labour supply is relatively limited despite the high demand. As a result, wage growth has gained speed as expected (see Figure 14). In 2006, incomes in general grew very fast: **average wages** rose by 16.2%, net wages by 17.3% and the average pension by 18.2%. Moreover, this created over-optimistic expectations and wage demands even increased: in the fourth quarter of 2006, the growth of average gross monthly wages reached 18%. Considering the 4.5% inflation, the real wage growth reached its all-time high – 13%.

Structure of expenditures

According to Statistics Estonia, in 2006 the average expenditure per household member amounted to 3,712 kroons and net income to 4,343 kroons. Compared to 2005, expenditures increased by 16% and incomes by 25%. Within a year, the share of spending on food in the expenditures of household members decreased, whereas expenditures on transportation, leisure and healthcare increased. The share of unavoidable costs decreased from 42% last year to 40% of total expenses.

The income growth was brought about by higher employment and also the rise of wages and pensions. The growth rate of expenses was inhibited by bigger loan repayments compared to 2005.

Financial position and savings

In 2006, the volume of loans granted to households increased much faster than savings, which is why the **net financial position** of households deteriorated considerably. Within the year it dropped by 8 percentage points to 12% of GDP (see Figure 15). Based on the developments in borrowing and depositing during the first quarter of 2007 it may be presumed that the positive net financial position decreased also at the beginning of 2007, although at a slower rate than in the second half of 2006. Households' stock of loans and leasing increased by 7.4 billion and deposits by 3.0 billion kroons in the first quarter of 2007.

Households prefer more liquid **financial assets** and hold a larger share of their financial assets in deposits than they used to before. The deposit growth rate remained at the level of 30% and even higher both in 2006 and at the beginning of 2007 (see Figure 16). The growth of time deposits recovered in mid-2006 after slowing down for a while and accelerated even further at the beginning of 2007. Growth was mainly boosted by short-term deposits with maturities of up to one month, their volume reaching

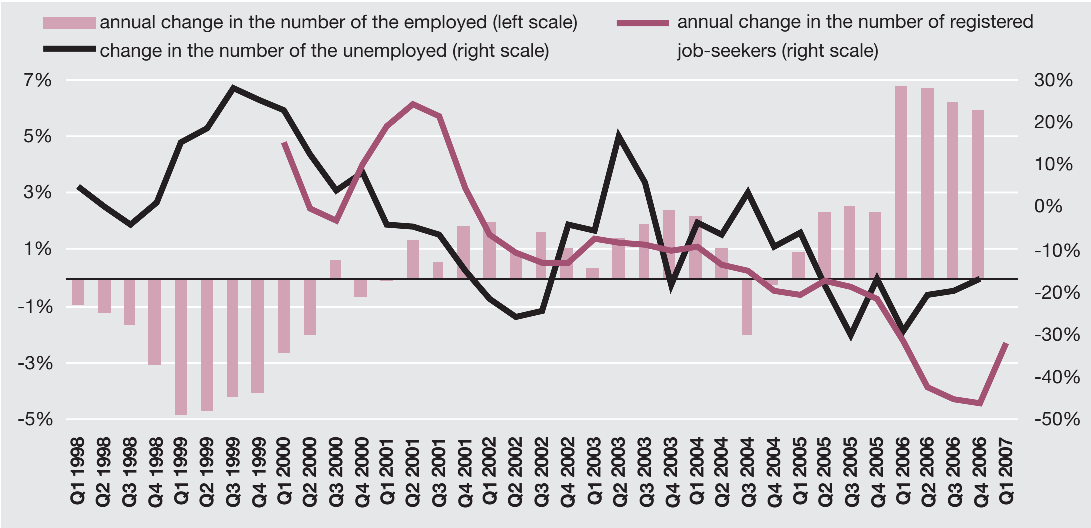


Figure 13. Annual change in the number of the employed, the unemployed and registered job-seekers

Source: Statistics Estonia

Figure 14. Average annual wage growth

Source: Statistics Estonia

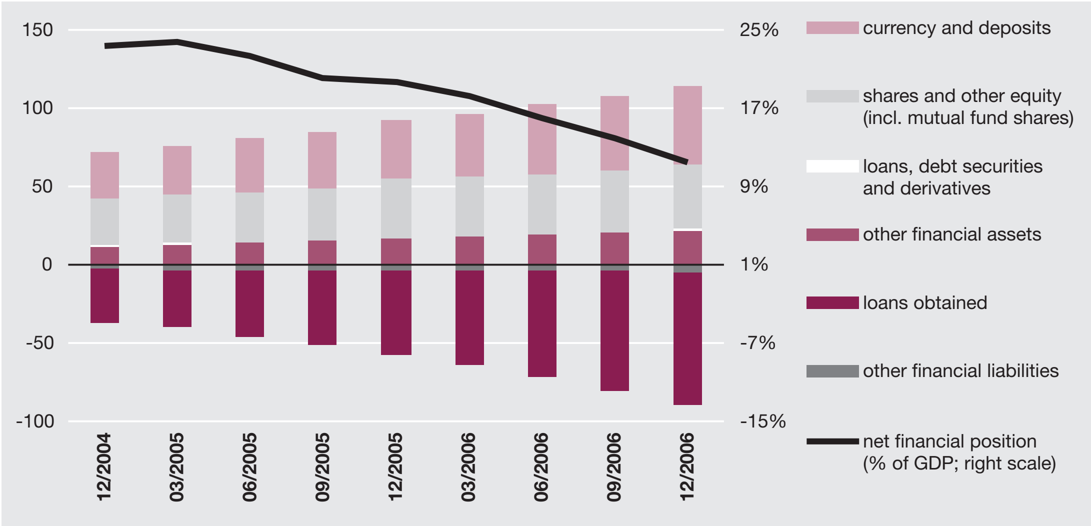


Figure 15. Household financial assets and liabilities (EEK bn and % of GDP)

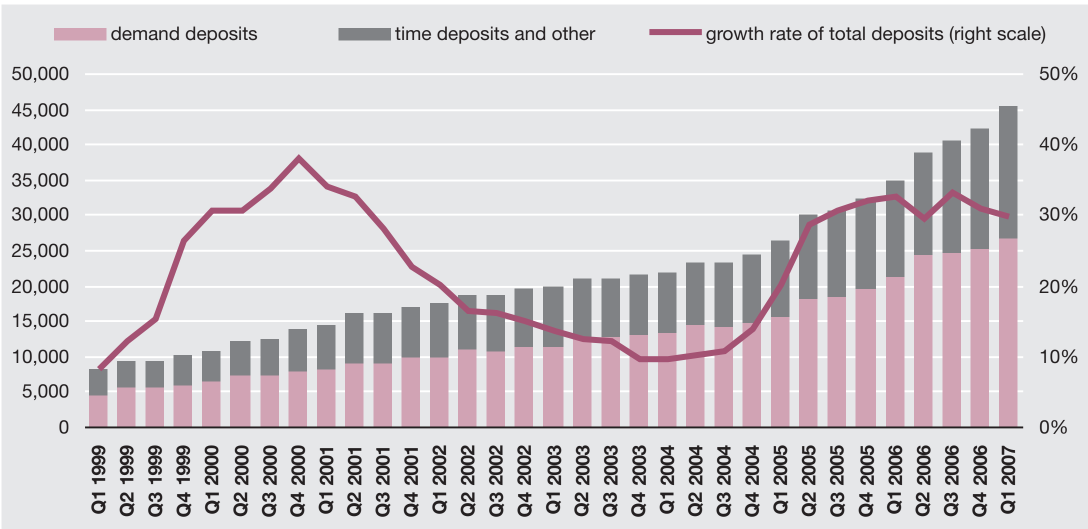


Figure 16. Household deposits in domestic banks (EEK m) and deposit growth

3.0 billion kroons at the end of March 2007 (year-on-year growth 81%; see Figure 17). Overnight deposits also kept soaring and their volume amounted to 1.9 billion kroons at the end of March 2007 (year-on-year growth 138%). The rapid growth of other deposits probably stemmed from the so-called investment deposits, their return rates being bound to the stock market yield. The volume of other deposits has tripled within the year, reaching 2.6 billion kroons in March 2007.

The stable growth of **pension savings** among financial assets continues. At end-2006, the volume of pension assets stood at 8.3 billion kroons, comprising approximately 7% of households' financial assets and 4% of GDP. At the end of 2006, households owned approximately 6.7 billion kroons worth of **shares listed on the stock exchange and investment fund units**, i.e. about 6% of financial assets and 3% of GDP.

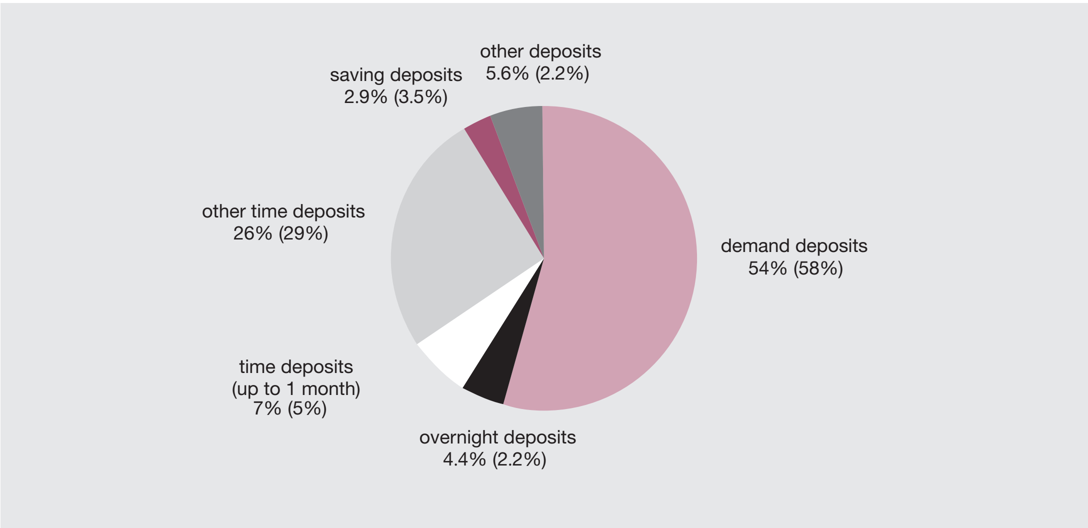


Figure 17. Structure of household deposits as at 31 March 2007 (in brackets as at 31 March 2006)

MICROECONOMIC PATTERNS OF HOUSEHOLD SAVING BEHAVIOUR

In the three previous years people saved relatively little, whereas in 2005 saving gained much popularity. The savings ratio calculated in relation to household disposable income doubled within the year, reaching 8% by the end of 2005. Though the total volume of savings has been increasing recently, it is still much smaller than in advanced economies. Although this may be largely explained by differences in the level of financial deepening between countries, several fascinating country-specific patterns emerge when analysing consumption expenditure and income at the level of households.

The analysis[2] based on the data of the annual Household Budget Survey conducted by Statistics Estonia confirmed that saving behaviour can be explained by several indicators describing the household and its wealth. Although the survey's data does not directly enable to assess the value and dynamics of household assets (both financial and non-financial, i.e. real estate), it is nonetheless possible to analyse the impact of the various features of households on saving. The best possibility to assess saving behaviour is to view the difference between income and consumption expenditure. The savings ratio construed on the basis of that is the main ratio used to analyse the financial behaviour of households at the microeconomic level.

1. **Incomes**. Analysis results confirmed the existence of a positive relation between the savings and the regular income of a family (see Figure 18). Savings are positively influenced also by seasonal incomes such as bonuses. This is entirely in accordance with the theory of intertemporal smoothing of consumption. The bigger the initial savings ratio, the smaller the effect on the savings ratio is[3]. At the same time, it should be kept in mind that in case of wealthier households, the same savings money-wise comprise a significantly smaller share of disposable income compared to households with lower disposable income.
2. **Real estate**. The effect of owning real estate as one of the wealth components on saving behaviour is almost non-existent. From the one hand, this may be caused by rapid changes in the real estate market during the monitored period, as their impacts on consumption and saving appear slowly (the abrupt price rise in 2005 is not reflected in households' savings ratios yet). Besides, in Estonia there are much more real estate owners than households who rent housing[4]. This, in turn, means that the growth of housing wealth might not affect the saving behaviour primarily because real estate is used purposefully (as a residence) and changes in its value are not used for increasing income for speculative purposes.
3. **Durable goods**. Durable goods may also be considered signs of wealth in transition and advanced economies and thus, they may be regarded as an additional factor for explaining saving behaviour. In Estonia, the existence of durable goods decreases the savings ratio of households: if a family

[2] D. Kulikov, A. Paabut, K. Staehr. "A Microeconomic Analysis of Household Saving in Estonia: Income, Wealth and Financial Exposure", Working Paper of Eesti Pank, forthcoming.
[3] The savings ratio is the share of savings in disposable income.
[4] According to the data of the Household Budget Survey, approximately 86% of the Estonian residents live in a housing that belongs to a family member.

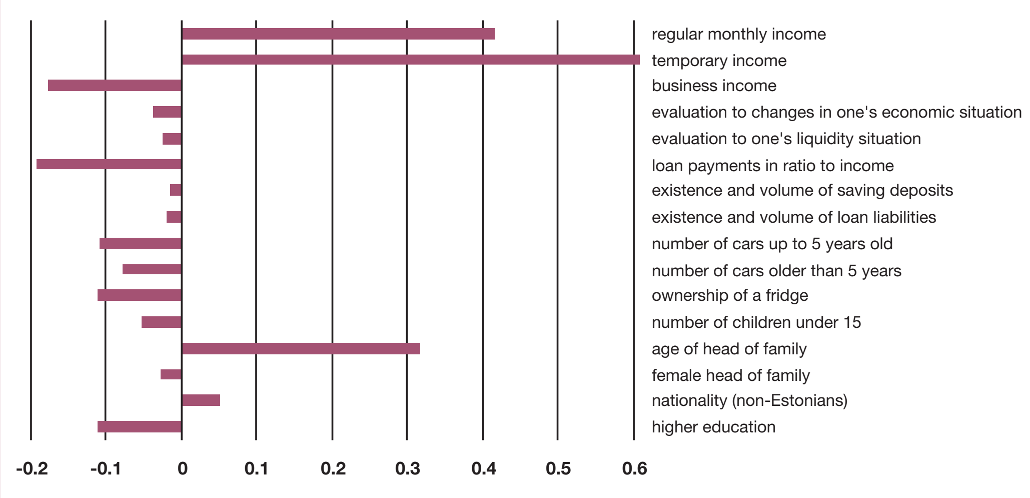


Figure 18. Factors influencing the savings ratio significantly (estimates for parameters during 2002–2005)

Source: D. Kulikov, A. Paabut, K. Staehr "A Microeconomic Analysis of Household Saving in Estonia: Income, Wealth and Financial Exposure", Eesti Pank Working Paper, forthcoming

owns a car, a refrigerator or a dishwasher, the savings are considerably smaller than in households without such durable goods. Higher consumption of goods accompanying the ownership of a car, for instance, (fuel, repair costs, etc.) might also have a say here. Such a result leads to the conclusion that several households are saving in order to purchase durable goods common in advanced economies. These families may be experiencing liquidity constraints or the financial system does not have consumer credit products suitable for them.

4. **Existing financial assets and liabilities**. Initially, indicators describing the financial assets and liabilities of households led to contradictory results. The data revealed that the existence of deposits and other financial assets affects saving adversely, which complies with the theory of intertemporal consumption smoothing. However, it also became apparent that existing loan and leasing liabilities affect savings negatively. This means that if households have access to various loan products, they can obtain loans for increasing consumption on account of future incomes and thus smooth their consumption over time.
5. **Loan servicing**. The amount of loan repayments (incl. interest payments) affects household savings adversely: the greater they are, the smaller the savings ratio. This means that savings decrease along with the increase in household indebtedness. This, in turn, means that the growth of loan repayments entails an increase in the sum of consumption expenditure. Although it might seem illogical at first glance, this indicator can also be used to describe the creditworthiness of households (for instance, this enables households to receive incomes when purchasing additional real estate, etc.).
6. **Age**. The fact that older and younger households save more than middle-aged families

contradicts the life-cycle theory, according to which middle-aged households with the highest incomes should save the most. At the same time, this result may describe differences in the saving behaviour of different generations, as the same result has also been reached in surveys on other transition economies (e.g. New Zealand, Russia). In Estonia, the savings ratio is the lowest in households where the head of the family is 29 years old. The savings ratio of older households (the head of the household being 65 years old) is nearly 8.3 percentage points higher. The great savings ratio of the older generation may be explained by the precautionary motive as well as thrifty consumption habits. Young people's interest in saving may primarily be explained by the desire to purchase their own home (the loan down payment motive).

7. **Other features**. Other characteristics such as the number of adults and children in the household, or the nationality, education and gender of the head of the household also play an important role in the development of the savings ratio. Similarly to surveys conducted in advanced economies, surveys on Estonia indicate that households with a female household head generally save less. As regards nationality, the savings ratio of non-Estonians is higher. The number of children in a household also affects the ability to save: the more children in the family, the less there are available resources for saving. The household head's higher education entails a lower savings ratio.

It may be concluded that indicators related to income and wealth play the most important role in describing the savings behaviour of Estonian households. The analysis carried out based on the data of the Estonian Household Budget Survey, however, does not allow to describe the trends of total household savings. It is also impossible to explain changes in total savings over time. However, it is possible to monitor the household savings ratio based on different characteristics within a unit of time.

Household debt and loan-servicing capability

Level and growth of debt

The **year-on-year growth of households' loans and leasing** started to decelerate after reaching the record level of 62.4% in March 2006. By the end of March 2007, it reached 55.6% (see Figure 19). Loan growth is mainly slowing down owing to the subdued growth of household loans; the growth rate of consumer credit does not display any clear signs of deceleration.

The annual **growth of household indebtedness** has remained brisk, but has not accelerated compared to autumn 2006. Year-on-year, indebtedness grew by 10 percentage points to 43% of GDP and by 19% percentage points to 79% of disposable income (see Figure 20). From among other Nordic and Baltic countries, the Estonian financial deepening, which stood at 10 percentage points, was exceeded only by Latvia where household indebtedness grew by 12 percentage points (see Figure 21).

Housing loans

The year-on-year growth of housing loans decelerated from the record level of 64.9% in March 2006 to 55% by March 2007. At the end of March 2007, the stock of housing loans amounted to 71.2 billion kroons. Although the increase in housing loans has slowed down, the number of new borrowers has not decreased much, given the **number of housing loan contracts**. With the first four months of 2007, as many more (12%) new housing loan contracts were concluded year-on-year as in the fourth quarter of 2006.

Meanwhile, since the beginning of 2007 (and especially in April) new contracts have been concluded mainly for smaller loans, i.e. loans amounting up to half a million kroons. Considering real estate prices, these are probably loans for renovating rather than purchasing housing (see Figure 22). This is also

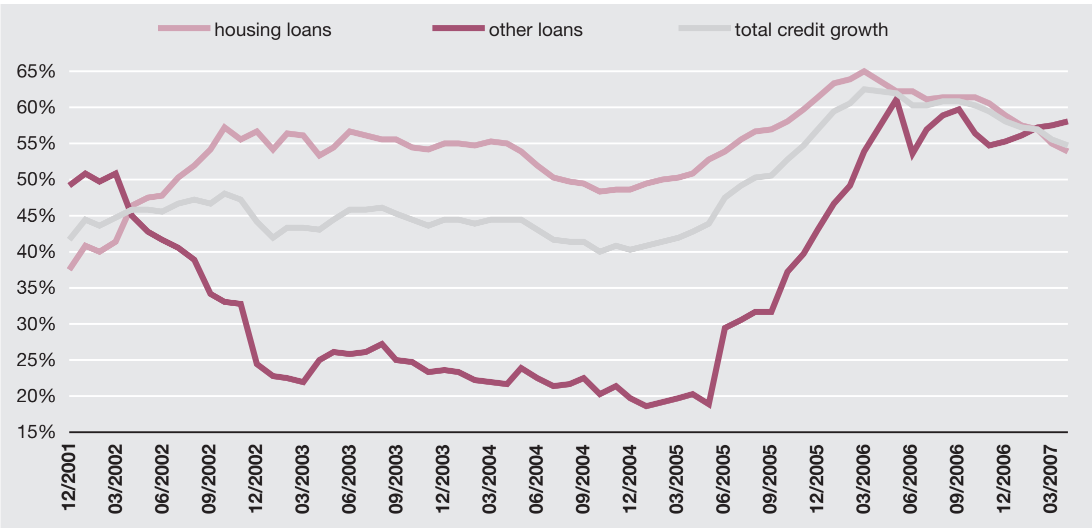


Figure 19. Annual growth of domestic credit to the household sector

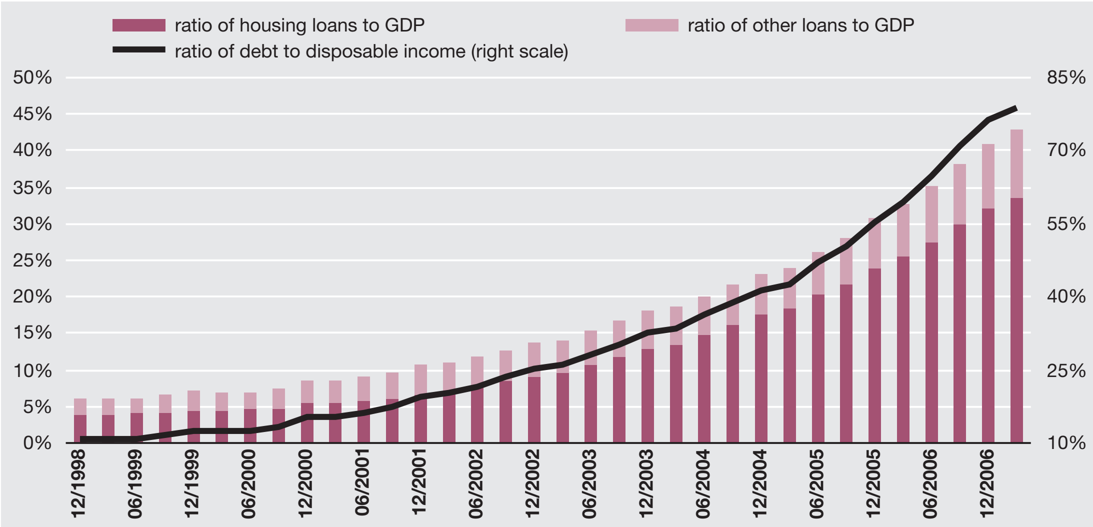


Figure 20. Household indebtedness

Figure 21. Ratio of household indebtedness to GDP (left scale) and annual growth rate (pp; right scale) in Nordic and Baltic countries

Source: national central banks

Figure 22. Structure of housing loans granted by loan amount (%)

supported by the fact that the number of housing transactions is declining. Thus, it is possible that some borrowers had a housing loan already before and there are actually less new housing loan customers than new contracts.

In addition to an increase in the interbank interest rates, the rise in the **average interest rates on housing loans** was shaped by the growing average interest margin. The average interest rate in March 2007 (5.0%) stood almost 2 percentage points higher than the lowest rate seen in April 2005 (3.1%; see Figure 23).

While in autumn 2006 the average interest margin on housing loans kept declining because of the tight competition of banks although interbank loan interest rates were on the rise, in November 2006 the average margin started to increase. In March 2007, it exceeded the level of October 2006 by 17 basis points. This was probably caused by the increasing share of borrowers with higher credit risk.

The application of longer loan maturities has expanded the number of potential borrowers in an environment of high real estate prices and growing loan servicing costs. In 2006, the average **housing loan maturity** continued to extend, but the share of loans with maturities of over 25 years among housing loan contracts concluded in the first quarter of 2007 has not risen (see Figure 24). While in the fourth quarter of 2006, 61% of loans were granted with maturities over 25 years, in the first quarter of 2007 their share remained 1.5 percentage points lower (a similar development also characterises April indicators).

Housing loan developments are also influenced by the decreased activity on the **housing market**. In the third quarter of 2006, the number of real estate transactions with residential buildings and dwellings started to shrink compared with the same period of 2005. In the first quarter of 2007, the number of transactions remained 8% smaller than the year before (see Figure 25). Also the year-on-year growth of housing prices has been slowing down considerably since the second half of 2006. The year-on-year price growth of a two-room Tallinn apartment in satisfactory condition decelerated to 6% in the first quarter of 2007 and compared to the fourth quarter of 2006,

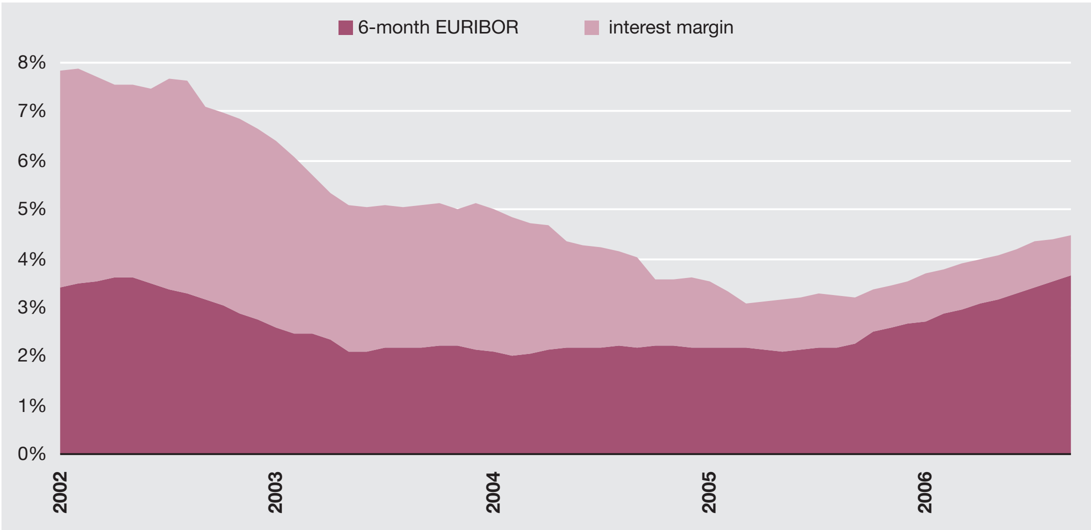


Figure 23. Dynamics of housing loan interest rates

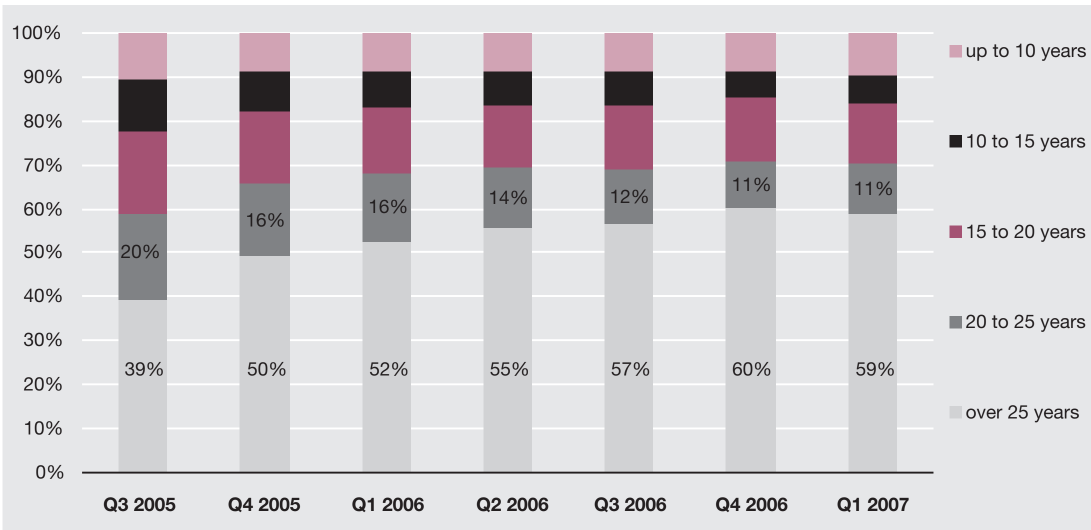


Figure 24. Maturity structure of new housing loans

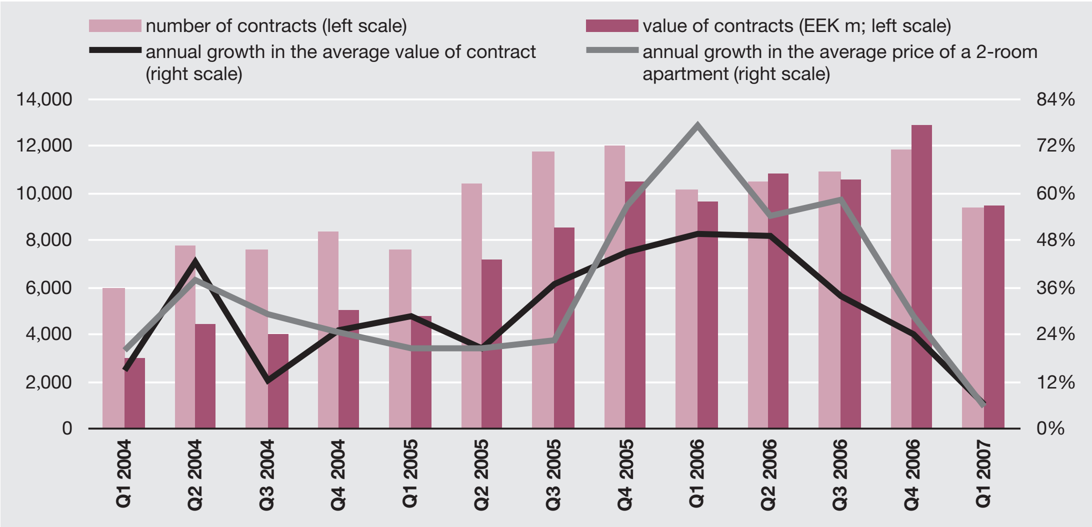


Figure 25. Notarised purchase-sale contracts with residential buildings and dwellings as real estate, average value of contract and annual growth in the average price of a 2-room apartment in satisfactory condition in Tallinn

Source: Statistics Estonia

the average price has dropped by 5%. As the apartment price growth has moderated and wage growth has picked up, the ratio of average apartment prices and average gross wages has not exceeded the level achieved at the beginning of 2006.

Consumer credit

Unlike housing loans, the year-on-year growth of **loans not directly related to the financing of housing** has not really slowed down. The annual growth rate of the respective loan and leasing stock stood at 58% at the end of March 2007, which is 2 percentage points lower than the high reached in September 2006. Compared to autumn 2006, the annual growth of car leasing has accelerated from 35% to 44%. Also the year-on-year growth of other loans picked up further at the beginning of 2007, amounting to 100% in March 2007 (see Figure 26). The year-on-year growth of study loans has remained low and steady and that of consumer credit obtained by credit card and without instalments decelerated from 105% in autumn 2006 to 85% in March 2007.

The volume of household **consumer credit** rose to 12.7 billion kroons by the end of March 2007, comprising an estimated 6.0% of GDP. Together with car leasing and study loans the stock of consumer credit stood at 20.1 billion kroons, i.e. 9.4% of GDP.

The **interest rates on consumer credit** generally move less in line with developments in key interest rates than the interest rates on housing loans (see Figure 27). The usage of real estate for collateralising consumer credit has become more popular, which has also helped to keep the average interest rate lower. At the end of March 2007, 77% of consumer credit without instalments and other loans was mortgage-backed (70% in March 2006). Thus, the volume of consumer credit collateralised by real estate has more than doubled within a year.

Households' loan-servicing capability and risks

Households' loan-servicing costs increased. By the end of March 2007, the **interest burden** of house-

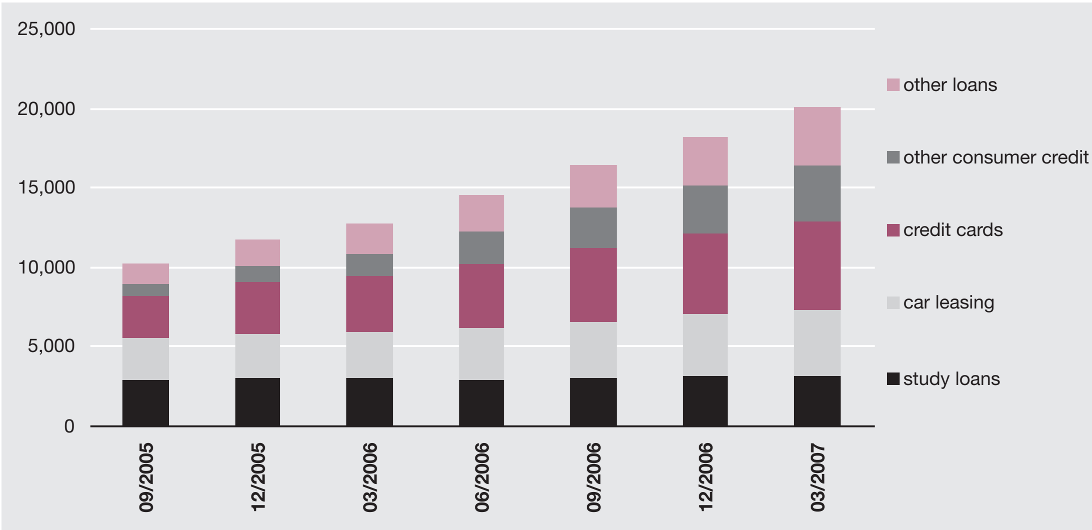


Figure 26. Stock (EEK m) and structure of non-housing household loans/leasing

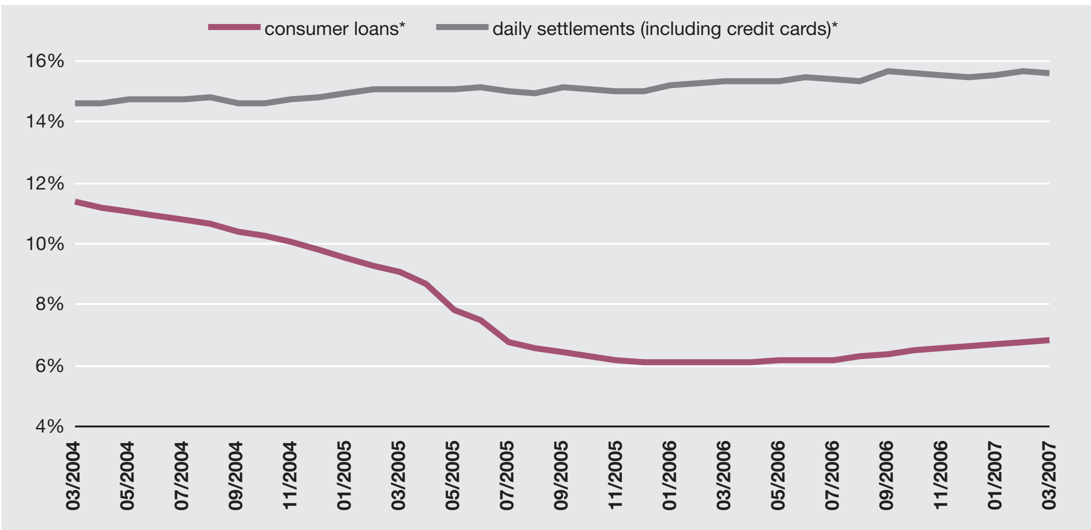


Figure 27. Consumer loan interest rates

* without the data of BIG

holds, i.e. the sum of loan and leasing interest rates in proportion to disposable income increased to 3.7% (see Figure 28).[5] The impact of higher interest rate on the interest burden is constantly growing and that of credit growth is declining. In the first quarter of 2007, the average interest rate rise accounted for about a half of the increase in interest costs.

The growing interest burden affects the ratio of loans with floating and fixed interest rates in the debt portfolio of households. Since December 2006, a more distinct trend towards **fixing interest rates** can be perceived. As a result, in March 2007 the share of fixed interest rate products rose to 9% of loans obtained within a month. A year ago this indicator remained below 3% (see Figure 29). However, the impact of increased risk awareness on the total loan stock still remains limited and the majority of the household loan portfolio is still exposed to interest rate risks.

In **conclusion** it may be said that the strong wage growth in the second half of 2006 has supported households' optimistic future expectations and will also continue to do so. Although loan-servicing costs are on the rise, their impact on the financial situation of households is offset by the dynamic growth of net incomes. The expected rapid economic growth in the near future will provide good outlook for further income growth and coping with loan-servicing costs. The steep fall in households' net financial assets in relation to GDP that accompanied the rapid debt growth, however, indicates that their shock-absorbing ability has decreased compared to a year ago.

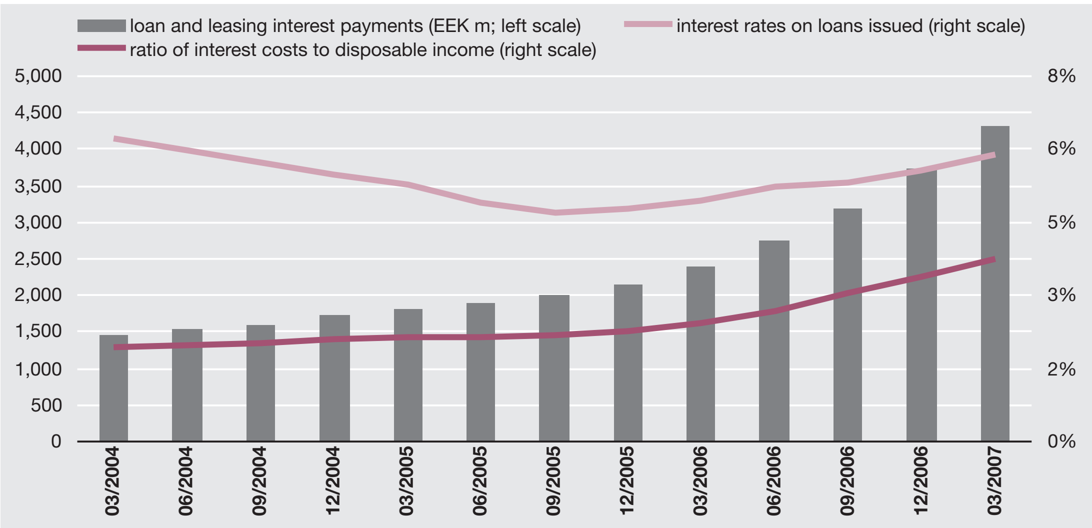


Figure 28. Households' loan and leasing interest payments during a year, interest rates on outstanding loans and ratio of interest costs to disposable income

[5] The methodology of calculating the interest burden indicator has been changed compared to the previous issue of the Financial Stability Review. Thus, the indicators have been corrected slightly downwards.

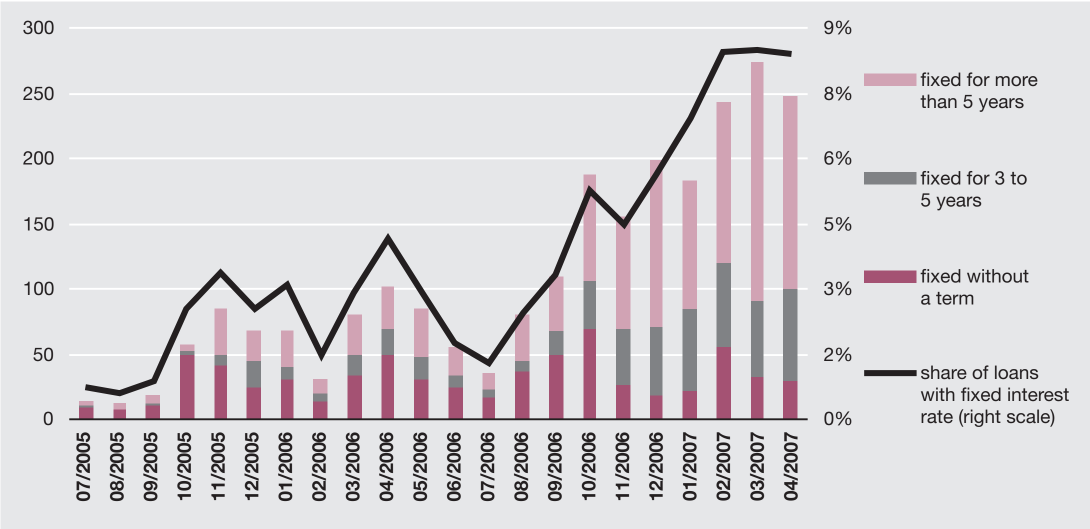


Figure 29. Volume of housing loans with fixed interest rate (EEK m) and the share of fixed interest rate loans in total housing loans granted during a month (%)

II BANKING SECTOR STABILITY AND RISKS

STRATEGIC DEVELOPMENT OF THE BANKING SECTOR

Seven companies licensed as credit institutions in Estonia and branches of seven credit institutions licensed in another European Union Member State were operating in Estonia at the end of the first quarter of 2007. Four foreign credit institutions had representative offices in Estonia and over 140 foreign credit institutions provided cross-border banking services. Approximately 20 new cross-border service providers have emerged during the past half-year.

The distribution of banks' market shares has remained relatively stable despite new market participants. At the end of the first quarter, 96% of the stock of loans and leases granted in Estonia was divided among four major market participants. Two of the major participants held 74% of that.

Considering only banks and not the whole consolidated groups, the growth of the assets of banks licensed in Estonia and branches of foreign banks operating in Estonia has decelerated slightly. This has been caused by the stabilisation of the loan market and changes in the financing schemes of subsidiaries. At the end of the first quarter of 2007, the year-on-year growth of assets reached 26% (33% the year before). The assets of credit institutions controlled by branches of foreign credit institutions or non-resident financial groups comprised 98% of the total volume of banks operating in Estonia.

Operating in the markets of neighbouring countries, primarily in Latvia and Lithuania, has gained importance in the activities of local banking groups. According to Hansapank group, the group's activities outside Estonia comprised 47% of the total operations in the first quarter of 2007. For the first time, the share of loans granted in Estonia among the total volume of loans granted by Hansapank group dropped below 40%.

Quality of assets

During the past half-year, the **growth rate of credit volume** decelerated for the first time after several years of acceleration (see Figure 1). There are many reasons for the stabilisation of the loan market: the rise in interest rates, the stabilisation of the real estate market and, to some extent, the adjustment of expectations to the future economic environment. The growth rate of housing loans has decelerated the most, declining to 55% by the end of the first quarter of 2007 (67% the year before). The growth pace of corporate loans is also slowing down. Consumption credit, on the other hand, is increasing rapidly from the initial low level.

At the end of the first quarter of 2007, the **total volume of loans and leases** issued in Estonia reached 216 billion kroons. The annual growth rate of the financing portfolio decreased from 52% at the end of the third quarter of last year to 48% at the end of March 2007 (49% in March 2006). Within the two last quarters, the total volume of the financing portfolio grew by 34 billion kroons. Household loans and leases held the largest share (see Figure 2). The volume of household loans and leases increased by a total of 16.8 billion kroons, accounting for 49.5% of the total growth of the financing portfolio. Compared to the end of the third quarter last year, the share of household loans and leases in the growth has risen by 4%. Commercial real estate development and management companies had the second largest share with 22%, which is as much as at the end of the third quarter of 2006.

Banks' financing portfolios primarily consist of loans related to housing and commercial real estate, which also experienced the highest growth rates. This reflects the increasing share of mortgage used **as collateral for bank loans** (see Figure 3). At the end of the first quarter of 2007, about 78% of loans were collateralised by pledges of buildings or mortgages. The share of loans without collateral has remained relatively stable at 8%. The share of loans without collateral among consumption loans has dropped (from 46% in the first quarter of 2006

Figure 1. Loan growth by sectors

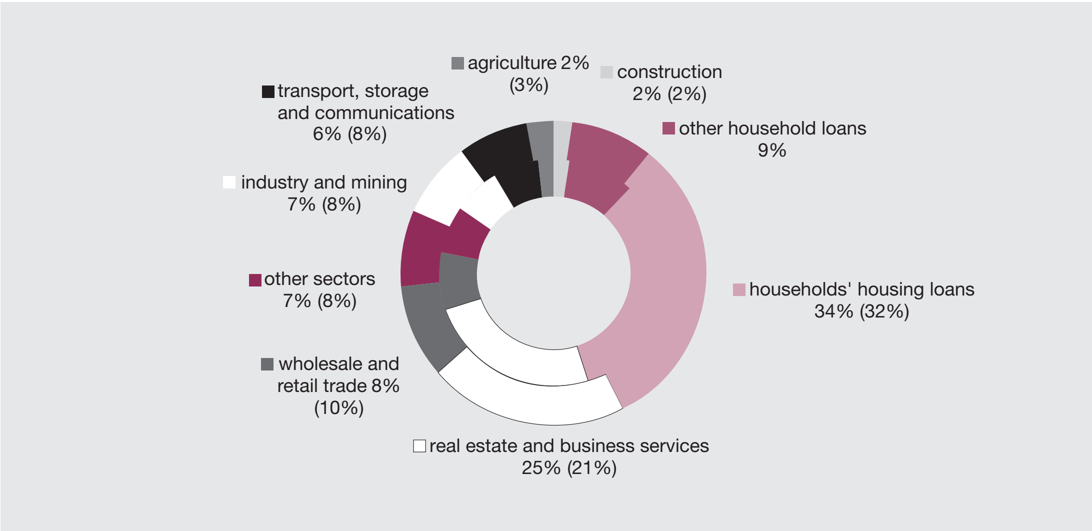


Figure 2. Financing by banks and leasing companies as at 31 March 2007 (in brackets as at 31 March 2006)

to 41% in the first quarter of 2007) and the percentage of consumption credit collateralised by real estate has risen (from 27% to 37%).

Despite the fact that customers' loan-servicing costs have increased in light of the rise in key interest rates (see Chapter I), their loan-servicing capability has remained good owing to the favourable economic environment. At the end of the first quarter, the share of **loans overdue for more than 60 days** among loans issued to the non-financial sector totalled 0.35% on an aggregate basis (see Figure 4). In international comparison, this indicator is extremely small. Although the stock of provisions for loan losses has declined slightly in recent months, at the end of the first quarter it still exceeded the volume of overdue loans by 28%. However, considering the possible further interest rate rise and the deceleration of economic growth, it is likely that the current modest share of overdue loans is about to increase during the next periods.

By **economic sectors**, the share of overdue consumer loans has increased along with the surge in the volume of consumer credit. At the end of March, the share of consumer credit overdue for more than 60 days reached nearly 2.1% on an aggregate basis. Also the share of housing loans overdue for more than 60 days has grown within the last six months, but still remained at a relatively low level of 0.25% at the end of March (0.24% at the end of the first quarter of 2006). Banks' assessments of the total loan portfolio have even turned more positive within the past six months. At the end of the first quarter, banks classified 90.3% of loans as "in order" (89.2% in the first quarter of 2006). The share of loans "subject to special monitoring" had dropped to 7.4% (8.6% in the first quarter of 2006).

Regarding banking groups, the share of write-downs in the loan portfolio has decreased even further on a consolidated basis. In the first quarter, the stock of provisions for loan losses comprised 0.67% of the aggregate portfolio of banking groups (0.72% in the first quarter of 2006). The share of loans overdue for more than 60 days in the financing portfolio of groups has remained relatively stable, accounting for approximately 0.35% of the aggregate loan portfolio at the end of the first quarter. Total write-downs of banking groups exceeded the volume of loans overdue for more than 60 days by about 1.9 times.

The small share of overdue loans may be attributed to the favourable economic environment. Although the volume of provisions for covering loan losses is satisfactory, during next periods potential developments in Latvia and Lithuania should also be taken into account.

Capital adequacy

On 1 January 2007, the new capital adequacy calculation principles entered into force[1], but due to the transition period all banks are still using the former system for calculating the adequacy ratio.

The **aggregate capital adequacy ratio** has been fluctuating around 14% for the past two quarters. Across banks, however, it varies greatly. The capital adequacy ratio of banking groups was slightly over 11% (see Figure 6).

As last year Eesti Pank increased the risk weight for housing loans to 100%, **credit risk weighted items** grew significantly in March 2006. During the past six months the structure of risk weighted items has not changed considerably. The share of credit risk weighted balance sheet items in risk assets still reaches 90%. The next in volume are credit risk weighted off-balance sheet liabilities (6.5% of risk weighted items). During the past two quarters, the share of risk adjusted trading book and foreign ex-

[1] A more risk-sensitive adequacy calculation system based on the new capital adequacy accord (Basel II).

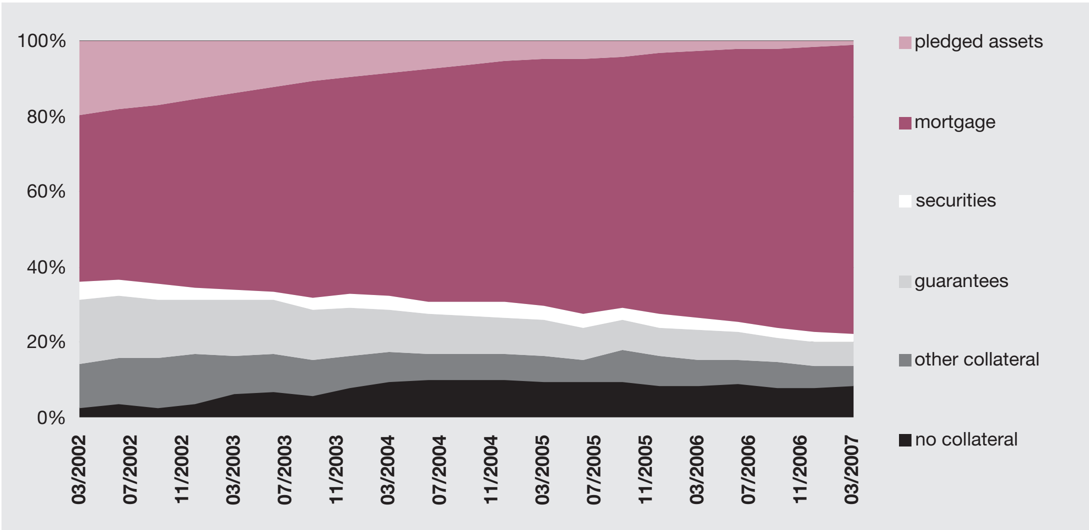


Figure 3. Loan collaterals by type

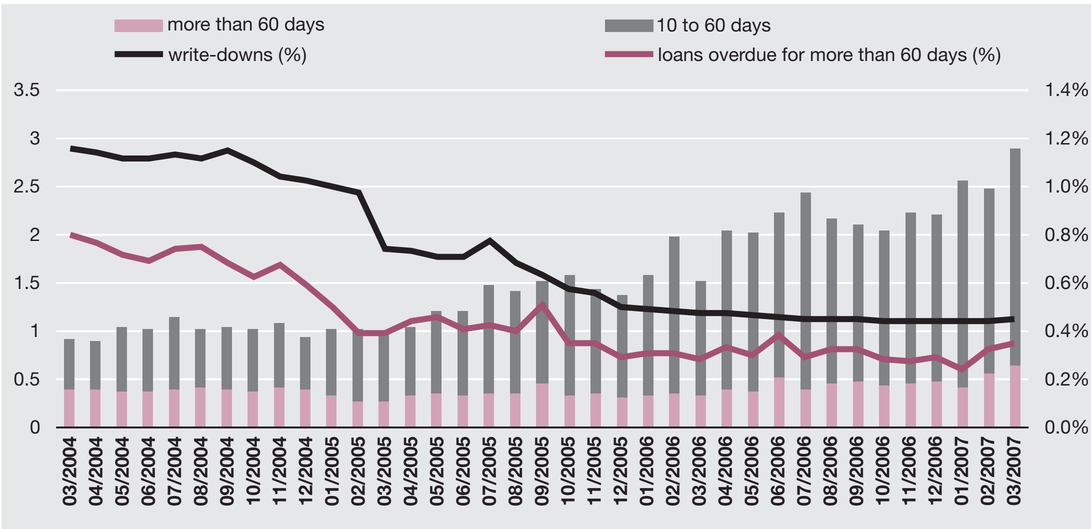


Figure 4. Volume of overdue loans (EEK bn; left scale) and share of overdue loans and write-downs in non-financial sector's loan portfolio (right scale)

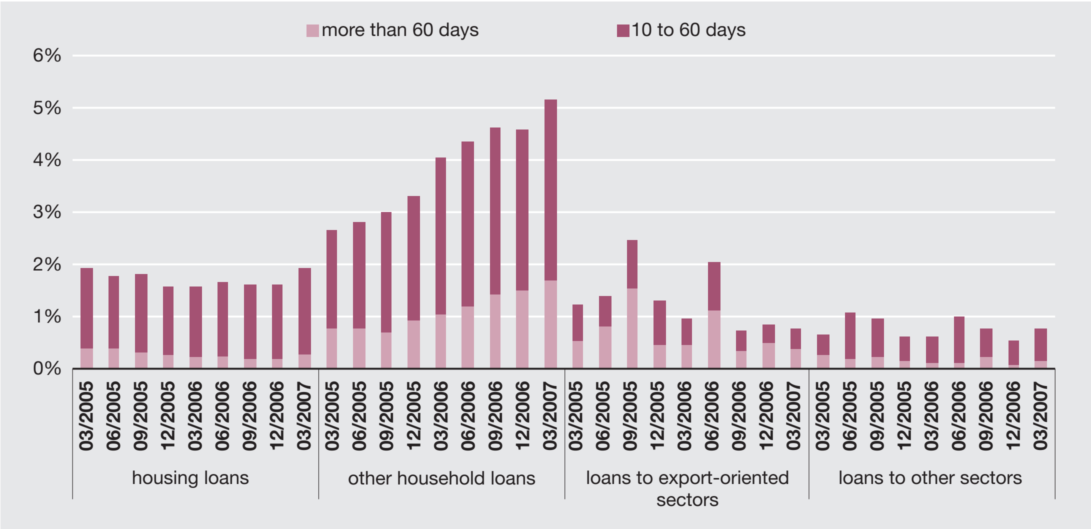


Figure 5. Overdue loans by economic sectors

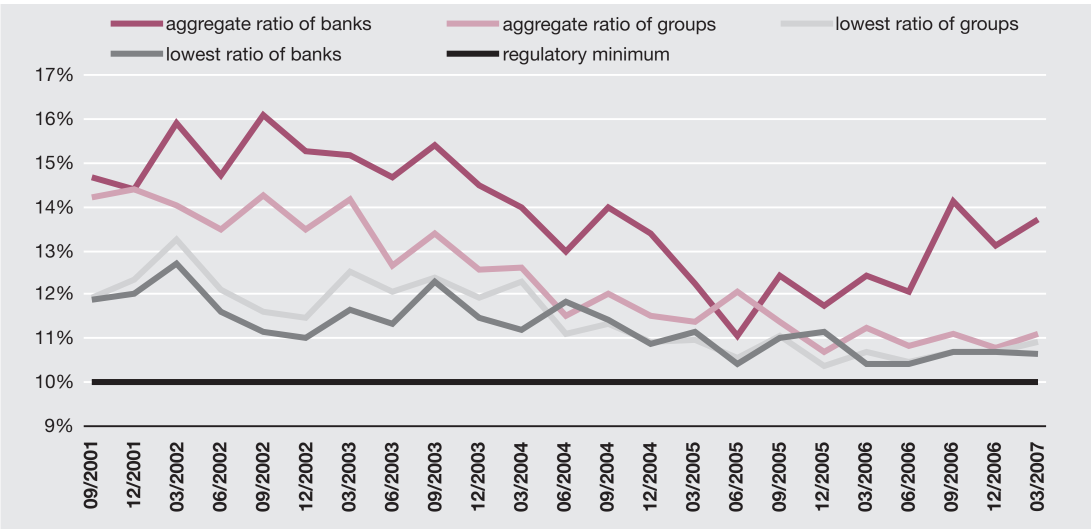


Figure 6. Capital adequacy of banks and banking groups

change positions in risk weighted items has somewhat increased (capital requirements for covering foreign exchange risks rose by 385%, year-on-year). At the end of the third quarter of 2006 they comprised 2.2% of the risk assets, whereas in this year's first quarter they formed 3.1%.

On an aggregate basis, the year-on-year growth of risk weighted items was 31% in the first quarter – slower than in the previous year before changing the risk weight (33% at the end of the fourth quarter of 2005).

In order to retain the level of capitalisation upon expanding their activities, banks had two ways to react to last year's regulation amendment: curb the growth rate of risk weighted items or increase own funds. Banks have preferred to include additional own funds rather than decrease risk weighted items. At the end of the first quarter, banks' **net own funds** totalled 27.2 billion kroons, of which 70% consisted of Tier I own funds (see Figure 7).

Own funds have gained 45% within the year (16% within the last six months). Tier I own funds have increased by 19% within the year, whereas Tier II own funds have grown by 94%. Thus, the share of Tier II own funds in gross own funds has been increasing since the first quarter of last year. In the first quarter of 2006, they accounted for 25% and in the first quarter of 2007 for 34% of gross own funds (before the regulatory amendment, Tier II own funds comprised 10% of gross own funds).

During the past year, also the difference between Tier I capital adequacy (Tier I – only primary own funds) and the total capital adequacy ratio (ratio of all own funds to risk weighted items) has been growing (see Figure 8). Until the end of 2005, the respective ratios posted relatively similar results, but since the first quarter of 2006, the gap has started to widen. Consequently, while the regulation amendment has caused an increase in the capitalisation of banks, the stucture of banks' own funds has undergone some qualitative changes.

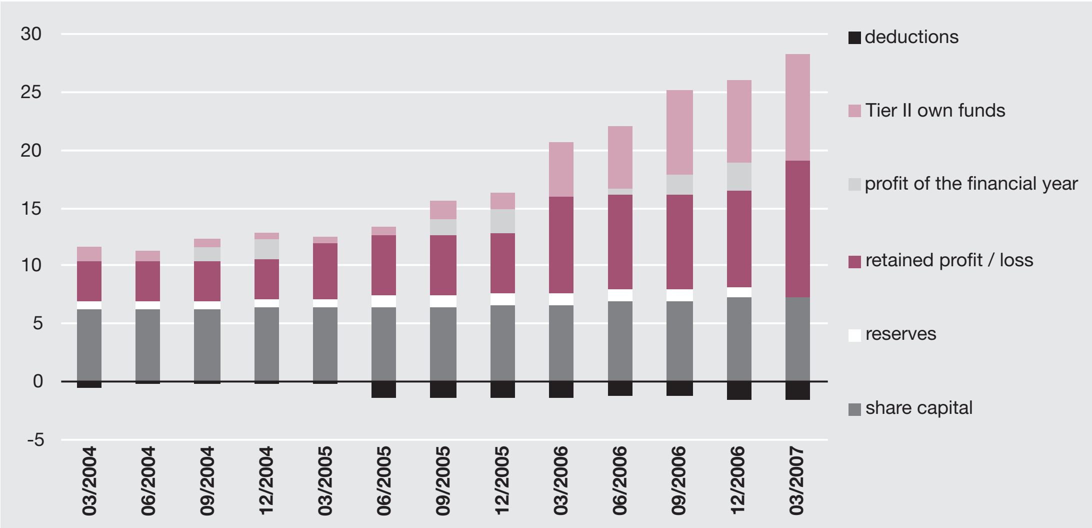


Figure 7. Structure of banks' own funds (EEK bn)

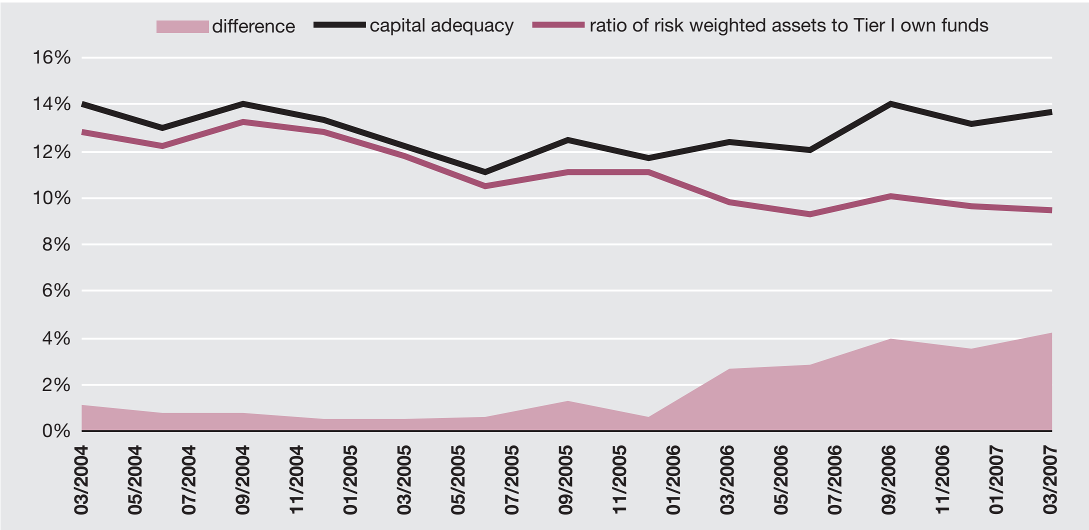


Figure 8. Tier I capital adequacy and the key indicator of capital adequacy

Liquidity

Funding

The growth of loan portfolios has been exceeding that of deposits. This has expanded the **funding gap between deposits and loans** even further. In order to fill it, more additional funds have been received mostly from parent banks.

The growth of **deposits**, which in 2005 mainly accelerated, slowed down again in 2006 (see Figure 9). Despite the growth of deposit interest rates, the negative yield stemming from inflation does not favour depositing savings but makes savers to look for profitable investment options. The interest rates on time deposits have risen much faster (year-on-year growth over 1 percentage point) than those of demand deposits, but the share of time deposits in the deposit structure has nevertheless grown by only a few percentage points. Demand deposits still comprise approximately two-thirds of all deposits (see Figure 10).

In June and July 2006, banks' **liabilities to foreign banks** diminished owing to rearrangements in intra-group financing schemes[2]. Still, owing to the continuing increase in the difference between deposits and loans, at the end of March the share of foreign financing among the banking sector's liabilities exceeded the level of 42% again and drew near 100 billion kroons.

The structure of banks' external financing did not change much within the past six months. About three quarters of our banking sector's external financing consists of funds received from parent banks as deposits and loans. The additional 9% originates from subordinated liabilities to parent banks. The volume of funds received by banks as bonds has not changed much recently. Over two thirds of bond liabilities consist of long-term funds received during earlier periods.

Although banks' **funding costs** have risen along with the increase in key interest rates of the European

[2] In financing subsidiaries, the role of local banks as resource intermediators was reduced.

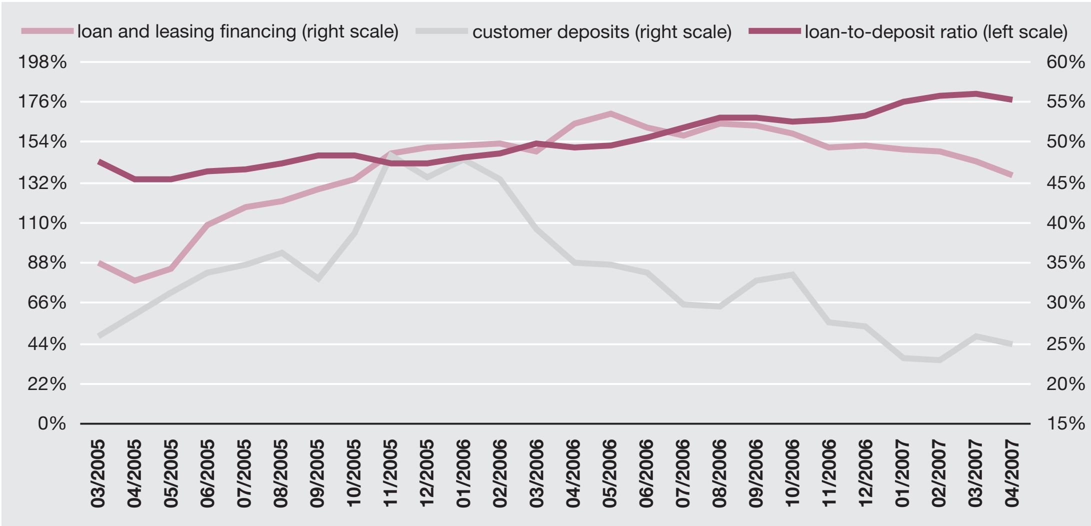


Figure 9. Annual loan and leasing growth and loan-to-deposit ratio (%)

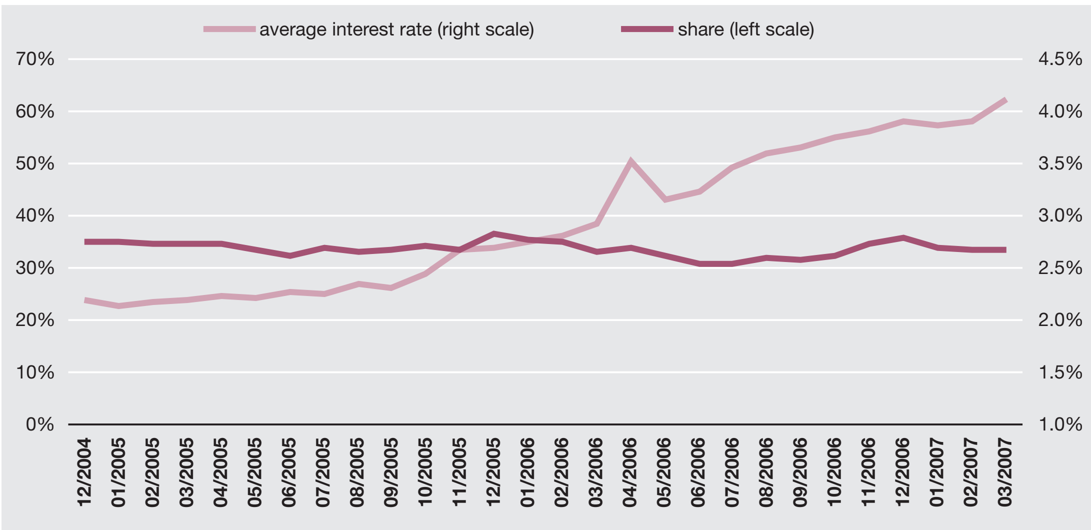


Figure 10. Average interest rate on time deposits and the share of time deposits in the deposit structure

Central Bank, they have increased less than key interest rates mainly due to the share of demand deposits. In the first quarter, demand deposits comprised 34% of all liabilities on average (see Figure 11). Also, the interest rates on time deposits have grown slower than those on external funds.

Liquid assets

After the cutback of the intermediation of funds to subsidiaries the **share of liquid assets** has remained relatively stable over the last two quarters. Also the coverage of current liabilities (with remaining maturities of up to one month) by liquid assets has remained at a below average annual level (see Figure 12).

Owing to the rising share of funds from parent banks, during the past half-year the percentage of current liabilities in the structure of banks' liabilities has somewhat decreased (liabilities with remaining maturities of up to one month now comprise less than 50% of all liabilities).

In autumn 2006, Eesti Pank raised the **reserve requirement** of banks operating in Estonia from 13% to 15%. This means that instead of 13%, banks are obliged to deposit 15% of their reserve requirement base in the central bank or own highly liquid securities. This step has also helped ensure the larger share of highly liquid assets.

Efficiency and profitability

Banks' profit growth has been supported by the continuous expansion of loan portfolios and the rise in key interest rates. As most of the loans in Estonia have been granted with a floating interest rate, banks' interest income on interest-earning assets has increased by 1 percentage point, year-on-year, to 4.9% on an aggregate basis. The interest paid on interest-bearing liabilities has increased by only 0.7 percentage points to 2.7%. The impact of the changes in key interest rates, however, has been reduced by the decreased share of deposits (as it is a cheaper resource than external financing) in banks' funding (see Figure 13).

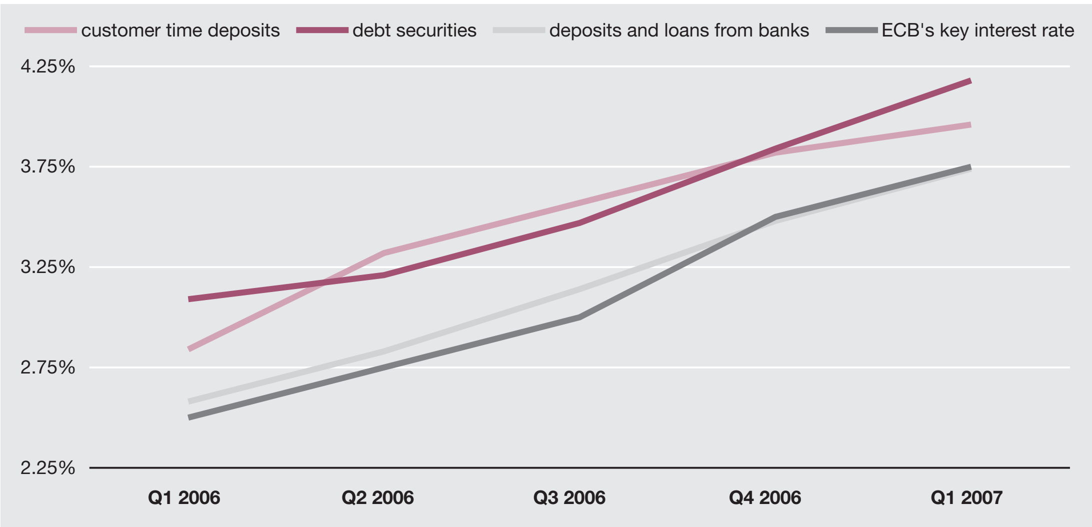


Figure 11. Average intrest rate on funds raised and ECB's key interest rate

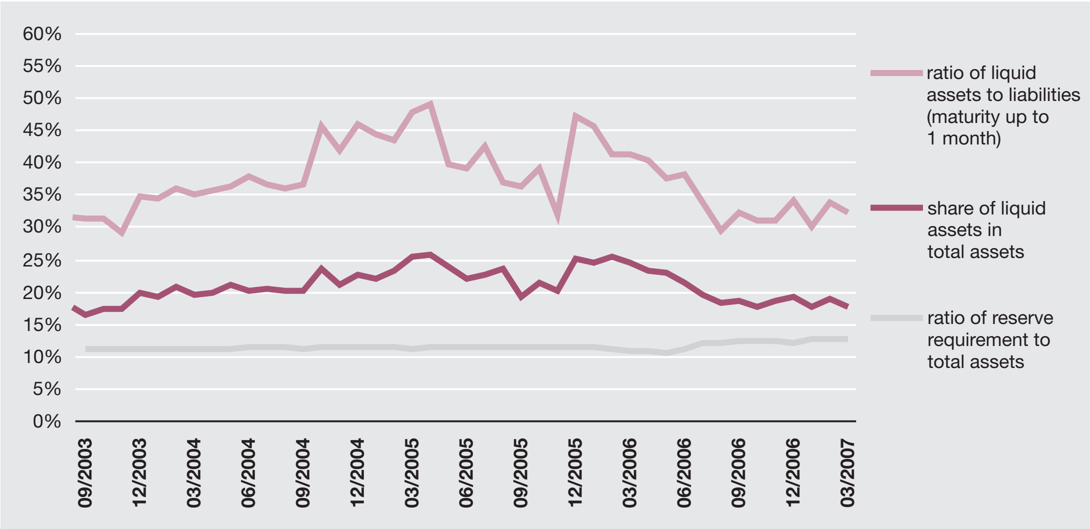


Figure 12. Liquid assets of the banking sector

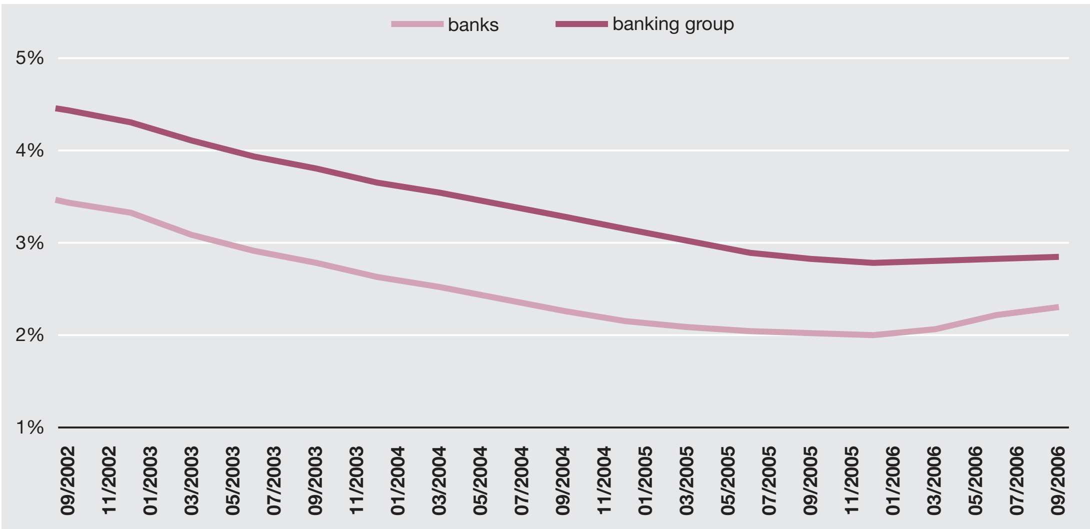


Figure 13. Aggregate net interest margin of banks and banking groups

Hence, during the past two quarters the share of net interest income in the banking sector's income structure has continued to grow. As regards banks, the ratio of net interest income to assets has grown by an average of 0.3 percentage points and that of banking groups by 0.04 percentage points compared to the third quarter of 2006[3] (see Figure 14).

In domestic operations, banks have been able to increase fee and commission income nearly as fast as the assets they manage. As regards banking groups, on the other hand, the ratio of the net fee and commission income to assets has kept on shrinking towards the aggregate indicator of banks' domestic results (see Figure 15).[4]

As for other income, the growth in recent profits has also been stimulated by higher income from trading. In the last two years subsidiaries have not contributed much to banks' profit in dividends because groups have been compelled to include profits in subsidiaries' own funds owing to the rapid growth of loan portfolios.

Besides the enhanced incomes the profitability of the banking sector has also been fostered by the so far relatively low risk costs. Although the share and volume of the net write-downs of claims has continued to increase, banks' total net write-downs of claims did not exceed 0.1% of assets as an annual average. In case of banking groups the share of write-downs is somewhat higher (0.26%).

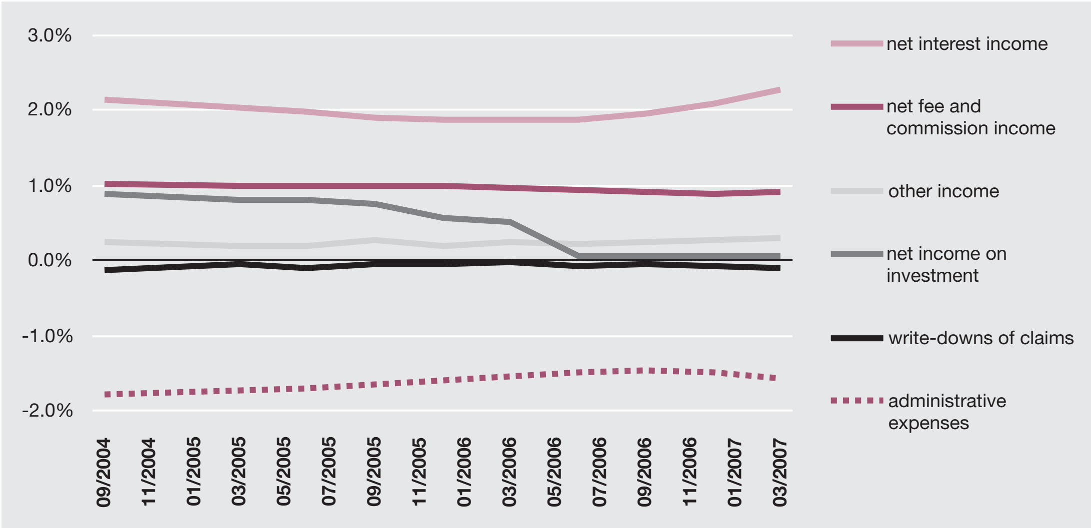
Administrative expenses have risen along with banks' income growth. This partly derives from the policy of associating the remuneration of employees with the profit earned. The ratio of total costs to assets has increased by nearly 0.2 percentage points compared to September (as for groups, however, the ratio has shrunk). Nevertheless, the faster increase in incomes compared to expenses has brought about a further decrease in the cost-income ratio. As mentioned in the previous issues of the Financial Stability Review, comparison with Nordic countries gives reason to assume that the Estonian banking sector's cost-asset ratio still has room to decrease (1.6% for banks; 1.8% for banking groups). The respective ratio in Sweden and Denmark, for instance, stands at approximately 1%[5].

In the first quarter of 2007, banks' aggregate net profit of the past four months exceeded a total of 4 billion kroons. Year-on-year, the net profit increased by 44%. The indicator of the profitability of banks' own funds has risen to 21% again (see Figure 16). The net profit of banking groups of four consecutive quarters, however, has risen by a half year-on-year, reaching 7.9 billion kroons. When assessing the growth of own funds' profitability, the increase in financial leverage should also be taken into account among other factors.

As regards the **future profitability of banks**, the further rise in key interest rates would probably facilitate the continuing growth of the net interest margin. However, this would occur at a slower pace, should the growth of loan portfolios still exceed that of deposits. In that case, the share of the more expensive external funds in banks' liabilities would increase. The rise in customers' loan-servicing costs, however, may decrease loan demand and entail a slight growth in the volume of loan provisions. Banks can react to the rise in key interest rates by curbing interest margins. But in order to preserve the current profitability, a change in net

3 As the average aggregate of the last four quarters.
4 In part, the share of fee and commission income has diminished also because in 2006 the principle of the so-called effective interest rate was adopted for recording incomes. In this case, a significant part of loan fees and commissions are spread out over the entire loan period and reflected as interest income. As for Estonian banking groups, most of the fee and commission income originates from payment intermediation services.
5 Source: ECB "EU Banking Sector Stability" (2006).

interest income should be offset by an increase in other types of income or a cut down on expenses[6]. As regards the latter, banks' opportunities are most probably not exhausted yet.



Joonis 14. Banks' income and expense items by type (% of total asstes)

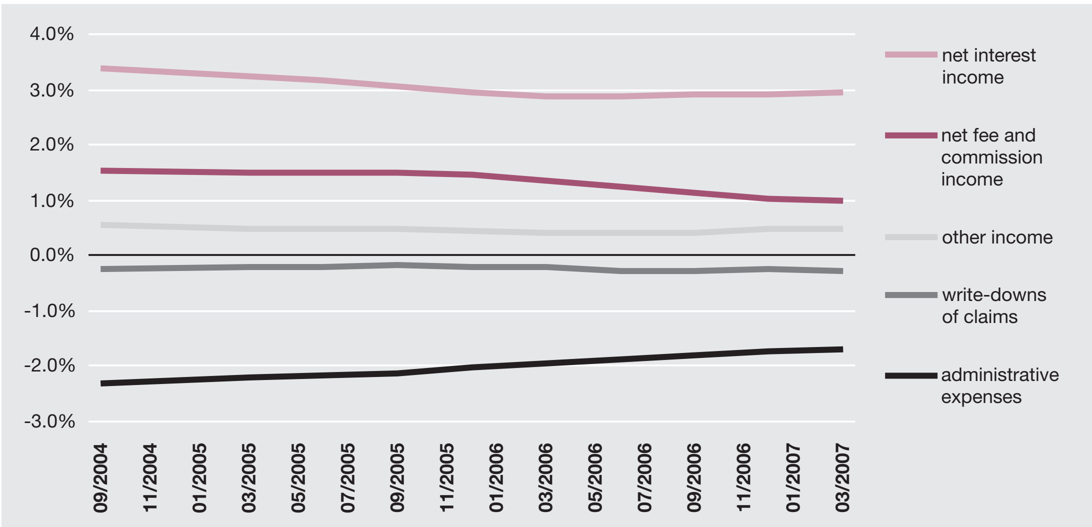


Figure 15. Banking groups' income and expense items (% of total asstes)

[6] Year-on-year, banks' net interest income increased by 1.7 billion kroons and administrative expenses by 0.8 billion kroons. The respective figures for banking groups were 3.7 and 1.4 billion kroons.

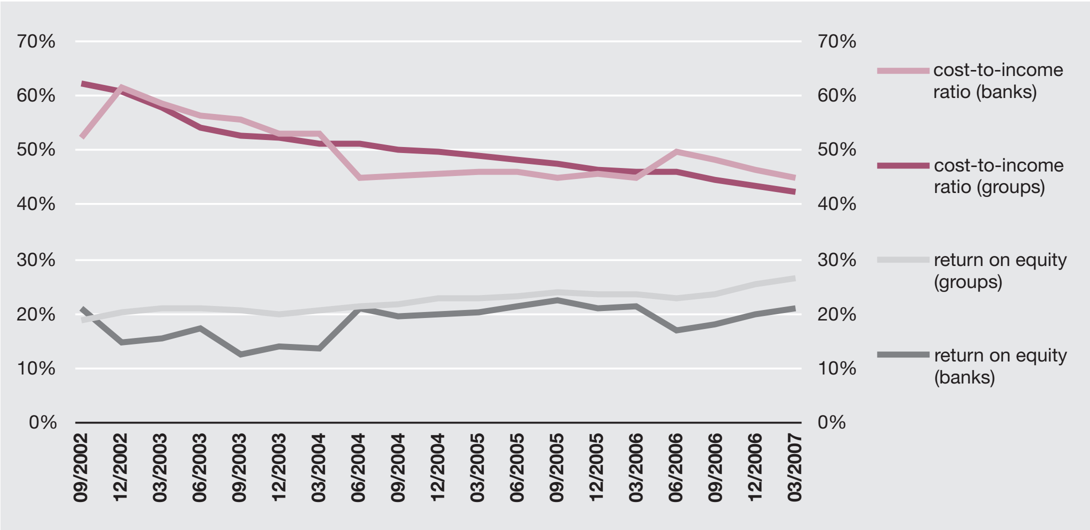


Figure 16. Profitability of banks and banking groups

Table 1. Profitability of banks

	2002	2003	2004	2005	Q3 2006	Q4 2006	Q1 2007
Return on assets	1,6%	1,7%	2,1%	2,0%	1,6%	1,7%	1,8%
Equity multiplier	7,3	7,9	8,8	9,9	10,6	10,7	10,7
Return on equity	14,7%	14,1%	20,0%	21,0%	18,0%	19,8%	21,2%
Cost-to-income ratio	61,6%	53,0%	45,8%	45,6%	48,4%	46,6%	45,1%
Net interest margin	3,6%	2,9%	2,4%	2,0%	2,1%	2,2%	2,3%
Spread	3,4%	2,8%	2,3%	1,9%	2,0%	2,1%	2,2%

Table 2. Profitability of banking groups

	2002	2003	2004	2005	Q3 2006	Q4 2006	Q1 2007
Return on assets	2,1%	2,1%	2,2%	2,1%	1,9%	2,0%	2,0%
Equity multiplier	9,2	9,2	9,7	10,7	12,0	12,4	12,7
Return on equity	20,3%	20,0%	22,8%	23,5%	23,6%	25,5%	26,5%
Cost-to-income ratio	60,9%	52,3%	49,7%	46,6%	44,6%	43,3%	42,3%
Net interest margin	4,6%	3,9%	3,4%	2,9%	2,8%	2,8%	2,9%
Spread	4,4%	3,8%	3,3%	2,8%	2,7%	2,7%	2,7%

III SECURITIES AND MONEY MARKET

International financial markets

Major **stock markets** experienced a strong upward trend at end-2006 and the beginning of 2007 (see Figure 1). The rapid acceleration in the growth of stock prices was conditioned by the relatively high economic activity, which also brought along an increase in corporate profits. The euro area stock market index (Stoxx 500) and the US S&P 500 grew by 10–15% within six months. Swedish and Finnish indices witnessed even faster growth, rising by an average of 20%. However, the general upward trend also had some setbacks. The decline in the Chinese stock market that lasted from the end of February to the beginning of March spread to other leading markets and caused a sudden sales pressure in the stock markets as well as other high-risk assets markets. Nevertheless, as the macroeconomic environment remained favourable, the stock markets recovered rather quickly and in several cases even reached all-time record levels.

The last quarter of 2006 in the **Central and Eastern European stock markets** was also characterised by a strong upward trend, followed by one or more corrections at the beginning of 2007, depending on the region (see Figure 2). The growth and subsequent downfall were the highest in Russia and Estonia, where the year-on-year growth reached nearly 100% in the fourth quarter of 2006. By the end of May 2007, the greatest year-on-year growth of about 50% was achieved by the Polish and Estonian stock markets. The growth of the Russian, Romanian and Bulgarian markets was similar to that of the euro area markets.

Developments in **bond markets** were brought about by the relatively high economic activity in advanced economies. The only exception proved to be the US, where the year-on-year GDP growth dropped to 2.1% by the end of the first quarter of 2007 and the real estate market continued to cool down. Thus, the US central bank kept the key interest rate unchanged while fast growing regions kept raising it. The European Central Bank raised the key interest rate twice to 3.75%. Also the United Kingdom and Sweden raised their key interest rates twice: to 5.5% and 3.25%, respectively. As a result, the three-month LIBOR in Sweden and the euro area grew by 60–70 basis points and the long-term (10-year) interest rates reached the level of 40–50% (see Figure 3). In the US, market interest rates remained virtually unchanged.

Foreign exchange markets witnessed a depreciation of the US dollar against other major currencies, except for the yen. During the last six months, the exchange rate of the euro appreciated against the dollar by 7%, reaching the all-time peak in intraday trading, i.e. 1.3680 (see Figure 4). The depreciation of the dollar was primarily caused by the weak US economic growth and the resulting decrease in the interest rate spread with other countries. Meanwhile, the Japanese yen depreciated against the dollar by 2%, which was mainly caused by Japan's continuously low key interest rate level. The exchange rate of the Swedish krona against the euro ranged within 9.0–9.4.

Similarly to stock markets also the **commodity markets** experienced a rather dynamic upward trend, which mainly relied on the demand growth resulting from global economic activity. The CRB index reflecting the prices of 22 major commodities rose by nearly 20% within the half-year. In line with that, the price of gold also grew by 12%, up to 670 dollars per ounce. The price developments of crude oil, on the other hand, remained volatile. From the end of September until January the price dropped partly for seasonal reasons, at times even falling to 50 dollars per barrel. Later on, the oil price started to increase again and reached the range of 60–65 dollars.

Money market

Despite the restrictive monetary policy of the European Central Bank (ECB), the Estonian monetary sector still enjoys high liquidity. During the past six months, the ECB additionally raised the euro area's monetary policy interest rate from 3.25% in

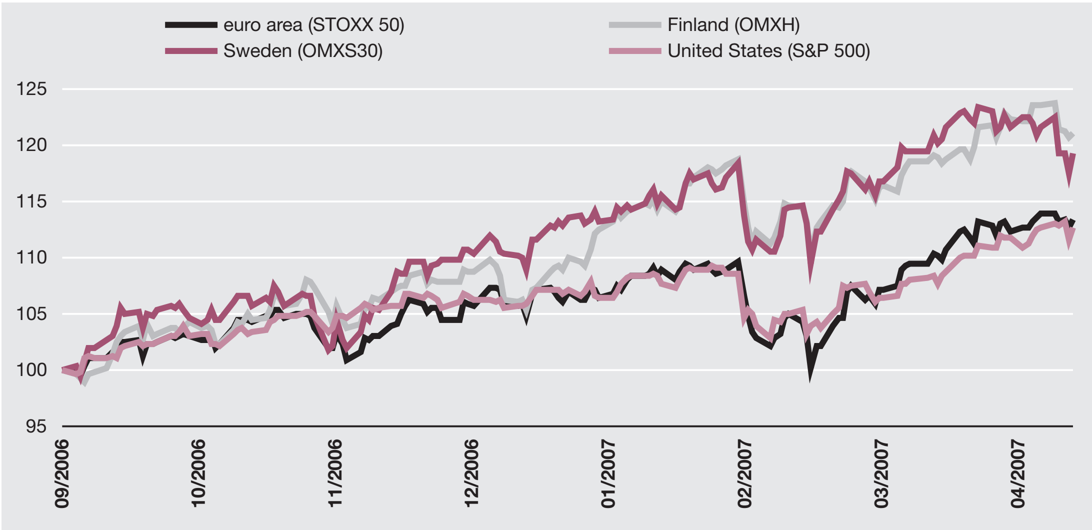


Figure 1. Stock indices in the United States, the euro area, Sweden and Finland (points; 29 September 2007 = 100)

Source: EcoWin

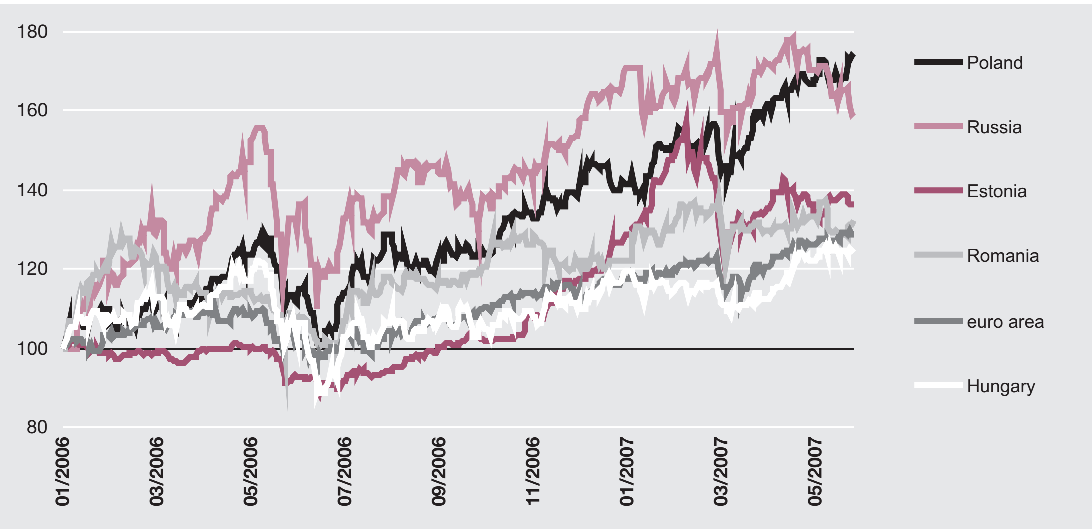


Figure 2. Dynamics of stock exchange indices of the new EU Member States, the euro area and Russia (points; 01/01/2006 = 100)

Source: EcoWin AB

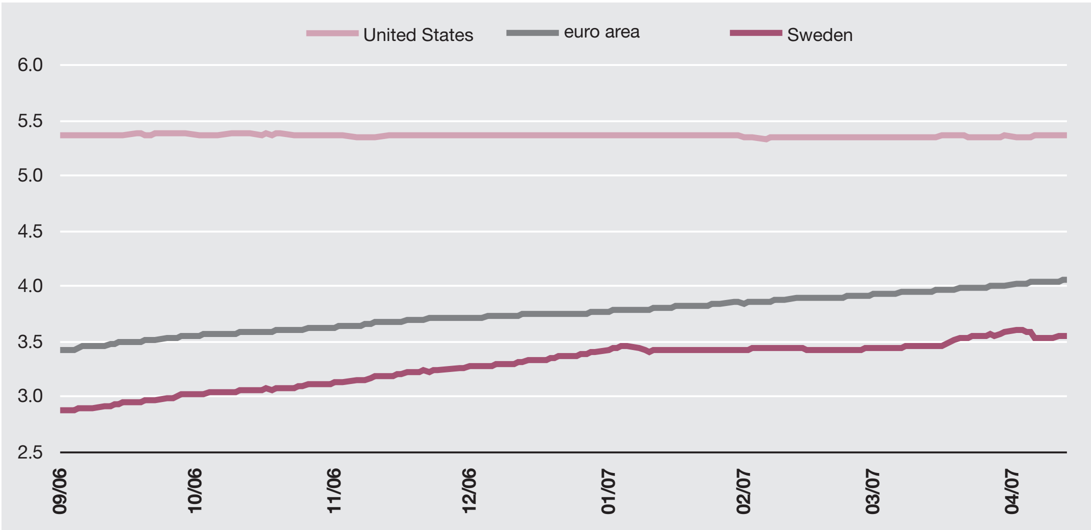


Figure 3. 3-month interest rates in Germany, Sweden and the United States (%)

Source: EcoWin

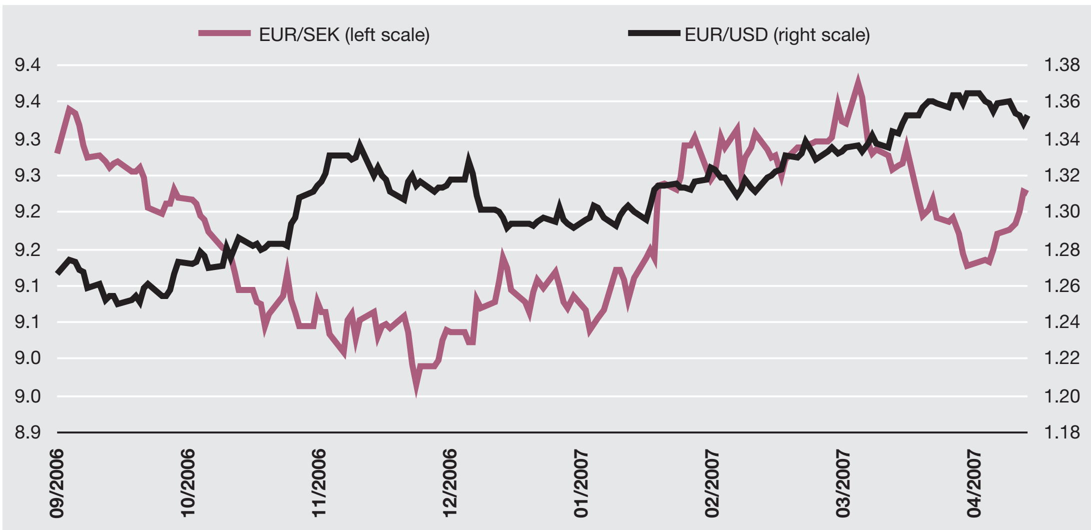


Figure 4. Exchange rate of the euro against the Swedish krona and the US dollar

Source: EcoWin

October 2006 to 3.75% in April 2007. The rise in the euro area key interest rate has entailed a gradual increase in the euro area **money market interest rates.** Since the fourth quarter of 2006 the three-month Euribor has climbed by an additional 60 basis points and compared to the beginning of the upward phase of the interest rate cycle the money market interest rates in the euro area have risen by almost 2 percentage points.

The Estonian money market interest rates have generally remained in line with the developments of the euro area money market interest rates (see Figure 5). Nevertheless, in this year's April money market interest rates increased at a slightly faster pace in Estonia compared to the euro area. In February, the confidence of foreign investors in the Latvian economy deteriorated slightly, which also affected neighbouring countries. The heightened interest in the economy of the Baltic States and the potential risks was brought about by the desire of some foreign investors to close the currency positions of the Estonian kroon. The growing interest of companies in Estonian kroon derivatives caused an increased demand for kroon loans in the interbank money market, which is why also the interest rate quotations of the Estonian money market rose, mostly across short-term maturities.

The rise in the interest rates on kroon loans on the domestic money market does not exert direct pressure on the Estonian financial sector, as the Estonian money market is relatively small and has low liquidity compared to euro area countries. Moreover, local credit institutions manage their liquidity in euros via their parent banks or directly on external markets, using the central bank's forex window to convert euros to kroons (see also the background information "Structure of the Estonian kroon money market" in the Financial Stability Review of November 2005). Rather, the increase in the interest rates on kroon loans influences the transaction costs of non-resident companies and banks who require kroon liquidity on the domestic market yet who do not have access to the central bank's forex window.

The slightly stronger demand for risk-hedging transactions related to the kroon's exchange rate also caused an increase in the difference between interest rate quotations that form the basis of future Estonian kroon and euro transactions (forward premiums). Banks' EUR/EEK net position in euros became short as well (see Figure 6). Despite this, there have been no pressures on the kroon exchange rate and participation in the exchange rate mechanism ERM II has gone smoothly.

As regards the longer maturities of the yield curve, the yield of the **five-year Estonian Government Eurobonds** on international markets has moved in line with the yield of other euro area government bonds. In the second half of 2006 and this year's first quarter, the spread between the average yield of the five-year Estonian Government Eurobond and German and Austrian government bonds with comparable maturities remained similar to previous periods (see Figure 7). The small spread between long-term interest rates indicates continuous confidence in the Estonian financial system.

The turnover of the Estonian kroon denominated money market loans is still strongly influenced by the great turnover of the derivatives market, caused by large-scale currency exchange transactions between a local bank and its parent bank in the first half of 2006 (see also Chapter IV of the Financial Stability Review of May 2006). Aside from the currency exchange transactions between the parent and subsidiary bank, the turnover of money market loans has slightly increased during the past six months. For the above reasons, the turnover of foreign currency derivatives increased by the beginning of this year. In the first quarter of 2007, foreign currency derivatives comprised more than a third of the total money market turnover (an average of 25% in previous quarters). Non-residents' transactions comprised over half of the turnover of foreign currency derivatives.

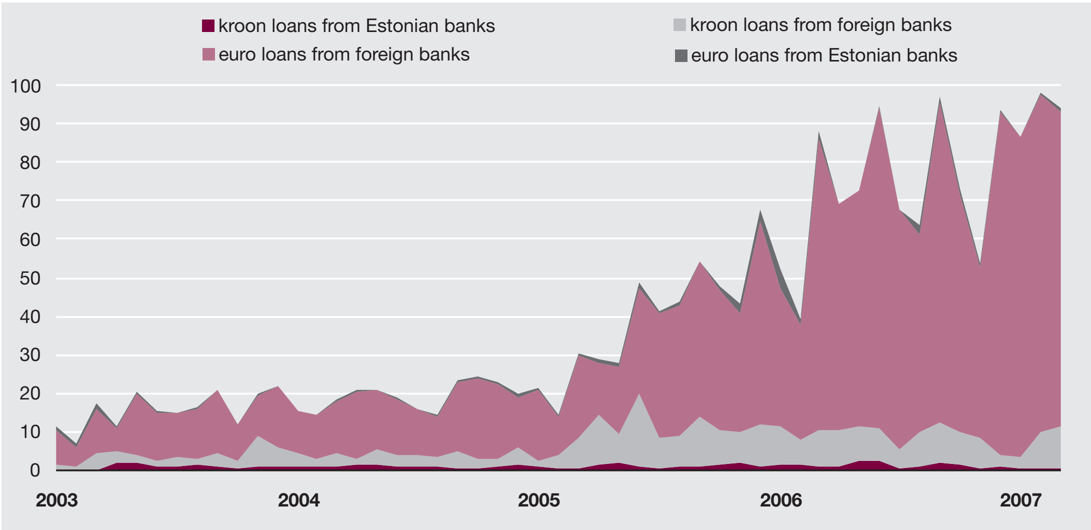


Figure 5. Money market interest rates in Estonia and in the euro area (%)

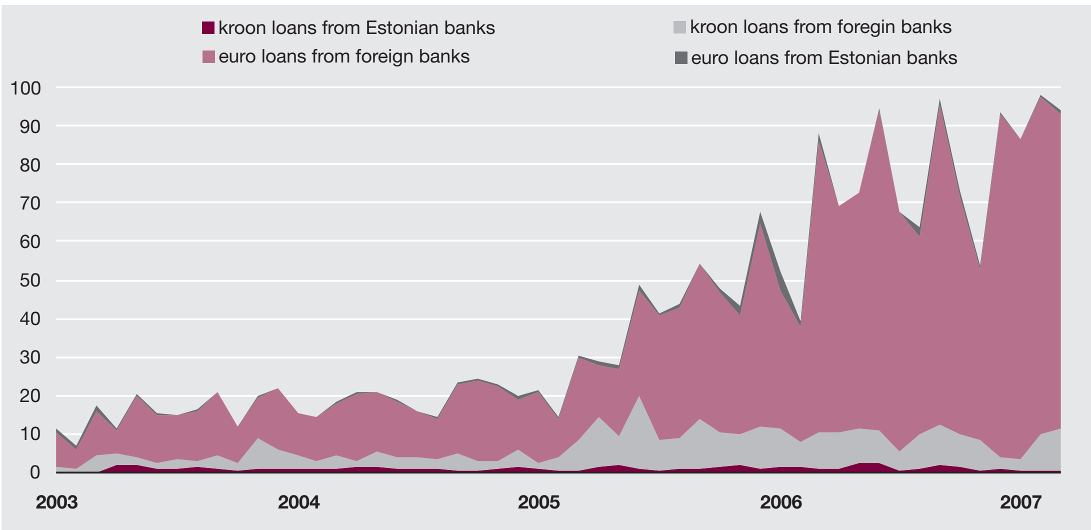


Figure 6. Loans of Estonian credit institutions received from the inter-bank loan market (EEK bn)

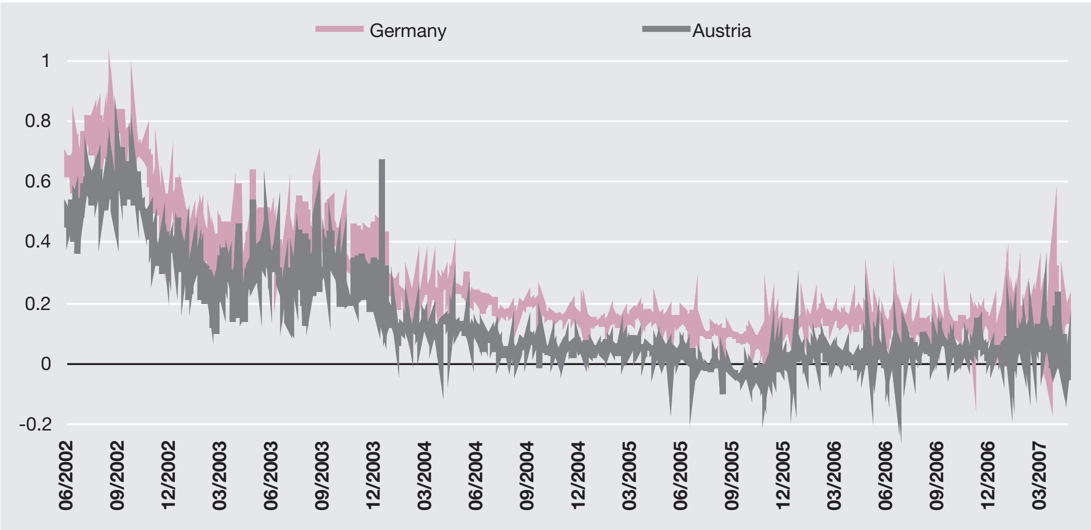


Figure 7. Yield difference between the Estonian Government Eurobonds and respective bonds in Austria and Germany (percentage points)

At the end of 2006 and in the first quarter of 2007, the turnover of short-term kroon loans was also slightly higher than in earlier quarters. The transactions of non-residents accounted for about 90% of the short-term kroon loan market. The most active participants were credit institutions from Sweden, Finland and Latvia.

Bond market

The growth of the domestic bond market has been robust for the past six months. By the end of March 2007, the growth in the **primary bond market** turnover accelerated to 81% (see Figure 8). While in 2006, the average quarterly turnover amounted to slightly below 2 billion kroons, in the first quarter of 2007 it even exceeded 3.3 billion kroons. Bond capitalisation increased by 76% year-on-year, reaching 10.4 billion kroons by the end of March and comprising already 4.9% of GDP. The largest contribution to growth came from the bond issues by resident companies, which more than doubled (170%). Real estate and other financial intermediary companies were the most active to issue bonds. The volume of banks' issues grew by 36%. The greatest contributor to the bond issues of banks was AS Sampo Pank. The volume of non-residents' bond issues has slightly decreased compared to earlier periods.

The **secondary bond market** has remained relatively subdued compared to the increasing turnover of the primary market. At the end of the first quarter of 2007, the secondary market turnover was a half smaller than the year before. Also the average daily turnover had declined, amounting to 12.9 million kroons (about 20 million kroons a year ago). Most of the transactions originated through the Estonian Central Register of Securities (ECRS) were performed with bonds issued by the financial sector (48%), but almost as many transactions were performed with bonds issued by the non-financial sector (43%; see Figure 9). The share of transactions with bonds issued by non-residents has diminished even further. Only 9% of the transactions executed through the ECRS were performed with bonds issued by non-residents. Most of them were transactions performed with bonds registered with the Central Securities Depository of Lithuania (44.4%) and a third were bonds registered with the Latvian Central Depository.

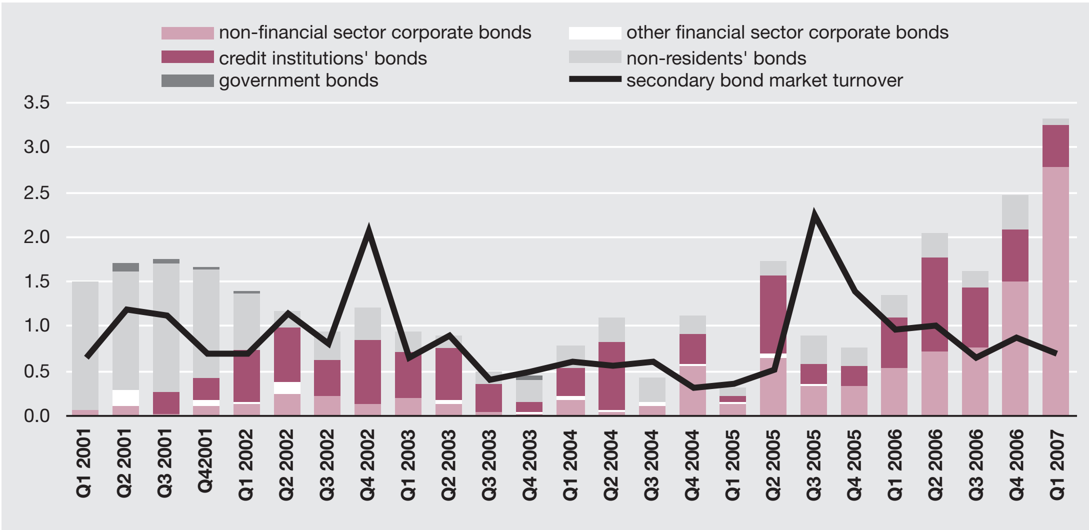


Figure 8. Volume of quarterly issued bonds and secondary bond market turnover (EEK bn)

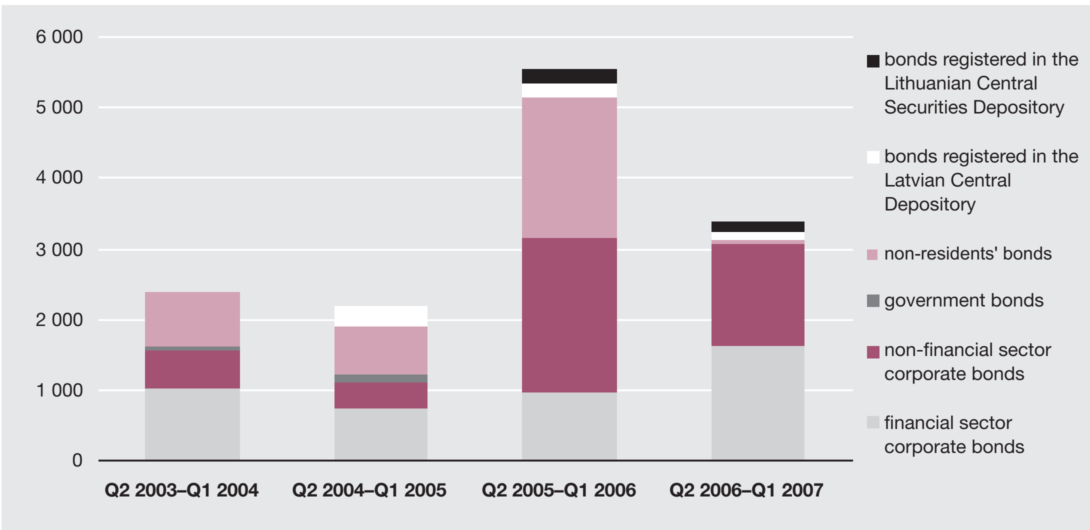


Figure 9. Structure of secondary bond market turnover (EEK m)

During the past six months no new bonds listed on the Tallinn Stock Exchange. One company was delisted from the stock exchange. Sampo Pank withdrew their subordinated debt liability. Moreover, in April SBM Pank's bonds became due. At the end of March 2007, the bonds of five companies were listed at the Tallinn Stock Exchange with a total market value of approximately 462 million kroons, i.e. 4.4% of the total capitalisation of the bond market. During the past six months, again only the bonds of Sampo Pank were traded on the stock exchange (four transactions in the total value of 8.5 billion kroons).

Stock market

One of the most significant events of the past six months was the listing of shares of Ekspress Grupp on the primary list of the Tallinn Stock Exchange. The price hike of the Ekspress Grupp's share on the very first day was the fastest in three years (20.3%) and in terms of turnover the third best issue in three years. The total turnover of the share amounted to 138 million kroons. The **total market capitalisation of listed companies** increased to 74 billion kroons by the end of March. In April, the listing of the shares of Ekspress Grupp added approximately 1.8 billion kroons.

The **value of the Tallinn Stock Exchange index OMXT rose** rapidly at the beginning of the year, achieving its highest level in three years, i.e. 1,043 points, and a year-on-year growth of 60% by the beginning of February (see Figure 10). The robust increase was followed by a correction in February and the value of the index dropped back to the end-2006 level. By the end of March, the stock market capitalisation reached 74 billion kroons, having grown by 62% year-on-year and comprising 34.8% of GDP (see Figure 11). Nearly 58% of the capitalisation growth stemmed from price growth and the rest, i.e. 12 billion kroons, from the inflow of new capital.

The **average daily turnover** of the past half-year's stock exchange transactions was about twice higher than the average of the previous period. Year-on-year, it has grown by about 70%, reaching 73 million kroons. During the last six months, transactions with the shares of Olympic Entertainment Group and Tallink Grupp were in the lead, comprising 28% and 21% of the stock market turnover, respectively. Though the shares of Eesti Telekom did not post the greatest turnover, they were nevertheless very liquid, comprising 9% of the stock market turnover. The shares of Baltika in the stock market turnover comprised 8%.

26 stock exchange members are entitled to act as brokers, two of whom are currently inactive. The number of foreign members is relatively high compared to domestic brokers. There are currently seven local members, comprising only 27% of all members. Most of the brokered transactions, however, are nonetheless intermediated by local members. Again, transactions brokered by AS Suprema Securities and Hansapank made up the majority, i.e. 78% of the total value of transactions on a rolling year basis.

Since the end of 2006, the **share of foreign investors** in the capitalisation of the shares listed on the stock market has decreased slightly (53%; see Figure 12). Within the past six months, investors from Luxembourg and Latvia have multiplied their investments in the stock exchange – by 1.5 and 3.8 billion kroons, respectively. At the end of March, the investments of resident companies accounted for 47% of the total value of listed shares. The share of private investors has slightly declined, totalling about 4%.

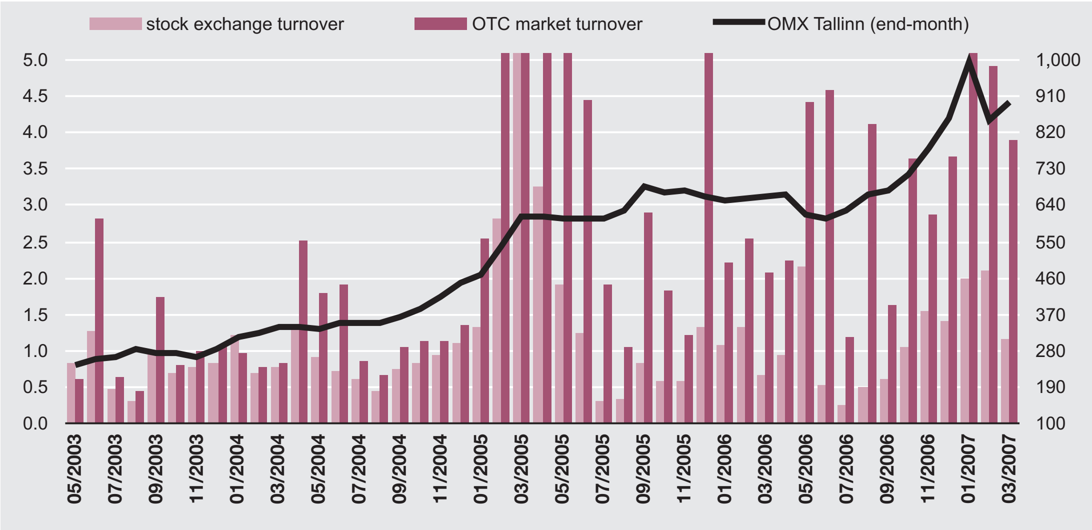


Figure 10. Stock turnover on the Tallinn Stock Exchange and OTC market (EEK bn; left scale) and Tallinn Stock Exchange index OMXT (points; right scale)

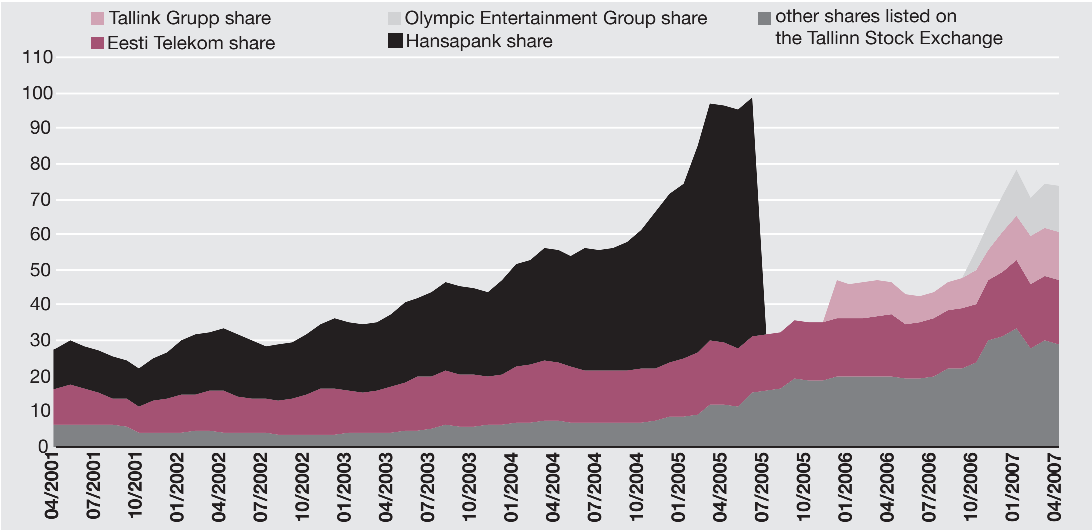


Figure 11. Market capitalisation of shares listed on the Tallinn Stock Exchange (end of month; EEK bn)

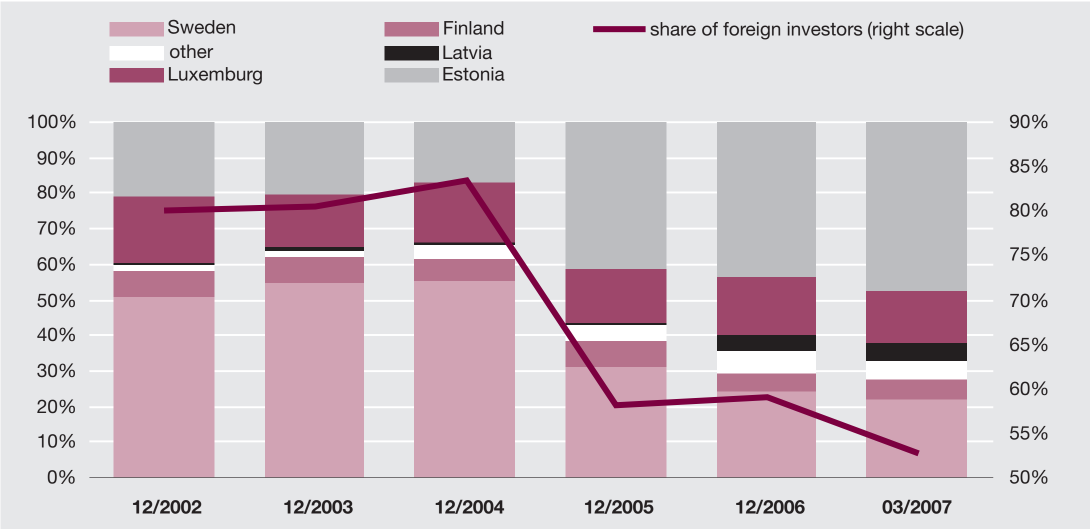


Figure 12. Structure of investors by residency and share of foreign investors of shares listed on the Tallinn Stock Exchange (%)

IV OTHER FINANCIAL MARKETS

INVESTMENT FUNDS

The **yield** of investment funds has been influenced by the rise in key interest rates since late March 2006, the rapid growth of stock prices in the second half of 2006 and the subsequent correction at the beginning of 2007 (see Figure 1). This mostly affected the yield of equity funds, which increased to 24% as a moving average by the end of March after having fluctuated slightly up and down. Along with the rise in key interest rates also the average yield of money market funds grew, reaching its highest level in three years at the end of March with 2.6%. At the end of March, the average yield of interest funds (2.7%) stood about twice higher than last year's average.

The **asset growth** of investment funds accelerated slightly in autumn 2006 thanks to the growing volume of equity funds, but by the end of March faced a year-on-year deceleration to 39% due to the high comparison basis and the stock market correction (see Figure 2). The volume of investment fund assets reached a record 21.4 billion kroons at the end of March. 40% of the year-on-year growth of investment fund assets stemmed from the yield of assets and the remainder, 3.6 billion kroons, consisted of new capital. Most of the new investments were placed in equity funds, amounting to an annual 4.2 billion kroons. Meanwhile, the growth of money market fund assets was entirely based on price growth. However, the increase in the average yield of interest funds did not alleviate the decrease in the volume of assets by a third, conditioned by the outflow of money from these funds.

The share of residents among the shareholders of equity funds decreased from approximately 60% last year to 55% by the end of March 2007. Less than half of the residents (44%) were private persons. Only about 12% of money market funds belonged to residents. From among non-residents, investors from Latvia and the British Virgin Islands invested quite a significant amount of capital (equal to that of Estonian investors). Most of the owners of interest funds (90%) were residents, of whom slightly over a third were private persons.

The **share of foreign assets** in the volume of fund assets started to climb moderately in the fourth quarter of 2006 and stood at 79% at the end of March 2007 (see Figure 3). The share of foreign assets in the volume of fund assets has primarily been fostered by investments in the shares and units of non-residents, which increased by 80% (by 5.7 bn kroons) with half a year until the end of March. Investments in EU markets grew from 64% last year to 76% of foreign assets (see Figure 4). This was mainly caused by the accession of Bulgaria and Romania to the European Union. During the past year, the markets of EU Member States witnessed the greatest growth in terms of investment, especially Luxembourg, the United Kingdom, Romania and Poland, and also Serbia which received 70% of the new foreign investment. The total volume of instruments issued to the Estonian stock, bond and fund markets has decreased to 11% of the assets of the investment and pension funds registered in Estonia, i.e. approximately by 3.5 billion kroons. Thus, by the end of March the year-on-year growth of these investments decelerated to 38%. At the same time, investments in listed shares grew by almost 60% within the year, reaching nearly 1.5 billion kroons by late March.

In the past half-year, **three new equity funds** were added to mutual funds: the SEB Active Fund of Funds, the SEB Balanced Fund of Funds and the Trigon Active Alpha Fund, whose assets accounted for 5% of the total volume of equity funds at the end of March. Considering the investment goals and risk level of the funds of funds, 80% of the assets of the SEB Active Fund of Funds and 35% of the SEB Balanced Fund of Funds are invested in equity instruments. The assets of the Trigon Active Alpha Fund are placed in Central and Eastern European, Russian and Turkish securities. Furthermore, as of April 2007, it is also possible to invest in the equity funds of AS Avaron Asset Management that

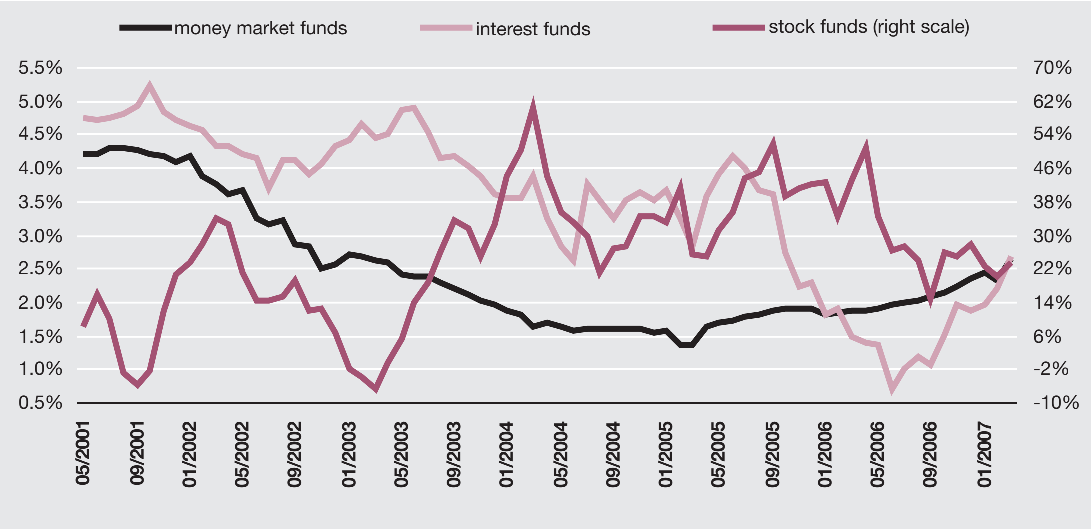


Figure 1. Average yield of investment funds

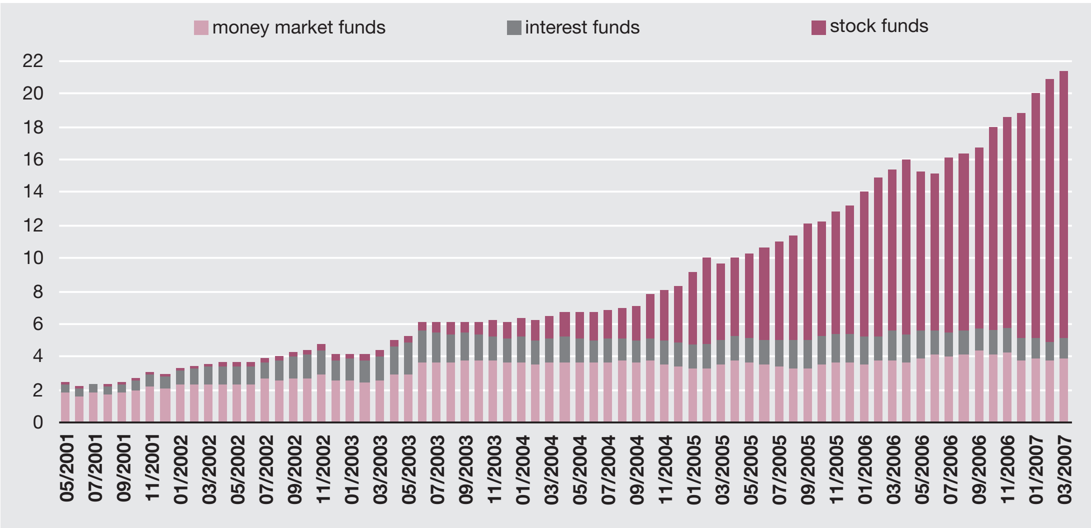


Figure 2. Volume of investment fund assets at end-month (EEK bn)

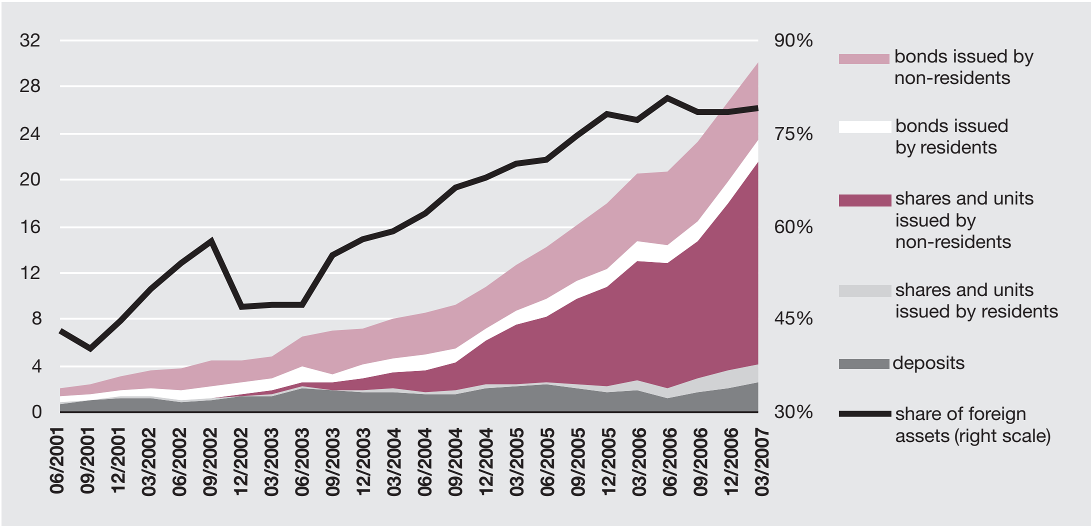


Figure 3. Structure of investment and pensions fund assets (EEK bn) and share of foreign assets (%)

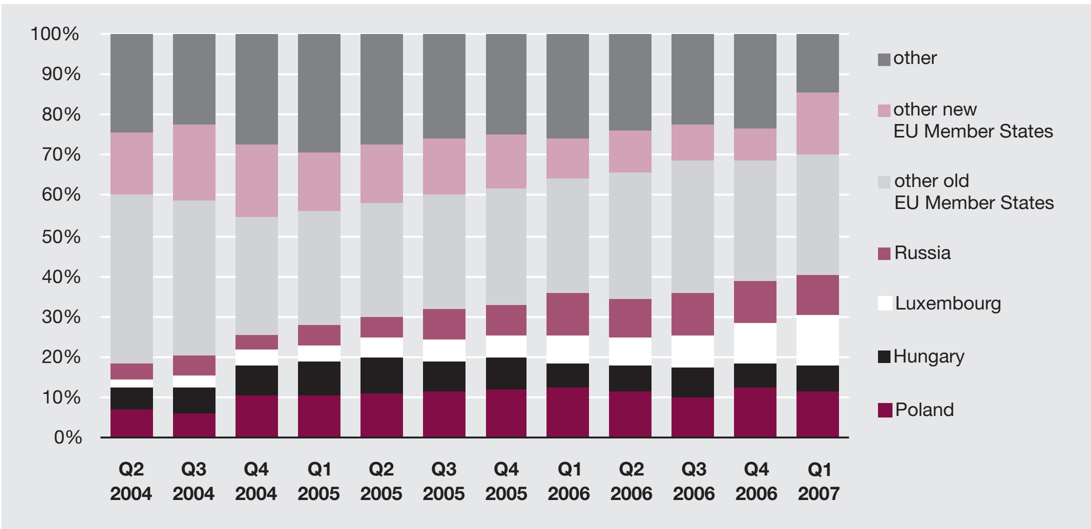


Figure 4. Foreign investments of investment and pension funds by residency at end of period

received its licence to operate as a fund manager in December 2006. Its equity funds include the Emerging Europe Small Cap Fund and the Balkan Fund.

PENSION FUNDS

At the end of April 2007, the number of subscribers to the **second pillar of the pension system** amounted to approximately 530,000 persons, i.e. about 58% of the labour force. The total volume of the second pillar funds increased by 56% (by 3 billion kroons) within the past year and stood at 8.3 billion kroons at the end of March (see Figure 5). At the end of the first quarter, the total volume of the second pillar pension funds comprised 27.2% of the financial assets invested in investment funds by households (compared to 25% a year ago). 14% of the year-on-year growth of the pension fund assets stemmed from the yield of assets and the rest, amounting to approximately 2.6 billion kroons, was new capital placed in the second pillar pension funds.

The number of subscribers to the **third pillar** reached nearly 32,000 persons by April 2007, accounting for approximately 3.8% of the labour force. The total volume of the third pillar funds grew by 57%, i.e. 302 million kroons (in March 2006, the growth in the volume was 10% smaller). 20% of the year-on-year growth of the third pillar funds derived from the yield of assets and the rest, 241 million kroons, was contributed by new capital. Including pension insurance, by the end of the first quarter of 2007 the third pillar posted nearly 2.65 billion kroons in volume, with pension funds comprising 31.4% of that.

The developments of recent quarters in the **asset structure** of pension funds have continued. The share of investment fund shares and units in the asset structure of the second pillar pension funds has increased even further. While a year ago they comprised 34%, this year 45% of assets have been invested in the funds (see Figure 6). Meanwhile, the percentage of units and shares, as well as bonds, has decreased.

By the end of the first quarter, the importance of investment fund stocks and shares in the investments of third pillar pension funds had also increased on account of other instruments: from 44% to 56% (see Figure 7). This development was well expected, as different investment fund options have greatly diversified recently (see "Investment funds"). In terms of countries and regions, the share of Western European countries in pension fund assets has grown during the past year: from 46% last year to 56% in the first quarter of 2007. The importance of Central and Eastern European countries, on the other hand, has diminished from 36% to 30%. Although the year-on-year yield of pension funds has recovered from the impact of the correction in last year's May, none of the funds have been able to achieve the previous record results (see Figure 8).

At the end of 2006 and the beginning of 2007, the issue of reviewing and amending the legislation regulating the operation of pension funds cropped up. The elaboration of the three-pillar pension system had mainly focused on guaranteeing the sustainability of the pension funds by laying down tariff rates and procedures for switching pension funds or transferring units. Owing to the specifics of the pension system and possible market failures, it is now considered essential that the principles of laying down management fees be reviewed and the procedures for switching mandatory pension fund units and the first contribution to a new fund be simplified. The exact contents and nature of the amendments will be specified by mid-2007.

INSURANCE

Life insurance

Similarly to 2005, the profit of life insurance companies stood at 147.6 million kroons also in 2006. Three out of five life insurance companies concluded the year with positive results.

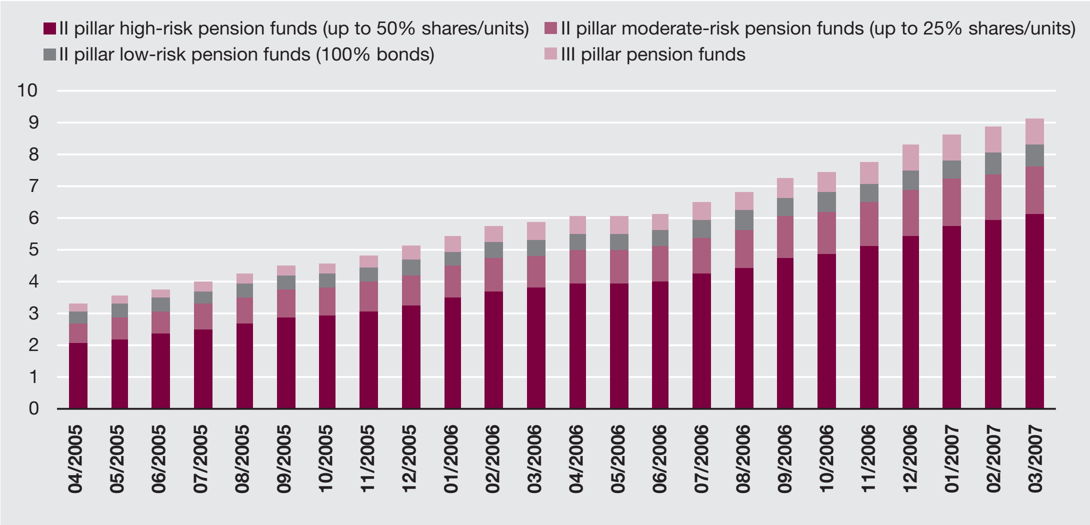


Figure 5. Volume of pension fund assets at end-month (EEK bn)

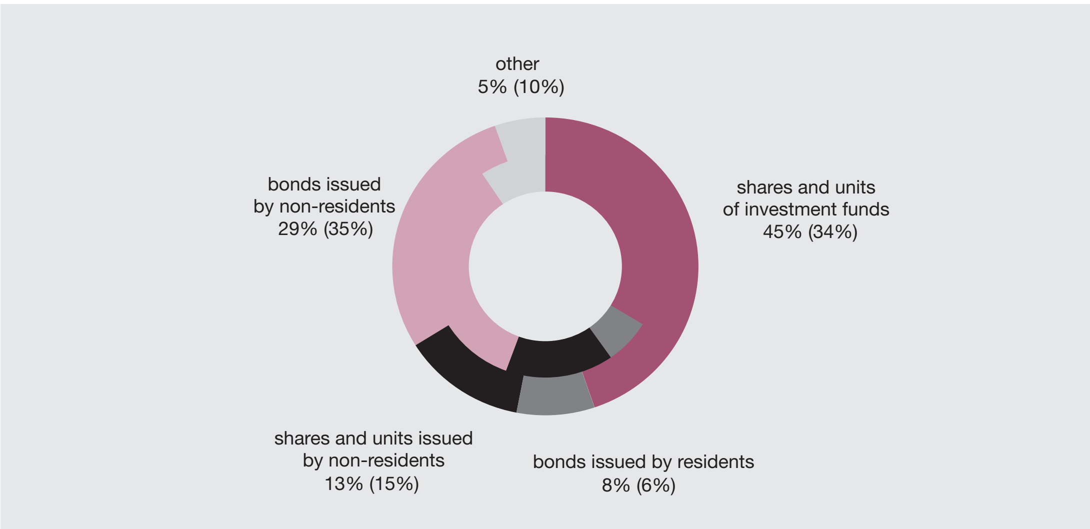


Figure 6. Structure of II pillar pension funds' assets as at 31 March 2007 (position on 31 March 2006 indicated in brackets)

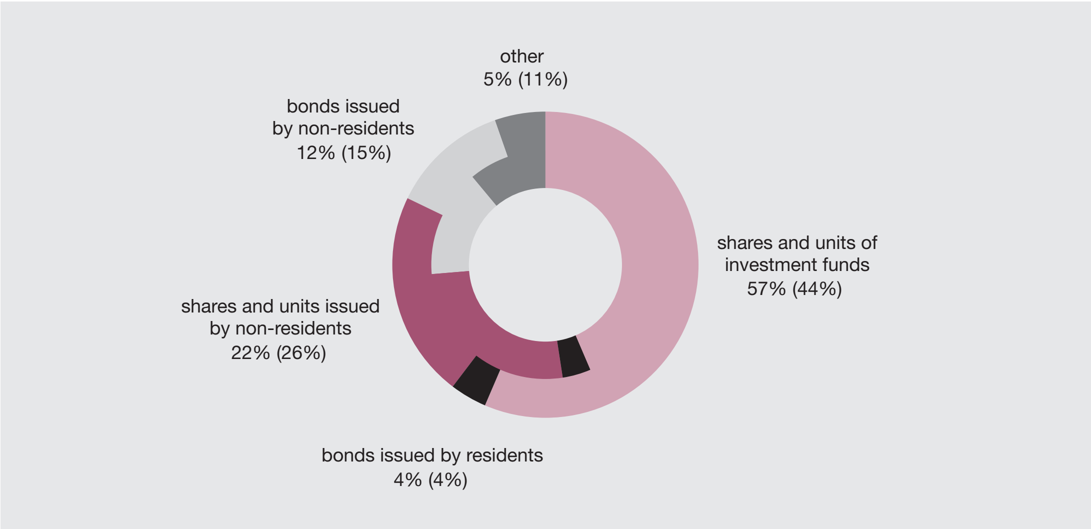


Figure 7. Structure of III pillar pension fund assets as at 31 March 2007 (position on 31 March 2006 indicated in brackets)

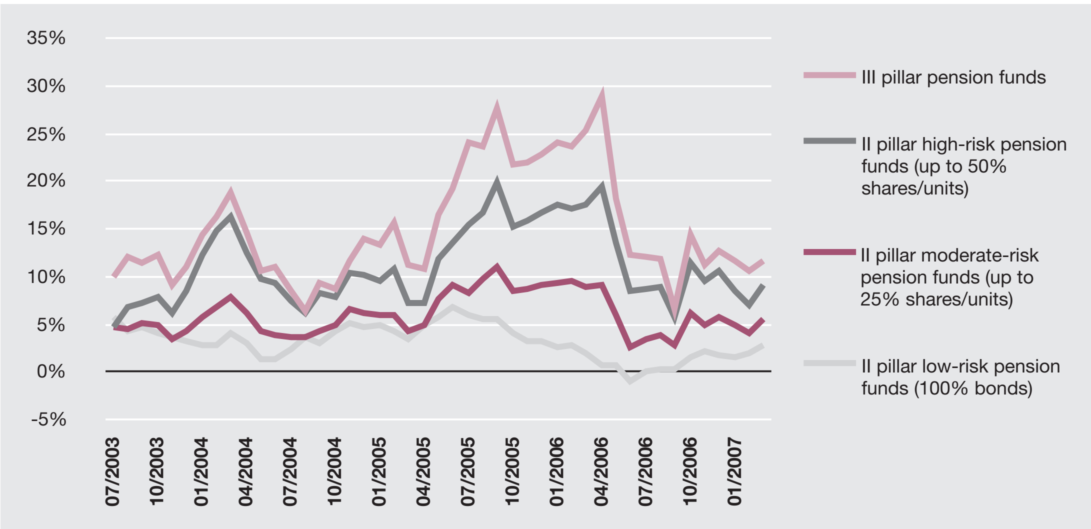


Figure 8. Annual yield of pension funds at end-month

The year-on-year growth of **gross premiums** (from the second quarter of 2006 to the first quarter of 2007) in the life insurance market reached 20% (see Figure 9). In absolute terms, 1.5 billion kroons worth of gross premiums were collected. Most of them were unit-linked life insurance contracts (year-on-year growth 31%) and pension insurance contracts (year-on-year growth 1%).

The balance sheet total of life insurance companies stood at 6.5 billion kroons at the end of the first quarter of 2007. During the year, it increased by 2.4 billion kroons, i.e. by 57% (see Figure 10). At the end of the first quarter, the investments of unit-linked life insurance comprised 47% of the balance sheet total of life insurance companies, having grown by 1.5 billion kroons (93%) year-on-year. As for the structure of investments made for covering other insurance contracts, the share of stocks and other securities has risen (from 32% to 40%) and that of bonds and other fixed-income securities has decreased (from 59% to 47%). The reasons may be the extension of the maturities of life insurance contracts and products, which diminishes the need for liquid assets, as well as the riskier behaviour of life insurance companies.

Non-life insurance

Similarly to 2005, the **profit** of non-life insurance companies stood at 432 million kroons in 2006. Return on equity was 21%.

Owing to new market participants, the concentration of the insurance market has decreased: in the first quarter of 2006, three major insurance companies controlled 82% of the market, whereas in the first quarter of 2007 the respective indicator was 80%.

The **gross premiums** collected by non-life insurance companies during the past year reached 3.3 billion kroons, having increased by 18% year-on-year (see Figure 11). As the greatest contributors to the growth of gross premiums were the insurance of land vehicles, private property insurance and third party motor liability insurance, the increase of gross premiums may still be explained by the generally favourable economic situation and the rapidly increasing volume of loans. In 2006, nominal GDP growth reached nearly 20% and it may be concluded that the growth of the non-life insurance market was slightly smaller than the previous year's nominal GDP growth. In the past year, 1.75 billion kroons of insurance benefits were paid, which is 22% more than the year before.

At the end of the first quarter of 2007, the assets of non-life insurance companies totalled 4.4 billion kroons, having grown by 1 billion kroons (30%) during the last year. The **investments** of non-life insurance companies accounted for 87% of the balance sheet total, i.e. approximately as much as the previous year. The structure of investments is undergoing the same developments as in earlier periods: investments are mostly made in bonds (73%) and their share is rising steadily. Meanwhile, investments in shares and other securities have decreased even further (from 12.6% in the first quarter of 2006 to 6.8% in the first quarter of 2007).

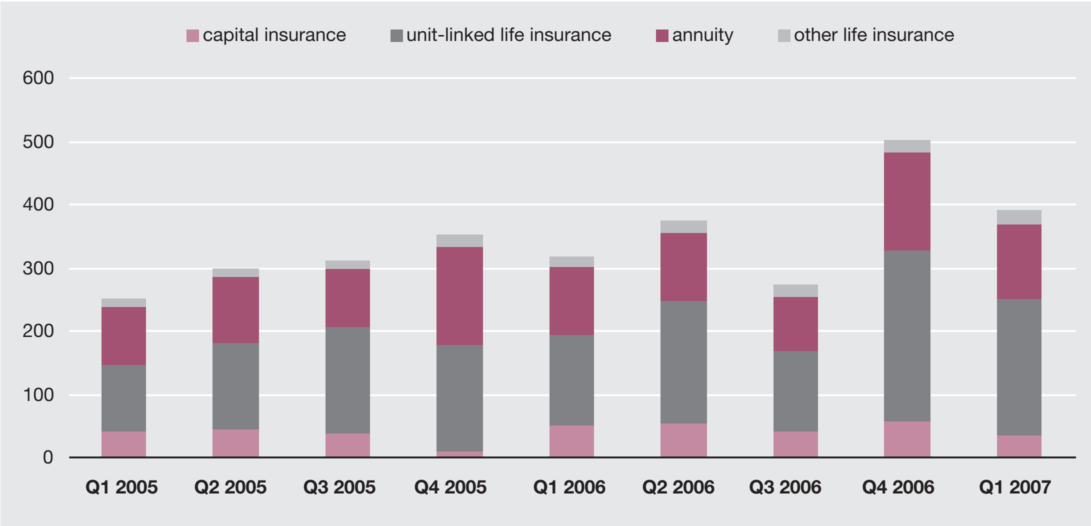


Figure 9. Gross premiums collected by life insurance companies (EEK m)

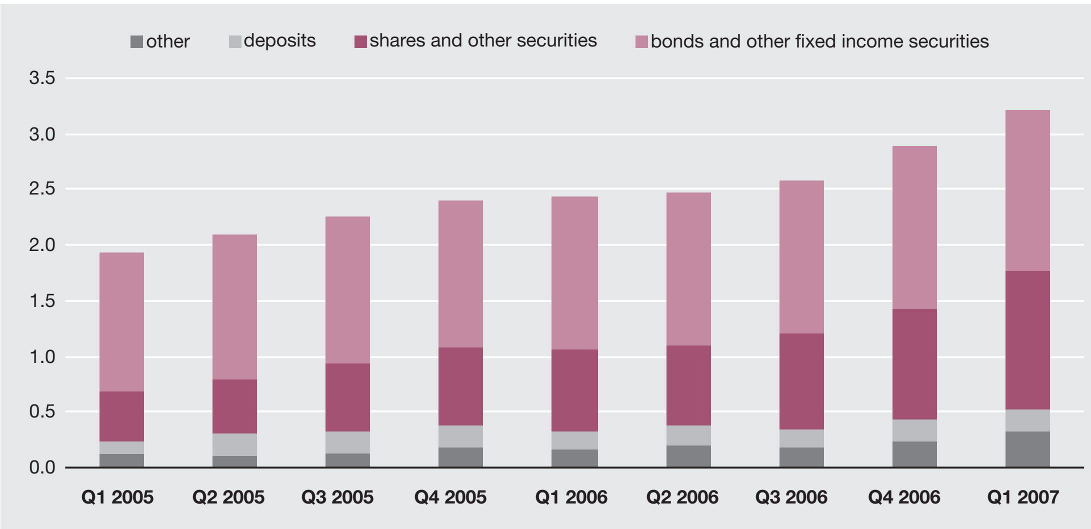


Figure 10. Investment structure of life insurance companies (EEK bn)

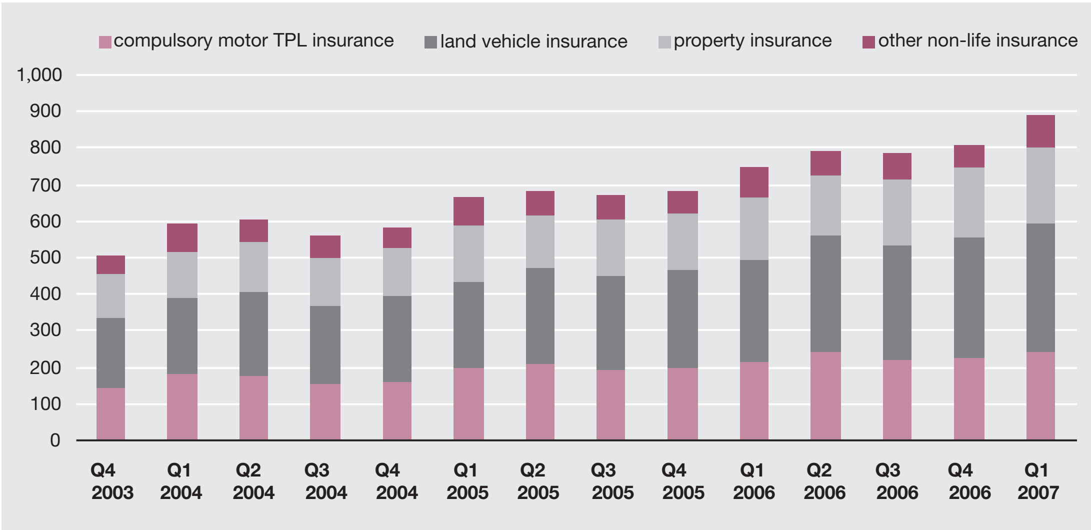


Figure 11. Gross premiums collected by non-life insurance companies (EEK m)

V PAYMENT SYSTEMS

SETTLEMENT SYSTEM OF INTERBANK PAYMENTS

Eesti Pank has been participating in the euro area payment system TARGET since 20 November 2006, when the Real-Time Gross Settlement System of Eesti Pank (EP RTGS) was connected with the Trans-European Real-Time Gross Settlement Express Transfer system (TARGET)[1]. While to date, the central bank provided interbank settlements only in Estonia, it now also offers a cross-border payment channel for the financial sector via the TARGET.

Joining the TARGET was executed through the Banca d'Italia. Besides Eesti Pank, four EP RTGS members joined the TARGET: OMX Tallinn, the Estonian branch of AS Parex Banka, AS Sampo Pank and the Estonian branch of Svenska Handelsbanken AB.

Along with joining the TARGET also the working day of the Settlement System of Ordinary Payments (ESTA) was extended by one hour. Thus, as of autumn 2006 retail payments intermediated by Eesti Pank are settled from 8 AM to 6 PM. Adding the tenth file exchange period has unified the daily pattern of settlements, decreasing the number of payments settled during the first file exchange period.

The number of payments settled through the EP RTGS has increased by 52% within the year (see Figure 1). The growth was brought about by new cross-border TARGET payments initiated in euros. Estonian bank customers originate an average of 67 express euro transfers and receive about 5 payments settled via the TARGET per day.

Until the end of the first quarter of 2007, an average of 274 payments per day were settled via the

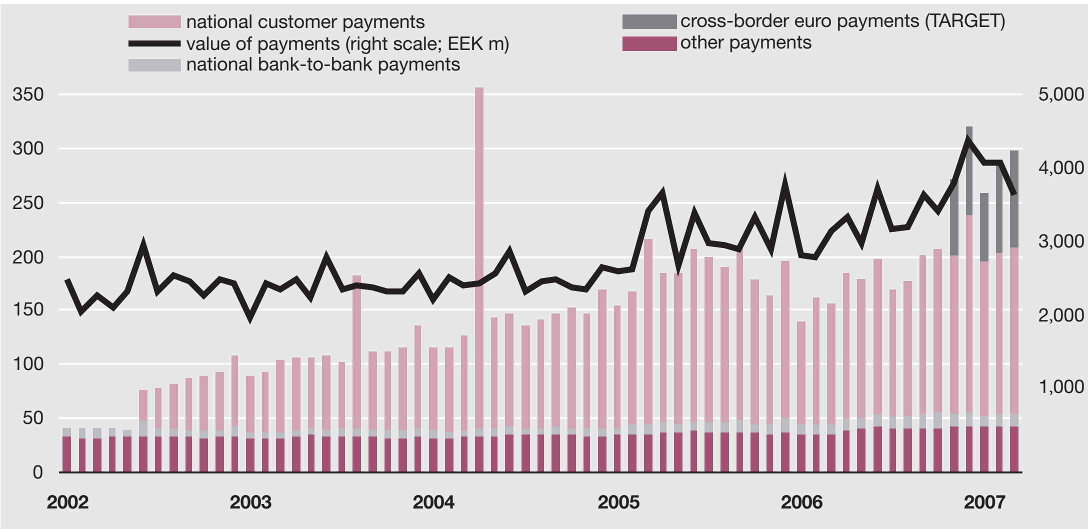


Figure 1. Number of payments processed per day in the EP RTGS and their average daily value per month

[1] Eesti Pank and credit institutions operating in Estonia plan to connect to the TARGET2, a system functioning on a single shared platform developed to replace the current TARGET, in the third wave on 19 May 2008.

EP RTGS on a rolling year basis. 79% of them were customer payments. The average value of domestic express payments originated by bank customers was 3.9 million kroons. The average value of cross-border payments is substantially smaller, remaining at the level of 240,000 kroons. The average turnover of payments settled through the EP RTGS increased by 16%, reaching 3.2 billion kroons per day. The largest share of the turnover (47%) still consisted of banks' collateral account transactions of the ESTA.

The number of payments settled via the **ESTA** grew steadily throughout the year: by 15% to an average of 85,000 payments per day (see Figure 2).

The average daily turnover of ESTA payments has also increased. During the year, the average turnover picked up by 37%, reaching a record 1.6 billion kroons in December 2006. The average value of payments settled through the ESTA during the period under analysis was 15,700 kroons.

Availability of settlement systems ESTA and RTGS

By the end of the first quarter of 2007, ten serious failures had occurred in the EP RTGS, year-on-year[2]. The incidents were caused by software errors and failures in the operation of the network. The ESTA also posted ten serious malfunctions during that period. The availability was disturbed by changes resulting from the transition to the new technical platform. The failures have been analysed and the causes eliminated. During the last 12 months the payment and settlement systems managed by Eesti Pank have not experienced malfunctions that might endanger the operation of the financial sector.

Assessment by the overseer of payment systems to the Delivery versus Payment service for the settlement of securities in real time

To date, financial claims and liabilities resulting from domestic securities transactions intermediated by

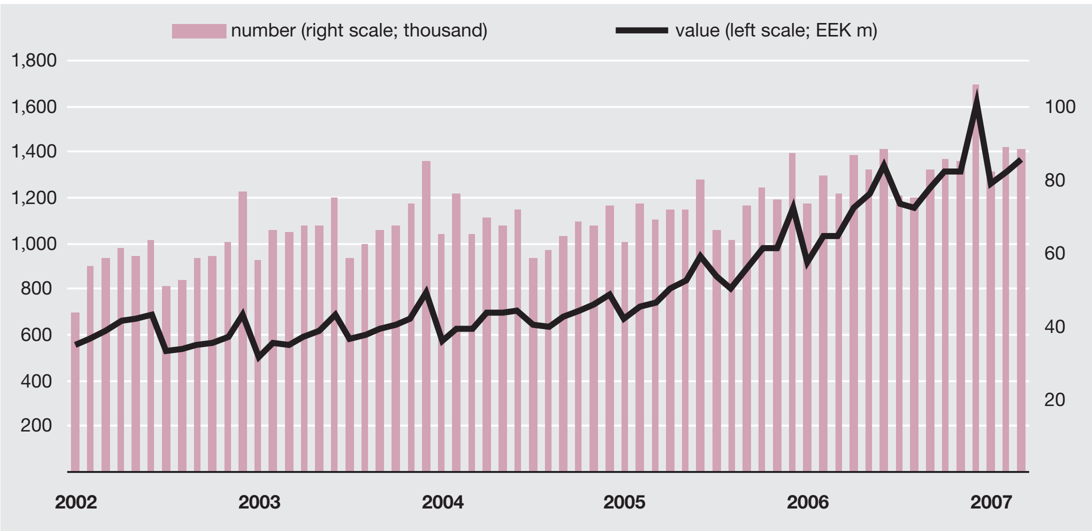


Figure 2. Number of payments processed per day in the ESTA and their average daily value per month

[2] According to the procedural rules of risk management, a failure is considered serious when the incident concerns several system participants or decreases the performance consistency or the availability of payment and settlement systems.

the Estonian Central Register of Securities (ECRS) have been met only in terms of settling net positions. Settlements of the cash leg[3] of the net positions of credit institutions acting as custodians are performed on EP RTGS accounts held with Eesti Pank once a day in case of stock exchange transactions and three times a day in case of over-the-counter transactions (at 11:30 AM, 1:45 PM and 3:45 PM). Cross-border over-the-counter (OTC) transactions originated by the ECRS and other depositories in the OMX group have been available via links between the omnibus accounts of depositories only as free of payment transactions[4]. For the settlement of claims and liabilities resulting from cross-border stock exchange transactions, depositories have also provided delivery versus payment, combining the central bank money and the correspondent banking money.

In order to offer effective solutions for emergency situations and enable the delivery versus payment settlement of claims and liabilities resulting from cross-border OTC transactions, in cooperation with Eesti Pank and credit institutions operating in Estonia the ECRS launched the **Real-Time Delivery Versus Payment (RT DVP)** service for the cash leg settlement of securities transactions. The new service is available as of 30 April 2007.

In case of a delivery versus payment settlement, the securities custodians intermediate the transfer of both the securities and the money. The purchased securities are transferred to the purchaser's securities account and the funds on the seller's settlement account as soon as the sum has been transferred from the custodian's account of the credit institution representing the purchaser in the EP RTGS to the custodian's account of the credit institution representing the seller.

As the RT DVP service reduces risks to the payment and settlement systems, the overseer considers the implementation of this service justified and positive. Developing a functionality similar to the RT DVP was discussed already at the time the EP RTGS was introduced, but as market participants had no interest in the service at the time, it was disregarded during the launch of the RTGS at the beginning of 2002.

For the smooth operation of the financial system, the functionality of the RT DVP service must guarantee that credit institutions are able to manage their own liquidity, which is especially crucial in the event of a crisis. Thus, the overseer of payment and settlement systems considers the following conditions essential for the application of the RT DVP service:

1. The RT DVP payment instruction priority in RTGS is four or lower[5];
2. The mandates of the parties, especially those of the ECRS and credit institutions, are clearly stipulated and they incur no additional risks on payment and settlement systems or the financial system as a whole;
3. The price of the service covers the costs of elaborating and providing the service and is brought out separately on the price list of the EP RTGS.

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3 Securities settlements are performed via two systems: the transfer of securities on securities accounts and transfer of cash on cash accounts.

4 Free of payment transaction means that the transfer of securities and cash is performed independently, i.e. they are not directly related.

5 In the EP RTGS, payment instructions have priorities from 1 to 5. Payment instructions carrying the first priority are the most essential and are fulfilled first and payment instructions with the lowest, i.e. fifth priority level are fulfilled when other payment instructions with priorities of 1–4 have been fulfilled.