Eesti Pank Bank of Estonia

# Financial Stability Review

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#### **SUMMARY**

### MACROECONOMIC AND EXTERNAL ENVIRONMENT

The global economic growth remained fast in 2005 and the first months of 2006. Price pressures induced by the rapid oil price increase created preconditions for implementing a **stricter interest rate policy in the euro area**. Euro area money market interest rates, which had remained low since 2003, increased by 70–90 basis points by spring 2006. International financial markets expect the moderate interest rate rise to continue in the following months.

Estonia's economic growth also gained momentum due to the strong external demand and favourable international liquidity environment. Real GDP growth stood at 9.8% in 2005, exceeding the 10% level at the beginning of 2006. Such high growth indicators probably imply that the current economic cycle has reached its peak, i.e. the maximum growth rate, and real growth is expected to remain in the average range of 7–8% in the next few years.

Higher external demand and continuously strong domestic demand boosted significantly the turnover and profitability of Estonian companies in 2005. Real estate and construction companies achieved above average results, and turnover grew very fast also in trade. Household confidence reached its highest level of recent years at the end of 2005. This was supported by further positive developments in the labour market and the rapid increase in income along with increased savings.

### CORPORATE FINANCIAL BEHAVIOUR AND RELATED RISKS

In the last quarter of 2005, also corporate financial assets increased owing to the acceleration of **deposit** growth. Although in comparison with other European countries the financial assets of Estonian companies remain at a moderate level in ratio to GDP, in recent years Estonia's net financial position has nevertheless deteriorated significantly due to the rapid loan growth.

The **corporate debt growth** started to pick up in 2005 and reached 26% towards the end of the year. This mainly stemmed from the exceptionally strong investment demand in the real estate sector, which obtained 43% of the total corporate loans granted in 2005. In addition to the real estate sector, also companies from other economic sectors engaged in profitable real estate development, although the majority of real estate investment was still probably related to the expansion of companies' primary activities.

### FINANCIAL BEHAVIOUR OF HOUSEHOLDS AND RELATED RISKS

The net financial position deteriorated to 17% of GDP in 2005 due to the rapid household debt growth. Meanwhile financial assets, particularly deposits, increased considerably. At the end of 2004, the net financial assets of Estonian households were the smallest compared to other European countries, and similarly to the corporate sector, the net financial position of households in ratio to GDP deteriorated the most significantly in Estonia.

Household **debt growth rate** has been reaching a new record level every month since the middle of 2005. In March 2006, loan growth exceeded already 62%. The housing loan market has been very active with the growth rate reaching 65%. The housing loan growth was mostly affected by the hike in real estate prices, whereas the number of new loans did not grow as fast any longer, partly for seasonal reasons.

Demand far exceeded supply on the **housing loan market**, bringing about a tremendous boost in prices and transaction volumes in the second half of 2005. In view of the growing expectations on achieving another price peak, the scarce supply diminished even further, in turn putting additional pressure on prices. Thus, in the second half of 2005, the average value of notarial transactions with houses and apartments increased 41%, year-on-year (24% in the first half of 2005). However, the beginning of 2006 showed some signs of stabilisation.

Besides housing loans, other loans have also undergone robust growth. Although the high growth rate of consumer credit (125%) can largely be explained by the low base level, it still clearly reflects the fast development of this market segment. The fact that **consumer credit** is often collateralised by mortgage refers to the increased use of the housing equity withdrawal.

The indebtedness growth was even more notable than high loan growth rates. The ratio of household debt to disposable income and GDP increased by 15 and 9.5 percentage points, respectively, by the end of March 2006. At such pace, Estonia's financial deepening was one of the fastest in Europe.

#### **BANKING MARKET**

Tight competition on the banking market continued and also several newcomers entered the market. The **quality of banks' loan portfolios** has remained good during the past two quarters in case of banks as well as banking groups. For future development it is essential banks remained conservative in granting loans. Conservative risk management calls for banks to consider the further acceleration of the recent real estate price growth when assessing collaterals for granting mortgage loans.

Although risk assets grew fast, partly owing to the regulation amendment concerning the risk weights on housing loans, **banks' capitalisation** increased because banks included profits in own funds and included additional subordinated liabilities from parent banks. So far, the regulation amendment has not slowed the growth of loan portfolios.

Rapidly growing customer deposits played an important role in **funding** the banking sector. Therefore, the share of institutional foreign borrowing in total liabilities did not increase remarkably despite active borrowing, remaining at the level of 42.5%. The share of funding from parent banks located in

Nordic countries increased even further in the banking sector's funding structure. Due to the better availability of parent bank funds, the level of **liquid** assets declined. Therefore, the banking sector became more dependent on parent banks in terms of funding as well as liquidity.

In the upward phase of the interest rate cycle, the banks that have a large share of loans with floating interest rates and demand deposits are in a favourable position because the increase in key interest rates boosts interest income over expenses. Although the **profit margin** has increased slightly on solo basis due to the rapid growth of net interest income and net fee and commission income, the return on equity nevertheless decreased by 1 percentage point to 21.3% compared to September 2005.

### SECURITIES MARKET AND OTHER FINANCIAL INTERMEDIARIES

The domestic **bond market** picked up due to the expansive environment. The growth of primary market and capitalisation grew in volume largely thanks to the increase in the volume of issues by residents, especially non-financial sector<sup>1</sup> companies. The secondary market expanded owing to a remarkable increase in the turnover of local non-financial sector companies' and non-residents' bonds.

The most significant event of the past half-year on the **Tallinn Stock Exchange** was listing the shares of AS Tallink Grupp in the primary list of the stock exchange. The growth of the stock index OMXT, which had reached its peak due to the takeover of Hansapank and the addition of new companies to the stock market in October 2005, slowed down by spring to 9% – a level similar to the economic growth rate.

The growth in **investment fund** assets that has been lasting for several years decelerated because of the high comparison basis. The majority of

 $<sup>^{\</sup>rm 1}$  Here and below the non-financial sector refers to households and non-financial corporations.

growth could be attributed to stock fund assets, which doubled in volume. Moreover, investment fund assets were boosted by the addition of eight new funds to the list of funds registered in Estonia. The most popular investment region for the new funds is Central and Eastern Europe.

The volume of second pillar **pension funds** increased to 5.3 billion kroons by the end of March 2006. Also the volume of voluntary pension insurance has risen drastically. The further increase in second pillar funds is primarily affected by wage growth, whereas the third pillar volume growth depends on the addition of new subscribers.

The **non-life insurance market** has been developing quite steadily in recent years, being mainly influenced by loan growth and overall favourable economic environment. The **life insurance market** has increased more dynamically, growing 62% year-on-year. The main contributors to the growth were unit-linked life insurance products, which had increased 141% as at March 2006, compared to a year ago.

## CONCLUSION AND FINANCIAL STABILITY RISKS

Similarly to autumn 2005, financial stability can be considered good, since the non-financial as well as the financial sector have secured positive income flows and accumulated wealth under favourable economic conditions. The good quality of banks' loan portfolios testifies to the fact that so far households and companies have not experienced major difficulties in fulfilling their financial obligations.

Nevertheless, the danger persists that in making their decisions driven by positive expectations, companies, households and the financial sector may have overestimated the future loan servicing ability of borrowers and underestimated the risks accompanying the potential deceleration of economic growth. The extremely rapid debt growth has made the borrowing households and companies

considerably more vulnerable to risks that might materialise in case of unfavourable economic developments.

The indebtedness of Estonian companies and households is one of the fastest growing among European countries. Modest saving compared to other countries has diminished the financial buffer even more. In addition to the strong housing loan demand, households' optimism for the future is also reflected in the considerably increased volume of consumer credit.

So far, the rise in interest rates has failed to reduce such highly optimistic expectations or change financial behaviour significantly. It is also too early to assess the impact of measures taken by Eesti Pank and entered into force in March 2006. However, the loan environment and housing market have shown initial signs that expectations and attitudes may start changing in the future. Whether these signs can be interpreted as the replacement of optimistic expectations with more realistic ones and less risky financial behaviour should become clearer in the following months.

In the near future, the housing loan demand of households will be affected by real estate price developments. The high price level achieved in some market segments at the end of last year may start to restrict the market potential because of insufficient purchasing power as well as increasing risk awareness among households. The net wage growth stemming from wage pressures and tax amendments partly helps households to offset the negative affects of rising interest rates. Meanwhile, the growth in production input prices and loan interest rates increase corporate costs, potentially damaging competitiveness and endangering the macroeconomic and financial stability of the entire economy.

#### I GLOBAL ECONOMY AND ESTONIAN ECONOMY

#### **EXTERNAL ENVIRONMENT**

#### Global economic cycle

Global economic activity remained high in the second half of 2005. Economic growth slowed down in the last quarter in the US and accelerated in Japan. The economic data of the first months of 2006 indicated that the decrease in economic activity at the end of the previous year was temporary and growth picked up pace again in the first quarter. Also the annual growth of industrial production and retail sales increased in January and February. In the euro area, the annual growth of industrial production underwent a decline at the end of 2005 and accelerated then to 2.5% by January 2006 (see Figure 1.1). Different economic activity indices refer to further rapid growth, especially in the euro area where the German IFO index, for instance, rose to the highest level since the past 15 years in March 2006. The annual global economic growth of 2006 should be 0.1 percentage point faster than in the previous year.1

High economic activity exerted a continuously positive influence on the labour market: in the second half of 2005 and at the beginning of 2006 unemployment dropped in all major economic areas. In September 2005, the swift rise of the oil price in the third quarter of 2005 lifted the inflation level to 4.7% in the US and to 2.6% in the euro area (see Figure 1.2). After the oil price rise subsided, also inflation slowed down, remaining in the range of 3.4-4.0% in the US and 2.2-2.4% in the euro area at the turn of the year and during the first months of 2006. After a lengthy deflation period, price growth in Japan also started turning positive: in January and February 2006, the year-on-year CPI growth remained in the range of 0.4-0.5% and for the first time since the past 15 years also land price growth turned positive.

Economic activity in **Finland** started recovering in the third quarter of 2005 and gained even more momentum towards the end of the year. Supported by domestic demand, the annual GDP growth accelerated to 2.9% in the fourth quarter and to 3.3% in January 2006. Due to high economic activity in the past year, the Finnish government increased this year's economic growth forecast from 3.2% to 3.7% (see Figure 1.3).

The average inflation of 2005 stood at 0.9% and remained at the same level also in the first months of 2006. The strong confidence of households, the increasing employment and the sudden acceleration of loan growth foster the growth in consumption. Therefore, this year also inflation is expected to rise up to 1.1%.

Domestic demand has remained strong and both retail as well as wholesale volumes have grown steadily, indicating households' continuing propensity to consume. The year-on-year growth of retail sales stood at 2.2%, despite a standstill at the beginning of 2005. At the start of 2006, the growth of retail trade accelerated even further and in February the year-on-year growth stood at 6%.

Swedish economic growth was brisk in the past year – the GDP growth reached 2.7%. Household consumption was considerably greater in the last quarters, owing also to the central bank interest rate cut by 50 basis points in June 2005. Considering the strong economic growth, the Swedish government increased the growth forecast for 2006 from 3.1% to 3.6% (see Figure 1.4). Moreover, labour market conditions are expected to improve and unemployment is expected to decrease this year as well as the next year.

The extraordinarily fast growth rate of retail sales in the final months of 2005 (in December the year-on-year growth stood at 10.7% which is the fastest level of the past 15 years) reflected the increased household consumption. These trends also continued in 2006, when the year-on-year growth of retail sales reached nearly 8% in January-February.

<sup>&</sup>lt;sup>1</sup> Source: Consensus Forecasts, March 2006.



Figure 1.1. Annual growth in the industrial production of the euro area, the United States and Japan (%)

Source: EcoWin



Figure 1.2. Consumer prices in the euro area, the United States and Japan (%)

Source: EcoWin

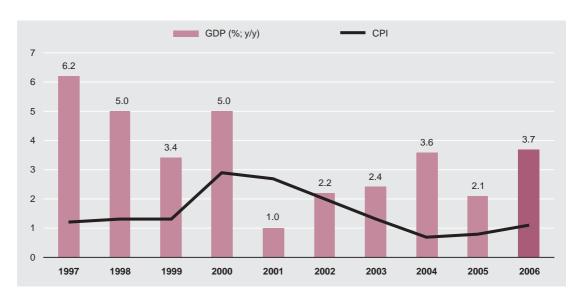


Figure 1.3. Finland's economic growth, inflation and forecast for 2006

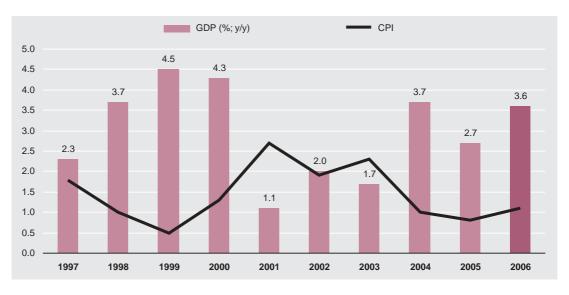


Figure 1.4. Sweden's economic growth, inflation and forecast for 2006

Inflation has been relatively low in recent years. In the final months of 2005, consumer prices accelerated mainly due to the oil price rise. The overall inflation of 2005 was 0.5%. In March 2006, however, it accelerated already to 1.1%. In order to protect the economy, the Swedish central bank raised interest rates twice in 2006 to 2%. The decision to increase interest rates has been explained by the unexpectedly fast economic growth and the improved labour market situation as well as by rising residential prices and high household debt.

#### International financial markets

The upward trend on the **stock markets** of advanced economies continued. The euro area stock index STOXX 50 grew 10.2% within a half-year and the growth of other stock indices could also be expressed by double digits: in Japan 26.4%, in Finland 19% and in Sweden 17.1% (see Figure 1.5). The steady positive outlook of global economic activity and corporate profit growth supported this trend. Stock prices changed slightly less in the US, where the S&P 500 index rose by 4.5% The continuous raising of the key interest rate by the Federal Reserve has inhibited the growth of stock prices. Some investors also reckon with the possibility that US economic growth might slow in the second half of 2006.

Interest rates on government bond markets rose, because economic activity remained high and the risk of inflation increased. The rise resulted from several central banks raising their key interest rates. The US Federal Reserve continued to reduce monetary policy stimuli by raising the key interest rate on four occasions by a total of 100 basis points, i.e. to 4.75%. The European Central Bank started to tighten the monetary policy at the end of the previous year by raising the key interest rate on two occasions by a total of 50 basis points to 2.5%. This also caused the three-month interest rate to rise by 59 basis points (see Figure 1.6). Also the central banks of Sweden and Norway increased key interest rates two times (to 2% and 2.5%, respectively). A remarkable change occurred in the monetary policy of Japan. As the longterm deflation came to an end, the Japanese central bank decided to terminate its "quantitative easing"

monetary policy that had been strongly favouring economic growth. In addition, the central bank is considering an increase in the key interest rate in the second half-year. Due to the abovementioned factors the ten-year interest rate rose by 65 basis points in the US, 73 basis points in the euro area and 76 basis points in Sweden (see Figure 1.7).

As regards the **currency markets**, the US dollar has shown no clear trend vis-à-vis other major currencies during the past six months. The euro traded against the dollar in the price range of 1.16–1.23 (see Figure 1.8). Meanwhile, the Japanese yen depreciated against the dollar by 4.5%, as despite the positive economic data the Japanese central bank did not increase the key interest rate and therefore the difference between interest rates continued to widen in favour of the dollar. Although the US current account deficit reached 7.1% of GDP in the fourth quarter, the dollar was still supported by positive economic indicators and the increase in the key interest rate.

### ESTONIAN ECONOMIC GROWTH AND MACROECONOMIC RISKS

### Economic growth, external balance and inflation

In the second half of 2005, Estonia's **economic growth** picked up even more thanks to the improving external environment and strengthening confidence: growth accelerated from 8.6% in the first half-year to 10.8% in the second. It exceeded the euro area economic growth by 9.2 percentage points (see Figure 1.9).

Such fast growth might have stemmed from the fact that the current economic cycle reached its peak, i.e. its maximum growth rate, and economic growth should stabilise at a more moderate level already in the near future. Eesti Pank estimated the economic growth for 2006 to be 8.1%, and 7.6% and 6.9% in the following two years.

Economic growth in 2005 remained broad-based, being supported by strong domestic demand as

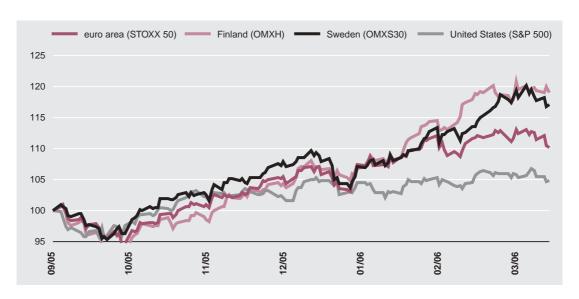


Figure 1.5. Stock indices in the United States, the euro area, Sweden and Finland (30 September 2005 = 100)

Source: EcoWin

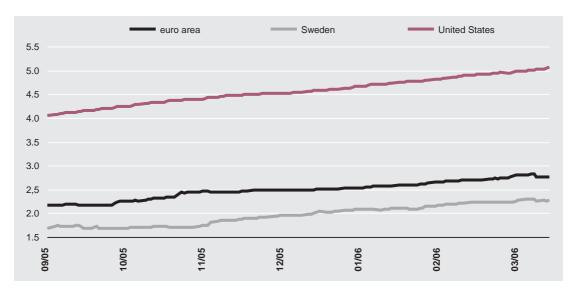


Figure 1.6. 3-month interest rates in Germany, Sweden and the United States (%)

Source: EcoWin

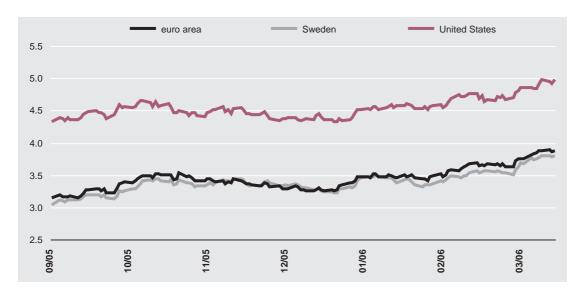


Figure 1.7. 10-year interest rates in the euro area, Sweden and the United States (%)

Source: EcoWin

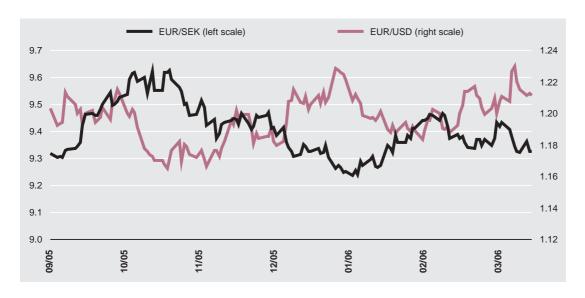


Figure 1.8. Exchange rate of the euro against the Swedish krona and the US dollar

Source: EcoWin

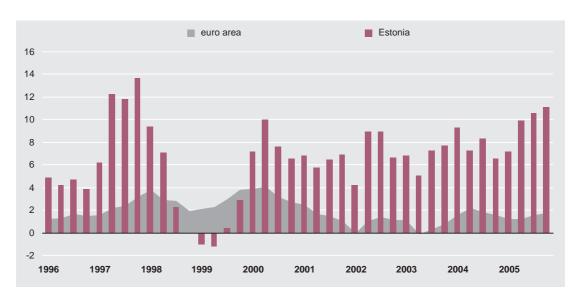


Figure 1.9. Real GDP growth by quarters (%)

Sources: Statistical Office of Estonia: Eurostat

well as improved external demand. In the second half of 2005, domestic demand was stimulated by **investment growth**. Although the share of investment in current prices decreased slightly in 2004, it rose to over 32% of GDP again in the middle of 2005. Another positive trend besides the increase in household housing investment and public sector infrastructure investment was the rise in corporate investment. During the following months good economic outlooks will continuously stimulate the investment activity.

Brisk economic growth also fostered the rapid growth of **government** revenues and the collection of several taxes exceeded expectations. Despite the supplementary budget the general government surplus comprised approximately 1.8% in ratio to GDP.

The purchasing power of consumers improved, owing to the increase in the average wages and pensions. This, in turn, stimulated the growth rate of **private consumption**, whereas at the same time it had a negative impact on the external balance through the import growth. Therefore, in conclusion the contribution of net exports to economic growth remained negative again, although the growth of **goods and** 

**services exports** accelerated (from 22% in the first half-year to nearly 28% in the second). In 2005, the current account deficit reached 10.5% in ratio to GDP (12.7% in 2004; see Figure 1.10).

The increase in consumer prices decelerated slightly in the fourth guarter of 2005: from 4.3% in the third guarter to 4.0% (see Figure 1.11). Also this time the inflation rate was affected by the fluctuation of oil prices. In the first quarter of 2006, however, consumer price growth accelerated again with prices rising by 4.4% year-on-year. In addition to the reacceleration of motor fuel price rise, this time the consumer basket was also significantly influenced by the prices of goods and services related to housing. The Estonian core inflation indicator also continued its rise. While in autumn it mainly stemmed from the growing prices of clothing, footwear and headgear and the transfer of the motor fuel price increase into other prices (mainly transport services), at the beginning of 2006 inflation was mainly stimulated by an increase in expenses related to leisure activities. According to the forecast of Eesti Pank, no significant slowdown in the price growth may be expected before the summer. Potential changes in fuel prices continue to be the main risk factor for inflation.

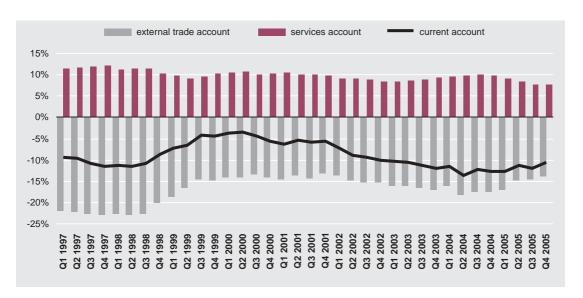


Figure 1.10. External trade account, services account, and current account balance in ratio to GDP (4-quarter average)

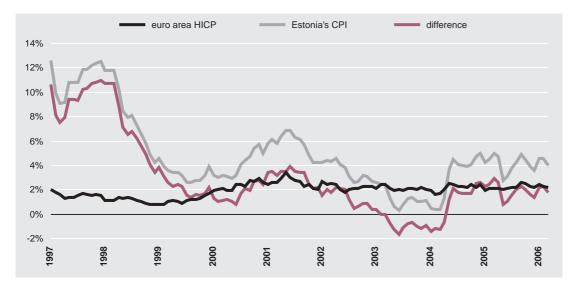


Figure 1.11. Annual consumer price growth in Estonia and the euro area

Sources: Statistical Office of Estonia; Eurostat

#### Corporate business situation

#### Confidence

The **economic confidence index** calculated by the Estonian Institute of Economic Research increased by 10 points in the second half of 2005, compared to the same period in the previous year. In addition to consumers, the confidence indicator of **construction companies**, reaching a historical high, also boosted economic confidence. According to the estimates of the Estonian Institute of Economic Research, the situation in the construction market will remain exceptionally favourable. Also, the majority of companies were expecting a rise in workload in the following months. The **retail trade** confidence indicator improved substantially (see Figure 1.12).

The growing confidence of **manufacturing companies** in the second half of 2005 was largely supported by positive expectations on production as well as domestic and external demand for the following months. The confidence of manufacturing companies remained relatively strong also in the first quarter of 2006 but no longer significantly exceeded the estimations of the respective months in 2005 (see Figure 1.13). Nevertheless, the output estimates for future periods remained positive.

#### Industrial sales and investment

Owing to relatively favourable export opportunities and higher domestic demand, the production and sales of both the export sector and local providers have grown quickly.

The growth of industrial production and sales, which remained slightly slower in the second half of 2005 compared to the first half, stood at a relatively high level: industrial production grew by an average of over 9%, and sales by 12% (see Figure 1.14). Growth was facilitated primarily by the fast increase in timber product sales as well as the sales volumes of textile and furniture production, which had recovered from the previous low. According to the GDP statistics, the

growth of the value added in manufacturing reached 13.1% in constant prices in the second half-year.

Corporate investment in tangible fixed assets grew faster in the second half of 2005 than in the previous year. Growth in the investment of manufacturing companies, transport, storage and communications companies as well as real estate and construction enterprises accelerated (see Figure 1.15).

#### New companies and bankruptcies

In the middle of 2005, the establishment of **new enterprises** increased drastically. Altogether approximately 10,000 companies were founded in 2005, i.e. a fifth more than in 2004 (see Figure 1.16). Similarly to earlier years, about half of the new companies were established in trade. A remarkable growth could be witnessed in the number of construction companies – nearly 800 new companies emerged (over 80% more than a year before).

The **number of bankruptcies** was the smallest of seven years in 2005. 199 enterprises went bankrupt, 35% of which operated in trade.

#### Corporate economic indicators

In the second half of 2005, the **net sales** growth of companies started to accelerate remarkably. According to preliminary estimates, the year-on-year growth stood at 20.3%, being considerably higher than the respective indicator for 2004 (13.7%; see Table 1.1). Meanwhile, the growth of value added accelerated even more substantially – by approximately 17 percentage points up to 23.6%. Although also the growth of corporate expenses accelerated (to 19.4%), the increase in total profits reached an impressive 34.4%.

By fields of activity, there were significant differences: **total profits** grew by more than a half in construction, metal product manufacturing, wholesale trade, and furniture production (65%, 63%, 61% and 57%, respectively). In the real estate sector, where profit

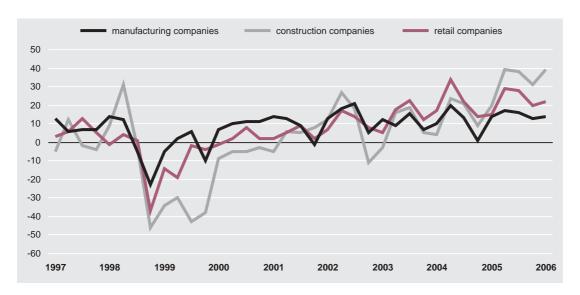


Figure 1.12. Confidence indicators of Estonian companies

Source: Estonian Institute of Economic Research

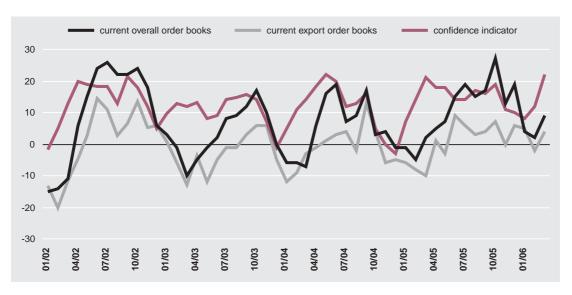


Figure 1.13. Demand for the production of manufacturing companies and confidence indicator

Source: Estonian Institute of Economic Research

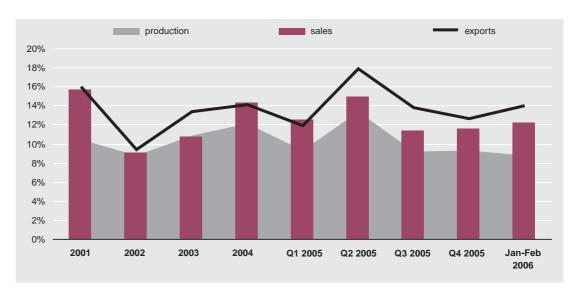


Figure 1.14. Production and sales indices of manufacturing

Source: Statistical Office of Estonia

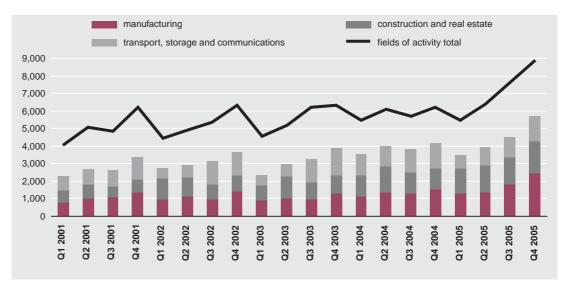


Figure 1.15. Corporate fixed investment (EEK m)

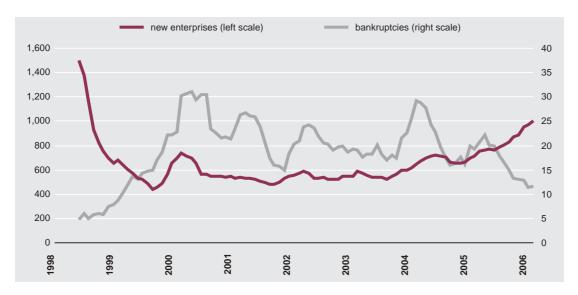


Figure 1.16. New enterprises entered in the commercial register within a month and bankrupt enterprises (6-months moving average)

Source: Estonian Enterprises Register

Table 1.1. Corporate indicators (%)

	All fields of activity			Manufacturing			
	2003	2004	2005	2003	2004	2005	
Growth of net sales	8.4	13.7	20.3	9.8	13.8	15.0	
Growth of total costs	8.3	14.8	19.4	9.9	15.1	14.0	
Growth of total profit	10.5	0.7	34.4	9.3	0.6	26.8	
Total profit to net sales	7.7	6.8	7.6	9.1	8.0	8.8	

Source: Statistical Office of Estonia

comprised 77% of the value added, the profit growth of 2005 remained more modest (14%). Meanwhile, profits decreased for instance in textile and food industries.

#### **Economic situation of households**

#### Labour market

The keywords for the second half of 2005 were fast employment growth and low unemployment rate.

**Employment** grew by an average of 11,900 persons in 2005, which is probably the highest indica-

tor throughout the whole period of independence (see Figure 1.17). Growth was stimulated by the services sector; in other sectors employment decreased slightly. The increase in employment stemmed primarily from the rapid economic growth. In the field of hotels and restaurants, the rise in employment was affected by the more active tourism after joining the European Union. Employment also grew swiftly in construction and the real estate sector.

**Unemployment** shrunk from 9.7% in 2004 to 7.9%, while the number of the unemployed decreased 17.9%. A significant drop was witnessed in the unemployment rate of the young aged 15–24 (from 21%)

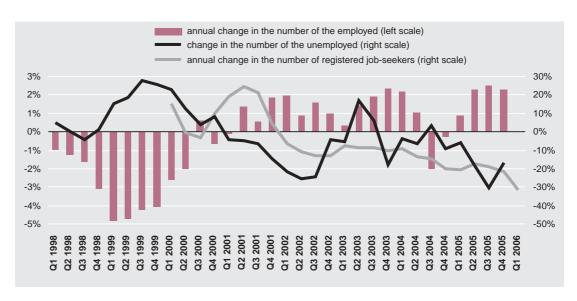


Figure 1.17. Annual change in the number of the employed, the unemployed and registered jobseekers

Source: Statistical Office of Estonia

to 15.9%) and unemployment decreased in all regions. Labour force participation remained unchanged on average in 2005 but picked up remarkably in the fourth quarter. The upward trend of senior activity continued, whereas the participation rate of the young dropped (because of studies).

#### Wages

The average **gross monthly wages** continued rising rapidly in the second half of 2005. Though in the third quarter it slowed down slightly, it accelerated significantly in the fourth quarter (up to 12.8%; see Figure 1.18). The average gross monthly wages in the third and fourth quarters of 2005 were 7,786 and 8,690 kroons, respectively (in Tallinn 9,111 and 10,113 kroons, respectively). The data on tax revenue collection from the beginning of 2006 indicate further wage growth acceleration also in the first quarter of 2006.

The rise in **net monthly wages** exceeded that of gross wages by nearly 2.5 percentage points due to the reduced income tax rate and the higher non-taxable income threshold<sup>2</sup>. Contrary to 2004, when wage growth was mostly driven by the public sector, in 2005 average wages increased the fastest in Estonian private enterprises. By fields of activity, the fastest wage growth was experienced in the sector of hotels and restaurants, in healthcare and social welfare owing to new wage agreements and also in agriculture.

As inflation slowed down in the last quarter of the year, the **real growth** of the average gross wages accelerated to 8.5% and the real growth of net wages sped up to 10.1% in the fourth quarter. All in all, the real growth of labour productivity remained in line with the real wage growth in 2005.

<sup>&</sup>lt;sup>2</sup> In 2005, the income tax rate was reduced from 26% to 24%; at the same time, the non-taxable income threshold increased from 1,400 to 1,700 kroons. As of 1 January 2006, the income tax rate is 23% and the non-taxable income threshold is 2,000 kroons per month.



Figure 1.18. Average annual wage growth

Source: Statistical Office of Estonia

#### Confidence and household budget surveys

The second half of 2005 and the first quarter of 2006 faced a continuing rising trend in the **consumer confidence indicator** (calculated by the Estonian Institute of Economic Research) which had begun in 2004 (see Figure 1.19). Households' fear of unemployment has been decreasing steadily and the increase in saving prospects has grown significantly. The price rise expectations for 2006 have generally diminished. The inflation expectations that grew drastically in September 2005 were affected by the rise in fuel prices stemming from the oil price increase.

According to the **household survey**<sup>3</sup>, the net income per household member increased from 3,029 kroons in 2004 to 3,431 kroons in 2005, i.e. almost 14%. Income from paid employment increased slightly faster than average (16%) and accounted for 66% of the total income. By income deciles the total in-

come growth accelerated most rapidly in the first, i.e. the lowest income bracket (approximately 20%), while wage income growth increased the fastest in the first, fourth and fifth income bracket.

Average spending per household member increased from 2,799 to 3,148 kroons, i.e. 12.5%. The share of spending on food in total expenses decreased from 28% in 2004 to 26.5% in 2005, i.e. to 834 kroons; food and housing costs comprised 41% of total costs and 38% of the average net income per household member. The gap between the average net income and average costs increased from 230 kroons in 2004 to 283 kroons.

In 2005, the expenses per household member grew due to active borrowing and increased incomes. However, growth was inhibited by real estate investment, which increased by more than two-thirds, and greater loan repayments compared to the previous year.

<sup>&</sup>lt;sup>3</sup> Source: Statistical Office of Estonia

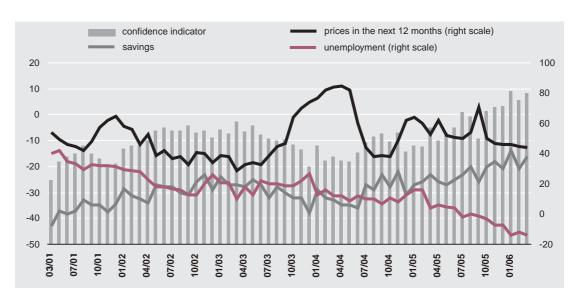


Figure 1.19. Consumer confidence indicators

Source: Estonian Institute of Economic Research

# II FINANCIAL BEHAVIOUR OF COMPANIES AND HOUSEHOLDS AND THEIR RISKS

#### **COMPANIES**

#### Financial position and saving

According to the financial accounts analysis (see also the background information "Compilation of financial accounts in Eesti Pank"), corporate financial investment exceeded savings in 2005. As **financial deficit** still decreased, the negative **net financial position** of companies improved by 2 percentage points by the end of 2005 compared to 2004, i.e. to -117% of GDP (see Figure 2.1).

Although generally companies invest most of their funds in fixed assets, some funds are also placed in financial assets in order to maintain liquidity, hedge risks and earn income. Approximately half of Estonian corporate **financial assets** are comprised of stocks and holdings in other companies (44%). The share of cash and deposits amounts to 15% and also the share of issued loans is the same. Last year, corporate deposits grew the most. In addition, more shares and holdings in other companies were acquired than in 2004. Besides domestic investment some financial funds also find their way out of Estonia, for example through the expansion of a company's activities abroad.

The growth rate of domestic corporate deposits started increasing again in October 2005, rising even to 68% in December. All the same, the growth of deposits was very volatile, referring to a possibility that part of that could be attributed to short-term investment of funds received from e.g. company sales or external funds attracted from abroad. The share of time deposits in total deposits increased, reaching a semi-annual average of 30% in March, which is 5 percentage points higher than six months before. This was caused by short-term deposits with maturities of up to two months. Companies have become more active in managing their liquid assets and have found more profitable ways to allocate them. This shows in the growth of the share of overnight deposits to 38% in total deposits, which is 4 percentage points higher than a year ago.

More than a half of corporate **financial liabilities** are shares and other equities and over a quarter are loan commitments. Few companies have issued bonds. Besides loan commitments, also the amount of stocks, shares and bonds issued increased in the past year. Due to the strong growth of deposits the coverage of corporate loan and bond commitments by liquid financial assets

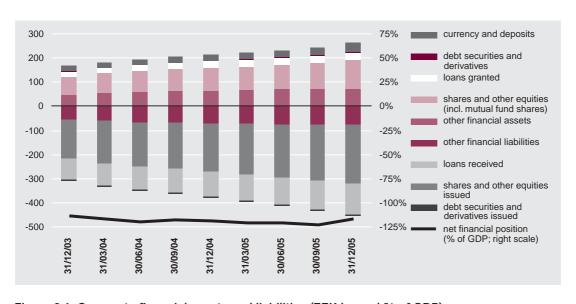


Figure 2.1. Corporate financial assets and liabilities (EEK bn and % of GDP)

(cash, deposits, securities and granted loans) has increased from 56% at the end of 2003 to 62% at the end of 2005.

From among European countries, Estonia had one of the greatest financial deficits in 2004 which can also be said about Slovenia (see Figure 2.2). Generally, the corporate sectors of new EU Member States suffered a financial deficit, while older Member States had a lower deficit or even a financial surplus. At the end of 2004, net financial assets in all countries were negative, reaching from 134% of GDP in Sweden to –62% in Poland.

In countries involved in the analysis of financial accounts, the largest share of corporate financial assets were comprised of stocks and holdings in other companies and other financial assets, including trade credit issued (see Figure 2.3). The share of currency and deposits in financial assets was the greatest among the companies of the United Kingdom and Greece (30% and 39%, respectively) and also Lithuania's indicator was high (27%). The coverage of corporate loan commitments by liquid financial assets varied greatly by countries, reaching from 31% in Italy to 97% in Belgium (see Figure 2.4).

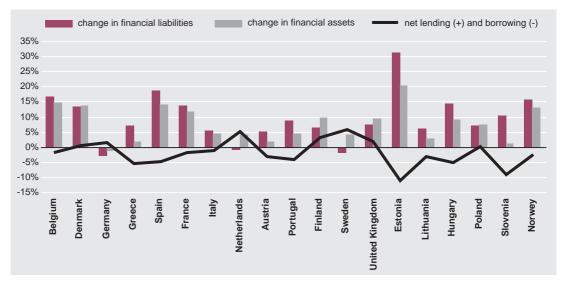


Figure 2.2. Corporate sector net lending and borrowing by countries in 2004 (% of GDP)

Source: Eurostat

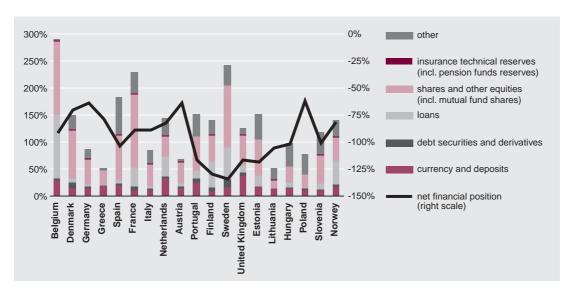


Figure 2.3. Corporate financial assets and net financial position by countries at end-2004 (% of GDP)

Source: Eurostat

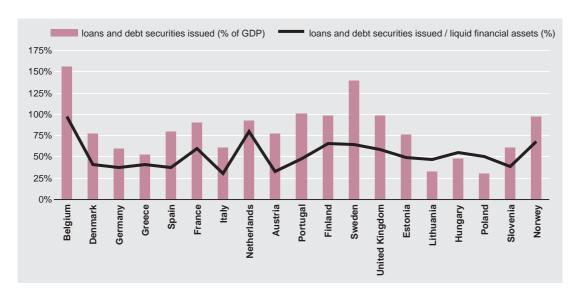


Figure 2.4. Volume of corporate loans and debt securities issued and their ratio to liquid financial assets at end-2004 (%)

Source: Eurostat

#### COMPILATION OF FINANCIAL ACCOUNTS IN EESTI PANK

In 2004, Eesti Pank commenced preparations for the compilation of quarterly national financial accounts. By today, the Financial Stability Department has completed the balance accounts as at the end of 2003, 2004 and 2005, and the transaction accounts of 2004 and 2005 by quarters<sup>1</sup>.

The financial accounts of the national accounts system describe the state of financial assets and liabilities as well as respective transactions between different economic sectors. Financial accounts include crucial financial information, which can be used for the analysis, forecasts and international comparison of the influence of the economic sectors' financial behaviour and economic policy decisions.

During the past few years the use of financial accounts has become extensive. For instance, the time-series created on the basis of financial accounts are essential for the European Central Bank (ECB). The ECB uses quarterly euro area data concerning financing and financial investment in the analysis of the economic situation of companies and households<sup>2</sup>, and these serve as the basis for making monetary policy decisions.

Eesti Pank also discovered the need for a more complete approach to financial indicators. In addition, we must be ready to meet the requirements of the European Central Bank regarding the compilation of statistics upon becoming a full member of the Economic and Monetary Union (EMU). Timeliness and high quality in submitting the time-series of financial accounts calls for lengthy preparations and experience in preparing the accounts, and thus the central bank started early. Thirdly, a financial account enables to coordinate the activities of different statistics compilers and improve the overall quality of statistics, as the entire economy is under scrutiny instead of single sectors.

In the compilation of quarterly financial accounts Eesti Pank proceeds from the European System of Accounts (ESA 95) and uses its concepts, definitions and classifications. Such an approach meets the needs of analysts as well as the requirements of forwarding data to the European Central Bank and is methodically compliant with the national annual accounts system.

Data from a variety of sources are used in the compilation of the financial accounts; there are no separate studies or surveys conducted for that purpose. The primary data sources are the following: the statistics of credit institutions; Estonia's balance of payments and international investment position data; the balance sheet data of Eesti Pank; the statistics of leasing companies; the reports of investment funds; the reports of savings and loan associations; the statistics on securities (data of the Estonian Central Depository for Securities); the reports of investment firms; fund managers' reports; insurance statistics; the reports of other financing institu-

<sup>&</sup>lt;sup>1</sup> National annual accounts (incl. financial accounts) are compiled in the Statistical Office. Quarterly financial accounts are compiled in Eesti Pank, which are completed approximately four months after the end of the respective period.

<sup>&</sup>lt;sup>2</sup> Euro area countries have been submitting financial account time-series to the European Central Bank pursuant to the "Guideline on the statistical reporting requirements of the European Central Bank (ECB) in the field of quarterly financial accounts" as of 21 November 2002.

tions and financial auxiliaries (quarterly survey of the Statistical Office); the survey concerning the annual statistics of companies and quarterly financial indicators of major enterprises (the Statistical Office); the quarterly and annual statistics of the general government, etc. In addition, other survey results (e.g. TNS EMOR surveys) and also indirect estimations are used.

The Estonian economy has been a net borrower during the past two years (see Figure 2.5). The

greatest source of the financial deficit has been the business sector whose deficit has reached a maximum of 18.2% of GDP. While traditionally households are regarded as a sector with financial surplus, Estonian households have shown a deficit throughout all quarters in the past two years – primarily due to the drastically increasing loan commitments. The general government has contributed to offsetting the deficit, usually posting a surplus in the first three quarters of a year and a deficit in the final quarter.

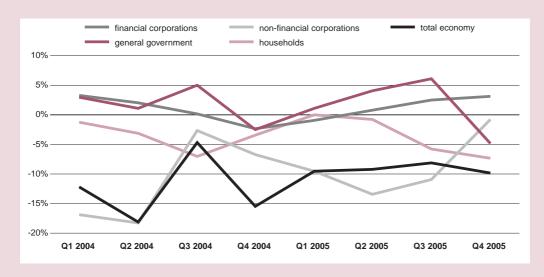


Figure 2.5. Net lending and borrowing (% of GDP)

#### Corporate debt

The **growth of corporate debt**, which started accelerating in the first half of 2005, sped up even more in the following quarters. By the end of the year, debt growth reached a record level of 26% (see Figure 2.6).

The structural development characteristic of recent years continued in 2005: the share of corporate external borrowing decreased and that of domestic borrowing increased. Compared to the end of 2004, the stock of corporate external debt even shrunk

(see Figure 2.7). Meanwhile, the growth rate of domestic debt reached record levels (46%). This indicates that the relative advantage of external borrowing will fade, if the role of domestic financial intermediaries in financing companies increases owing to the decrease in interest margins and better availability of loans. Structural changes are expected to take place in the near future as well.

The remarkable acceleration of debt growth brought along an **increase in the corporate indebtedness**. Corporate debt in ratio to GDP reached 67% by the

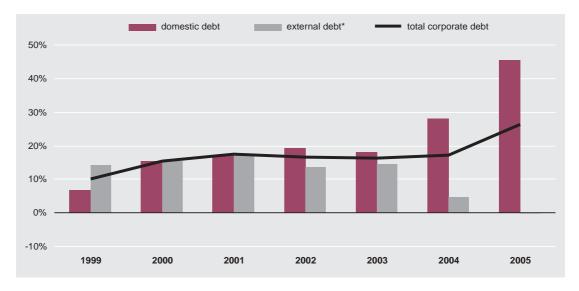


Figure 2.6. Corporate debt growth

<sup>\*</sup> intragroup claims subtracted

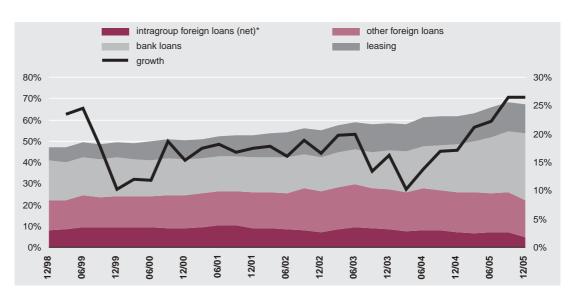


Figure 2.7. Corporate debt (% of GDP; left scale) and growth rate (right scale)

<sup>\*</sup> intragroup claims subtracted

end of 2005, having grown by over 5 percentage points within a year.

As for **economic sectors** in 2005, real estate and construction companies were again the most active to attract debt, being the destination for 43% of the total debt acquired by non-financial companies during the last year (see Figure 2.8). Debt grew quite modestly in transport, storage and communications, where financing was probably based more on own funds during this period.

The growth of domestic debt at the beginning of 2006 was expectedly faster in the fields of real estate and trade. Compared to the beginning of the previous year, the credit to construction and agricultural companies increased faster (the annual growth rate of the stock of loans and leasing stood at 71% and 58%, respectively).

#### Real estate financing by domestic banks

At the end of March 2006, 59% (30.5 billion kroons) of corporate loans were purposed for acquiring real estate (incl. for own use as well as for commercial

purposes). 54% of that accounted for loans granted to real estate companies.

Other sectors borrowed a total of 14 billion kroons for financing real estate, whereas the year-on-year growth was virtually double. Real estate loans comprised 44% of the debt of non-real estate companies, i.e. proportionally as much as in 2005 (see Table 2.1). By sectors the differences are quite remarkable: as to hotels and restaurants, for instance, the share of real estate loans in total debt reaches 82%, whereas the respective ratio is 30% in the transport sector, 39% in trade, and 44% in manufacturing.

In terms of loan purposes, the acquisition of real estate for own use prevails for both real estate and other companies (see Figure 2.9). However, it cannot be ruled out in any field that instead expanding or improving production, storage, trading or office spaces, the loan decision might have been spurred by the desire to earn additional income from real estate development. By adding household housing loans and leasing to the stock of corporate real estate loans, the real estate portfolio of banks has grown to 76 billion kroons (45% of GDP).

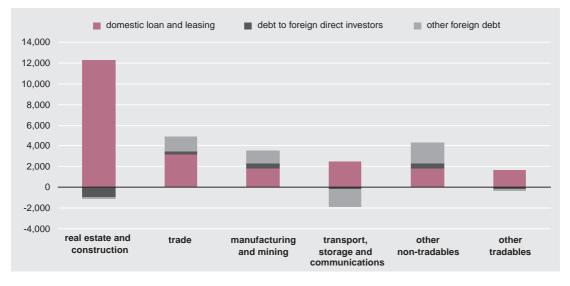


Figure 2.8. Net borrowing of corporate sector in 2005 by fields of activity (EEK m)

Tabel 2.1. Stock of corporate real estate loans

	2003*	2004*	2005	Q1 2006
Real estate sector				
real estate for own use (EEK m)	3,130	5,106	8,629	9,681
commercial real estate (EEK m)	3,225	3,860	6,348	6,654
share of real estate loans in total loan volume	87%	78%	87%	87%
Other sectors				
real estate for own use (EEK m)	4,996	6,711	10,941	11,929
commercial real estate (EEK m)	368	688	2,011	2,237
share of real estate loans in total loan volume	43%	45%	44%	44%

<sup>\*</sup> Business services included; real estate activities distinguished as of July 2005.

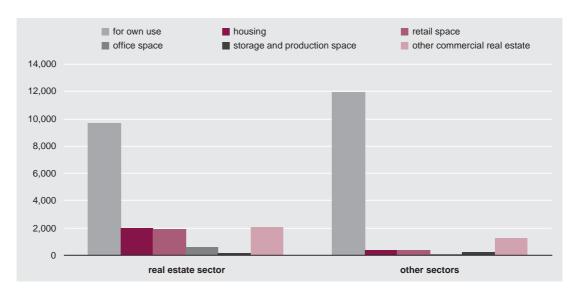


Figure 2.9. Corporate real estate loans (EEK m; as at 31 March 2006)

#### HOUSEHOLDS

#### Financial position and saving

Contrary to previous years, the financial investments of households have exceeded savings in 2004 and 2005, resulting in a **financial deficit** (3.8% and 3.3% of GDP, respectively). Due to the rapid debt growth the **net financial position** of households weakened by 3 percentage points during 2005 to 17% of GDP (see Figure 2.10).

Households' **financial assets** are primarily kept as currency and deposits (44% of total financial

assets). Shares and holdings in investment funds comprise 39%, of which investment fund shares account for 3% of total financial assets. So far, insurance and pension products are not yet a popular form of investment in financial assets, but they are expected to grow fast as the volume of pension assets increases. In 2005, household pension assets stood at 6.2 billion kroons, i.e. at 7% of the total volume of financial assets.

Last year, financial assets experienced an increase mainly in currency and deposits as well as resources held in pension funds. However, the volume of listed

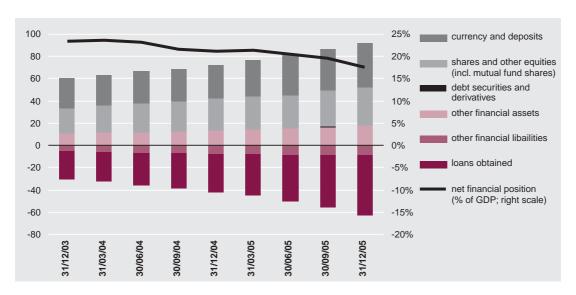


Figure 2.10. Household financial assets and liabilities (EEK bn and % of GDP)

shares held by households decreased in the last two quarters of 2005, partly as a result of the sales of Hansapank's shares in respect to the takeover of Hansapank.

The growth rate of household **deposits** has remained over 30% in the past half-year (see Figure 2.11). Though the share of time deposits in total deposits stayed near 40%, increasingly more short-term deposits are being used as time deposits and the share of long-term deposits has been constantly decreasing.

The growth of households' **financial liabilities** was outstanding both in 2004 and 2005. Therefore, the net financial position as well as the **coverage of liabilities by liquid financial assets** deteriorated.

From among European countries in 2004, the Estonian household sector displayed the greatest financial deficit, though also the households of Denmark, Finland, Spain and the United Kingdom invested more than they saved (see Figure 2.12). In all the European countries observed, the net financial assets of households were positive, reaching from 206% in Belgium to 21% of GDP in

Estonia (see Figure 2.13). Generally, it appears that the ratio of households' net financial assets to GDP in the new EU Member States was lower compared to older Member States.

Similarly to Estonia, the financial assets of other European households have also been analysed mainly in terms of currency and deposits, shares and other equities. In some countries, insurance products also play an important role in household assets (the United Kingdom, Germany and France). The importance of these assets mainly depends on the structure of the pension system and the volume of assets placed in pension insurance.

#### Household debt and loan-servicing ability

#### Debt level and growth

The year-on-year loan and leasing growth of households has been accelerating since the beginning of 2005. By the end of March, the growth rate exceeded 60% (see Figure 2.14).

Similarly to recent years, the rapid loan growth mainly stemmed from the strong loan demand on

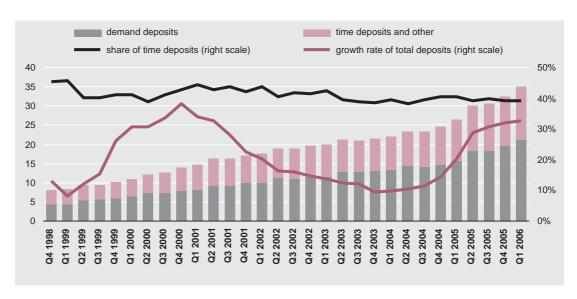


Figure 2.11. Household deposits in domestic banks (EEK m) and deposit growth

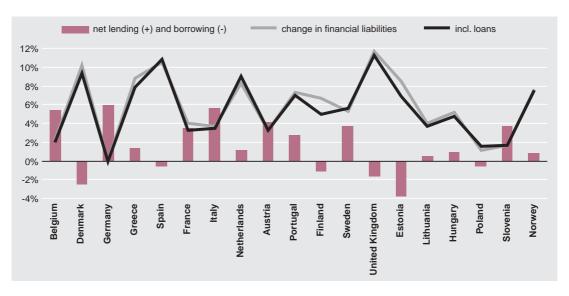


Figure 2.12. Net lending and borrowing of the household sector in European countries in 2004 (% of GDP)

Source: Eurostat

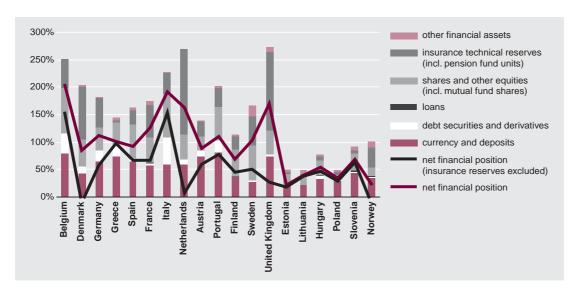


Figure 2.13. Household financial assets by countries as at end-2004 (% of GDP)

Source: Eurostat

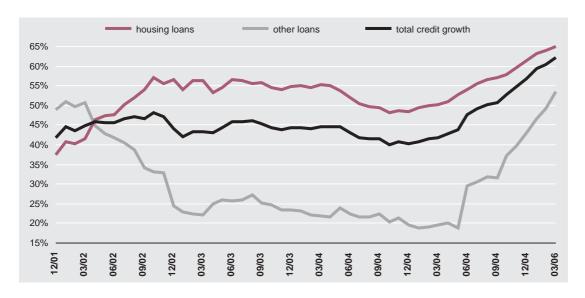


Figure 2.14. Annual growth of domestic credit to household sector

the housing loan market. Though the share of other loans (incl. consumer credit) in household debt has decreased from 23% to 22% over the year, this market segment has also revived in light of general economic activity.

Household indebtedness, which comprised 57% in ratio to the real disposable income at the end of March 2006, has shot up by more than 15 percentage points within the past year (see Figure 2.15). The debt level continues to be low in comparison to the more advanced economies of Europe (e.g. at the end of 2005, the ratio of debt to real disposable income amounted to an estimated 225% in Denmark, 150% in the United Kingdom, 130% in Sweden, and 89.5% in Finland)<sup>3</sup>. As for the indebtedness growth, however, Estonia is in the forefront of European countries (see the background information "Household loan growth in European countries").

#### Housing loans

The **stock of housing loans** reached 46 billion kroons at the end of March, increasing by over 18 billion kroons, i.e. 65%, within a year. Within the last six months, the number of housing loan customers has grown by approximately 11,400 households and has raised the share of households with the respective long-term loan commitment to 17.5%<sup>4</sup>. If the next few months witness a similar rise in the number of new customers as the first quarter (an average of 1,600 new clients per month), the share of households with a housing loan may increase to 20% by the end of the year.

Due to the rise in real estate prices, the **share of large loans** in the banks' loan portfolio has increased. In March 2006, loans in the sum of over 1 million kroons accounted for about 32% in the turnover of new loans; only half a year ago they comprised 16%, i.e.

half the volume (see Figure 2.16). Quite a number of loans are also taken for renovating housing.

Low interest rates have played a substantial role in the housing loan market activity (see Figure 2.17). From the end of September 2005, when EURIBOR started to recover from its long-term low, the key interest rate (6-month EURIBOR) increased by approximately 80 basis points by the end of March 2006. The relatively modest rise of EURIBOR could not cool off the borrowing frenzy: the growth of housing loans accelerated instead. The impact of the rise of EURIBOR rates on household budgets was the largest for those who had borrowed at the time the key interest rates were at their lowest level, i.e. from June 2003 to October 2005. At the same time, acknowledging the potential interest rate increase helps new loan customers make their loan decisions more deliberately, taking into account the potential risks.

Households have enjoyed low interest rates owing to low interest margins of banks. The average interest margin reached 1% in March 2005 and has remained at that level throughout the year.

The **maturities** of housing loans have been **extended** further in the last six months. In case of high real estate prices, longer loan maturities are among the most crucial factors determining access to borrowing. In March 2006, loans granted with maturities of over 25 years comprised 54% of the turnover of new housing loans (37% of the total number of loans issued). In September 2005, their share amounted to 41% (27% of total loans; see Figure 2.18). Also in international comparison, the maturities of loans in Estonia are relatively long. For instance, in Finland where loan maturities have also extended, the typical housing loan maturity is 20 years. Only larger loans (over 150,000 euros) have longer maturities

<sup>&</sup>lt;sup>3</sup> Source: national central banks.

<sup>&</sup>lt;sup>4</sup> In comparison to other European countries, this ratio is rather low. For instance, in Finland which also has a relatively low debt level, 29% of households have taken a housing loan (source: The Finnish Bankers' Association, Säästäminen ja luotonkäyttö. Tutkimusraportti, April 2004)

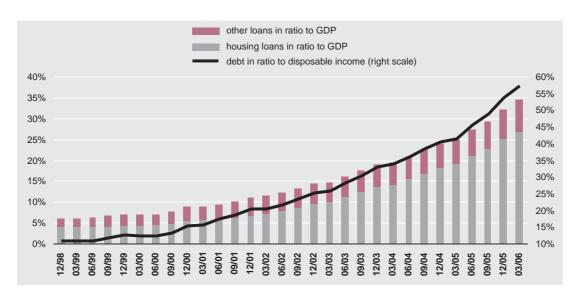


Figure 2.15. Household indebtedness

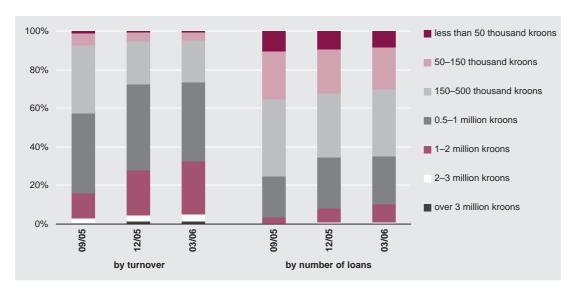


Figure 2.16. Breakdown of housing loans per month by loan size

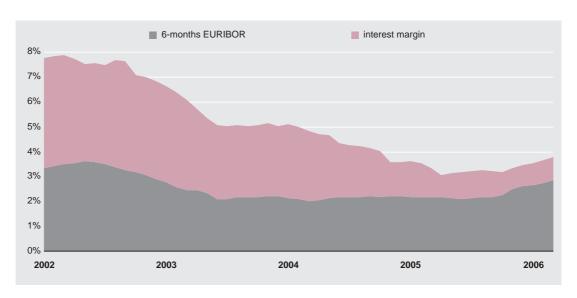


Figure 2.17. Development of housing loan interest rates

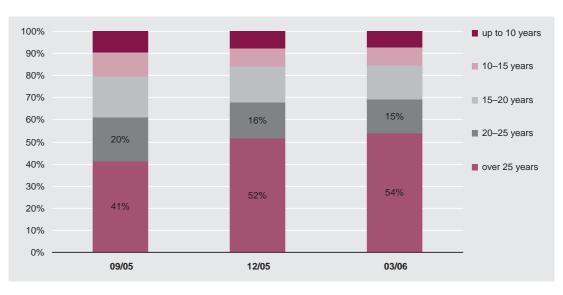


Figure 2.18. Maturity structure of new housing loans

(25–30 years), but also in their case the average loan maturity is 22 years.<sup>5</sup>

The housing loan growth rate stayed in line with price changes on the housing market, though remained more inert. While in the final quarter of 2005 the **housing market growth** reached record levels both in terms of prices and transactions, in the first quarter of 2006 the Tallinn apartment market gave an indication of stabilisation.

The average value of housing-related notarial transactions performed in the second half of 2005 increased 41%, year-on-year, and the number of transactions grew even 50% (see Figure 2.19). In the most active segment of the real estate market – the apartment market – demand significantly exceeded supply, enabling sellers to experiment with increasingly higher price peaks. Hence, according to the Statistical Office, the annual price growth of a two-room apartment in Tallinn reached even 57% in the fourth quarter of 2005. In the first quarter of 2006, the supply on the secondary market of apartments in Tallinn increased and sales periods lengthened, indicating a potential deceleration of price growth.

Due to the extraordinary developments of the housing market, apartment prices have achieved another record level also in ratio to the average gross wages. In Tallinn one square meter of a two-room apartment costs already two and in Tartu one-anda-half average gross wages of the respective region (see Figure 2.20). Such a high level of real estate prices in ratio to incomes might obstruct the labour mobility and therefore the entire country's economic development. Meanwhile, an increase in real estate prices in relation to disposable income also limits the number of potential investors entering the housing market and thus has a negative effect on credit demand.

#### Consumer credit

As expected, rapid economic growth has also fostered the increase in **loans not directly related to financing housing** (see Figure 2.21). The year-on-year growth in the stock of non-housing loans and leasing accelerated to 54% by the end of March 2006. Consumer credit<sup>6</sup> grew the fastest (annual growth 125%). Such robust growth can be largely explained by the addition of a market participant not previously reflected in the analysis, although the growth rate would have been anyhow extraordinary (108%). Compared to the relatively modest growth of 2005, the beginning of 2006 also witnessed the acceleration of car leasing growth, which reached a year-on-year level of 40% by the end of March.

The volume of **consumer credit** reached nearly 5 billion kroons by the end of March 2006, remaining rather small in ratio to nominal GDP (3% of GDP). The average volume of consumer credit in the European Union was 8.5% in 2004. Sweden, the United Kingdom, Austria, Greece, Malta, and Ireland stood out with higher levels (over 10%).<sup>7</sup>

In addition to the demand-side factors (e.g. income growth, stronger confidence, active real estate market), consumer credit growth accelerated also owing to better loan terms and conditions. The **interest rates** on loans obtained for consuming products and services started declining already in 2004. A steeper fall took place in the summer of 2005 and the downward trend lasted until the end of the year (see Figure 2.22). Despite the rise in the money market interest rates in the euro area, the average interest rate on consumer credit stabilised at the level of 6% in the first quarter of 2006. The interest rate drop was probably supported by the increasing use of real estate as collateral. The share of consumer credit collateralised by mortgage increased

<sup>&</sup>lt;sup>5</sup> Source: The Finnish Bankers' Association, *Säästäminen ja luotonkäyttö*. Tutkimusraportti, April 2006.

<sup>&</sup>lt;sup>6</sup> Consumer credit is regarded here in narrower terms as the acquisition of products and services without instalments and the use of credit cards. Therefore, car leasing and study loans have not been included under consumer credit.

<sup>&</sup>lt;sup>7</sup> Source: European Central Bank, "EU Banking Structures", October 2005. The definitions of consumer credit may vary greatly across countries.

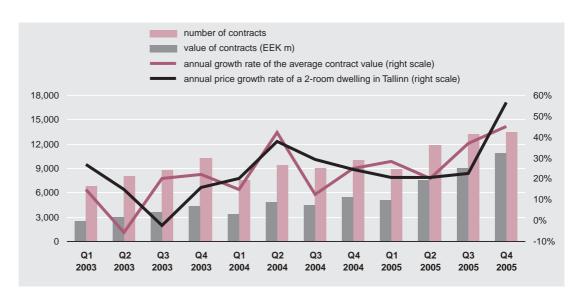


Figure 2.19. Notarised purchase-sale contracts of dwellings and residential buildings as movable assets and real estate, average contract value and price of a 2-room dwelling in Tallinn

Source: Statistical Office of Estonia

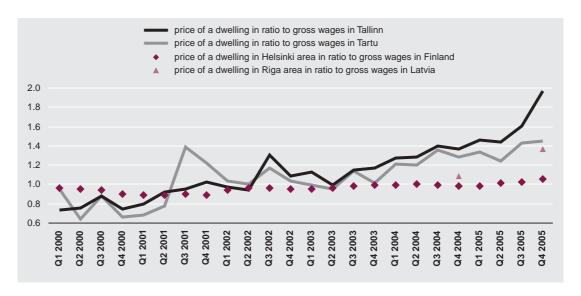


Figure 2.20. Ratio of the price of a two-room dwelling to gross monthly wages

Sources: Statistical Office of Estonia, Central Statistical Bureau of Latvia, Statistics Finland

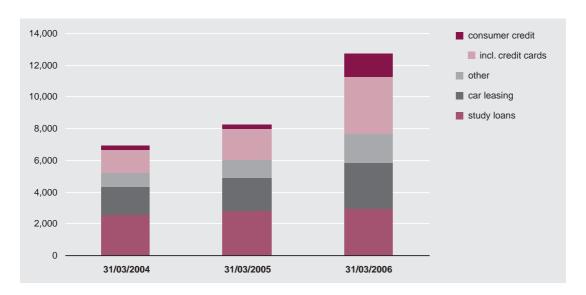


Figure 2.21. Stock (EEK m) and structure of non-housing household loans/leasing

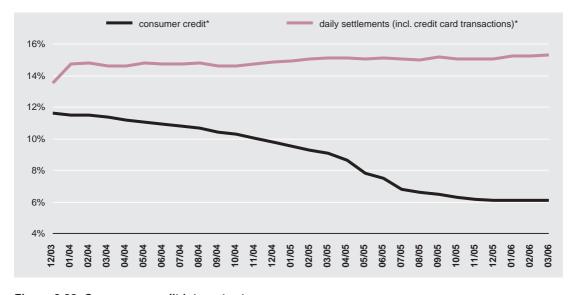


Figure 2.22. Consumer credit interest rates

<sup>\*</sup> without the data of BIG

to 64% by the end of March 2006 (50% at the end of September 2005).

The **maturities** of consumption loans have become substantially longer within the past half-year. The most significant structural change was the rise in the share of loans with maturities of over ten years in the stock of consumer credit, climbing to 33% by the end of March 2006 (19% at the end of September 2005; see Figure 2.23). The share of loans with maturities of up to three years has remained quite stable at the level of 12%.

The increasingly widespread use of mortgages for obtaining consumer credit points to the increased use of the housing equity withdrawal among Estonian households. Meanwhile, the consumption portfolio of the last half-year shows an increase in the amount of loans with parameters (such as long maturity, low interest rate, large sums) more pertinent to housing loans.

# Households' loan servicing ability and risks

In 2005, households' loan servicing costs increased further in ratio to disposable income. Households' **interest rate burden**<sup>8</sup> rose to 2.4% at the end of the year (see Figure 2.24). Similarly to 2004, the rise in the interest burden was primarily affected by the significant increase in loan volumes. On the other hand, the sharp indicator boost concerning the beginning of 2006 can also be explained by the rise in the average interest rate. By March 2006, the interest burden of households reached approximately 2.7%; excluding the influence of the interest rate increase it would have stood at 2.5%.

Rising interest rates might weaken the loan servicing ability in the coming years. Though the income forecasts for the near future are rather optimistic, it is possible that households' expectations regarding

income growth have been higher than fears arising from the interest rate rise.

This is confirmed by the high level of (housing) loan contracts concluded with a **floating interest rate**. At the end of March 2006, housing loans with floating interest rates comprised 99% of the total volume of household loans<sup>9</sup>.

The resolute upward trend of EURIBOR slightly increased households' motivation to fix housing loan interest rates as of November 2005. Generally, the share of housing loan contracts with a fixed interest rate has remained modest. Fixed interest rate housing loan contracts comprised only 2.4% of the housing loans granted in March 2006. Therefore, Estonian households, whose loan history is brief and who have not experienced an upward interest rate cycle so far, have not yet acknowledged the interest rate risk or do not consider risk covering worthwhile.

In conclusion, though the modest increase in EURIBOR may curb the borrowing enthusiasm slightly, it will not entail a significantly lower loan servicing ability. The net wage rise caused by wage pressures as well as tax changes helps to offset the negative impact of the interest rate increase. At the same time, in addition to the estimates concerning the financial behaviour of the so-called average person, it is important to assess the loan servicing ability and financial buffers on the level of single households. The loan servicing reserve might become exhausted faster than expected. For now, the good loan quality indicators of banks show no sign of major problems.

<sup>&</sup>lt;sup>8</sup> Interest burden is the ratio of household interest payments to disposable income.

<sup>&</sup>lt;sup>9</sup> Loans with floating interest rates are loans with the initial period of fixation of the interest rate below 5 years.

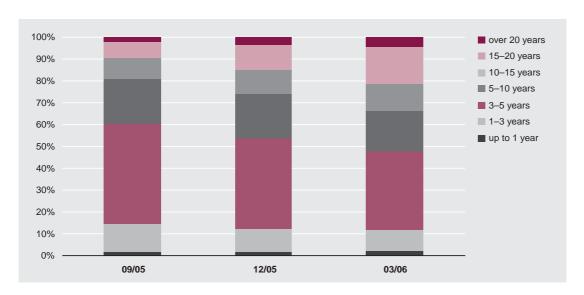


Figure 2.23. Maturity structure of new consumer loans

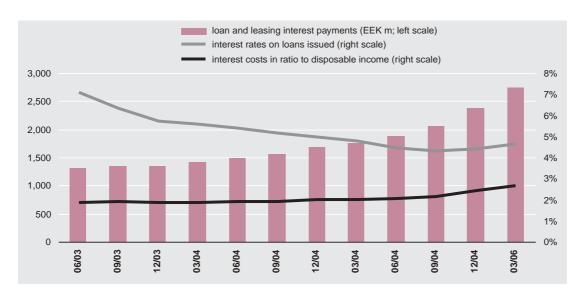


Figure 2.24. Households' loan and leasing interest payments during a year, interest rates on outstanding loans and interest costs in ratio to disposable income

#### HOUSEHOLD LOAN GROWTH IN EUROPEAN COUNTRIES<sup>10</sup>

Estonia posted a nearly 60% household **loan growth rate** in 2005, being among the fastest growing countries in Europe (see Figure 2.25). Growth was faster only in other Baltic States and the new EU Acceding States, Romania and Bulgaria. As for old Member States, at the end of 2005 the growth rate was faster than average in Ireland, Spain and Finland (28.5%, 21% and 15%, respectively).

The household indebtedness in ratio to income in the new Member States and Acceding States is still relatively low (see Figure 2.26). This is also the main reason why the developing financial markets have faced such drastic loan growth in recent years.

Comparing countries in terms of loan growth rate or debt level, however, does not provide sufficient clarity in estimating the pace of financial deepening. The easiest way would be to achieve appropriate comparability through various flow indicators (e.g. the ratio of loans obtained during a certain period to income or indebtedness growth), which would help alleviate the base effects. **Indebtedness growth** allows for a more explicit interpretation of loan growth intenseness, i.e. showing how many percentage points the debt-to-GDP ratio increased during a certain period.

In 2005, on the basis of this indicator financial deepening was most noticeable in Iceland, where households' indebtedness increased by 13 percentage points in light of the loan growth rate reaching 23%. From among the Baltic States, Latvia experienced the fastest growth with the indebtedness growing by approximately

10 percentage points within the year (see Figure 2.27). In Lithuania, the increase in the debt level remained much more modest (5.2 percentage points) despite rapid loan growth, just as in Bulgaria and Romania (5.1 and 2.6 percentage points, respectively).

A fascinating trend of 2005 was the acceleration of indebtedness growth in Denmark and the Netherlands, where the debt level is already one of the highest in Europe. In Denmark, for instance, indebtedness growth accelerated as much as in Estonia (by 8 percentage points) and reached its highest level since five years in the Netherlands (6.1 percentage points). Indebtedness grew briskly also in Ireland (by 9.6 percentage points) and Spain (by 7.8 percentage points). In several European countries, the debt level increased faster in earlier years (e.g. in Norway, 6-8 percentage points in 2002; in the United Kingdom, 6-7 percentage points in 2003-2004; in the Netherlands, 5-7 percentage points in 1997 and 7-8 percentage points in 2002).

Great differences in the level and growth of debt by countries give rise to the question whether these are the most appropriate indicators for assessing the loan behaviour or just as well the vulnerability of households. A general overview and simplified methodology is not enough to determine the appropriate convergence rate for new Member States.

Besides considering the debt level in assessing the vulnerability of households, it is essential to analyse the amount and changes of loan servicing costs. To this end, the **interest** 

<sup>&</sup>lt;sup>10</sup> Sources: central banks, Eurostat, EcoWin.

burden indicator is used. A comparison with the Nordic countries (4.5% in Norway, 3.4% in Sweden, 2.7% in Estonia) shows that Estonian households use a slightly smaller share of their net income to pay interest rates. At the same time, it should be mentioned that in Estonia this

indicator is low in ratio to the total number of households, but probably quite high in ratio to borrowers. Therefore, it is logical to conclude that given the growing number of households that have taken a loan the interest burden of the total household sector will also continue to rise.

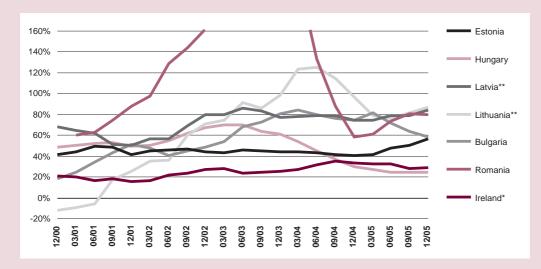


Figure 2.25. European countries with fastest loan growth rate in the last five years

<sup>\*</sup> real estate loans
\*\* leasing excluded

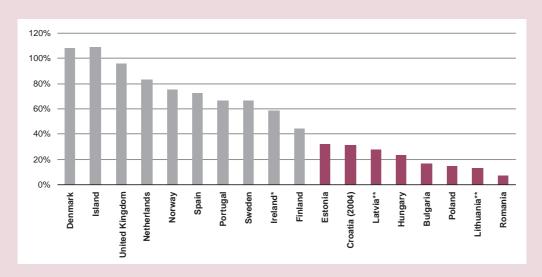


Figure 2.26. Households' indebtedness in ratio to GDP as at end-2005

<sup>\*</sup> real estate loans \*\* leasing excluded

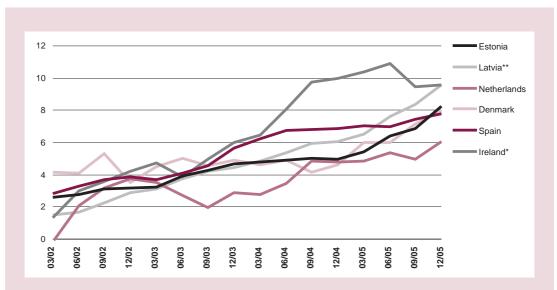


Figure 2.27. European countries with largest indebtedness growth in 2004-2005 (percentage points)

<sup>\*</sup> real estate loans \*\* leasing excluded

# III BANKING SECTOR STABILITY AND RISKS

# STRATEGIC DEVELOPMENT OF THE BANKING SECTOR

Competition on the Estonian banking market tightened further in the fourth quarter of 2005 and first quarter of 2006. The last half-year saw the addition of new branches of foreign credit institutions that commenced operations in Estonia as well as credit institutions expressing their desire to provide cross-border services from their country of origin. As at 31 March 2006, 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. Five foreign credit institutions had representative offices in Estonia and 97 foreign credit institutions had submitted an application for providing cross-border services.

Within the past 12 months, the aggregate volume of assets of the banks licensed in Estonia and the branches of foreign banks operating in Estonia grew 33% on a solo basis, exceeding 200 billion kroons at the end of the first quarter of 2006 (see Figure 3.1). At the end of the first quarter of 2006, 99% of the

banking sector assets belonged to the branches of foreign credit institutions or credit institutions controlled by non-resident financial groups. Despite new market participants, the distribution of the local loan market did not change considerably within the past half-year: at the end of the first quarter, over 97% of the total outstanding loans and leasing financing granted in Estonia divided between four major market participants. The same credit institutions also hold over 96% of the deposits deposited in Estonia (see Figure 3.2).

Besides residents' deposits, during the past half-year the rapid growth of financing portfolios was also financed by funds received from parent banks. At the end of the first quarter of 2006, the share of institutional foreign borrowing in banking sector liabilities rose again to 43%, which reflects the close dependence of banks operating in Estonia on non-resident parent banks. Meanwhile, local banks also continue operating on and channel funds to the markets of other, mainly neighbouring countries. The majority of financial groups licensed in Estonia are still operating in the Baltic States, but continue expanding their activities also in the Russian Federation.

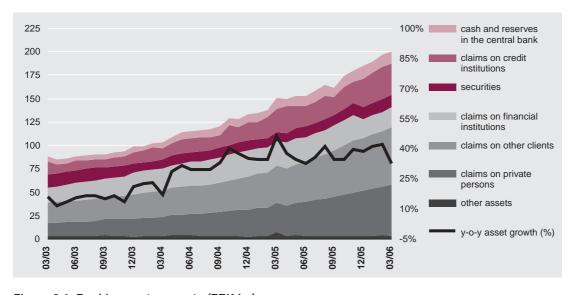


Figure 3.1. Banking sector assets (EEK bn)

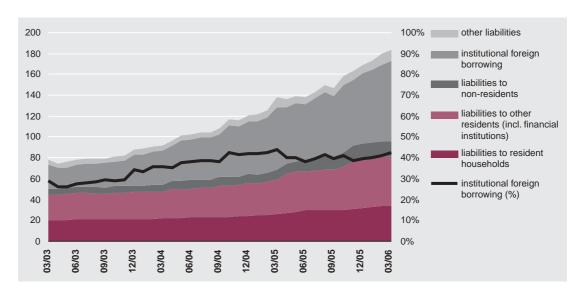


Figure 3.2. Liabilities of credit institutions (EEK bn)

#### **QUALITY OF ASSETS**

Owing to the strong loan demand the year-onyear growth of banks' and leasing companies' aggregate portfolio picked up even further during the last two quarters. Thus, the total volume of bank loans and leasing granted in Estonia exceeded 146 billion kroons in March 2006 and the year-onyear growth of financing portfolios accelerated more than up to 50% by the end of March. The volume of financing portfolios grew by 26 billion kroons during the past six months. The increase in the housing loans and consumer credit contributed 47% to growth. During the past six months, the share of housing loans in the financing portfolio grew by nearly 2 percentage points, approaching 32% at the end of March. The share of crediting of the second largest sector - commercial real estate development and/or management companies - in the financing portfolio of banks and leasing companies accounted for more than 15% at the end of the first quarter of 2006 (see Figure 3.3).

Domestic bank loans are ever more collateralised by mortgages or pledges of building (76% of the total loan volume; see Figure 3.4). The share of loans without collateral has decreased to 6.2% (40% of that accounts for loans issued to households, 37% to companies and 23% to the government). On the one hand, this may be regarded as more careful risk hedging by banks, but it is important that the actual market value of the collateral would exceed the outstanding loan amount also in case there would be a need to sell the collateral on less favourable market conditions than the present ones. Therefore, it is crucial that despite the current tight competition banks would not neglect the importance of assessing the clients' loan servicing ability and would retain the appropriate down payment requirement.

The quality of banks' loan portfolios has remained good in the favourable economic environment and the accelerating growth of loan portfolios, despite the fact that the majority of loans and leasing are granted with a floating rate and the raising of key interest rates since the second half of 2005 has thus increased the loan servicing costs for customers.

By the end of the first quarter, the share of **loans** overdue for more than 60 days among loans issued to the non-financial sector decreased below

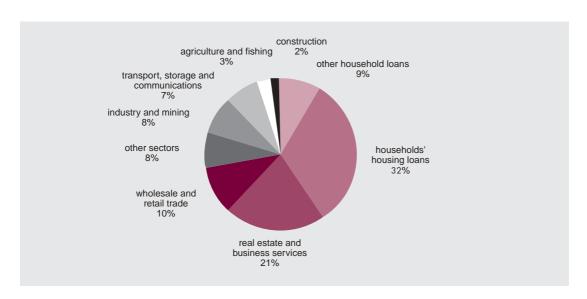


Figure 3.3. Financing by banks and leasing companies (as at 31 March 2006)

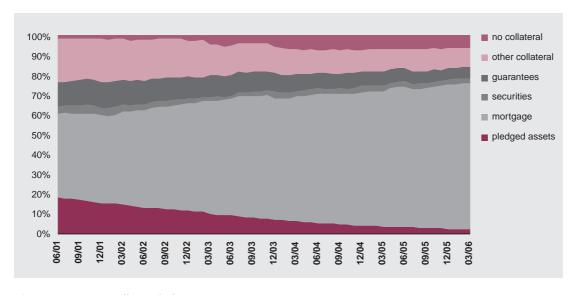


Figure 3.4. Loan collaterals by type

0.3% on an aggregate basis (see Figure 3.5). The ratio of the stock of provisions for loan losses decreased to 0.5%, but provisions still exceeded the amount of loans overdue for more than 60 days by nearly 1.7 times. Though lately the share of loans overdue among consumer credit has slightly increased, the amount of loans overdue for a longer period has so far remained modest (see Figure 3.6).

Due to the continuing strong loan demand also in other neighbouring countries (mainly the Baltic States where banks operating in Estonia have subsidiaries), the annual growth of banking groups' aggregate loan and leasing portfolio picked up to 58% by the end of the first quarter. By the end of the first quarter, the aggregate volume of the loan portfolios of banking groups licensed in Estonia thus exceeded 222 billion kroons. The share of loans issued to Estonian residents has been decreasing steadily in this aggregate portfolio. Consequently, at the end of the first quarter, claims to Estonian residents in the aggregate portfolio of banking groups reached 52%, i.e. barely over a half of total claims (52%). Claims to Lithuanian and Latvian residents held the next largest shares (18% and 17%, respectively). The share of financing the operations of Russian Federation residents in the banking groups' aggregate portfolio remained below 4% at the end of the first guarter of 2006.

In light of rapid growth, the quality indicators of loan portfolios have remained on an aggregate basis good also in case of **banking groups**. By the end of the first quarter, the ratio of the stock of provisions for loan losses decreased to 0.7% of the loan portfolio, whereas the share of loans overdue for more than 60 days declined as well (to 0.4%). Consequently, at the end of the first quarter the aggregate stock of provisions made by banking groups exceeded the volume of loans overdue for more than 60 days by more than 1.7 times.

Although indicators vary across banks as well as banking groups, the provisioning practices of Estonian banks may generally be considered rather conservative in comparison with the rest of Europe. According to the European Central Bank, the EU-25 average of non-performing and doubtful assets comprised 2.7% of banks' loans an advances in 2004<sup>1</sup>, while the average ratio of the stock of provisions amounted only to 2.0%<sup>2</sup>.

Thus, the quality indicators of the Estonian banking sector's loan portfolios may be considered relatively good, but the interpretation of current indicators also calls for considering the present favourable economic environment. Though in view of the rapid loan portfolio growth, the ratio of problem loans has recently remained quite low, it is essential that banks retain sufficient conservatism in assessing and hedging risks in order to maintain sustainability.

# **CAPITAL ADEQUACY**

As of 1 March 2006, based on the analyses<sup>3</sup> and forecasts of Eesti Pank, the central bank decided to increase the risk weight used for housing loans issued to Estonian residents in calculating the own funds requirement (capital adequacy) for banks and banking groups licensed in Estonia from 50% to 100%. In other words, while until now banks were required to finance only 5% of housing loans issued to Estonian residents from their own funds (95% could be external funds), by the amended regulation banks are required to provide 10% of the loan value from own funds.

Although Eesti Pank has repeatedly drawn attention to the potential increase in risks and also notified market participants of the planned regulation amendment, the year-on-year growth of banks' financing portfolios and consequently also risk assets picked up even further in the fourth quarter

<sup>&</sup>lt;sup>1</sup> As the definitions of non-performing and doubtful assets differ between countries, these data should be interpreted with caution.

<sup>&</sup>lt;sup>2</sup> "EU Banking sector stability", November 2005.

<sup>&</sup>lt;sup>3</sup> See also "Financial Stability Review", November 2005.

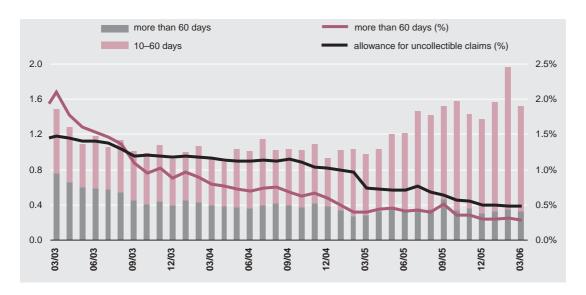


Figure 3.5. Volume of overdue loans (EEK bn; left scale) and share of overdue loans and allowance for uncollectible claims in banks' loan portfolio (right scale)

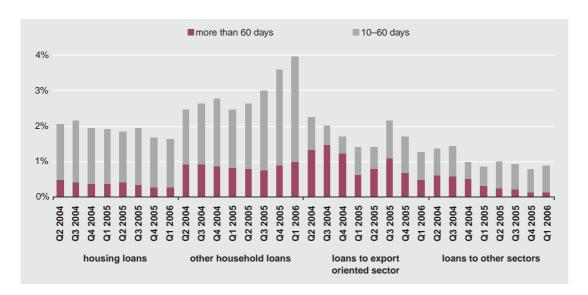


Figure 3.6. Overdue loans by economic sectors

<sup>\* 3</sup> months average

of 2005 and first quarter of 2006, reaching 37% in January-February (i.e. before the enforcement of the regulation amendment). By the end of March, banks' aggregate risk assets had increased by 22 billion kroons compared to the end of February (monthly growth 17%), of which approximately 17 billion stemmed from the regulation amendment's entry into force on 1 March.

As to the structure of risk assets, in case of the Estonian banking sector credit risk weighted balance-sheet assets account for a vast majority of total risk weighted items. Within the past two quarters their share rose to more than 90%. The share of credit risk weighted off-balance-sheet items, however, decreased to 6%. The share of risk adjusted trading book and foreign exchange positions has decreased in the past two quarters close to 2% of total risk weighted items (see Figure 3.7).

At the end of the first quarter, banks' net own funds reached 18.8 billion kroons on an aggregate basis, which is 5 billion kroons more than at the end of September. Own funds were significantly boosted also by the inclusion of additional subordinated liabilities (+3.3 billion kroons compared to the end of the third quarter of 2005), which is reflected in changes in the structure of own funds (the share of Tier II capital has increased). Hence, by the end of March the aggregate capital adequacy ratio of banks grew to 12.4%, despite the rapid growth of assets and the increase in risk weighted items as a result of the measures taken. The lowest capital adequacy ratio of banks stood at 10.4% at the end of March (see Figure 3.8).

As the volume of the banking sector's financing portfolios continued to grow rapidly during the past two quarters also in the neighbouring countries where banking groups licensed in Estonia are operating, the **risk weighted items of banking groups** licensed in Estonia increased 48% in 2005. At the end of the first quarter of 2006, the aggregate volume of banking groups' risk weighted items thus reached already 242 billion kroons (the implementation of the 100%

risk weighting instead of the former 50% for housing loans to Estonian residents is also reflected here). As regards banking groups, the structure of risk weighted items did not change significantly either – over 97% of the risk weighted items stem from credit risk weighted on- and off-balance-sheet items.

At the end of March, the **own funds of banking groups** exceeded 27 billion kroons, which is over 6.7 billion kroons more than at the end of September. Similarly to banks, also the growth of the own funds of banking groups was mostly achieved by the inclusion of audited profits and the increase in subordinated liabilities. At the end of March, the aggregate capital adequacy ratio of banking groups stood at 11.3%, remaining close to the respective past year's figure (11.4%). The lowest capital adequacy ratio of banking groups at the end of the first quarter was 10.7% (see Figure 3.8).

Thus, banks have not reacted to the regulation amendment by slowing down the growth of housing loan portfolios but have preferred to increase own funds instead, which has, to the most part, been achieved by the inclusion of audited profits and by attracting additional subordinated liabilities from parent banks.

As regards future developments, it is important whether banks are ready to accept a decrease in the profitability of own funds. Should retaining the earlier levels of profitability remain a goal also in the circumstances of the amended regulation, it is important which methods will be chosen for achieving that goal.

#### LIQUIDITY

## **Funding of banks**

Since last year's November, customer deposits have increased faster than loan and leasing financing. Thus, also the share of **institutional foreign borrowing** in total liabilities has remained around 40% during the last 12 months, despite the fact that banks have also been active in raising foreign funds (see Figure 3.9). In March 2006, the

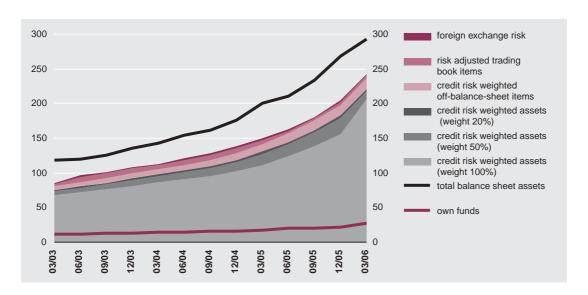


Figure 3.7. Structure of banking groups' aggregate risk weighted items and own funds

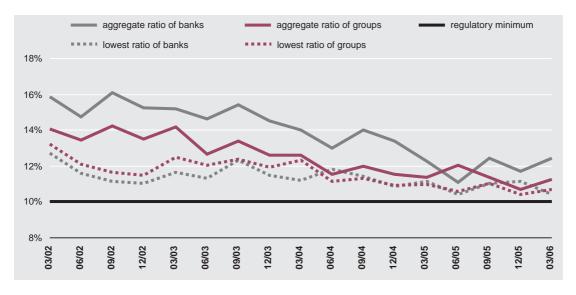


Figure 3.8. Capital adequacy of banks and banking groups

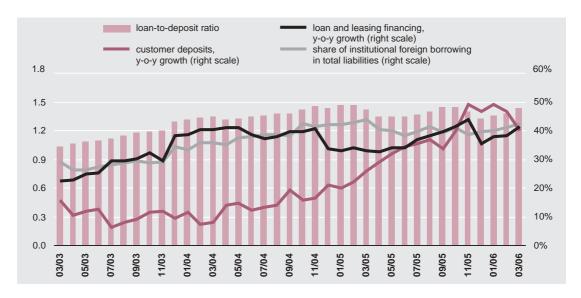


Figure 3.9. Loan-to-deposit ratio and share of institutional foreign borrowing in total liabilities (right scale)

**loan-to-deposit ratio** increased to 1.43 again, because of the interaction of the deceleration of deposit growth caused by the base effect and an increase in foreign borrowing.

As the ownership structure of Hansapank changed, the share of **non-resident parent banks' resources** in funding the Estonian banking sector increased as expected, comprising approximately three-quarters of institutional foreign borrowing. In addition, while until now funds from parent banks were primarily received as deposits, in the past half-year loans have prevailed in this respect. As loan and leasing financing has been growing fast and the capital adequacy regulation amendment necessitated an increase in own funds, some banks have also included subordinated liabilities from parent banks.

The **price of funds** raised by banks continued to increase across the funding structure (see Figure 3.10). As a result of the interest rate rise on the European money market, banks raised the interest rates on customer deposits, which is why also the average cost of deposits increased. Furthermore, the cost of funds received from banks also grew,

partly because the maturity structure of funds changed.

## Liquid assets

The share of liquid assets in total assets increased to 24.6% by the end of March, exceeding the average of the past 12 months by 1.5 percentage points (see Figure 3.11). Actually, however, liquidity has not increased because the increase in **liquid assets** was brought about by transactions related to intra-group liquidity management. Without taking this into account, the level of the banking sector's liquid assets would have been slightly less than 20%, which is several percentage points lower than the 12-month average.

For the same reason, liquid assets increased robustly in ratio to current liabilities in December 2005, finally decreasing to 45% in March 2006. Without considering transactions related to intragroup liquidity management, the indicator of March would have remained close to that of November 2005 (36%). As the high liquid asset ratios of the banking sector at the end of 2004 and at the beginning of 2005 resulted from raising large amounts of market-based funds, the decrease in

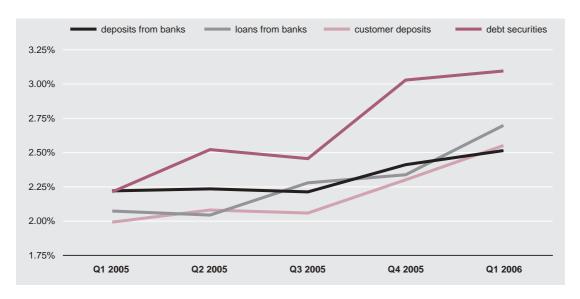


Figure 3.10. Weighted average interest rate on funds raised

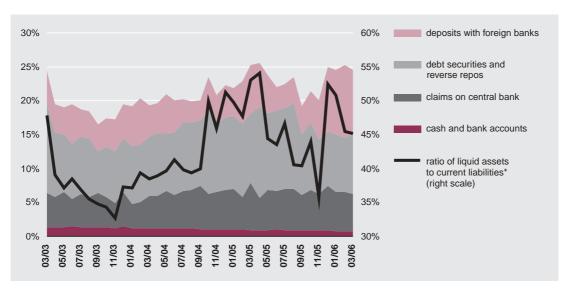


Figure 3.11. Structure of liquid assets and their share in current liabilities (% of total assets)

 $<sup>^{\</sup>star}$  current liabilites – remaining maturity of up to one month

the share of liquid assets in the balance sheet of banks with a more flexible access to parent bank funds was to be expected.

#### **EFFICIENCY AND PROFITABILITY**

The banking sector's profit margin4 increased slightly in the first quarter of 2006 compared to September 2005, though the asset utilisation<sup>5</sup> and return on assets6 continued to decrease (see Table 3.1). An increase in the net interest income as well as the net fee and commission income contributed greatly to the growth of the profit margin (see Figure 3.12). The net profit of four consecutive quarters was to some extent enhanced also by changes in the accounting principles resulting from the implementation of the International Financial Reporting Standards (IFRS/IAS) last year, which caused a decrease in provisioning and an increase in profit from the value adjustments of assets. Also, had the income from financial investment remained at the same level, the profit margin might have increased more. However, the return on equity<sup>7</sup> still dropped by 1 percentage point to 21.3% compared to September 2005, as the profit margin rose relatively little.

In the upward phase of the interest rate cycle, these Estonian banks that have a large share of loans with floating interest rates and demand deposits are in a favourable position, since the interest rate rise boosts interest income over expenses. The average interest income on interest-earning assets turned upwards in the first quarter of 2006. On the other hand, the growth of the average interest expenses of interest-bearing liabilities also accelerated, which is why the spread and net interest margin continued declining, although at a slower pace. As the volume of interest income exceeds that of the interest expenses, the net

interest income has increased considerably despite the increase in average interest expenses.

Owing to the strong growth of net interest income, the share of **net fee and commission income** in the net interest income has stabilised at the September 2005 level, i.e. 52%.

Controlling expenses in the context of ever expanding operations, the banking sector has reached a certain critical level, as the share of administrative costs in income has increased to 24% again, i.e. to the same level as a year ago. Thus, the **cost-income ratio** has also remained at the level of September 2005, i.e. 45.0%. The ratio might even have grown, had it not been supported by a decrease in the loss from value adjustments of real estate investment, tangible and intangible assets, which were largely brought about by the changes in the accounting principles after the implementation of IFRS/IAS.

Similarly to the banking sector's solo indicators, the figures on the return on assets and asset utilisation of **banking groups**<sup>8</sup> also continued decreasing. Meanwhile, the consolidated profit margin of banking groups has decreased slightly during the past half-year, unlike the solo indicator of the banking sector (see Table 3.2). This resulted from the smaller share of net fee and commission income and net interest income in total income and the higher expenses of writing down claims. The profit margin was underpinned by a further drop in the cost-income ratio. As the profit margin decreased, so did the return on equity by 0.4 percentage points to 23.5% compared to September 2005.

As it becomes increasingly difficult to achieve higher cost-effectiveness of the banking sector on a solo basis and the impact of changed accounting

<sup>&</sup>lt;sup>4</sup> Profit margin is calculated by dividing net profit by total income.

<sup>&</sup>lt;sup>5</sup> Asset utilisation is calculated by dividing total income by total assets.

<sup>&</sup>lt;sup>6</sup> Return on assets is calculated by dividing net profit by total assets.

<sup>&</sup>lt;sup>7</sup> Return on equity is calculated by dividing net profit by equity.

<sup>&</sup>lt;sup>8</sup> The consolidated ratios of banking groups have been retroactively adjusted.

principles resulting from the implementation of the International Financial Reporting Standards (IFRS/IAS) on profit is waning, profitability may be increased further mainly through a rise in net interest income and net fee and commission income. Due to the structure of banks' assets and liabilities, the increase in interest income in the upward interest cycle will probably exceed the increase in interest expenses, therefore causing a rise in the net interest margin and spread. However, presuming that the indicators of Estonian banks converge towards the EU average, in the long-run competition pressures should continue to decrease the net interest margin.

Table 3.1. Banks' profitability on solo basis (%)

	2002	2003	2004	Q1 2005	Q3 2005	2005	Q1 2006
Asset utilisation	9.3	7.9	7.4	7.2	7.1	6.7	6.4
Return on assets	1.55	1.70	2.13	2.06	2.12	1.96	1.94
Profit margin	16.8	21.7	28.8	28.6	30.0	29.4	30.3
Return on equity	14.7	14.1	20.0	20.3	22.3	21.0	21.3
Cost-income ratio	61.6	53.0	45.8	46.2	45.0	45.6	45.0
Net interest margin	3.59	2.91	2.39	2.27	2.08	2.04	2.01
Spread	3.44	2.78	2.30	2.18	1.99	1.95	1.92

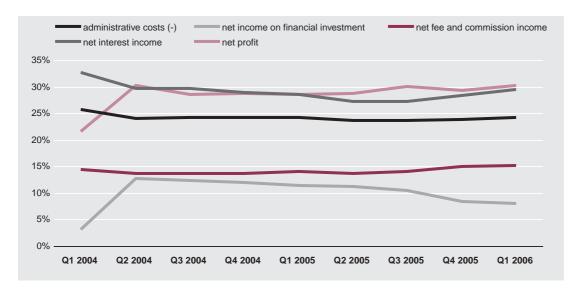


Figure 3.12. Income and expense items by type (% of total income)

Table 3.2. Banking groups' profitability on consolidated basis (%)

	2002	2003	2004	Q1 2005	Q3 2005	2005	Q1 2006
Return on assets	2.12	2.07	2.22	2.15	2.18	2.08	2.03
Return on equity	20.3	20.0	22.8	22.8	23.9	23.5	23.5
Cost-income ratio	60.9	52.3	49.7	49.1	47.5	46.6	46.9
Net interest margin	4.55	3.94	3.42	3.27	3.02	2.89	2.81
Spread	4.41	3.80	3.28	3.14	2.88	2.76	2.68

# IV SECURITIES AND MONEY MARKET

#### MONEY MARKET

At the end of 2005, the European Central Bank started to raise monetary policy interest rates again after five years and did it twice with a three-month interval: on 6 December 2005 and on 8 March 2006 by a total of 50 basis points. In Estonia, the development of money market interest rates has remained in line with the interest rate changes in the euro area. As the increase in interest rate quotations in Estonia and the euro area occurred at different times, the difference between **money market interest rates** even turned negative for a while during the weeks preceding the decision to increase monetary policy interest rates (see Figure 4.1).

In the middle of April, the difference between the money market interest rates in Estonia and in the euro area stabilised within the range of 6–14 basis points. This is comparable to the September 2005 level before the expectations of an interest rate rise started to increase. Also, the difference in interest quotations, which form the basis for future Estonian kroon and euro transactions (forward difference) has retained previous price differences (see Figure 4.2). Thus, the liquidity of the Estonian kroon has remained stable, and there have not been any problems with the kroon liquidity either.

The continuously high confidence of international financial markets in investing in Estonia is also reflected in the convergence of long-term interest rates with the euro area interest rates. The **yield of the five-year Estonian Government Eurobond** has been moving in line with the yields of government bonds issued by other European countries. The difference between the yield of Estonian Eurobonds and German bonds with comparable maturity reached an average of 14.5 basis points in the first half of 2006, whereas the difference with comparable Austrian bonds stood at an average of 3 basis points (see Figure 4.3).

The money market turnover has not changed significantly, except for the large turnover of

derivatives in the past half-year, which stemmed from the large-scale currency exchange transactions between a local bank and its parent bank. Excluding these transactions, the turnover of derivatives has remained relatively stable. During the last half-year, its share accounted for approximately 33% of the total turnover of money market loans, whereas non-residents' transactions comprised nearly half of that. The turnover of short-term kroon loans formed about a quarter of the total money market turnover, of which transactions related to non-residents comprised 90% with Swedish and Finnish banks prevailing.

#### **BOND MARKET**

The domestic bond market has significantly revived owing to the still expansive environment. In March 2006, the growth of the primary bond market turnover accelerated to 57% (see Figure 4.4). As a result, bond market capitalisation increased 45% compared to a year ago, reaching 5.3 billion kroons, i.e. 3.1% of GDP, by the end of March. The market expanded because of a 75% growth in the volume of resident companies' bond issues. The volume of bonds issued by non-financial sector companies again multiplied. Though the volume of bonds issued by credit institutions increased by more than a half, the growth of the entire market outpaced that and at the end of March the stock of bank bonds comprised 36% of the total bond market capitalisation.

Thanks to the boost in the primary bond market turnover, also the **secondary bond market** picked up pace, growing by 2.8 times, year-on-year, by the end of the first quarter (see Figure 4.5). The average daily turnover increased from 7.2 million kroons the year before to 19.9 million by March as the sum of four consecutive quarters. 42% of the transactions made through the Estonian Central Register of Securities were performed with bonds issued by non-residents, and 9% of these comprised bonds registered in the Latvian Central Depository and 8% in the Lithuanian Central Securities Depository.

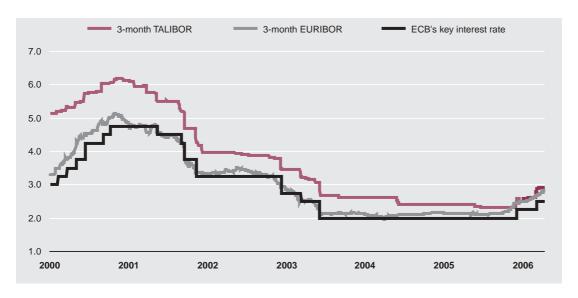


Figure 4.1. Money market interest rates in Estonia and in the euro area (%)

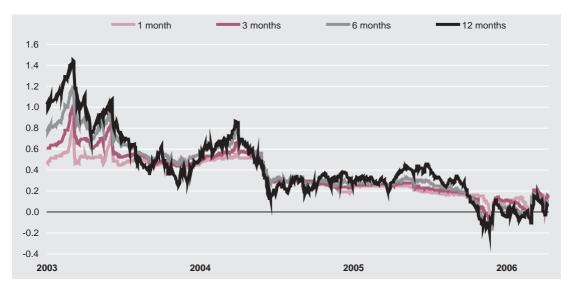


Figure 4.2. Difference between money market interest rates in Estonia and in the euro area (percentage points)

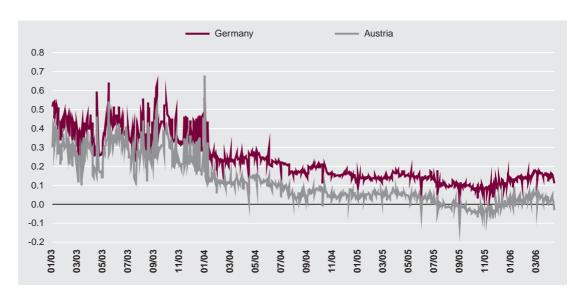


Figure 4.3. Yield difference between Estonian Government Eurobonds and respective bonds in Austria and Germany (percentage points)

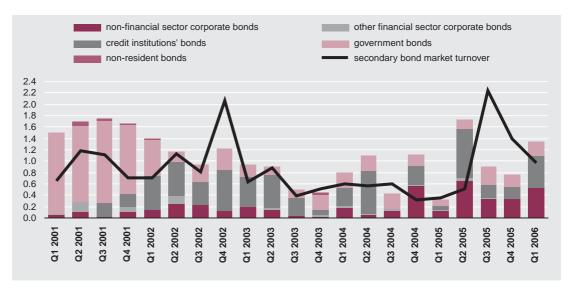


Figure 4.4. Volume of quarterly issued bonds and secondary bond market turnover (EEK bn)

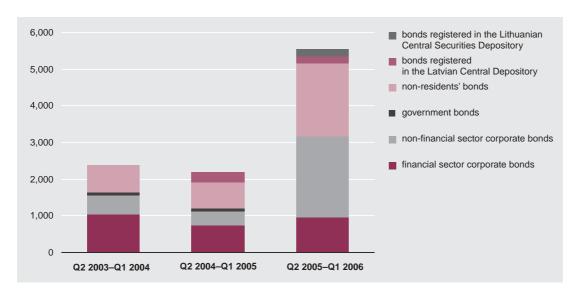


Figure 4.5. Structure of secondary bond market turnover (EEK m)

The turnover of non-financial sector bonds had grown the fastest (over seven times) by March as the sum of four consecutive quarters.

In November 2005, two debt securities were added to the bonds of companies listed on the stock exchange<sup>1</sup>: the bonds of Balti Investeeringute Grupi Pank AS (BIG) and Sportland International Group AS. Hence, at the end of March 2006, the market value of the bonds of eight companies listed on the Tallinn Stock Exchange amounted to 0.7 billion kroons, i.e. 13% of the total bond market volume. Although listing company bonds on the stock exchange has become more frequent, they are still mainly acquired for holding. Contrary to the robust growth of bonds traded on the over-the-counter market, no trading with bonds listed on the stock exchange could be witnessed during the past half-year (except for one transaction).

### **STOCK MARKET**

The rapid rise on the **stock markets of Central and Eastern Europe and Russia**, which commenced

at the beginning of 2005, slowed down slightly in autumn (see Figure 4.6). In October and March 2006, the correction on these markets remained more short-lived than expected. The increase in stock prices continued due to the growth potential of these countries as well as the shrinking risk margins, but also because of the relatively low level of key interest rates and the rise in raw material prices.

By the end of April 2006, the Russian stock market had experienced the strongest growth, which reached nearly 147%. The stock exchanges of Poland and Hungary followed with 70% and 49%, respectively. Czech, Latvian and Croatian stock market indices have moved in line with the euro area indices (annual growth over 30%). Similarly to the situation on the Estonian stock market, the Lithuanian market's growth rate has also slowed down, reaching only 16%, which is modest compared to other developing markets. Analysts are moderately optimistic about the market growth of Eastern and Central Europe and Russia based on the potential of these regions and the possible enlargement of the EU (Bulgaria, Romania).

<sup>&</sup>lt;sup>1</sup> AS SBM Pank, AS Eesti Post, AS Fenniger, LHV Ilmarise Kinnisvaraportfelli OÜ, AS Sampo Pank and AS Tallinna Sadam.

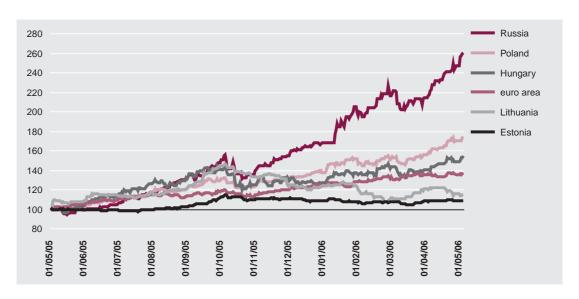


Figure 4.6. Dynamics of stock exchange indices of the new EU Member States, the euro area and Russia (points; 01/05/2005 = 100)

Source: EcoWin AB

The most significant event of the last half-year on the **Tallinn Stock Exchange** was listing the stocks of AS Tallink Group, the most rapidly developing shipping company on the Baltic Sea, on the primary list of the stock exchange (see Figure 4.7). Trading with shares started on 9 December 2005. As a result, **stock market capitalisation** shot up to 47 billion kroons, i.e. 28% of GDP, by the end of March.

Owing to the takeover bid for Hansapank and the listing of new stocks on the Tallinn Stock Exchange, the **stock index OMXT**<sup>2</sup> reached its record level with 700 points on 4 October 2005 (see Figure 4.8). By the end of September, the year-on-year index growth amounted to 90%. After that OMXT underwent a correction characteristic of extremely rapid growth. By the beginning of May 2006, the year-on-year index growth decreased to 9%, a level similar to economic growth.

Mainly because of the listing of new stocks on the stock exchange, the **average daily turnover** of transactions on the stock exchange reached 43 million kroons in the past half-year. This is close to the year-ago level if excluding the record months related to the takeover transactions of Hansapank. The main driving force was trading with the shares of Tallink, forming 37% of the stock exchange turnover. Other more liquid securities at that period were the shares of AS Eesti Telekom and AS Tallinna Vesi, comprising 23% and 16%, respectively, of the total turnover.

191 stock exchange members were entitled to act as brokers; three of them are temporarily inactive. 12 stock members trade from abroad. In March, transactions brokered by AS Suprema Securities and Hansapank again made up the majority with 94% of the total value of transactions as a sum of four consecutive years.

<sup>&</sup>lt;sup>2</sup> As of 3 October 2005, OMX harmonised the index name structure for all OMX exchanges, including in Tallinn. The new name of the Tallinn Stock Exchange index is OMX Tallinn (OMXT).

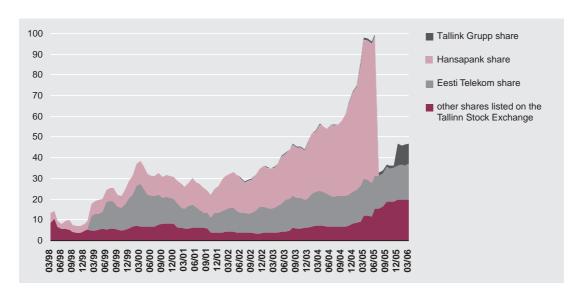


Figure 4.7. Market capitalisation of shares listed on the Tallinn Stock Exchange (end of month; EEK bn)

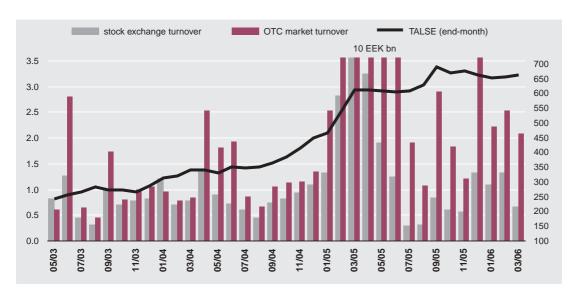


Figure 4.8. Stock turnover on the Tallinn Stock Exchange and OTC market (EEK bn; left scale) and Tallinn Stock Exchange index TALSE (points; right scale)

The all-time record level of **non-residents' investments**, which accounted for 87% in the capitalisation of shares listed on the stock market before the final takeover of Hansapank, dropped until January 2006, but has started to recover again (see Figure 4.9). In the first quarter, foreign investors mainly invested in the shares of Baltika AS and Klementi AS. At the end of March, the majority (41% of the shares' market value)

belonged to Estonian investors. Resident investors were primarily financial and non-financial sector companies, whose investments in listed shares increased to 16.6 billion kroons, i.e. 34% of the total stock market capitalisation. Within a half-year, the investments of retail investors on the stock market increased by one-third up to 2.1 billion kroons, i.e. to over 4% of the total value of listed shares.

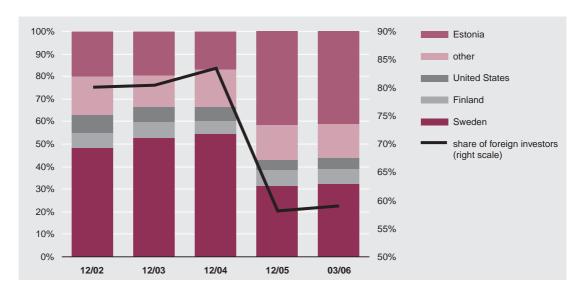


Figure 4.9. Structure of investors by residency and share of foreign investors of shares listed on the Tallinn Stock Exchange (%)

# **V** OTHER FINANCIAL MARKETS

#### **INVESTMENT FUNDS**

Since the end of March 2005, the **yield** of investment funds has been mainly influenced by the increase in key interest rates and the rapid growth of developing markets, primarily caused by the foreign investment inflow, decreased risk premiums and the rise in commodity prices (see Figure 5.1). The development of Central and Eastern European and Russian markets as profitable investment regions in 2005 took the yield of equity funds registered in Estonia to 43% on average by the end of March 2006 as the sum of four consecutive quarters. The average yield of money market funds grew as well along with the rise in key interest rates, amounting to 1.9% at the end of March.

The growth of investment fund assets, which had lasted for several years, slowed down due to a high basis of comparison, reaching 58% at the end of March, year-on-year (see Figure 5.2). As investors increasingly prefer riskier but more profitable equity investments instead of the shares of the more stable and liquid money market funds, investment fund assets increased mainly owing to the multiple growth of equity fund assets. As a result, equity fund assets grew from 4.7 billion kroons at the end of March 2005 to 9.8 billion kroons within a year. Contrary to equity funds, the merely 23% annual growth of interest fund assets and the 7% growth of money market funds has remained considerably more modest. At the end of March 2006, 62% of the equity fund shareholders were residents, nearly half (49%) of whom were private persons.

The share of foreign assets in the assets of funds that has been constantly growing since 2003 decreased slightly in the first quarter of 2006 and comprised 77% at the end of March (see Figure 5.3). Investments to EU markets decreased to 64% of foreign assets by the end of the period (see Figure 5.4). Investments to the markets of

Russia, Poland and Luxembourg grew the most. The total volume of instruments issued to the Estonian equity, bond and fund markets in the assets of investment and pension funds registered in Estonia again accounted for 12%, i.e. nearly 2.6 billion kroons, which is a third more compared to the end of September 2005 in nominal terms. Investments in domestic shares and units have nearly tripled, amounting to more than 0.9 billion kroons at the end of March.

During the last half-year, eight new funds were added to open-ended investment funds: Hansa Eastern Europe Bond Fund, Hansa Funds of Funds<sup>1</sup>, Sampo Global Growth Fund, SEB Generic Pharmaceutical Fund, Kawe Investment Fund and Trigon New Europe Top Picks Fund. Hansa Funds of Funds and Sampo Global Growth Fund are funds that place capital in other funds. 50% of the assets of Hansa Funds of Funds are invested in Eastern Europe, and the rest in other international financial markets (USA, Asia). The assets of Sampo Global Growth Fund are primarily placed in the equity funds of global and European developing markets. SEB Generic Pharmaceutical Fund invests in the shares of global generic pharmaceutical manufacturers, at least 40% of which are channelled to Central and Eastern European countries. The assets of the Hansa Eastern Europe Bond Fund are invested in securities representing the debts of Eastern European issuers; the assets of the new Trigon fund, on the other hand, are placed in the ten most attractive shares of the same region. Unlike the aforementioned funds, the Kawe Investment Fund is a mixed fund where assets are invested mainly in shares and bonds without a focus on any specific economic sector or region.

# PENSION FUNDS AND INSURANCE

In April 2006, the number of subscribers to the second pillar of the pension system amounted

<sup>&</sup>lt;sup>1</sup> Hansa Fund of Funds 30, Hansa Fund of Funds 60 and Hansa Fund of Funds 100 are intended for investors with different risk preferences and they invest 30%, 60% or 100% of fund's assets, respectively, in equity funds.

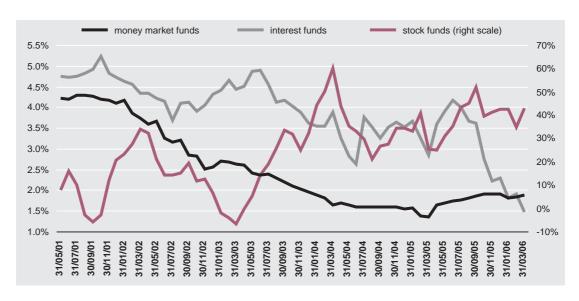


Figure 5.1. Average yield of investment funds (%)

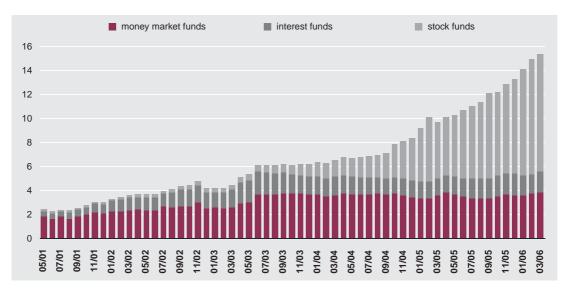


Figure 5.2. Volume of investment fund assets at end-month (EEK bn)

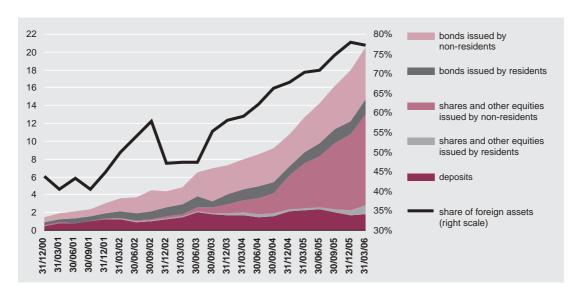


Figure 5.3. Structure of investment and pension fund assets (EEK bn) and share of foreign assets (%)

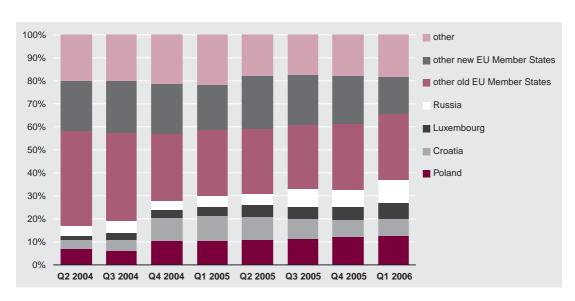


Figure 5.4. Foreign investments of investment and pension funds by residency at end of period (%)

to approximately 489,000 persons, comprising about 80% of the employed. Within the past year, the volume of the second pillar funds increased 76%, i.e. by 2.3 billion kroons (see Figure 5.5). Their total volume at the end of March amounted to 5.3 billion kroons. The fast growth period of the second pillar funds, when many new subscribers joined the system, is now over and presently funds mainly grow as a result of the increase in wages and profitability. Therefore, the growth rate of the volume of second pillar funds is modest compared to the previous year (in March 2005, the annual growth was 125%). Within the last year, the volume increased by 190 million kroons per month on average.

The number of subscribers to the third pillar reached 95,000 by April 2006, accounting for approximately 15% of the employed. The year-on-year growth of the third pillar pension funds stood at 115%; the volume of funds grew by 284 million kroons (86% and 113.4 million kroons in March 2005, respectively). While the second pillar's growth potential is limited by the number of new subscribers and wage increase, the growth of the third pillar very much depends on the sales of funds and insurance companies offering the respective

products. Including pension insurance, the volume of the third pillar stood at 1.57 billion kroons at the end of 2005, of which pension funds comprised 30%. The share of pension funds in the structure of the third pillar pension fund system is continuously heading upwards on account of insurance.

The structure of pension fund assets had some changes within the past year. The percentage of shares in the second pillar pension fund assets increased due to the popularity of high-risk funds, whereas the share of bonds decreased (see Figure 5.6). Moreover, the share of residents' shares and bonds also grew. The share of residents' as well as non-residents' shares and equities in the assets of the third pillar funds has grown significantly (see Figure 5.7). While a year ago shares and equities comprised 39% of the assets of third pillar funds, this year the respective figure rose to 72%. The higher percentage of shares affected also directly the increase in the return on the third pillar pension funds: while in March 2005 the average return stood at 11.25%, in March 2006, the average return on different third pillar funds accounted for 25.31%. Investments in non-residents' shares and bonds rose remarkably too: from 68% to 79%, year-on-year.

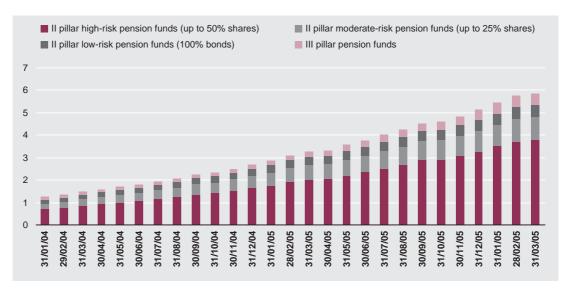


Figure 5.5. Volume of pension fund assets (EEK bn)

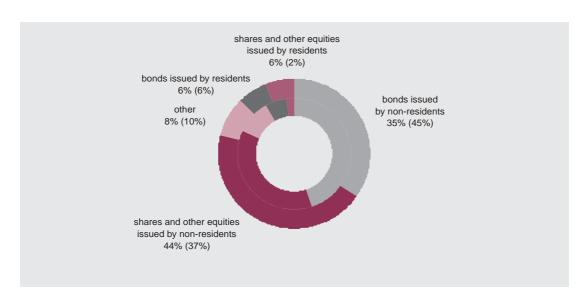


Figure 5.6. Structure of II pillar pension fund assets as at 31 March 2006 (position on 31 March 2005 indicated in brackets)

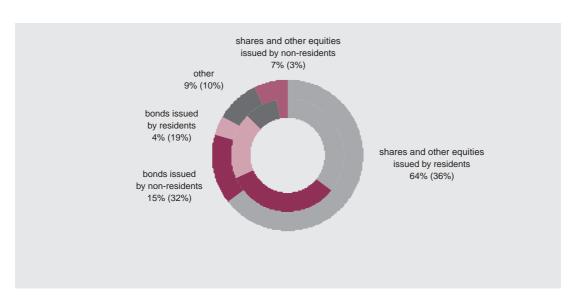


Figure 5.7. Structure of III pillar pension fund assets as at 31 March 2006 (position on 31 March 2005 indicated in brackets)

At the end of March 2006, 80% of the assets of third pillar funds included investments in foreign markets. The total volume of domestic shares, equities and bonds in the investments of these funds reached 108 million kroons. Despite the fact that the total volume of domestic shares, equities and bonds increased by 30 million kroons, year-on-year, their share in the total third pillar investments has declined from 32% to 20%. The share of Western Europe (France, Luxembourg and Switzerland) in the third pillar fund investments has significantly increased: from 8% in the past year to 32%.

## LIFE INSURANCE

In 2005, life insurance companies earned a profit of 149.6 million kroons, i.e. 55% more than in 2004. The return on equity of life insurance companies has been increasing since 2001, reaching 30.3% in 2005.

The year-on-year growth of the volume of gross premiums on the life insurance market stood at 62%, and the total amount of gross premiums collected was 1.4 billion kroons (see Figure 5.8). The gross premiums collected by unit-linked life insurance contracts increased the most with the annual growth of 141%.

Unit-linked life insurance differs from ordinary life insurance mainly for the fact that while traditionally, a life insurance contract is concluded to hedge the risks (e.g. death, illnesses) of an insurance policy holder and accumulate a fixed sum of money, then in case of unit-linked life insurance the policy holder carries the investment risk. Also, there is no guaranteed interest as in the case of an ordinary insurance product, the direct insurance cover is small and the investor can earn unsecured income depending on their risk tolerance. The policy holders can channel their payments in different funds and the value of the insurance policy accumulation reserve depends on the price change of fund shares. In case of unit-linked life insurance, payments made after 12 years since the conclusion of the contract are exempt from income tax. Therefore, in a sense,

unit-linked life insurance is an ordinary financial investment concluded through a life insurance policy in order to reduce future income tax paid on capital growth.

It is difficult to explain the extraordinary increase in the number of unit-linked life insurance contracts and based on the available data it is too early to tell whether it is a one-off change in the behaviour of consumers or a long-term trend. As unit-linked life insurance contracts have been concluded in Estonia already since 1997, it is not very likely that this type of insurance was discovered as a form of investment only now. Therefore it is reasonable to assume that the excessive growth premiums collected by unit-linked life insurance contracts was a one-time event.

At the end of 2005, the total investment volume of life insurance companies amounted to 2.27 billion kroons, which formed 61.3% of the balance sheet total (76% at the end of 2004; see Figure 5.9). The percentage of shares and other securities increased in the investment structure mainly on the account of bonds and other fixed income securities. Investments of insurance companies are being reinvested mainly because it is difficult to find eligible investments for insurance contract commitments.

# **NON-LIFE INSURANCE**

The profit of non-life insurance companies for the financial year 2005 stood at 442 million kroons, which is 27% more than in the previous year. The return on equity was 28% in 2005. The development of the non-life insurance market has remained relatively stable in recent years, which is also illustrated by the fact that the market shares of non-life insurance companies have fluctuated only within the range of a few percents for a while already.

In the past year, insurance companies collected 2.7 billion kroons in gross premiums, which is 14.5% more than in 2004 (see Figure 5.10). As land vehicle insurance, property insurance and compulsory motor third party liability insurance contributed the

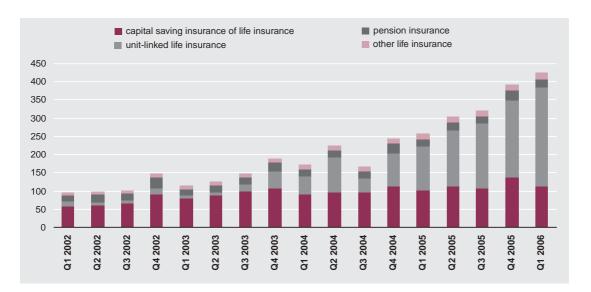


Figure 5.8. Gross premiums collected by life insurance companies (EEK m)

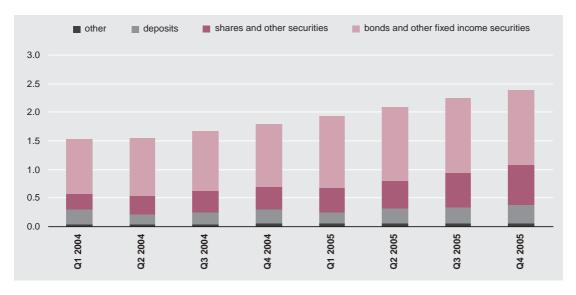


Figure 5.9. Investment structure of life insurance companies (EEK bn)

most to the growth, the gross premium growth of non-life insurance may be explained by favourable economic situation and the continuous high loan volume.

At the end of 2005, investments comprised 89% of the balance sheet total of non-life insurance companies, which was 3.2 billion (see Figure 5.11).

As non-life insurance companies invest in more liquid assets than life insurance companies, the majority of non-life insurance assets are placed in fixed income securities and the share of credit institutions' deposits is also significantly greater. In 2005, the share of bonds and other fixed income securities increased approximately 12% primarily on account of shares and other securities.



Figure 5.10. Gross premiums collected by non-life insurance companies (EEK m)

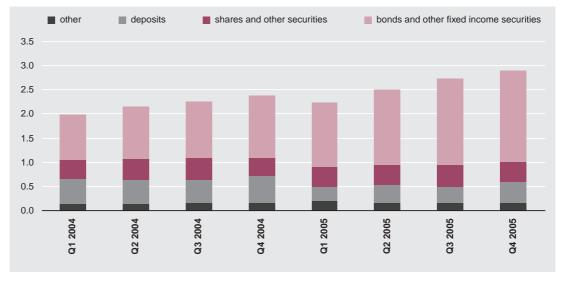


Figure 5.11. Investment structure of non-life insurance companies (EEK bn)