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Contents

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Preface

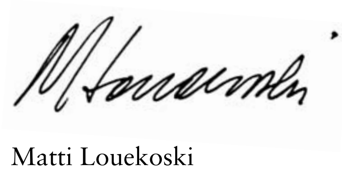
The Bank of Finland's key statutory tasks include participation in the maintenance and development of a reliable and efficient payment system and overall financial system. These tasks are also an integral part of the ESCB's and ECB's role in promoting the integration and smooth operation of payment systems and the stability of the financial system within the euro area.

The Bank of Finland sees its role as a promoter of stability. Price stability, stable and efficient financial markets and the integration of Europe's financial markets provide the requisites for economic growth and employment. The various functions of the Bank of Finland all work to further these goals. Indeed, the Bank's success is founded on high-level expertise in monetary and financial economics, the capacity to combine macroeconomic and financial market perspectives, along with an effective network of partners – international and domestic. Efficient and open communication is an integral part of this success.

Since 1998, the Bank of Finland has published biannual reports on financial stability in the journals Euro & talous (in Finnish) and the Bank of Finland Bulletin. A separate, broader based overview of the stability of the Finnish financial market, to be issued once a year, was first published in the autumn of 2003. The Financial Stability edition of the Bulletin describes international developments in the sector and provides more analytical evaluations of financial market developments. Repeated financial crises in different parts of the world along with the major structural changes to the financial markets have increased the need for analysis by the authorities, and by the central banks in particular, of both developments in the financial system and the attendant risks. The Bank of Finland was one of the first central banks in the world to begin the publication of a regular stability assessment. An international trend, promoted particularly by the IMF and the BIS, has led to the publication of extensive, in-depth stability analyses by central banks all over the world.

Through its publications the Bank of Finland seeks to spread awareness of the functioning and outlook of the financial markets and to stimulate debate on the operations and role of these markets in Finland.

Helsinki, 19 October 2005



Matti Louekoski
Deputy Governor of the Bank of Finland

Summary and conclusions

This has been a sound and reliable year for Finland's financial system. Current economic forecasts suggest continued stability for the near future. Any short-term risks that arise concern the global imbalances and whether there will be any possible disorderly adjustments whose impact would be channelled into the Finnish financial system. Longer-term risks concern the ongoing issue of structural change within the financial sector as well as the practicalities of the supervisory and regulatory functions in an increasingly global operating environment.

2005 has been a sound and reliable year for the financial system in Finland, as much as for financial systems internationally. Robust growth in several key economic areas has contributed significantly to overall financial stability. An improvement has been seen at global level in the performance of companies operating in the banking and insurance sectors, resulting in an improvement in risk-bearing capabilities. The growth prospects for the world economy remain favourable but are overshadowed by a number of threats which, were they to materialise, could disrupt the operations of the financial system.

Finnish banking and insurance operators have experienced robust performance in 2005. The operating profits generated by banks are clearly up in the first half of the year. Cost efficiency and profitability have, in general, improved. A rapid growth in lending stock led to a slight decline in capital adequacy in the first half of 2005, but, despite that, banks' solvency remained at higher-than-average levels. On the whole, the situation in the Finnish banking and insurance sectors is sound at present.

The Finnish financial system's short-term risks are mainly related to global imbalances and the potential effects of any disorderly adjustments on both banks operating in Finland and otherwise on the domestic financial system. The ample liquidity presently seen in the world economy has long fuelled the key economic areas' current account imbalances, as well as affecting the household and public sectors' indebtedness of several countries and can be seen in the rise in asset prices, particularly those on the housing and bond markets. Correction of these imbalances will probably be brought about through gradual change; however the possibility of uncontrolled and damaging corrective moves cannot be ignored. The effect of disorderly adjustments on the Finnish financial sector would probably be transmitted most powerfully directly through market impacts as well as indirectly via financial institutions' customers.

In the medium term, banks' strong growth in housing lending linked with a loosening in lending criteria could lead to an increase in loan servicing problems and loan losses. Finland's household sector indebtedness remains at a reasonable level, in the light of both historical and international comparisons. Interest rate margins on household lending have narrowed, loan periods have lengthened and new financial instruments have been taken into use. The lengthening of loan periods and new forms of loans have had the effect of making the market more efficient, although the speed of change may cause a certain amount of excess in the market. All in all, households are deemed not to pose significant risks for the stability of the Finnish financial system in the near future.

From the banks' perspective, the sharp narrowing of interest margins on lending and the stretching of loan periods could, in the medium term, lead to profitability problems if the strategies adopted by the banks to gather their income from selling other financial services to their customers does not prove to be as lasting as expected.

The rate of growth in lending has for a number of years already been clearly faster than the growth in deposits, leading banks to increasingly resort to market-based funding. Although well-integrated money and capital markets are capable of offering banks a functioning source of financing, changes in the funding structure set ever greater challenges to banks' liquidity management.

Longer-term risks concern the ongoing issue of structural change within the financial sector as well as the practicalities of the supervisory and regulatory functions in an increasingly global operating environment. Cross-border and cross-sector consolidation in the financial sector has again increased in intensity. Demand for financial services has increased on a global scale and in emerging economies in particular, which can be seen in the increasing interest shown by the financial institutions of developed economies in the markets of emerging economies. Increasing integration and the provision of cross-border services are having a tightening effect on competition in several financial services' sub-sectors. Development also poses greater pressures to amend financial sector regulation and supervision on a world-wide scale. For example, it is possible that the principles behind the division of labour between home and host supervision will have to be reassessed with the creation of ever larger multinational financial groups.

The infrastructure of the financial markets is faced with significant challenges and changes, despite having secured its reliability in the short term through well-planned systems and contingency arrangements. Nevertheless, the capacity of existing systems to effectively transmit payments throughout the entire euro area still leaves scope for considerable improvement.

Realising the objective of a single euro payment area involves reforms that are intended to benefit EU citizens and corporations alike. However the benefits to Finns and Finland from the existing plans are not necessarily obvious. The Bank of Finland works to promote the positive effects of financial market development on the realisation of the EU's growth strategy. The payment services of many countries would need significant enhancement in order to meet the service levels provided in Finland. The application of sufficiently open and universally applicable standards can ease entry into the markets. This, in turn, can create incentives to both new and existing market participants, even the ones operating as de-facto monopolies in certain services, to develop innovative functions.

The future of the Finnish market place is threatened by integration, unless participants adopt European procedures and unless the expectations of both the issuers of securities and investors are met. In the last couple of years, the markets have clearly devoted their energies to increasingly integrate the financial markets in the Nordic region. However, it is not certain whether this represents a trump card, in terms of cross-border competition. The financial market infrastructure is affected by many conflicting expectations, hindering the decision making process with which the market participants are faced.

The regulatory initiatives currently being prepared by the European Commission have a potentially far-reaching effect on the basic structures of the markets, cost-efficiency and the level of legal certainty. The Directive on markets in financial instruments will bring about changes in competition and, if successfully implemented into national legislation, will increase efficiency without increasing investors' risks. Although the Directive includes several sections that threaten to increase financial service providers' costs, a similar initiative is likely to be needed to enhance the securities post-trading processes and payment services.
Above all, ensuring legal certainty is the key aspect of these initiatives.

International operating environment

Developments in the international economy continue to lend support to financial stability although growth in the global economy is expected to slow down. The financial markets have survived recent disruptions without serious difficulties. However, global imbalances that have deteriorated for many years already – imbalance of current accounts, indebtedness of households and public sectors as well as an increase in asset prices – serve to increase the vulnerability of the international financial system. Results trend in the banking sector has been globally favourable. Rapid growth of the loan stock poses a significant challenge to banks' risk management.

The global economic outlook continues to be favourable, although global economic growth is expected to decelerate from 2004.[1] As a result of favourable economic developments, financial institutions have been able to strengthen their balance sheets and the ability of the international financial system to withstand disruptions has generally improved. Financial stability would not be in immediate peril even if global economic growth slowed down more than expected.

However, recent years have witnessed phenomena on a global scale that have been interpreted as symptoms of imbalance in the international financial system. Such problematic phenomena include an imbalance of current accounts, indebtedness of households and public sectors and an increase in asset prices particularly in the fixed income and real estate markets. Although these phenomena are related in many respects to favourable economic developments, they increase the vulnerability of the international financial system.

Ample liquidity increases the vulnerability of the international financial system.

Many explanations have been proposed to the imbalances that are causing worries. For example, differences in the real growth rates between various countries have been viewed as a partial explanation to the imbalance of current accounts. On the other hand, inflation developments and the decrease seen in uncertainty in the financial system have been considered to explain improvements in possibilities to incur debt and the decrease in return requirements.

Attention has also been drawn to the fact that the propensity to invest has been low relative to saving at the level of the global economy. This has decreased required investment returns, thus weighing on long-term interest rates. In addition, the distribution of saving and investments in the various areas of the world economy has caused an imbalance of current accounts. What is considered particularly problematic is the abundance of liquidity accumulating in the world economy and the financial markets. In several developed economies it has contributed to an increase in indebtedness and accelerated the increase in asset prices.

Among the various phenomena threatening the balanced development of the international financial system, in recent years the most attention has been paid to the deficit of the US current

[1] See a more specific discussion on the development of the international economy in Bank of Finland Bulletin 3/2005.

account. During the previous ten years it has grown almost six-fold in nominal terms and also become manifold in relation to the level of total output (Chart 1). During the previous year and a half, the deficit of the US current account has been over 50% of the country's goods and services exports. The deficit has been financed particularly by investors in Asian countries with surplus current accounts.

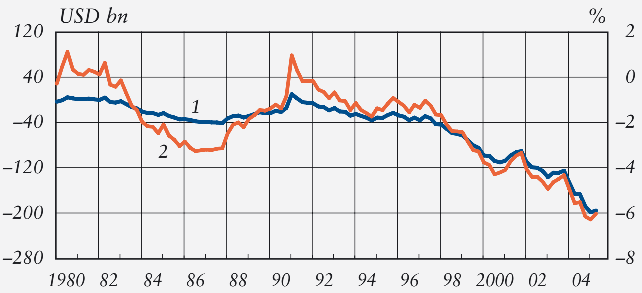
Secondly, worries have been caused by the indebtedness of households and the public sector in many developed economies. In particular, attention has been paid to the deficits in the US public sector – especially the federal deficit – the indebtedness of the household sector and low savings rate, which are among the reasons for the deficit of the country's current account. The indebtedness of US households has grown at an increasingly rapid pace in the 21st century.

Companies' indebtedness in major developed economies has been moderate in recent years. Since the development of results has been favourable and the investment growth has been fairly subdued, companies have been able to solidify their balance sheets and they have had little need to resort to external finance. However, recently there have been signs of an increase in mergers and other corporate restructuring on a global scale, which has increased companies' indebtedness.

A third problem – with a particular bearing on the operation of the financial markets – is the development of asset prices in various markets. Increase in house prices has been rapid in many developed economies, but there are significant country-specific differences, and recent changes in price developments have been considerable (Chart 2). An increase in house prices is closely connected with households' indebtedness. The sustainability of house prices has become a concern particularly in some parts of the United States, where price growth has accelerated clearly from the beginning of 2004. In the second quarter of 2005, the quarterly rate of price increase was

Chart 1.

Development of US current account

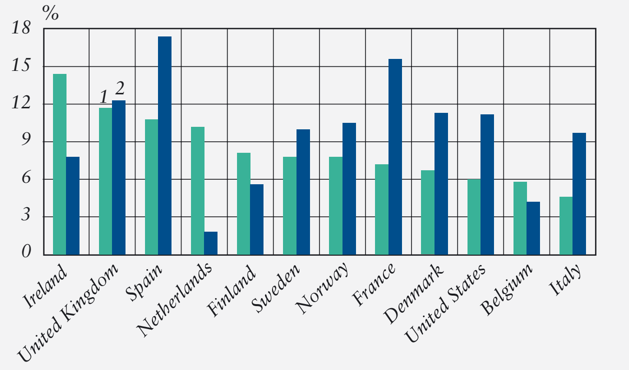


1. *Quarterly current account surplus/deficit, seasonally adjusted (left-hand scale)*
2. *Current account surplus/deficit as percentage of GDP (right-hand scale)*

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Chart 2.

Average annual changes of nominal house prices in certain countries, 1996–2003 and 2004



1. *Annual change 1996–2003*
2. *Annual change 2004*

Source: BIS.

13.4%. The last time when increases as rapid were seen was at the end of the 1970s.[2] In contrast, for example in the United Kingdom the increase in house prices has all but stopped this year although in 2004 the rate of growth was still higher than average.

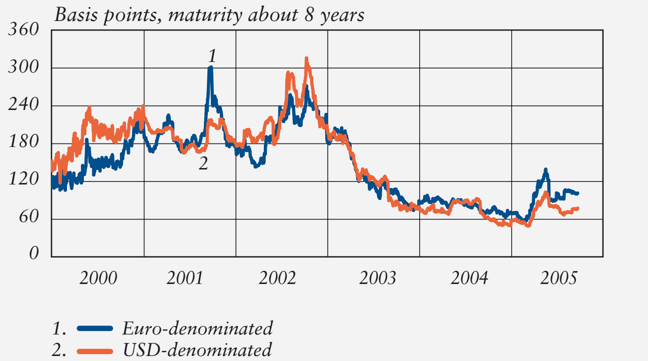
In the international bond markets, the level of interest rates on bonds issued by major countries has been historically low in recent years. The low level of long-term interest rates has lent support to households' growing indebtedness and increase of house prices in countries where the pricing of housing loans is linked to long-term market rates. As the low level of long-term interest rates has further made it easier to finance the indebtedness of the public sector, the long-term interest rates have also indirectly contributed to the growth of current account deficits in certain countries.

The low level of long-term interest rates has set investors in search of higher returns in higher-risk bonds and other types of investments. As a result of increased demand, the yield spreads between corporate and government bonds narrowed rapidly in 2003 and have remained fairly narrow recently (Chart 3). In spring 2005, however, the yield spreads on corporate bonds grew rapidly, particularly as a consequence of difficulties in the US car manufacturing industry. At the beginning of the summer yield spreads narrowed again.

Despite the narrow yield spreads and the generally low level of interest rates, issues of corporate bonds have remained subdued in the international markets (Chart 4). A worrisome characteristic is that the proportion of companies with low credit ratings in total corporate debt has increased in major market areas. All in all, the favourable interest rate situation as regards companies has been more apparent in the market for syndicated loans than for bonds, and the use of syndicated loans in the finance of mergers and acquisitions has increased. In contrast to other companies, issues by financial institutions have grown rapidly. This is partly explained by the need to finance banks' rapidly growing loan stocks.

Chart 3.

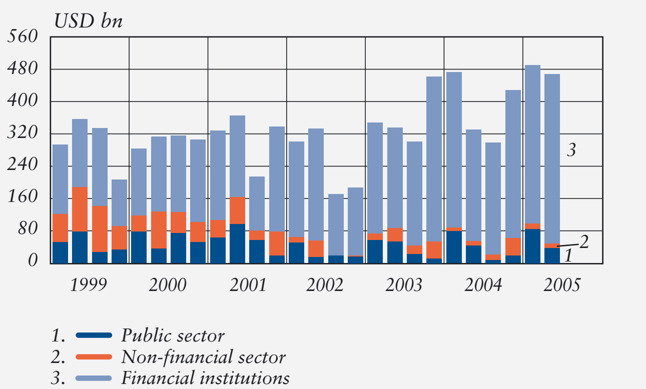
Yield spread between corporate (BBB rated) and government bonds



Source: Merrill Lynch.

Chart 4.

International bond issues in net terms



Source: BIS.

[2] Office of Federal Housing Enterprise Oversight, release on 1 September 2005.

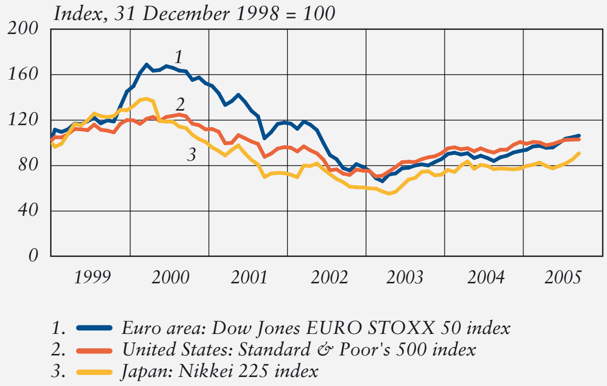
Narrow yield spreads may point to distortions in the pricing of risk.

Ample liquidity raises a concern for the functionality of pricing particularly in the interest rate markets. Yield spreads have been pushed narrower partly as a consequence of a decrease in credit risks associated with companies and investors' increased willingness to take risk due to favourable economic prospects. However, it is possible that the increased interest by investors toward high-risk instruments that has been observed is a consequence of the low yields on alternative low-risk investments, which prevents investors from reaching their target rates of return. In such a situation, there is the danger that investors underestimate the risks of their new investments relative to their returns, which are being dampened due to their increased demand.

The increase in equity prices that began in 2003 has continued but price developments in major equity markets have been reasonable (Chart 5). The valuation of equities (P/E ratios) in major markets is lower than in recent years and near their long-term average. Stock index volatilities indicating uncertainty in the stock markets have remained low.

Chart 5.

Equity indices in the euro area, United States and Japan



Source: Bloomberg.

How the existence of imbalances affects the operation of the financial system, how these problems unwind and which factors could prompt a potentially adverse correction are crucial for the international financial system. From the Finnish point of view, how the impact of the problems and their unwinding are channelled into banks operating in Finland and the rest of the domestic financial system needs to be assessed.

So far financial markets have operated without any major difficulties despite recent natural disasters, terrorist attacks and other disruptions. The imbalances have not had any significant impacts on the functionality of the financial system. If the accumulation of the imbalances continues, the vulnerability of the markets for sudden fluctuations may increase. This may result in increased costs for banks and other market participants and make it more difficult to operate in the markets.

Correction of the global imbalances is unavoidable before long but it is most likely to take effect through gradual changes. In such a scenario, the correction would not severely disturb the functionality of the financial system. Factors contributing to such a correction could include for example a gradual increase of savings rate in the United States, a corresponding increase in consumption and investments in certain emerging Asian economies and oil producing countries, a rise in major long-term interest rates and rebalancing of housing price developments in countries with overheated housing markets.

However, the possibility of disorderly adjustments in the international financial system can not be ruled out. Such a correction could emerge if investors' confidence and willingness to take risk weakened significantly in the financial markets. A loss of confidence could be caused either by difficulties within the financial system or external disruptions, such as a rapid deterioration of economic development. Recently the high oil price has overshadowed global economic growth and put investors' confidence to the test. In addition it is a crucial question whether the quality of corporate debt, which has so far remained quite high, starts to deteriorate in the near future. Problems could be caused in particular by companies with low credit ratings, whose borrowing has been increased by the low level of interest rates. Problems related to market confidence could also be related to a sudden deterioration of households' confidence in industrialised countries and a consequent rapid rise in the savings rate. A disruption that would undermine confidence could likewise be caused by difficulties in individual industries or companies as well as individual unexpected incidents, such as terrorist attacks or natural disasters.

Probably a sudden correction would not endanger the functionality of the financial markets in their entirety, but liquidity in certain market segments could at least be temporarily weakened. The correction could also entail significant exchange rate changes, most likely a steep decline of the dollar, if the US current account deficit were considered by the markets unsustainable. If investors attached higher uncertainties to long-term investments due to a depreciation of the dollar or other reasons and if investors' willingness to take risk decreased, long-term investments would be subject to higher return requirements than currently, and long-term interest rates might rise rapidly. In addition, investors would probably reassess the pricing of risks, and yield spreads in the markets would increase rapidly. It is likely that the impacts would also extend to the equity markets. Indirect consequences could be more severe than the direct impacts on the financial markets. These would affect the financial system through increased credit losses on the part of households and companies and through a decrease in the demand for financial services.

Weakening of confidence could prompt disorderly adjustments.

The changes in the structure of the international financial system seen in recent years may also have an impact on the nature of the correction in the markets. The main financial markets have deepened, broadened and integrated. This has improved the possibilities to diversify risk and increased the flexibility of the financial markets and its ability to withstand disruptions. In extreme situations where the tolerance of market participants were exceeded, however, market price fluctuations could be stronger than before. In such a case problems could spread further than before, as investors in the integrated markets would act in a similar manner and the role of banks in dampening the disruptions would be less significant than presently. The spread in the market of new, complex financial instruments, such as credit derivatives could also strengthen the steepness of a change in market prices, since these instruments

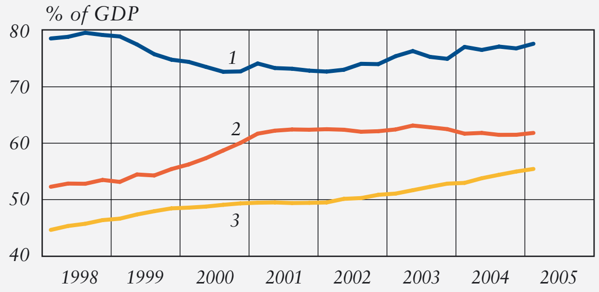
Global problems could spread in the Finnish financial sector through the markets or customers.

may entail uncontrollable uncertainty and over-reaction by investors in difficult market conditions.

The impact of corrections in the international financial system would be channelled into the Finnish financial sector both through direct market impacts and through the customers of financial institutions. On the one hand corrections could result in the materialisation of market risks, against which banks are, however, protected more extensively than previously. On the other hand, the exceptional uncertainty related to corrections could considerably drain liquidity in certain market segments in extreme conditions. This would also increase the risks of banks operating in Finland and would undermine their operational possibilities in the markets. In addition, strong movements in market prices could have significant impacts on the real economy. These impacts would be channelled to banks as the quality of their assets weakened and loan losses increased. Corrections could also be seen in the demand for financial services both due to the impacts on the real economy and increased uncertainty.

Chart 6.

Debt ratio in the euro area broken down by sector



Sources: Bank of Finland and European Central Bank.

Many central banks have recently taken measures that may alleviate the imbalances troubling the international financial system. In the United States, monetary policy has been tightened since summer 2004, and policy rates have been hiked in some other countries as well. On the other hand, for example the currency systems of China and Malaysia were changed, with the effect that the pegging of their currencies to the US dollar were loosened. The challenge of policy measures is to try correct imbalances in a controlled manner so that these measures do not prompt any sudden changes in the markets.

Europe

The main external threat for the EU financial system is a disorderly adjustment of global imbalances, which would be reflected both in the European real economy and financial markets. The euro area economic and financial system which is weakened in particular by the subdued economic development in recent years is quite vulnerable in some part to sudden corrections.

Economic growth in the euro area in the first part of 2005 was slower than expected. This reflected not only external factors, such as the appreciation of the euro and a rise in oil prices, but also structural problems in the euro area economy. Growth is expected to pick up in 2006 and 2007.[3]

Households' indebtedness in the euro area has increased in recent years (Chart 6) but is lower relative to disposable income

[3] See a more specific discussion on the economic development in the euro area in Bank of Finland Bulletin 3/2005.

than for example in the United States or Japan. The increased indebtedness is explained in many euro area countries by the growth of housing loans and the related rise in house prices. Increased borrowing has been supported by the low level of interest rates and it has not been prevented by the fact that consumer confidence in the euro area has remained below its long-term average. There are large differences across euro area countries in households' indebtedness. In addition to the debt-to-GDP ratio, the vulnerability of each country's household sector depends on the type of interest-rate linkages applied to household debt. Attention must be paid to indebtedness, particularly in countries where rapid growth of indebtedness is related to a rapid rise in house prices.

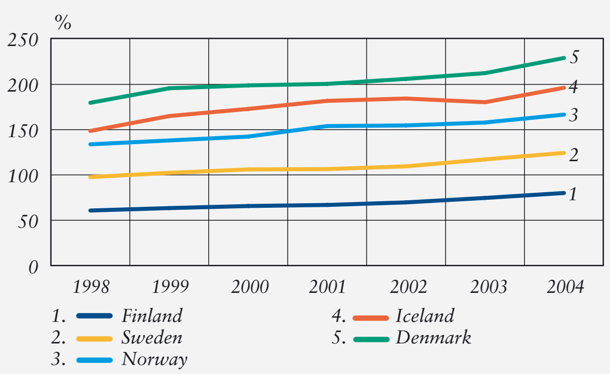
Although euro area companies on average continue to be indebted to a comparatively high degree, indebtedness relative to total output has not increased significantly after 2001. According to market indicators, risks related to the corporate sector have decreased in recent years and also the development of credit ratings have so far pointed towards an improvement in companies' standing. A large proportion of euro area companies' demand is from outside the economic area, so companies are not dependent on the subdued outlook of the euro area. On the other hand, this means that companies are vulnerable to disruptions in the world economy and exchange rate developments.

Economic growth in the Nordic countries outside the euro area slowed down at the beginning of 2005 but has revived since then. In the non-EU countries Norway and Iceland, growth has been faster than in other Nordic countries. Particularly Norwegian economic outlook has been influenced by oil price developments, which have also increased investments in the industry. Corporate sectors in the Nordic countries are in a relatively sound shape. This is indicated by an improvement in profitability and market information based assessments on companies' default probabilities. However, there are considerable differences in the future outlook for companies in different industries. Investments have picked up somewhat, which has also been shown as an increase in corporate finance.

Households in non-euro area Nordic countries have been highly indebted for a long time already. Particularly in Denmark and Iceland but also in Norway and Sweden the indebtedness of households relative to disposable income has been clearly greater in comparison to the indebtedness of the household sector in Finland (Chart 7). This is partly explained by

Chart 7.

Households' total debt in relation to disposable income



Sources: Bank of Finland, Sveriges Riksbank, Danmarks Nationalbank, Norges Bank and Seðlabanki Íslands.

International banking system has withstood problems in the real economy and other disruptions well.

structural differences in the financial systems but it should also be noted that the proportion of the debt in disposable income has grown in all non-euro area Nordic countries by several dozen percentage points since the late 1990s.

The rapid economic growth witnessed in the Baltic countries in recent years has also continued at the beginning of 2005. The growth rate is expected to remain high also in the next few years. Although growth prospects are favourable as the Baltic countries converge towards old EU member countries, rapid changes in the economy and the financial system increase vulnerability to disruptions. Vulnerability of the Baltic states has been increased for a long time by current account deficits, which are typical to economies in rapid growth.

Households in the Baltic countries have accumulated debt at a rapid pace for many years now. For example, the loan stock of households in Estonia grew by a good 40% in the first quarter of 2005. Indebtedness of the sector has mainly been related to the very rapid growth of housing loans. However, indebtedness of households in the Baltic countries relative to disposable income remains low for example in comparison to the situation in the euro area and the Nordic countries, and households' loan stock has not so far given rise to any significant concerns on the growth of credit losses. Corporate sectors in the Baltic countries also accumulated more debt due to the rapid economic growth and low level of interest rates. However, companies' indebtedness has grown significantly slower than households'. Management of the rapid growth of the loan stock and related risks, however, poses significant challenge to banks operating in the Baltic countries.

International banking sector

Economic growth supports the demand for financial services on a global scale. Large global banking groups are extending their operations particularly into China, as economic growth and the increase in the demand for financial services can be expected to be rapid over there.

In recent years, the international financial system and banks as its crucial constituent have withstood any disruptions in the real economy as well as other difficulties well. However, potential disruptions and difficulties have an impact on the banking sectors in various countries and may also affect the Finnish banking sector directly through market and counterparty risks as well as indirectly through customers.

Consequent improvement of the results and balance sheets of banking groups reflect the ample liquidity in the world economy. Credit losses recorded by banks in 2004 were very little in many countries. During 2005, recorded credit losses and problem loans have decreased further. In major equity markets, the prices of banks' and insurance companies' shares have developed differently in 2005 (Chart 8).

In the **United States**, results in the banking sector have developed solidly already for a long time. Banks' income has developed favourably. Interest rate margins of US banks have remained almost unchanged for the past two years. The solid results development has also been supported by good and steady trend in other income, consistently tight cost control and very low credit losses. In the second quarter of 2005, loan loss provisions relative to the loan stock reached the lowest level since 1986.[4]

At the same time, there has been record fast growth of the loan stock. In particular, the sum of adjustable-rate mortgages (ARMs) provided by large commercial banks has risen rapidly in the last few quarters. The interest rate environment in the United States is a challenge for the operation of banks, and the importance of interest-rate risk management is highlighted in these circumstances. The Federal Reserve has hiked its policy rate but long-term interest rates have remained low and banks have been forced to operate in conditions with a flat yield curve.

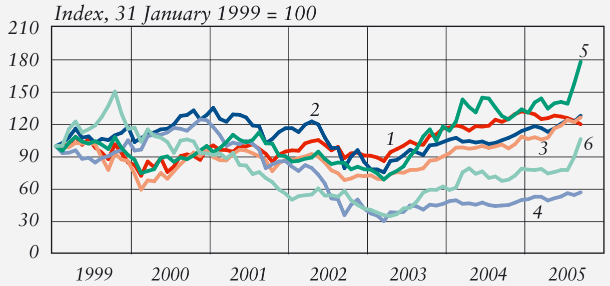
The situation of the **Russian** banking sector has recently been good. The rise of equity prices in summer 2005 and favourable economic developments have had a positive impact on banks' standing. As regards the long-term development of the banking sector, common measures by banks and authorities among other things to improve risk management and strengthen the capital adequacy of financial institutions are of key importance. The deposit guarantee scheme has been reformed recently, and nearly all deposits by the public are covered by deposit guarantee. The Russian banking sector so far remains limited in size and the total assets of the sector only amount to about 42% of the GDP.

Also the banking sector in **China** seems to have developed favourably in the light of numbers, and its profitability is exceptionally strong. However, the main reason behind banks' success is massive government subsidies, since the amount of nonperforming loans in Chinese banks is still very high. Taken together, the three largest banks have so far received subsidies from the government in the amount of almost USD 60 billion. The goal is to put government-owned banks in good shape by the end of 2006. At that time, the Chinese banking sector opens to international competition in accordance with its WTO accession treaty. In addition, government-owned Chinese banks continue to have problems in relation to corporate governance. Nevertheless, foreign interest towards the Chinese banking sector has been active. Many foreign banks are opening

Chart 8.

Share prices of banks and insurance companies in Europe, United States and Japan

Index, 31 January 1999 = 100



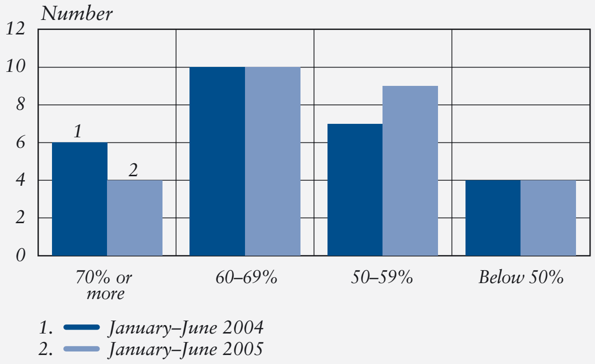
1. United States: Standard & Poor's 500,banks
2. Europe: Dow Jones STOXX 600, banks
3. United States: Standard & Poor's 500, life insurance
4. Europe: Dow Jones STOXX 600, insurance
5. Japan: Topix, insurance
6. Japan: Topix, banks

Source: Bloomberg.

[4] Federal Deposit Insurance Corporation, Quarterly Banking Profile (second quarter 2005) and FED, Quarterly Summary of Banking Statistics (first quarter 2005).

Chart 9.

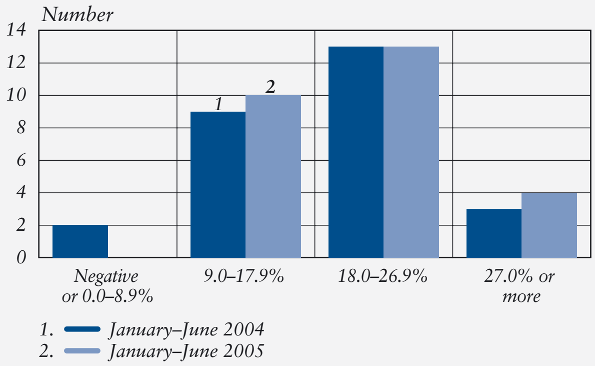
Distribution of the cost/income ratio in large European banking groups in January–June 2004 and 2005



Source: Interim reports.

Chart 10.

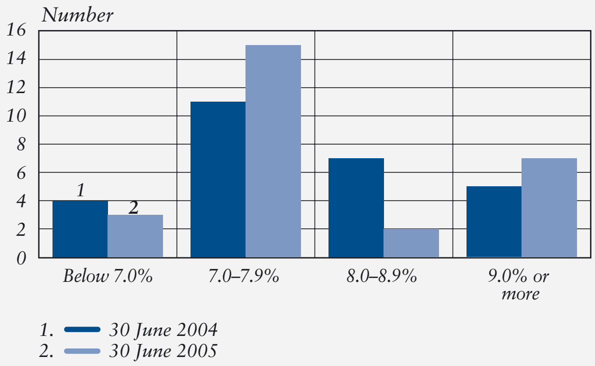
Distribution of the return on equity (ROE) in large European banking groups, January–June 2004 and 2005



Source: Interim reports.

Chart 11.

Distribution of the capital adequacy (Tier 1 capital) in large European banking groups as at 30 June 2004 and 30 June 2005



Source: Interim reports.

branches in the country or have bought shares in Chinese banks. The Chinese banking sector is large in relation to the economy. This is the result of a high savings ratio. Savings have been channelled into loans, amounting to roughly twice the GDP.

The biggest problems of the banking sector in **Japan** seem to be in the past. The results of the seven largest banking groups for the first half year were positive, and income of the entire sector has increased clearly over last year. The improvement in profitability is mainly a result of decreased credit losses and increased fee income. In addition, many banks have again made strong efforts to develop their foreign operations. Operations have been extended to the international markets often in cooperation with foreign banks, particularly from the United States. Restructuring continues in the Japanese banking sector. Two large financial conglomerates announced in July that they would merge and together make the world's largest bank. The merger of Mitsubishi Tokyo Financial Group and UFJ Holdings creates a financial conglomerate whose balance sheet would amount to almost USD 1.7 trillion and employs over 80,000 people.

In the **euro area and rest of Europe,** the results of banks have in general developed favourably in 2004 and the first half of 2005.[5] The results of large groups in the EU area in the first half of 2005 have grown from the previous year. Financial key figures are at a good

[5] ECB, EU banking sector stability report. October 2005.

level although there is naturally large variation between the groups (Charts 9, 10 and 11).[6]

The growth of lending has provided banks with good opportunities to increase income. The development of net interest income has been weakened in many countries by price competition which has narrowed interest rate margins. On the other hand, the growth of banks' loan stocks has been fairly rapid, which has had a positive impact on the development of net interest income.

Banks' fee income has increased and furthermore the situation in the capital markets has been favourable for accumulating income. All in all, banks' income development has been good.

Good results have also been supported by very low loan loss provisions. In the first half of 2005, the loan loss provisions of large EU area banks remained historically low. Containment of cost growth and improvement of efficiency continue at banks, but the significance of cost developments for result improvement is at the moment smaller than it still was a year ago.

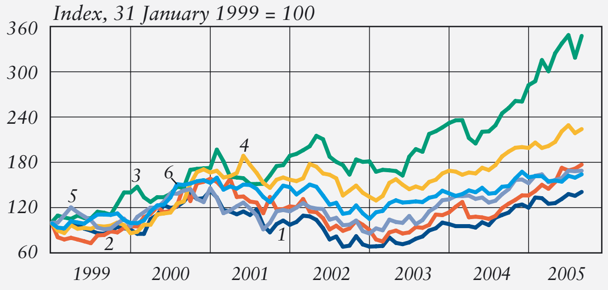
The results trend of financial corporations in the **Nordic and Baltic countries** has been favourable in the first half of 2005. The cumulative result of the largest Nordic financial groups grew by 25% from the previous year to EUR 7.0 billion. Expectations of a continuing good results development were also reflected in the share prices and market valuations of large Nordic financial groups (Charts 12 and 13).

Also in the Nordic countries, the favourable result development has been supported by strong lending growth.

Banks' results have improved amid rapid growth of the loan stock.

Chart 12.

Share prices of Nordic banking groups, 1999–2005

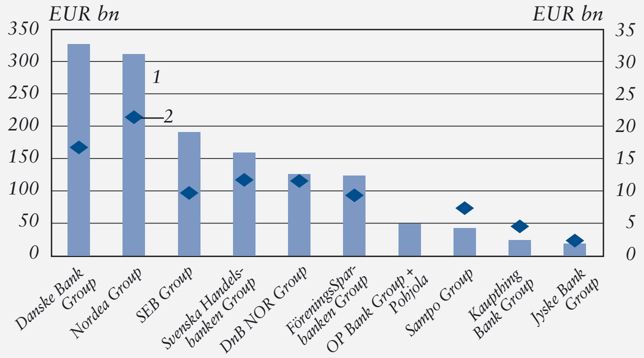


1. Nordea
2. Sampo
3. OKO
4. Danske Bank
5. SEB
6. Svenska Handelsbanken

Source: Bloomberg.

Chart 13.

Balance sheet totals and market values of the largest Nordic banking groups, 30 June 2005



1. Balance sheet total (left-hand scale)
2. Market value (right-hand scale)

Sources: Interim reports and Bloomberg.

[6] Data contained in Charts 9–11 have been gathered from the following European groups (in order of balance sheet size): UBS, Barclays, HSBC, BNP Paribas Group, RBS Group, ING Group, Crédit Agricole S.A., Deutsche Bank, ABN AMRO Group, Credit Suisse Group, Société Générale Group, HBOS Group, Santander Group, Fortis, Rabobank Group, Dresdner Bank Group, HVB Group, Dexia, Lloyds TSB Group, Commerzbank Group, BBVA Group, Abbey National Group, UniCredito Group, Banca Intesa Group, Bank Austria Creditanstalt, Erste Group and AIB Group. The data are derived from interim reports published in August and September 2005.

This has effectively compensated for the negative influence of price competition on net interest income. Also other income items in addition to net interest income have generally developed outstandingly. Credit losses in the Nordic countries have been all-time low and in many groups reversals and recoveries of loan losses have in fact exceeded new loan loss provisions.

The development of costs in Nordic groups during previous two years is two-fold. Cost developments have been controlled in financial groups that have grown organically without acquisitions. Costs have grown particularly in groups where volume and income growth has been achieved through acquisitions. Key figures in large Nordic banking groups are generally at a very good level (Table 1).[7] In the Baltic countries, the rapid volume growth of the groups has also been reflected in a rapid growth of costs.

Good results in Europe and the Nordic countries have kept banks' capital adequacy ratios high and loss buffers fairly large. On the other hand, many large financial groups had lower capital adequacy ratios at the end of June than at the end of last year. Many financial groups are optimising the amount of their equity capital and loss buffers. The optimisation may have wide-spread adverse effects if the operating environment of the banking sector took a sudden turn to the worse. On the other hand, the optimisation of the amount of capital may serve to speed up consolidation of the financial industry.

Solid income developments have resulted from rapid business volume growth, but if the growth for some reason stopped altogether or slowed down substantially, it would mean immediately a deterioration of income and result development. In addition, the competition on interest rate margins weakens the results.

Rapid growth of the loan stock makes banking operations vulnerable to an increase in problem loans and a re-emergence of growing loan loss provisions particularly if loan growth is related to a relaxation of lending criteria. The current low levels of loan loss provisions in Europe are not likely to be sustainable in the long term. Also the new IFRS standards have an impact on banks' loan loss provisions. An overall picture of these impacts will likely emerge once banks have made their first full-year financial statements under the new IFRS standards.

Banks are on a constant drive to improve their operational efficiency. How well the groups succeed in these aims will be revealed when income

[7] The data includes the following Nordic banking groups: Danske Bank, Nordea, SEB Group, Svenska Handelsbanken, DnBNOR Group, FöreningsSparbanken (Swedbank), OP Bank Group, Sampo Group, Kaupthing Bank and Jyske Bank. All data are group-level data. Figures have been translated into euro at exchange rates on 30 June 2005. The source of the data is interim reports published in August. These interim results and comparative data have been published in accordance with the new IFRS standards.

Table 1.

Key financial figures of the largest Nordic banking groups

Key figures as averages	*1–6 2004*	*1–12 2004*	*1–6 2005*	*Range 1–6/2005*
Profitability: ROE (%)	*18.4*	*18.0*	*21.2*	*12.6 – 36.1*
Efficiency: cost/income, %	*56.5*	*55.5*	*52.0*	*30.3 – 64.2*
*Capital adequacy, % (Tier 1)**	*8.7*	*8.8*	*8.3*	*5.8 – 14.0*

** At the end of period.*
Source: Banks' interim reports.

growth slows down. In addition, the significance of liquidity and interest rate risks by banks will be emphasised since the rapid loan growth will be funded increasingly from the money and capital markets.

International insurance sector

The profitability and solvency of the insurance sector have been improving for several years and the sector has recovered from the difficulties witnessed in the early 2000s. In response to the pronounced decline in share prices, the investment return of life and pension insurers fell considerably at the beginning of the millennium. In addition, claims experience for non-life and reinsurance companies was also exceptionally high.

The stability of the investment environment contributed to the performance of the insurance sector last year and has continued to do so this year. The disasters caused by the hurricanes witnessed in autumn 2005 will, however, influence the results of non-life and reinsurance companies, with higher claims experience foreseen for the large European reinsurance companies. As several European insurance companies also conduct insurance business in the United States, they will furthermore be partially liable for compensation for the disasters caused by the hurricanes.

In several European countries, improvement of the profitability of the insurance sector has, however, been dampened by the sluggish increase in premiums written. An exception in this respect are the new member states of the European Union as their insurance business has in practice commenced only in the 1990s.[8]

The European integration of the insurance sector is only beginning. The exception is the reinsurance business where the largest companies operate globally and the market is concentrated. Insurance companies with cross-border life and non-life operations are located primarily in the Benelux and Nordic countries. Several Nordic companies also operate in the Baltic countries where growth has been rapid.The current state of the insurance sector is sound. The key challenge facing the sector is the low level of interest rates, particularly in respect of life and pension insurers. The situation has been somewhat eased by the lower guaranteed return on policies provided for in several countries. The proportion of premiums written accounted for by unit-linked insurance has also grown and the companies are therefore able to pass on investment risks to their customers.

Low level of interest rates presents a challenge to the insurance business.

The low level of interest rates has boosted insurance companies' interest in instruments other than traditional fixed income instruments. Investment in new products has increased, with insurance companies starting to invest for example in risk transfer products. Credit risk spreading among a broader group of investors is, as such, a positive development but may step up contagion from one sector to another during serious financial market disruptions.

[8] See sigma No. 2/2005. Swiss Re.

Although the insurance companies of several countries have reduced the proportion of equity holdings in their investment portfolios, the considerable fall in share prices continues to be one of the major threats related to investment operations in the insurance business.

The implications of an ageing population are also reflected in the insurance business. In the short term, the ageing of the population will promote interest in saving under life insurance policies and have a positive impact on premiums written. In the long term, population ageing, together with higher life expectancy, may undermine the profitability of the companies providing personal pension insurance.

The many ongoing regulatory projects further increase the challenges facing the insurance business. Reforms of financial reporting practices (IFRS) will for example change the code of conduct in the field. The different approaches to measurement of assets and liabilities in the balance sheet pose considerable challenges to the risk management of insurance companies and contribute to the volatility of insurance companies' results. The supervisory authorities have also focused increasing attention on the imbalance between the durations of assets and liabilities in balance sheets. Insurance companies have therefore taken measures to raise the proportion of long-term bonds with a maturity of 50 years or even more in their investment portfolio of interest rate securities.

Development of international regulation and supervision

The most significant global regulatory project in financial markets of recent years has been the New Basel Capital Accord, also known as Basel II, prepared by the Basel Committee on Banking Supervision (Basel Committee). Recommendations for banks' capital adequacy requirements were issued in summer 2004. The Basel Committee, nevertheless, continues to work on the reform for example by conducting a quantitative impact study (QIS) on the effects on capital requirements for banks (see Box 1) in the course of autumn 2005 and calibrating parameters for calculation of capital requirements in spring 2006.

Sound corporate governance has been promoted within the EU and the United States, as well as globally.[9] Sound governance has taken on greater importance in step with the increasing role of market-oriented financing as a source of corporate financing as well as the more widespread use of complex financial instruments and corporate structures. Several of the EU projects promoting sound governance carried through in recent years fall within the EU Financial Services Action Plan (FSAP).[10] In the United States, stricter legislation on sound governance was introduced after the corporate scandals of the early 2000s.

The debate on the regulation of hedge funds has continued. The limited

[9] ECB, Monthly Bulletin (May 2005) The evolving framework for corporate governance.

[10] See for example the website of the European Commission at europa.eu.int/comm/internal_market/finances/actionplan/index_en.htm.

regulation of hedge funds has been justified for example by the fact that most of the hedge fund investors are institutional investors or wealthy private individuals for whom it has not been considered necessary to provide regulatory protection. There are, however, signs indicating that private investors have better opportunities to invest in hedge funds. The adequacy of the consumer protection afforded to private investors has been one of the key issues highlighted in the recent debate.[11]

Over the next few years, EU financial market legislation will focus on national implementation. In May 2005 the European Commission launched public consultations on the Green Paper on Financial Services Policy 2005–2010, with the White Paper to be published in November 2005. There are no plans for launching another broad action plan like the Financial Services Action Plan (FSAP) for the years 1999–2004. New EU level legislative projects may, however, be launched especially in two focal areas: asset management and retail financial services. The European Commission will apply the principle of better regulation to new legislative projects. According to this principle, all new projects must, for example, be preceded by broad advance consultations and impact surveys.

The major legislative process currently underway is the transposition of the New Basel Accord into EU legislation. The European Parliament and the Ecofin Council adopted the draft directive of the European Commission in autumn 2005. The Directive will take effect gradually at the end of 2006 and 2007.

The new capital adequacy framework is expected to enhance the stability of financial markets by relating banks' capital requirements more closely to the actual level of risk, encouraging banks to adopt a more advanced approach to risk management, strengthening supervision of capital adequacy and improving the transparency of capital adequacy management and, hence, market discipline. There are, nevertheless, major challenges to be addressed, especially during the transitional period. In terms of providing a level playing field for banks as well as for the operation of market discipline, the Committee of European Banking Supervisors (CEBS) plays a key role. CEBS involvement includes harmonisation of supervisory methods, promotion of cooperation between home and host country supervisors of cross-border banks and development of a common reporting framework (FINREP) for consolidated financial reporting and a European Common Reporting Framework (COREP) required by the Capital Requirements Directive (CRD).

Focus of EU financial market legislation on national implementation.

International Financial Reporting Standards (IFRS) applicable to all listed companies were introduced within the EU at the beginning of 2005. An important element of the standards is the greater use of fair values in financial statements. All derivative instruments must for example be booked at fair value

[11] See for example Financial Services Authority (June 2005) Hedge funds: A discussion of risk and regulatory environment and ECB Occasional Paper No. 34 (August 2005) Hedge funds and their implications for financial stability.

Long-term effects of IFRSs on banks' activities hard to foresee.

in the balance sheet. IAS 39 'Financial Instruments: Recognition and Measurement', which is key to the banks, took effect, subject to certain exceptions. These exceptions were related to the so-called fair value option and the application of hedge accounting to bank deposits in particular. These decisions were preceded by criticism of IAS 39 voiced by many European banks and the European Central Bank (ECB). The standard was not seen as being in harmony with banks' risk management needs, nor promoting a prudent approach.

The issue of the fair value option was resolved when the International Accounting Standards Board (IASB) endorsed an amendment to IAS 39 in June 2005. According to the revised standard, use of the fair value option should be justified by risk management considerations or by reduction of artificial volatility that would otherwise influence results. EU endorsed application of the revised standard in July 2005. The issue on the revision of hedge accounting remains unresolved so far.

Banks' changeover to the new IFRSs has proceeded smoothly so far. The average effects of the reform on the key financial figures of European banks and banks' share prices have been very moderate. More important than the immediate effects, however, are the long-term effects on banks' behaviour. This is especially true of banks' risk management. The International Accounting Standards Board (IASB) has signalled an understanding of the concern expressed by the banking sector that the current standards are not fully in accord with banks' risk management needs. Discussion also continues on the possible extension of fair value measurement to a larger group of financial instruments, including bank loans and deposits.

The new IFRSs have an effect on several of the banks' profit and loss account and balance sheet items. The reform will introduce a new definition for book equity, which will also have an effect on the minimum capital requirements applicable to banks. At the request of the European Commission, the Committee of European Banking Supervisors (CEBS) issued a guideline on the use of prudential filters by the authorities of the EU member states in order to avoid any unwanted effects of the new IFRS rules on the calculation of capital requirements.[12] As the EU Capital Requirements Directive (CRD) will not take effect until the end of 2006, implementation of the recommendations can be decided by the national authorities.

One of the major legislative projects of the Financial Services Action Plan (FSAP) of the European Commission is the Markets in Financial Instruments Directive (MiFID) adopted in April 2004 to replace the Investment Services Directive (ISD). The Directive is to be transposed into national law by November 2006. The Markets in Financial Instruments Directive is the first EU-level instrument regulating the operations of securities marketplaces. The Directive was called for by the

[12] Committee of European Banking Supervisors (December 2004) CEBS guidelines on prudential filters for regulatory capital.

increasing competition between stock exchanges and alternative marketplaces. One of the objectives of the Directive is to create a level playing field for stock exchanges and alternative marketplaces and promote cross-border trade in investment services. As a consequence of the reform, for example provision of investment advice will become subject to licence, financial intermediaries will have greater opportunities to offer investors cross-border services and cross-border cooperation between securities regulators will gain in importance.

A project equivalent to the capital adequacy reform applicable to banks and investment firms is underway in the insurance sector. The Solvency II project is aimed at reforming the capital adequacy and other supervisory regulations applicable to EU insurance companies. The operating environment of the insurance business has undergone profound changes over the past few decades but most of the current provisions date back to the 1970s. The reform will relate the capital requirements to be met by insurers more closely to the company's risk profile, resulting in the growing importance of the company's risk management and internal control processes. The reform is also aimed at achieving international conformity with other major regulatory projects, such as the introduction of new IFRS rules and revision of the capital adequacy framework for banks. The aim is to finalise the proposal for the Directive by mid-2007 and complete national implementation by 2010.

Many observers have recently suggested that cross-border reorganisation of banks may become more widespread in Europe after a few very quiet years. Some cross-border mergers or acquisitions of large European banks have either been implemented recently or are scheduled for implementation. The closer integration and growing internationalisation of the financial sector involves threats as well as benefits, with some of the threats being regulatory arbitrage and a higher risk of contagion. Effective supervisory cooperation and information sharing in managing these risks will therefore become increasingly important.

The major international regulatory projects already underway or scheduled for implementation during the coming few years are expected to enhance the stability of financial markets and promote the integration of European financial markets. In the short term, however, these reforms involve challenges. As there are many broad and complicated regulatory projects underway at the same time, it is difficult to predict the consequences for the behaviour of financial companies and markets, especially at the launch stage. The success of global or EU-level legislative projects is also dependent on the degree of harmonisation of national implementation. In this respect, the committees of EU banking, securities market and insurance supervisors play a key role.

Box 1.

The estimated impact of Basel II

The new minimum capital requirements for banks will gradually become effective in the EU at the end of 2006 and of 2007. The requirements are based on recommendations issued by the Basel Committee on Banking Supervision, which were published after several rounds of consultation in summer 2004.[1] The aim of the reform is to ensure closer correspondence of banks' capital requirements and risk exposures.

Within the EU, the revised framework will be applicable to all credit institutions and investment firms. The US authorities intend to make the recommendations mandatory for only the largest, internationally active banks. Many emerging economies, such as China, India and Russia, are likely to start applying the recommendations in full only in the course of a longer transition period.

The new requirements necessitate implementation of major changes in banks' information and risk management systems. Investment costs will be considerable in many cases. The revised capital adequacy framework may also have a significant impact on banks' behaviour. There may be changes in the targeting of lending and pricing of credits. Such effects will primarily be positive, as the revised framework is based on more accurate risk measurement. On the other hand, the new requirements may increase volatility in credit supply during different business cycles, as they are tied to the credit ratings of banks' borrowers. Credit ratings typically change when cyclical patterns change. Thus, the revised framework may reinforce business cycles via effects from credit supply.[2]

A number of assessments have already been made of the impact of Basel II. Central banks, banks' risk management experts and academic researchers have examined the impacts of the reform, using both statistical and theoretical models. In addition to the relationship between capital requirements and cyclical developments, these studies have also considered the implications of the reform for banks' risk appetite and pricing of loans.

A number of consultancy firms, in turn, have conducted surveys on the opinions of bank management. This has provided a view of the size of required investments and of the effects that the reform will have on banks' business strategies.

As part of the reform implementation, the Basel Committee on Banking Supervision has worked together with national banking supervisors and banks to provide estimates of the changes that the new rules would cause in capital requirements. These Quantitative Impact Studies (QIS) have so far been conducted four times. The composition of countries participating in QIS exercises has varied to some extent.

On the one hand, the Quantitative Impact Studies have focused on identifying how the banking sector's average capital requirement will change and, on the other hand, examining whether the various optional calculation methods under the new rules will lead to differences in capital requirements, as desired.[3] The results obtained from various calculation methods have mainly been in line with the targeted effect, ie simple approaches provide a higher average capital requirement than advanced approaches. Banks are thus provided with incentives to introduce more advanced approaches, as it would also mean improvements in banks' risk management systems.

The most advanced approaches under Basel II make use of banks' own risk assessment methods, which must fulfil certain criteria. Under the

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[1] The Basel Committee on Banking Supervision is an extended forum for cooperation between G10 countries' central banks and banking supervisors.

[2] These effects are studied in the Bank of Finland Bulletin 4/2003.

[3] Basel II provides three options for the calculation of capital requirements for credit risk and operational risk.

most advanced approach for calculation of capital requirements for assets involving credit risk, for instance, banks themselves provide an assessment of how large a proportion of the amount of the credit granted, on average, will be finally forgone as a credit loss if the customer defaults.[4]

The QIS 4 exercise conducted in the United States revealed that the most advanced approach to credit risk led to considerable variation in capital requirements between banks. One likely reason for this stemmed from differences between banks in the estimation methods concerning the above-mentioned loss parameter. On the basis of the findings drawn from the study, a special working group of the Basel Committee on Banking Supervision provided further guidance for the definition of the parameter.[5]

[4] This refers to the LGD (Loss Given Default) ratio.

[5] See www.bis.org. Basel Committee publications relating to Basel II implementation: Guidance on the estimation of loss given default.

In particular, the results from the most recent Quantitative Impact Studies conducted in the United States and Germany also showed that capital required from banks on average would be significantly lower under the new rules. The US authorities responded to these findings by announcing in October 2005 that they intended to postpone the introduction of the new capital adequacy framework by one year, and by tightening the limitations set on the reduction of banks' capital requirements. Under the Basel II framework, during the next three years following the introduction of the reform, a bank's capital requirement is allowed to diminish only gradually in relation to its capital requirement under the current rules. According to the US authorities' plan, the transitional provision applicable in the United States will be slightly tighter than that provided for in the Basel II framework and the EU capital requirements directive. After this three-year transitional period, the US authorities will also determine, on a bank-by-bank basis, whether they will continue applying their stricter capital requirements.

The Basel Committee intends to calibrate the new requirements so that the average capital requirement for banks would remain unchanged in connection with the reform. In contrast, capital requirements for individual banks may change considerably. For a final calibration of the capital requirements, a fifth QIS is being planned. It will be based on bank data from the second or third quarter of 2005.

Domestic operating environment

In recent years, Finland's economic growth has been faster than that of the majority of other countries. Economic stability has boosted corporate profitability and households' demand for loans, particularly housing loans. Near-term economic developments in Finland are expected to remain favourable. The indebtedness of some individual households may already be too high in comparison to their debt-servicing capacity. Overall, the credit risk caused by the household sector nevertheless remains small. Economic forecasts indicate that the short-term credit risk arising from the non-financial corporate sector is also small.

The Bank of Finland estimates real economic growth to be 1.6% in 2005 and to accelerate to just under 4% in 2006. Real economic growth will ease to just under 3% in 2007.[1] Economic forecasts indicate good near-term outlook for companies and households. The stock of housing loans and household indebtedness are expected to continue to grow as a result of economic stability, improving employment and low interest rates.

Corporate sector

Credit risk arising from the non-financial corporate sector, affecting the domestic financial sector, continues to be light. The forecast stable growth supports corporate profitability. Business surveys indicate that non-financial corporations' near-term overall cyclical situation, output and sales expectations as well as the volume of orders are mainly good.[2] Also market indicators, such as share prices, show that the outlook for non-financial corporations is promising (Chart 14).

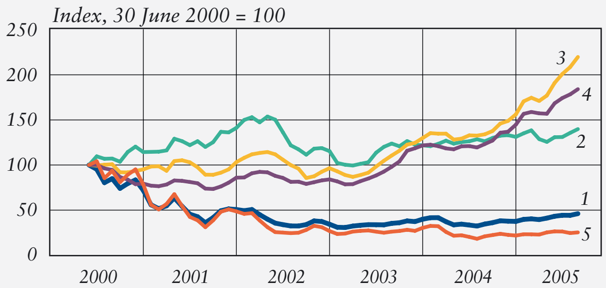
Corporate borrowing and indebtedness (Chart 15) have increased

[1] For more information about overall economic prospects, see Bank of Finland Bulletin 3/2005.

[2] The Confederation of Finnish Industries EK's confidence indicator (September 2005), business tendency survey (August 2005) and business tendency survey of SMEs (August 2005).

Chart 14.

OMX Helsinki index and key industry indices

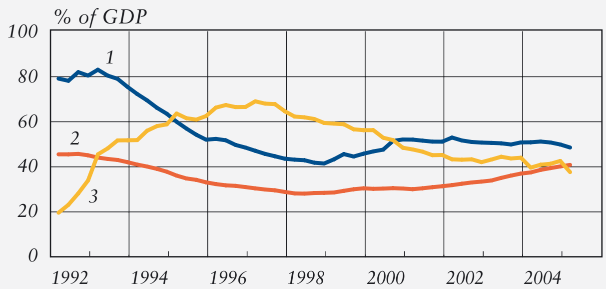


1. OMX Helsinki
2. Materials
3. Industrials
4. Consumer discretionary
5. Information technology

Source: Helsinki Stock Exchange.

Chart 15.

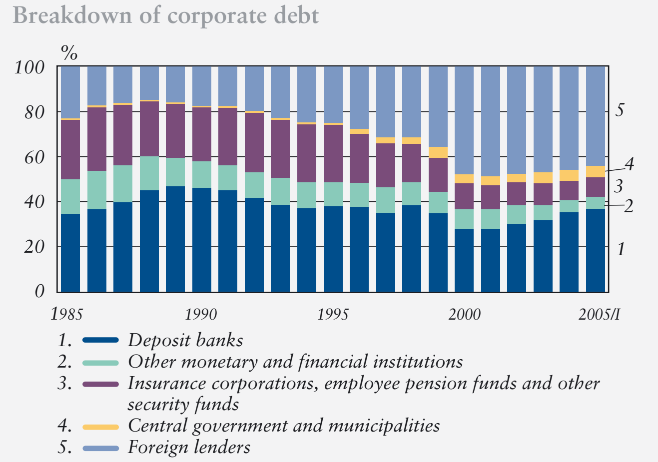
Indebtedness by sector in Finland



1. Companies (excl. housing corporations)
2. Households
3. Central government

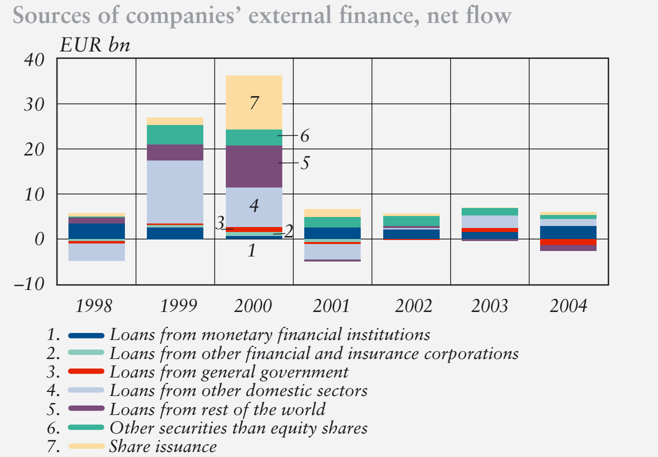
Sources: Statistics Finland, State Treasury and Bank of Finland.

Chart 16.



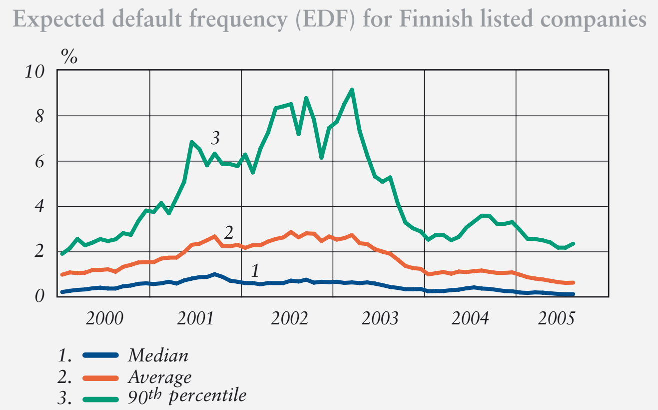
Sources: Statistics Finland and Bank of Finland.

Chart 17.



Sources: Bank of Finland, financial accounts and Helsinki Stock Exchange.

Chart 18.



Source: Moody's KMV.

slowly. At the end of June 2005, the stock of domestic corporate credit totalled EUR 57.3 billion, representing an increase of more than 3% year-on-year. The stock of corporate credit obtained from abroad decreased by 7% over the course of the year, totalling EUR 33 billion.[3] As a result of the sluggish growth in corporate credit in recent years corporate indebtedness relative to GDP and value-added is considerably lower than in the early 1990s and by international comparison. The slow growth of corporate lending in turn reflects the low level of corporate investment. Companies' willingness to invest affects not only the overall economic development but also the demand for domestic financial services. A protracted sluggishness of corporate investment would be worrying from the perspective of the demand for financial services.

The position of domestic deposit banks as lenders to non-financial corporations has strengthened considerably since 2001 at the expense of other domestic lenders and credit obtained from abroad (Charts 16 and 17). Domestic banks accounted for 38% of the corporate credit stock and for 67% of the total credit stock in the second quarter of 2005. The corresponding figures for 2001 were 31% and 60%, respectively. A survey conducted among bank managers shows that companies' willingness to borrow is on the rise.[4]

The low number of companies' bankruptcy applications and payment

[3] Loan stock statistics of Statistics Finland.

[4] The bank barometer of the Finnish Bankers' Association (September 2005).

defaults indicates that credit risk from domestic companies is limited. On top of which, market-based indicators show that credit risk from the non-financial corporate sector to providers of finance have remained modest. Companies' expected default frequency (EDF) figures, calculated on the basis of share prices and financial statement data, are currently significantly lower than in 2002 and 2003 (Chart 18).[5]

From the perspective of financial market efficiency, the availability of corporate external financing and the allocation of financing to most productive investments are important. Surveys show that only a small share of non-financial corporations has had difficulties obtaining external financing.[6] Efficient allocation of financing requires that the conditions for financing granted to non-financial corporations correspond to the risks related to financing. With the new capital adequacy framework for banks that will take effect gradually, at the end of 2006 and 2007, banks' capital requirements reflect the estimated creditworthiness of borrowers more accurately than before. As a result of the reform, the pricing of corporate loans will become more risk sensitive, which is positive from the perspective of financial market efficiency.

[5] The EDF figure, calculated for a 12-month period, using the options pricing method, measures the probability of the market value of a company's total assets of dropping below the nominal value of its liabilities. The market value and volatility of a company's total assets are derived from the market value and volatility of its share price and the nominal value of liabilities.

[6] Survey on Business Finances (2004) by the Bank of Finland, the Confederation of Finnish Industries and the Ministry of Trade and Industry.

In international debate, concerns have often been expressed regarding the consequences of the consolidation of the banking sector and the growth of the average size of banks, as well as the increasingly risk-based pricing of lending as a result of the capital adequacy reform applicable to banks. There have been concerns that the development might weaken the availability of bank financing to small and medium-sized enterprises, increase the interest rate on their bank loans and tighten other loan conditions. There is, however, no strong evidence of this kind of development. The financing opportunities of small and medium-sized enterprises must nevertheless be the focus of attention also in Finland because the availability and adequacy of external financing is usually a bigger problem for these companies than for large ones.

From the perspective of financial market efficiency, the availability of corporate external financing and the allocation of financing to most productive investments are important.

Household sector

The favourable development of the Finnish economy has also reflected on the household sector. The fall in unemployment rate over the past ten years and the favourable development of disposable income have maintained consumers' confidence in the future. This has been reflected also in the relatively high household indebtedness (Chart 19).

Since 1998, the stock of household lending has increased faster than households' disposable income. At the end of 2004, household indebtedness relative to annual disposable income was 79%. This is, however, clearly less than the peak ratio recorded at the end of the 1980s: at the end of 1989, the ratio was

Continued rise in household indebtedness, biggest increase registered in housing loans.

approximately 90%. The ratio is not exceptionally high even by international comparison because the average ratio for industrial countries is well above 100%.

The current level of indebtedness differs from the situation of the late 1980s in many respects. Changes in household indebtedness have been more moderate because the level of indebtedness has increased over more years than in the 1980s. In addition, interest payments relative to disposable income are currently lower than during the last peak in the early 1990s, which is a significant difference. Moreover, the structure of debt differs from that of the end of the 1980s: growth in consumer and other credit has been slower, whereas the fastest growth has been recorded in housing loans. Households' stock of housing loans relative to disposable income is currently even higher than in 1989, when it peaked. The rise in housing debt is partly explained by the launch of loans with a long maturity, which has enabled households to take bigger loans than before. Households' interest in borrowing is expected to remain the same. Moreover, their plans concerning house purchase continue to be extremely high.[7]

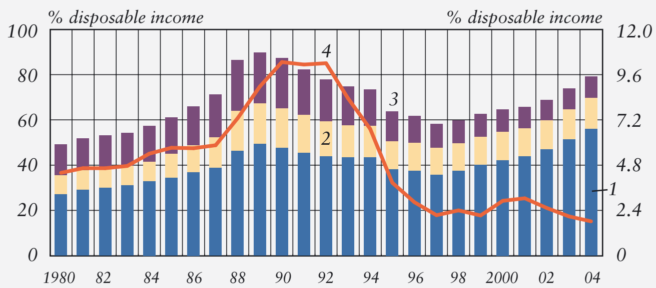
The new forms of loans introduced by banks, and the increasing role of mortgage banks in the market bring the domestic financial market closer to European and Nordic practices because these instruments have been used in the other markets already for a long time. Mortgage banks help spread the risks of housing loans to a wider group of investors. On the other hand, the introduction of new instruments may have an impact on the amount of credit available and thus on housing prices.

In the management of housing loan-related risks, the key issues are the development of the value of the dwelling used as collateral and of the borrower's debt-servicing ability. Many factors have an impact on the borrower's debt-servicing ability. Until now, household income has developed favourably and interest rates have been low. In addition, the margin on housing loans provided by banks has narrowed due to increasing competition.

The majority of households' housing loans are linked to short term market rates. When taking out a housing loan, loan holders should leave leeway for an eventual rise in interest rates or a change in conditions (eg unemployment). A survey by the Finnish Bankers' Association shows that 72% of loan holders have prepared for an eventual rise in the interest rates on housing loans. This is not enough because every housing loan holder

Chart 19.

Households' indebtedness and interest expenses in Finland



1. Housing loans
2. Consumer credit and study loans
3. Other loans
4. Interest expenses (right-hand scale)

Sources: Statistics Finland and Bank of Finland.

[7] The bank barometer of the Finnish Bankers' Association (September 2005).

should consider what a rise in interest rates means, particularly with a long-term housing loan. However, the same survey also shows that the debt-servicing expenses of only a small proportion of the respondents accounted for a considerable share of their monthly disposable income. Every other household with debt-servicing expenses of more than 40% of income has taken out payment protection insurance on their loan. The proportion of housing loan holders with payment protection insurance has increased from 34% to 36% within the past twelve months.[8]

The development of private individuals' payment defaults does not seem to be alarming, due to the decrease in payment defaults in 2004.[9] Cause for concern, however, were the results of a survey by the Finnish Bankers' Association in which respondents were asked about their current financial situation. Of the respondents, 47% reported that their current income was as high as their current expenses (40%) or that their expenses exceeded their income (7%). Housing loan holders may have problems servicing their loans if there are major changes in employment or interest rates. When such a large group of households is concerned, a change in consumption habits would be reflected more widely in the real economy. An increase in debt-servicing obligations will have an even longer term impact on also consumption, as a result of longer repayment periods.

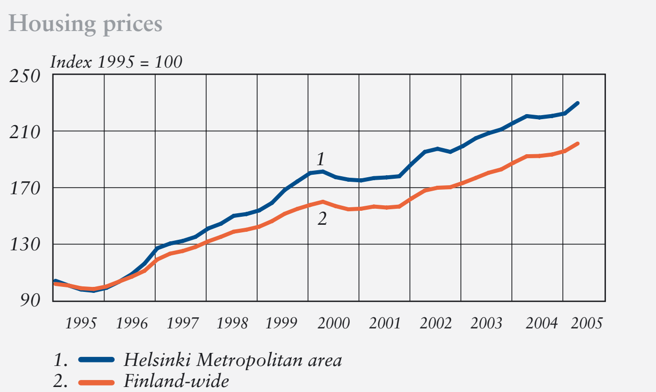
With longer repayment periods, the development of households' payment capacity should be assessed far into the future. Households' disposable income is expected to grow further in the near future, albeit at a slower pace than in previous years. Households' debt-to-financial assets ratio is currently approximately 50%. The ratio has increased since early 2000, when it stood at its lowest level, ie 36%. On the aggregate level, the current level of domestic indebtedness does not seem to be alarming. This does not, however, rule out the possibility of individual households running debts that exceed their debt-servicing capacity. This possibility is emphasised by the fact that the proportion of housing loan holders of total households is currently (29% in April 2005) lower than in 1989 (36%).[10]

Indebtedness of individual households may be too high in comparison with the ability to service debt.

The development of housing prices in Finland is not exceptional, despite the strong increase in nominal house prices in the past eight years (Chart 20).

[10] The Finnish Bankers' Association.

Chart 20.



Sources: Statistics Finland and Bank of Finland.

[8] Survey on saving and the use of credit by the Finnish Bankers' Association (May 2005).

[9] The decrease is partly due to problems in the new debt recovery system, as a result of which a significantly smaller amount of indigence cases established during debt recovery have been registered than in the previous year.

Housing prices react to a change in interest rates.

Nominal house prices, as measured by the housing price index of Statistics Finland, rose by 62% during 1997–2004. This is not a particularly high increase by European comparison: in the United Kingdom, nominal house prices rose by 150% and in Spain by approximately 153% in the same period. Outside Europe, in the United States, for example, nominal house prices rose by approximately 72% in the same period. In real terms, housing prices in Finland rose in 1997–2004 by only approximately 36%.[11]

Housing prices are based on the relationship between supply and demand. As long as demand exceeds supply, prices will increase. Demand has been boosted by the favourable economic situation and the bright prospects for households' own economy. Demand has also been supported by the low level of interest rates as well as bank competition, which has narrowed interest rate margins. An additional factor has been internal migration and the resulting demand pressure. Supply factors should also be considered as housing supply is fairly inflexible in the short term. As a result, prices react easily to fluctuations in demand. In Finland, housing prices have risen faster than the construction cost index.

Finnish housing prices react to a change in interest rates. A rise in euro area interest rates in 2000–2001 resulted in a fall in housing prices. The reactions were clearly evident also in the housing market of the Helsinki area. Particularly in 2001, the selling times for dwellings lengthened and the nominal price per square metre of old two-room flats fell in the Helsinki area. Changes in interest rates are also reflected in the annual percentage change of households' stock of housing loans: in 2000–2001, the housing stock grew at a considerably slower pace than in the past six years on average.

Housing prices could fall considerably if demand weakened rapidly in connection with an abundant supply of dwellings to the market. This type of a situation would be created only if the debt-servicing ability of a large group of households collapsed, as a result of, for example, extensive unemployment. There is currently no sign of such development.

Capital market

The development of the domestic capital market has followed international trends in the past year. There is a sustained upward trend in share prices and the level of interest rates has remained considerably lower than the long-term average.

Share price performance on the Helsinki Stock Exchange has been strong in 2005. By the end of September 2005, the OMX Helsinki All-Share Index had risen by more than 30% year-on-year. The All-Share Index, which reflects the development of share prices, has fluctuated strongly due to the continued heavy weighting of the electronics industry in the index. Following the rise in share prices, trading on the Helsinki Stock Exchange has increased significantly in 2005.

[11] International housing price trends are examined in the chapter "International operating environment" of this publication.

Moreover, share trading is not as narrow as before. Trading at the Helsinki Stock Exchange is still nevertheless fairly concentrated: in January–September 2005, trading in Nokia shares accounted for more than half of total trading, and the share of the five most-traded shares was over 70%.

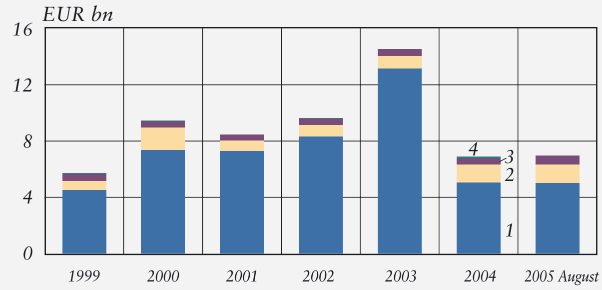
Integration of the Nordic and Baltic share markets has entered a new stage. All the OMX exchanges have started using the Global Industry Classification Standard (GICS), developed by Morgan Stanley Capital International and Standard & Poor's.[12] The new classification improves the international comparability of price developments in different industries and provides companies a larger peer group. The reform should increase demand for shares in Finnish SMEs among foreign operators investing in indices.[13]

The sound fiscal position of the Finnish central government is reflected in the bond market: the yield on 10-year Finnish government bonds has been the lowest in the euro area for already a protracted period, like that of Irish government bonds. This has had a favourable impact also on the private sector bond market. Bond issues by Finnish non-financial corporations and monetary financial institutions have increased after a period of sluggishness over a number of years. Despite the growth of issuance activity, the Finnish private sector issuance market is still fairly thin (Chart 21). The most important change in the Finnish bond market has been the gradual start of a mortgage-backed bonds market.

One of the characteristics of the Finnish financial market is the slow start of the mutual funds market, followed by rapid growth over the past few years (Chart 22). The rate of expansion of the Finnish mutual funds market is currently one of the highest in Europe. Households, as well as insurance corporations and

Chart 21.

Bond issues in Finland

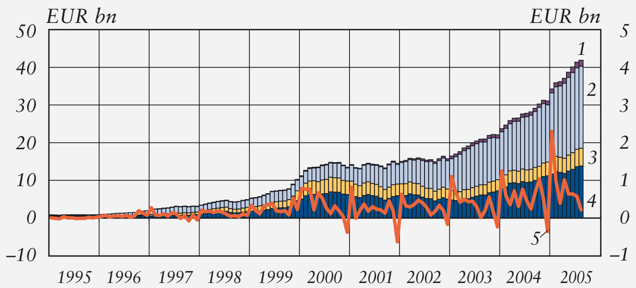


1. Central government
2. Financial institutions
3. Companies
4. Local government

Sources: Financial Supervision Authority and State Treasury.

Chart 22.

Mutual funds registered in Finland



1. Risk funds
2. Money market and bond funds
3. Balanced funds
4. Equity funds
5. Total net investment (right-hand scale)

Sources: Helsinki Stock Exchange and Finnish Assosiation of Mutual Funds.

[12] Global Industry Classification Standard (www.gics.standardandpoors.com and www.msci.com).

[13] Financial Market Report 3/2005 of the Bank of Finland, see. www.bof.fi.

employment pension funds, for example, have increased their investment in mutual funds. Moreover, the corporate sector is using particularly money market funds as an instrument for investing liquid assets.

Subdued financing from the domestic capital market.

The securitisation of Finnish households' financial assets is increasing continuously even though bank deposits have maintained their position as the key vehicle for investing households' financial assets. The securitisation of households' financial assets is also boosted by the continuous growth of households' insurance savings. In insurance investment, the proportion of unit-linked life and pension insurance has increased significantly relative to guaranteed-return insurance plans.

New risk transfer products have rapidly been introduced in the international financial markets. Their importance for the Finnish financial market is nevertheless still limited.

Growth of the venture capital investment market has slowed down in Finland after a rapid expansion at the turn of the century. The amount of assets managed in venture capital funds has for already some years remained at the level of just over EUR 3 billion. Of the managed funds, just under 60% were tied to target undertakings at the end of 2004 and the remaining part is available for new investments or refinancing. Capital investments have for several years totalled some EUR 300 million. In 2004, capital investments amounted to EUR 369 million, up by just over 10% year-on-year. Acquisitions by company management accounted for some 40% and investments in companies in the seed or start-up stage for a third of total investments. Public sector capital investments totalled some 10%. The focus of investments was on healthcare, information and communication technology as well as on the chemicals industry and industrial production.[14]

Exits from capital investments increased in 2004 by just over 10%: the value of exits totalled just under EUR 300 million. A third of the exits were via acquisition and none were via an initial public offering.

The importance of domestic capital markets as a source of finance for companies' investments was fairly marginal in 2004, as in previous years. Companies' continued good profitability and low level of investment were reflected in the low number of share and bond issues. Companies have acquired domestic debt financing mainly from banks. The amount of financing acquired from abroad has been low.[15]

Use of the domestic short-term money market as a source of financing remained unchanged in 2004. The outstanding amount of domestic money market instruments has decreased in 2005. The volume of short-term financing raised by the Finnish government has been low. The amount of certificates of deposits issued by banks has also decreased slightly in 2005. Large banks have increasingly started to acquire money market financing from the international money markets.

[14] The Finnish Venture Capital Association.

[15] Financial Market Report 3/2005 of the Bank of Finland, see. www.bof.fi.

Regulation and supervision

The Financial Supervision Authority (FIN-FSA) issued and circulated for comments several draft standards concerning the preparations on the revision of the capital adequacy framework for banks and investment firms. The standards include capital adequacy requirements for credit, market and operational risk, securitisation and the application of certain credit risk mitigation techniques in capital adequacy calculation, as well as covering the costs of the FIN-FSA concerning the approval process on the introduction of the Internal Ratings Based Approach (IRBA). The draft standards are based on the draft directive issued by the European Commission in July 2004 and its amendments.

The International Financial Reporting Standards (IFRS) were introduced in all EU countries at the beginning of 2005. Consequently the application of International Financial Reporting Standards became mandatory in the consolidated financial statements of those companies whose securities are traded publicly. A study by the FIN-FSA shows that listed credit institutions' transition to IFRSs is on schedule.[16] Transition to IFRS financial statements has an impact on banks' capital adequacy calculation. The FIN-FSA issued a recommendation, based on preliminary international recommendations, on the reporting of own funds by credit institutions preparing IFRS financial statements.[17]

The Ministry of Finance set up a working group in 2004 to prepare for a proposal for amendments required in Finnish legislation to implement the Directive on Markets in Financial Instruments (MiFID). This is an extensive reform impacting securities market structure, provision of investment services, requirements for service providers, and investor protection. It requires the amendment of, for example, the Finnish Securities Markets Act, the Act on Trading in Standardised Options and Futures, and the Investment Firms Act. The working group's proposal is expected to be finalised in spring 2006.

Several changes have been implemented in securities market regulation to improve the functioning of the market.

In securities market regulation, several changes have been implemented to improve the functioning of the market, investor confidence and consumer protection. The Securities Markets Act was amended in July 2005 to implement the amendments required by the Market Abuse Directive and the Prospectus Directive on the prospectus to be published when securities are offered to the public or admitted to trading.

In February 2005, the FIN-FSA issued three standards on the disclosure of information affecting the value of securities. The standards are based on the disclosure requirements in the Finnish Securities Markets Act and they deal with securities offering and listings, disclosure requirements applicable to listed companies and shareholders, and takeover bids and mandatory bids. The standards are designed to promote the disclosure of reliable, clear, consistent and timely information. They are also

[16] FSA Newsline 1/2005.

[17] FSA interpretation 2/2005.

Insurance sector legislation is being clarified and updated.

designed to enhance the transparency of the ownership and governance structures in listed companies and changes therein, and to foster the reliable functioning of corporate acquisition markets by promoting investors' access to information and their equitable treatment.[18] In August 2005, the FIN-FSA issued a standard on the declaration of insider holdings and insider registers, supplementing the Securities Markets Act. The provisions of the Consumer Protection Act on distance marketing of financial services and products came into force on 1 April 2005. The provisions are designed to improve consumer protection in the distance marketing of financial services.

Several amendments are being prepared on insurance sector legislation. A working group examining the reform of the Insurance Companies Act is preparing a proposal for a new Insurance Companies Act and other legal provisions. The objective of the working group is to clarify and update insurance sector legislation. The need to amend the Insurance Companies Act is driven, in particular, by the amendments to be made in the Companies Act. A working group has prepared a proposal for the implementation of the directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision. The task of the working group is also to define the need to reform Finnish legislation on employee benefit funds and pension foundations. The rapporteur appointed by the Ministry of Social Affairs and Health, Matti Louekoski, Deputy Governor of the Bank of Finland, issued an interim report on the need to amend the Act on Authorized Pension Insurance Companies. The development of authorised pension insurance companies' investment activities has been studied by a working group headed by Kari Puro, President and CEO of Ilmarinen Mutual Pension Insurance Company. Finnish authorities have also participated actively in the preparation of the reform of the EU regulations on the solvency and other supervisory requirements of insurance companies (Solvency II).

At the end of 2004, the Banking Committee of the National Board of Economic Defence completed its contingency plan for authorities and key market participants for ensuring the essential functions of the financial system in emergency situations.

OKO Bank, the central bank of the OP Bank Group, acquired a nearly 60% stake in the insurance company Pohjola in September 2005. The acquisition will create a new financial conglomerate, as specified in the act on the supervision of financial and insurance conglomerates, with the Financial Supervision Authority acting as the main supervisor.

From the perspective of financial stability, financial conglomerates involve certain typical risks. Internal arrangements may, for example, enable so-called regulation arbitrage, potential difficulties in one part of the group may spread to the other parts of the group and complex corporate structures may

[18] FSA Newsline 1/2005.

decrease transparency of business operations.[19] To manage these risks, the European Parliament and the Council issued in 2002 a directive on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate. The directive was transposed into Finnish legislation in 2004 with the Act on the Supervision of Financial and Insurance Conglomerates. The act is designed to provide for comprehensive supervision of member companies of financial conglomerates. The conglomerates are jointly supervised by the Financial Supervision Authority and the Insurance Supervisory Authority. As provided in the Act, the supplementary supervision covers particularly group-level capital adequacy, risk concentrations, intragroup transactions and risk management procedures. Close cooperation and information sharing between supervisory authorities are of key importance in terms of the supervision of financial and insurance conglomerates.

[19] See eg Frank Dierick (2004) The supervision of mixed financial services groups in Europe. ECB Occassional Paper Series No. 20.

The banking and insurance sector

The financial results of banks and insurance companies operating in Finland have improved and their profitability has remained good. Underlying these improved results were increased net interest income and net fee income, moderate development in expenses and recoveries in respect of earlier loan losses. On top of which, financial conglomerates' financial results improved on account of growth in operating profits from insurance activities. The capital adequacy of the Finnish financial sector on average is still good, and economic forecasts indicate continued stability for the sector. According to stress test calculations, the banking sector would withstand clearly worse-than-forecast economic developments. Risks facing the banking sector relate to the strong growth in the stock of loans, liquidity management, and operational and strategic risks resulting from structural changes and regulatory reforms. Main risks to insurance companies are associated with the price developments of investments.

Financial results of the banking sector

The total operating profits of Finnish banking groups (excl. Nordea)[1] for the period January–June 2005 increased by 5% to EUR 510 million from the corresponding period in 2004.[2] Underlying better operating profits were growth in net interest income and net fee income, moderate growth in expenses and recoveries in respect of earlier loan losses (Chart 23).

Total operating profits of the banking sector increased.

Net interest income increased as a result of growth in the volume of loan stock. Two opposing factors have influenced the development of net interest income during the year – the volume of loan stock and interest rates on loans. On the one hand, rapid growth in loan stock means more loan customers who pay loan-related fees and interest to banks. On the other hand, interest rates on individual loans have fallen. Since the 12-month Euribor, the most commonly used reference rate, has no longer declined significantly within the past year, the fall in interest rates has resulted from a narrowing of interest rate margins. Margins have narrowed as a consequence of heightened competition. On the whole, volume growth has however offset the negative effect of narrowed interest rate margins. At the end of June 2005, net interest income accounted for about 56% of Finnish banking groups' (excl. Nordea) total income, and thus, its development has a major importance to banks' operating profits.

1 Finnish banking groups include the following: savings banks, Aktia Savings Bank plc Group, local cooperative banks, Bank of Åland plc Group, Evli Group, eQ Online Group, OP Bank Group and Sampo Group's banking and investment services.

2 The International Financial Reporting Standards (IFRS) entered into force at the beginning of 2005. The introduction of IFRS brings changes to contents and titles of income statement and balance sheet items of listed banks. The figures for January–June 2004 and end-2004 presented in this section are comparison figures calculated by banks in accordance with the new accounting policy. For this reason, banks' income statement and balance sheet items as well as the indicators discussed in this section differ slightly from information given in the Bank of Finland publication 'Financial Stability 2004'.

Banks have generated fee income particularly from asset management, investment funds and products and lending. Income was also derived from card transactions, insurance intermediation (and loan payment protection insurances in particular) and investment activities. Net fee income accounts for about 27% of Finnish banking groups' total income. At present, products related to investment funds, bank cards and asset management are proving attractive and lucrative for banks. Net subscriptions in investment funds have grown during this year, and in January–August 2005 net subscriptions in domestic funds amounted to EUR 6.8 billion.[3] Since the majority of domestic funds belong to some banking group, fees from fund subscriptions and other related administration increase banking groups' fee income.

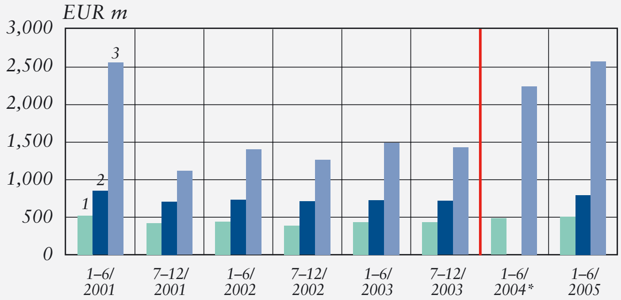
Banks' efforts to control costs are primarily reflected in the decline in other expenses. By contrast, staff expenses grew in almost all banks. Expenses grew as a result of an increase in staff numbers, higher wages and a rise in expenses related to staff bonus systems. Loan losses have remained at a lower level, or alternatively banks have still recorded recoveries in respect of earlier losses.

The total operating profits of financial conglomerates operating in Finland[4] increased by about 15% from January–June 2004. Financial conglomerates' financial results have been improving markedly for two years now, however, changes in conglomerate structures weaken the comparability of the results (Table 2).

In the period January–June 2005, the operating profit of the Nordea Group grew by 6%, to EUR 1,572 million. Two-thirds of which originated from retail banking, about 18% from large corporate and private customer units and about 9% from asset management and life insurance business units. The earnings from the group's banking business grew by about 21%, as income increased and expenses remained at the level recorded in the corresponding period in 2004. The Group also recorded recoveries in respect of earlier loan losses amounting to EUR 107 million, as Nordea sold a loss-making fish farm that had come into its possession. The operating profit from Nordea's retail banking in Finland totalled EUR 285 million in January–June 2005.

Chart 23.

Semi-annual operating profits of financial conglomerates operating in Finland, Jan–Jun 2001 to Jan–Jun 2005



Data for 2004 and 2005 in compliance with the new International Financial Reporting Standards (IFRS).
**No data available for Finnish banking business for 2004.*
1. Finnish banking groups (excl. Nordea)
2. Finnish banking business
3. Financial conglomerates operating in Finland
Source: Banks' interim reports.

[3] Finnish Association of Mutual Funds, Mutual Funds Report, (September 2005).

[4] Includes the following: savings banks, Aktia Savings Bank plc Group, local cooperative banks, Bank of Åland plc Group, Evli Group, eQ Online Group, OP Bank Group, Sampo Group and Nordea Group.

Sampo Group's operating profit improved by 51% to EUR 630 million. A change in the group structure and non-recurring items weaken the comparability of the result. Insurance company If did not fully belong to Sampo Group in the first quarter of 2004 but was regarded as an affiliate. In addition, the Group received one-off capital gains in January–March 2004 on the sales of Skandia shares. Growth in Sampo Group's operating profit in 2005 was based on increased operating profit from life and non-life insurance business. Operating profit from banking and investment services remained in turn at the level recorded in January–June 2004.

OP Bank Group's operating profit grew by just under 7% to EUR 293 million. More than 80% of the profit originated from retail banking business. The operating profit of the OKO Bank Consolidated also improved and grew to EUR 75 million. Increased net interest income and net fee income masked a rise in expenses in the OP Bank Group. Staff expenses grew on account of higher wages and fees paid within the Group's bonus system.

Provided that there are no negative surprises affecting developments during

Table 2.

Operating profits of banks and financial conglomerates

EUR m	*1–6/2004*	*1–6/2005*	*Change, %*	*2004*
Nordea Group	*1,481*	*1,572*	*6.1*	*2,745*
Nordea Group, banking	*1,097*	*1,329*	*21.1*	*2,326*
Nordea Group, insurance	*81*	*70*	*–13.6*	*129*
Nordea Bank Finland plc (Group)	*384*	*488*	*27.1*	*874*
Nordea retail banking in Finland	*–*	*285*	*–*	*–*
Sampo Group	*417*	*630*	*51.1*	*942*
Sampo Group, banking and investment services	*137*	*136*	*–0.7*	*274*
Sampo Group, insurance	*155*	*519*	*–*	*563*
Sampo Bank plc (Group)	*109*	*119*	*9.2*	*232*
OP Bank Group	*275*	*293*	*6.5*	*511*
OKO Bank Consolidated	*70*	*75*	*7.1*	*138*
Saving Banks (excl. Aktia), total	*24*	*29*	*20.7*	*43*
Aktia Saving Bank plc (Group)	*18*	*21*	*22.3*	*36*
Local cooperative banks	*14*	*16*	*14.2*	*28*
Bank of Åland plc (Group)	*7*	*9*	*20.5*	*14*
Evli Group	*8*	*4*	*–50.3*	*4*
eQ Online Group	*2*	*2*	*–20.3*	*2*
1. Finnish banking groups (excl. Nordea)	*485*	*510*	*5.1*	*912*
2. Finnish banking business	*–*	*795*	*–*	*–*
3. Financial conglomerates operating in Finland	*2,246*	*2,576*	*14.7*	*4,325*

1. Includes saving banks, Aktia Savings Bank Group, local cooperative banks, Bank of Åland Group, Evli Group, eQ Online Group, OP Bank Group and Sampo Group's banking and investment services.
2. Includes Finnish banking groups and Nordea's retail banking in Finland.
3. Includes Finnish banking groups, Sampo Group and Nordea Group.
Source: Banks' interim reports.

the remainder of 2005, banks' total operating profits will probably increase from the level of 2004.

Profitability and capital adequacy of the banking sector

Banks' average capital adequacy is good.

Banks' cost efficiency as measured by the cost-to-income ratio has improved, on the whole, owing to increased income and cost control. Improved efficiency is also reflected in bank profitability as measured by return on equity (ROE %). Banks' ROE percentages have either increased or have remained unchanged from end-2004 levels. Only Sampo Group's banking and investment services recorded a weaker cost-to-income ratio and lower ROE percentages (Table 3).

At the end of June 2005, capital adequacy ratios had weakened slightly for almost all banks from the end of 2004. Underlying this deterioration was a faster growth in risk-weighted assets than in own funds. Risk-weighted assets increased as a result of the rapid growth in housing loan stock. The development of own funds was supported by good financial performance and increased Tier 2 capital. Banks' capital adequacy has nevertheless remained high, on average. Banks' notional capital buffers were somewhat bigger in June 2005 than at the end of 2004 (Table 4).

Traditionally about two-thirds of the total income of Finnish banking groups originates from net interest income and one-third from other income sources. Banking sectors of most other EU 15 countries also have similar income structures (Chart 24).

Table 3.

Banks' profitability and cost efficiency

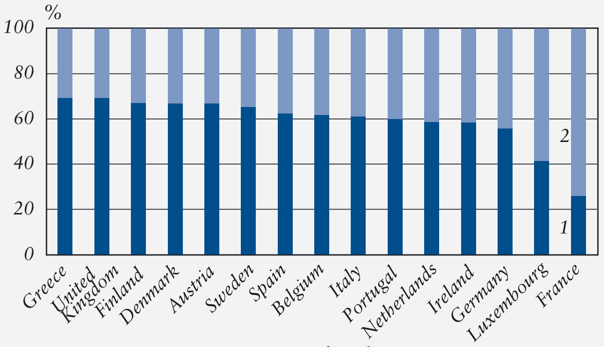
	Profitability: Return on equity (ROE), %		*Cost efficiency: Costs, % of income*	
	2004	***1–6/2005***	***2004***	***1–6/2005***
Nordea Group	*16.9*	*19.2*	*60*	*55*
Nordea Group, retail banking	*30.0*	*30.0*	*58*	*55*
Nordea Bank Finland plc (Group)	*5.5*	*6.1*	*49*	*47*
Nordea, retail banking in Finland	*34.0*	*33.0*	*53*	*51*
Sampo Group	*26.5*	*30.3*	*–*	*–*
Sampo Group, banking and investment services	*21.1*	*19.1*	*64*	*67*
Sampo Bank plc (Group)	*17.2*	*18.6*	*65*	*65*
OP Bank Group	*12.0*	*12.6*	*55*	*53*
OKO Bank Consolidated	*13.9*	*14.9*	*51*	*50*
Savings banks (excl. Aktia), total	*–*	*–*	*71*	*65*
Aktia Savings Bank plc (Group)	*11.2*	*14.9*	*66*	*63*
Local cooperative banks, total	*–*	*–*	*72*	*68*
Bank of Åland plc (Group)	*9.8*	*12.4*	*68*	*66*
Evli Group	*5.2*	*11.7*	*91*	*91*
eQ Online Group	*5.2*	*6.8*	*91*	*91*

Savings banks and local cooperative banks do not publish ROE data. ROE percentages are calculated by banks themselves and are not fully comparable.
Source: Banks' interim reports.

However, financial sector has been in a turning point for some time now. The aim has been to establish ever bigger units and so-called financial conglomerates that, along with banking services, also offer insurance services. In Finland, the most recent example of this is the planned merger of OKO Bank Consolidated and Pohjola Group announced in September 2005. The income structure of financial conglomerates differs from that of traditional banking business, as the share of other income (premium income in particular) increases and that of net interest income decreases. For

Chart 24.

Banking sector net interest income and other income of total income in EU 15 countries, 2004



1. Net interest income, % of total income
2. Other income, % of total income
Source: European Central Bank.

Table 4.

Banks' capital adequacy and buffers against losses

	Capital adequacy (Tier 1 + Tier 2), %	
	12/2004	6/2005
Nordea Group	9.5	9.4
Nordea Bank Finland plc (Group)	22.9	20.1
Sampo Group	170.6*	196.5*
Sampo Bank plc. (Group)	10.7	9.9
OP Bank Group	15.5	15.6
OKO Bank Consolidated	11.0	11.0
Savings Banks (excl. Aktia), total	18.5	18.3
Aktia Savings Bank plc (Group)	14.1	14.5
Local cooperative banks, total	20.4	19.7
Bank of Åland plc (Group)	11.8	11.7
Evli Group	20.0	16.1
eQ Online Group	22.8	20.2
	Buffer for 8% capital adequacy, EUR m	
	12/2004	**6/2005**
Nordea Group	2,143	2,135
Sampo Group	–	–
Sampo Bank plc (Group)	374	289
OP Bank Group	1,921	2,129
OKO Bank Consolidated	296	325
Savings Banks (excl. Aktia), total	284	299
Aktia Savings Bank plc (Group)	126	143
Local cooperative banks, total	191	196
Bank of Åland plc (Group)	41	41
Evli Group	28	24
eQ Online Group	20	18

Sources: Banks' interim reports and Bank of Finland.
** In compliance with the new capital adequacy regulations for financial conglomerates, which entered into force at the beginning of 2005, Sampo Group's capital adequacy is calculated using the consolidation method. The capital adequacy ratio indicates the ratio of a group's own funds in relation to the total of requirements calculated for each business sector.*

Box 2.

Measuring the efficiency and productivity of the banking sector

Although analysis of the efficiency of the banking sector is challenging, it is possible to some extent to measure the relative efficiency differences between banks and banking systems. This requires e.g. productivity indicators. Such indicators should describe the relation between input and output, ie what volume of services can a bank produce with inputs used.

The cost-to-income ratio is the easiest to calculate and hence the most commonly used measure of cost-efficiency. The cost-to-income ratios of Finnish banks peaked during the banking crisis when income was very low (Chart A). However, the ratio started to fall markedly owing to banks' cost saving programmes and structural changes, and reached its lowest level in 2000.

However, the cost-to-income ratio is not an optimal indicator for efficiency comparisons, since variation in the ratio can be caused by changes in the relative prices of inputs and outputs. For this reason comparisons should be made by using indicators calculated on the basis of constant-price volumes of input and output adjusted for price changes. There are alternative methods to compute these indicators.[1]

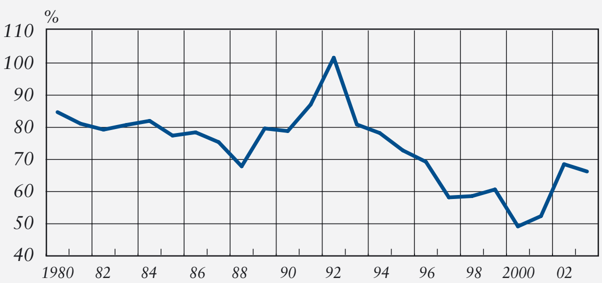
This box presents a simple method to calculate total productivity for the banking sector.[2] The central feature in computing total production is to clearly define the services produced (output) and inputs used by banks. The output of Finnish banks can be considered to consist of financial intermediation services, payment services and other services. Financial intermediation services include long-term deposits and lending. Payment services contain short-term deposits and the production of payment services. Other services entail, for instance, various savings products (other than deposits), securities and currency transactions carried on behalf of customers and, in case of some banks, asset management and investment banking. Inputs refer to staff and capital goods such as IT and offices.

Constant-price input and output indices can be computed either directly from volume data or from value data through deflation.[3] Value data is used in the calculation of both financial intermediation services and other services. The required data is obtained from banks' financial statements and interest rate statistics compiled by the Bank of Finland. When this data is used the biggest challenge is to find the appropriate price deflator. For instance, here the price deflator used for financial intermediation services' value data is the price index calculated on the basis of Consumer Price Index and banks' interest rate margin (interest rate differential between average lending and fixed-term deposits). Payment transaction volume data can in turn be used for the calculation of payment services output. As for inputs, volume data is available regarding staff and offices.

The different services indices are combined into output and input indices with the help of weights. These are obtained by using the profit and loss account information on income

Chart A.

Cost-to-income ratio of Finnish banks*, 1980–2003



** Comprises Finnish banks and banking groups, including Nordea Bank Finland (plc) Group.*

Sources: European Central Bank, banks and Bank of Finland.

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[1] For example, Statistics Finland calculates the production of banking business and other financial intermediation services as part of National Accounts in accordance with EU legislation. In this calculation method, output consists of three components: market production, financial intermediation services indirectly measured (FISIM) and production for own final use.

[2] The calculation method is based on the method outlined in Suominen, M and Tarkka, J (1991), 'Rahoituspalveluiden markkinat ja tuotanto Suomessa', ('Financial services markets and output in Finland') Bank of Finland, A:82.

[3] Mörttinen, L (2002), '*Banking sector output and labour productivity in six European countries*', Bank of Finland Discussion Papers No. 12/2002.

and expenditure. The relation between output and input computed on the basis of this method is called total factor productivity (TFP). Chart B shows the input and output indices computed on the basis of this method and the TFP of the Finnish banking sector.

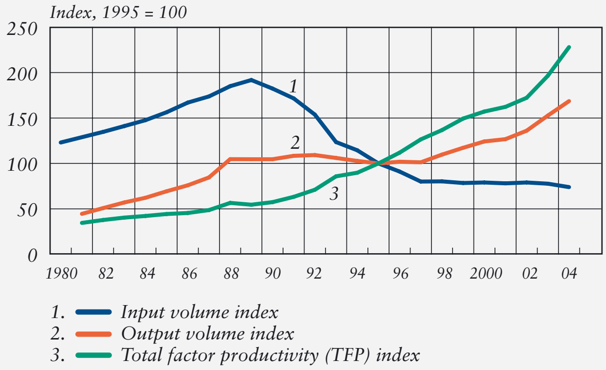
The Chart shows that production was fairly inefficient in 1981–1988 when rapid growth in inputs maintained slow TFP growth. Starting from 1989, growth in the output volume of the banking sector came to a halt that lasted through the banking crisis, during the time of which lending stock even decreased. However, TFP improved, since input volumes started to decrease sharply owing to reorganisation programmes. Productivity growth showed signs of deceleration again at the end of the 1990s when the reorganisation cycle came to an end. After the beginning of 2000, banks' productivity rebounded mainly as a result of a pick up in housing loans. At the time, price deflation also improved productivity, as the low level of interest rates and competition among banks on housing loans narrowed banks' interest margins that directly lowered the price index used. Banks were also able to slightly reduce input volumes since 2002, which led to a further improvement in TFP.[4] The average annual growth in TFP stood at 7.8% in 1982–1994 and at 9.8% in 1995–2004.

Although the TFP as outlined above can be regarded as a better indicator of efficiency than the cost-to-income ratio, there are some important reservations as to its use. Firstly, it is rather difficult to compute volumes of outputs and inputs from different value data because of the difficulty of determining an adequate price index. Secondly, the cross-subsidisation between products, which is typical to the financial sector, is easily ignored due to the lack of data. This weakens the information content of individual output indices in particular. Thirdly, volume indices should measure the volumes of outputs and inputs, the quality of which does not change. Because, in practice, the quality of services changes over time, indices should be adjusted as to register these changes. Otherwise, for instance weakened product quality and the accompanied price decrease could be interpreted as improved efficiency in production and growth in volume.

The index outlined above takes account of changes in the quality of loans only retroactively. TFP reacts to changes only after credit losses are realised. In the calculation method, the narrowing of interest rate margin, for instance, affects the volume index as if the pricing of product had become more efficient, even if the margin fell under the risk premium required by the actual risks related to the loans.

In practice, it is difficult to measure the quality of financial services offered. However, the method for calculating TFP index could be adjusted by using different bank-specific indicators reflecting e.g. the market assessment of banks' risk pricing. This would serve to develop a better indicator for changes in banks' efficiency, an indicator which would also control changes in banks' risk taking. Such bank-specific efficiency indicators are currently being developed also in the Bank of Finland.

Chart B.
Production of services by Finnish banks



There have been statistical changes in the source data, starting from 2001.
Sources: IMF, Statistics Finland and Bank of Finland.

[4] The indicator outlined in Chart is computed by using banks' unconsolidated financial statements data. The index is affected by structural changes undertaken in the Finnish banking sector.

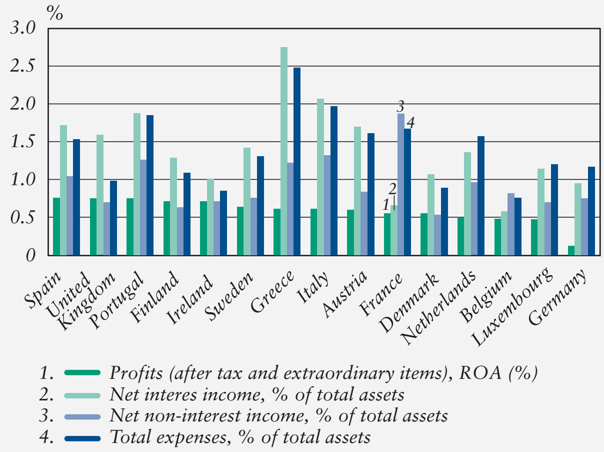
instance in January–June 2005, 35% of Finnish financial conglomerates' total income originated from net interest income and 65% from other income. This is similar to the average income structure of large financial conglomerates operating in Europe, for which net interest income accounts for 45% and other income for 55% of total income.

When banking sectors are compared in terms of profit and loss account items in relation to total assets, Finnish figures are low compared with those of other EU 15 countries (Chart 25).[5] In Finland, the share of net interest income relative to total assets is the seventh smallest among EU 15 countries. This has partly been affected by interest rate margins on lending, which have been, on average, narrower in Finland than in other European countries. The share of non-interest income relative to total assets for Finnish banking sector is the second smallest among EU 15 countries, and that of total expenses the fifth smallest. The low expense ratio for Finnish banks is largely explained by banks' improved efficiency after the banking crisis in Finland.

However, the Finnish banking sector is quite cost-effective and profitable when compared with the banking sectors of other EU 15 countries. Measured by the cost-to-income ratio, the Finnish banking sector is the sixth cost-effective among the EU 15 (Chart 26). Similar results are attained when comparing the share of profits (after tax and extraordinary items, ROA) relative to total assets. In terms of this ratio describing profitability, Finland shares the fourth place among the EU 15. Along with cost-efficiency, the good placing is attributable to low loan losses.

Chart 25.

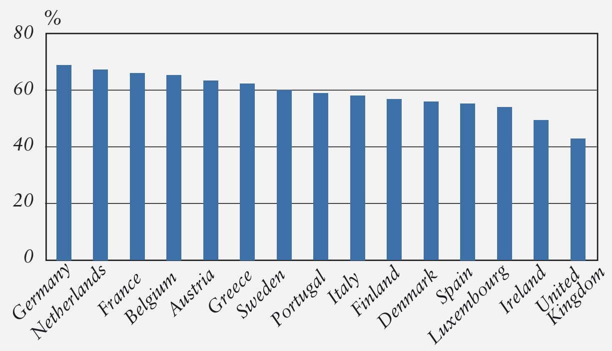
Banking sector profit and loss account items in relation to total assets in EU 15 countries, 2004



Source: European Central Bank.

Chart 26.

Cost-to-income ratios of banking sector in EU 15 countries, 2004



Source: European Central Bank.

[5] The comparison is based on country-specific indicators for 2004 published in the ECB's report 'EU Banking sector stability' (October 2005). The indicators are calculated on the basis of data for banks operating in each respective country. Therefore, for instance data for Finland comprises deposit banks operating in Finland (incl. Nordea Bank Finland Group) and branches of foreign credit institutions operating in Finland. However, insurance companies are not included in the data.

Risk outlook

The situation for the Finnish banking sector is stable at present, with no major threats to the sector's stability. Favourable economic situation in Finland and the low level of interest rates support borrowers' financial situation. Similarly, international disturbances do not directly threaten borrowers' creditworthiness. Banks' operating profits could withstand a clear deterioration of economic developments without endangering the stability of the banking system.

The loan stock of Finnish MFIs has continued to grow at a brisk pace. In January–September 2005, the MFI loan stock grew at an annual rate of about 12%. Over half of the stock of loans consists of loans to households (Chart 27), and loan stock growth is largely attributable to strong increase in housing loans. Although housing loan stock has in places grown even disturbingly rapidly it is unlikely that, in light of current economic forecasts, it would lead to significant loan losses for the banking sector. Nor is it likely that weaker-than-forecast economic development would cause significant loan losses for the whole banking sector, since loans granted by banks are collateralised through real estates or other assets.

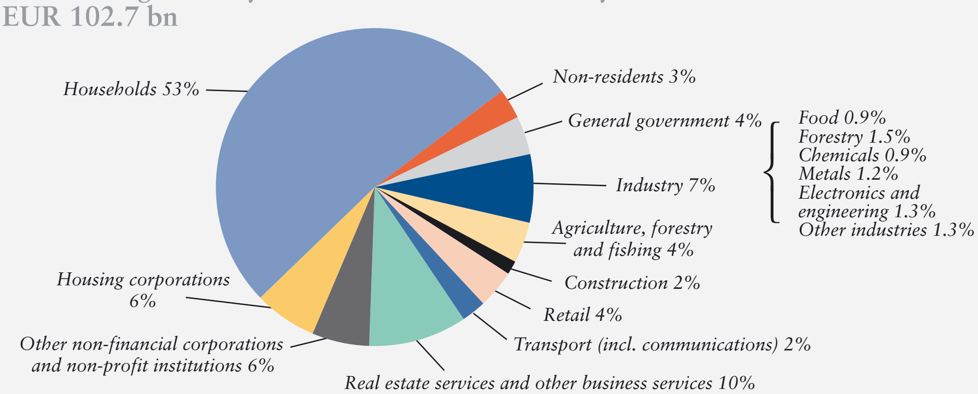
Rapid growth in lending stock increases credit risks.

In addition to housing loan stock, consumer credit to households has also increased rapidly in 2005. Consumer credit and other loans have grown at an average annual rate of 9%. Other financial institutions offering consumer credit to public have also entered the Finnish financial market. Besides ordinary consumer credit, the use of credit cards has also become more popular recently. From the banks' perspective, consumer credit is riskier in nature than housing loans since consumer credit is usually uncollateralized. However, provided that economy develops as forecasted, banks' risks will remain small.

Growth in loans to households has recently been closely linked with

Chart 27.

MFI lending stock by sector and economic activity* 31 December 2004: EUR 102.7 bn



** Excl. financial institutions and insurance companies.*
Source: Statistics Finland.

Box 3.

Stress testing of the banking sector

As part of stability assessment, calculations have been made in the Bank of Finland on the effects of macroeconomic disturbances on the banking sector. The effects have been estimated using models in which macroeconomic factors and market interest rates are assumed to affect banks and their customers as they have, according to statistical analyses, affected in the near past. The calculations have been performed using data on banking groups. Insurance companies within the same group are excluded from calculations, although the majority of all banking activity currently takes place through groups that also have significant insurance business activities.

In a simulation calculation carried out recently, a scenario of weak economic growth was first produced, covering the period from autumn 2005 to the end of 2008. The assumed situation is however not as extreme as the recession of the early 1990s. In the scenario, a strong supply shock is assumed. Such a situation could be caused, for instance, by an exceptionally sharp rise in oil prices, but similar results could also follow from price increases of other central production factors and a reduction in their supply. The assumed disturbance would halt the real GDP growth within a year. This would be followed by a gradual recovery in economic growth in two years. The disturbance would fairly quickly lead to a strong rise in money market interest rates. In the scenario, however, money market rates would fall quickly to a level even lower than the one in the most probable future scenario. Unemployment would clearly increase.

A temporary rise in interest rates would increase banks' net interest income because lending rates would rise more strongly than deposit rates. The effects on net interest income would only show with a time lag. Decelerated growth in deposit and lending stocks would weaken net interest income growth. The real, inflation adjusted deposit stock would probably remain relatively unchanged or would decline in the assumed situation.

However, the profitability of the whole banking sector would weaken clearly compared with 2004 and the most probable future development. A slowdown in economic growth and a rise in interest rates would increase loan losses as debtors would run into difficulties. They would also weaken the net income from securities and currency trading and slow down the growth in net fee income. The effects on loan losses in particular would be strong. Rising interest rates and slow economic growth would create a problematic combination for debtors whose ability to service their debt would weaken. Loan losses could even become many tens of times higher than what their current levels, although their level is presently exceptionally low.

Even though banks' profitability would weaken, the calculations suggest that the banking sector would still make clear profit. The calculation did not include bank-specific assessments.

competition among banks on market shares. Competition has stiffened particularly as regards housing loans. Interest rate margins on new housing loans[6] have already fallen to under 0.7 percentage points (Chart 28). Competition has also spread to consumer credit. In July 2005, margin on new consumer credit had narrowed by 0.9 percentage points as compared with the corresponding period in 2004.

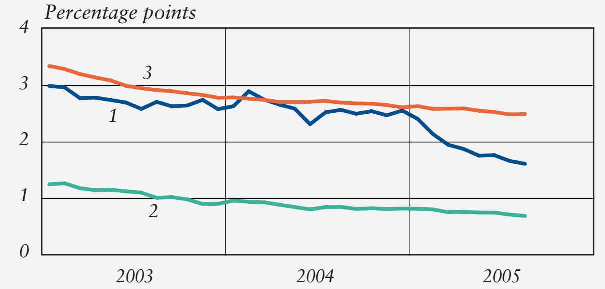
At the end of 2004, loans to non-financial corporations represented about 35% of MFI lending stock. From the historical perspective, non-financial corporations as borrowers have posed a higher risk to banks than households. In the period from July 2004 to July 2005, Finnish MFI lending to non-financial corporations grew by 8.6%, on average. Part of the growth in the stock of corporate lending is explained by the fact that non-financial corporations have converted funding raised from other sources into bank loans. On the other hand, much of the loans by non-financial corporations have recently been directed to the financing of corporate restructuring. A possible downturn would weaken non-financial corporations' scope for action, which could in turn increase banks' loan losses. In the light of current economic forecasts, the probability of these losses is however limited.

Rapid growth in the stock of loans increases banks' credit risk and highlights the importance of risk management. Banks should pay special attention to the pricing of loans and

[6] Interest rate on new loans – 12-month Euribor.

Chart 28.

Interest rate margins on MFI loans

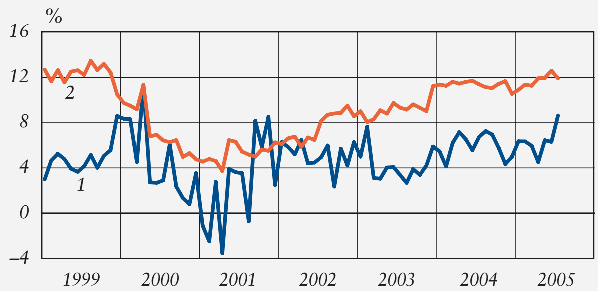


1. Finnish MFI's new consumer credit minus 12-month Euribor
2. Finnish MFI's housing loans minus 12-month Euribor
3. Overall margin (average lending rate – average deposit rate)

Source: Bank of Finland.

Chart 29.

12-month growth rate of MFI lending to and deposits by the public



1. Deposits
2. Loans

Source: Bank of Finland.

Chart 30.

Domestic deposit banks' euro-denominated loans in relation to euro-denominated deposits

Source: Bank of Finland.

Liquidity management has become increasingly important.

make sure that they charge adequate risk premia on loans and that their costs are covered. Narrow margins do not necessarily entail sufficient buffers in case of loan losses. Banks' profitability could weaken fast if the growth in lending dried up and other income for banks fell at the same time sharply.

Deposit stock has increased at a considerably slower pace than lending stock. In the period July 2004–July 2005, deposit stock grew by about EUR 6.3 billion, whereas lending stock grew by EUR 11.7 billion (Charts 29 and 30). The difference between these growth rates has had an effect on banks' balance sheet structures and has highlighted the importance of so-called liquidity risk.[7]

Since banks have not been able to fully finance lending growth through deposit funding, they have issued more assets on money and capital market terms. In the aggregated balance sheets of Finnish MFIs, debt securities issued and liabilities outside the euro area have increased by about EUR 2.3 billion in July 2004–July 2005. At the same time, the share of short-term (up to 1 year) debt securities issued by MFIs has decreased from about 65% to about 54%, and that of long-term (over 1 year) debt securities has in turn increased. For instance, OP Bank Group has acquired financing through OKO Bank Consolidated that has increased its long-term financing in 2005 by about EUR 1.1 billion. Growth in the share of long-term financing can be considered positive because short-term debt financing is highly volatile and its price reacts quickly to changes in banks' situation.

Long-term debt financing has also been acquired through mortgage banks. For instance, Aktia Real Estate Mortgage Bank has issued two mortgage-backed bonds valuing EUR 250 million each. Sampo Group has in turn acquired new funding amounting to EUR 1 billion through a bond issue made by its subsidiary Sampo Housing Loan Bank. Funding raised through mortgage banks is in itself a welcome development in the Finnish financial market, since it brings Finnish financial market practices closer to those in the European markets.

Although banks still obtain the majority of financing from Finland, they also acquire financing from elsewhere. The acquisition and provision of financing outside Finland creates channels through which possible foreign disturbances can be transmitted to the Finnish financial sector. At the end of June 2005, of loans by Finnish MFIs to MFIs and other sectors, 74.4% were granted to Finland, 10.2% to Sweden and 5.1% to Denmark. At the same time, 71.2% of deposits held by Finnish MFIs were from Finland, 4.5% from Sweden and 3.1% from the United Kingdom. Assets and liabilities of Finnish banks from developing countries are small. Hence, the most important linkages for the Finnish financial sector are to other Nordic countries.

The Finnish banking sector is exposed to relatively small market risks

[7] Liquidity risk refers to the risk of a bank being unable to fulfil its payment obligation in a timely manner or without causing huge extra costs. Liquidity risk for banks arises because lending is long-term and borrowing consists of short-term liabilities and demand deposits.

posed by share prices and foreign exchange rate or interest rate changes. Banks' share portfolios are small and their investments tend to be largely in shares of companies within the own group. Currency trading has in turn declined after the introduction of the euro. Banks are also increasingly using derivatives in order to hedge against interest rate risk.[8]

Restructuring in the banking and insurance sector has continued in the Finnish financial market. In contrast to the development observed a few years ago, it appears that the trend is towards non-life insurance business being linked again as part of financial conglomerates. The current trend increasingly exposes financial conglomerates' results to insurance sector performance. Insurance sectors' results are largely dependent on return from companies' investment portfolio, which is in turn affected by fluctuations in stock and interest rate markets. Hence, in future, stock and interest rate markets will increasingly affect the results of Finnish financial sector.

The integration of banking and insurance sectors will also increase operational risks,[9] as processes and systems of two different sectors are integrated as part of a bigger whole. Links between the two sectors also allow disturbances and problems to spread more quickly. Restructuring also puts a greater pressure on authorities to improve supervisory cooperation related to companies operating in financial markets.

The International Financial Reporting Standards (IFRS) entered into force at the beginning of the year and are applicable to all listed deposit banks (OKO [OP Bank Group], Sampo, Nordea and Bank of Åland). Unlisted deposit banks prepare financial statements in accordance with the Finnish Credit Institutions Act. The Act has been amended to ensure that all credit institutions follow the same practices in preparing financial statements. The new financial reporting requirements are reflected in banks' financial statements. The balance sheet and income statement have also been changed in both layout and content. In the early part of 2005, banks have issued press releases concerning the transition and impact of the new financial accounting regulations on financial performance and balance sheet. These press releases and interim reports for 2005 indicate that the introduction of the new accounting standards has not had a major impact on Finnish deposit banks.[10] The true effects of the IFRS reform will only become evident later.

Operational risks have grown along with structural changes.

Indicators based on market information also paint a favourable picture of the development and near-future prospects for the Finnish banking sector. In 2005 there have been no changes in credit ratings of Finnish banks, except for the upgrade in long-term OKO Bank's loans and the credit

[8] See also FSA Newsline 4/2005, article 'No major changes in banks' interest rate risks'.

[9] Operational risk refers to direct or indirect loss arising from inadequate or weak internal process, staff, systems or external factors. It includes legal risks but excludes strategic and reputational risk.

[10] For further details, see Bank of Finland, Financial Market Report 2/2005.

rating of Sampo Bank by S&P. Finnish banks' credit ratings are roughly as good as those of other large Nordic financial conglomerates. At the same time, financial sector share prices have risen clearly faster than average share prices. The good dynamics of share prices reflects market participants' confidence in the Finnish financial sector.

Financial performance and solvency in the insurance sector

Insurance sector able to sustain good performance.

The performance of domestic insurance companies has remained relatively sound, reflecting the development of the financial sector overall, with average solvency of insurance companies improving in the course of 2004. The operating profits of life insurers declined from nearly EUR 1 billion in 2003 to somewhat under EUR 700 million, whereas that of non-life insurers clearly improved from EUR 200 to EUR 500 million. The overall result of employee pension insurers remained unchanged from the year before (Table 5). During the first half of 2005, employee pension insurers in particular improved their overall performance considerably compared to the first half of 2004. The performance of life and non-life insurers has varied more clearly across companies. Differences in portfolio structure have contributed to the diverging performance of life insurers for example, while variations in the performance of non-life companies are primarily related to differences in the claims experience among the companies. Non-life insurers have, nevertheless, been successful in further enhancing operations, with resulting improvements in expense ratios.

Insurance companies' aggregate solvency improved clearly in 2004 and the positive trend continued during the first half of this year (Table 6). The solvency margins of life and pension insurers strengthened clearly in 2004. Non-life insurers' aggregate solvency margins slightly declined for example in response to the transfer of sound actuarial profitability from the solvency margin to the equalisation provision for the settlement of future claims.[11] All

[11] Annual Report 2004 of the Insurance Supervisory Authority and the report of 30 June 2005 on the solvency of insurance companies and pension funds.

Table 5.

Operating profits and premiums written in the insurance sector

Operating profits in the insurance sector (EUR m)	*2002*	*2003*	*2004*
Life insurance companies, total	*284*	*997*	*658*
Non-life insurance companies, total	*236*	*200*	*501*
Employee pension insurance companies, total	*–1,026**	*2,263**	*2,242**
Premiums written in the insurance sector (EUR m)	***2002***	***2003***	***2004***
Life insurance companies, total	*3,263*	*2,911*	*2,907*
Non-life insurance companies, total	*2,796*	*2,855*	*2,957*
Employee pension insurance companies, total	*6,431**	*7,116**	*7,494**

** Excl. Etera Mutual Pension Insurance Company.*
Sources: Federation of Finnish Insurance Companies and employee pension insurance companies' press releases concerning financial statements.

insurance company groups report continued improvement in solvency margins over the period January–June 2005.

The volume of premiums written in the insurance sector went up by 3.6% in 2004.[12] The uncertainty related to the tax treatment of personal pension plans slowed the increase in premiums written by life insurers last year. Premiums written by life insurers have also started to grow relatively briskly this year, particularly in response to an increase in endowment insurance and group pension insurance. Despite clarification of the tax treatment, the increase in premiums written on personal pension plans, however, continues to be marginal. It is also important to notice the ongoing increase in unit-linked policies in premiums written on life insurance. In this respect, investment risks are increasingly allocated to policyholders. In step with improvements in the labour market situation and higher wage income, premiums written by employee pension insurers increased by a good 10% over the period January–June 2005.

The low level of interest rates is one of the foremost challenges facing the Finnish insurance business, as well. Life insurers for example have a large volume of old guaranteed-return life and pension policies providing a rate of return of 4.5% or 3.5% annually. This problem is, however, alleviated by the higher proportion of unit-linked policies in the portfolio.

[12] Finnish Insurance Economy. Financial year 2004. Federation of Finnish Insurance Companies.

Table 6.

Solvency of the insurance sector

	12/2003	*12/2004*	*6/2004*	*6/2005*	*Change, %*
Life insurance companies					
Capital and reserves, EUR m	*2,022*	*2,048*	*2,257*	*2,345*	*3.9*
Solvency margin, EUR m	*2,948*	*3,342*	*3,061*	*4,437*	*45*
Solvency capital, EUR m	*3,103*	*3,504*	*3,219*	*4,601*	*42.9*
Solvency margin, % of minimum amount	*308.4*	*332.4*	*321.4*	*438.8*	
Solvency capital, % of technical provisions	*14.3*	*15.3*	*14.6*	*19.5*	
Non-life insurance companies					
Capital and reserves, EUR m	*1,189*	*1,376*	*1,266*	*1,430*	*13*
Solvency margin, EUR m	*1,889*	*1,849*	*1,788*	*2,114*	*18.2*
Solvency capital, EUR m	*3,179*	*3,311*	*3,149*	*3,615*	*14.8*
Solvency margin, % of minimum amount	*406.4*	*349.7*	*383.5*	*394.1*	
Solvency capital, % of premiums earned over 12-months	*131.2*	*130.1*	*127.5*	*136.3*	
Employee pension insurance companies					
Capital and reserves, EUR m	*205*	*220*	*213*	*229*	*7.5*
Solvency margin, EUR m	*7,787*	*9,614*	*8,210*	*11,760*	*43.2*
Solvency margin, % of minimum amount	*323.6*	*352.4*	*300.9*	*376.5*	
Solvency margin, % of technical provisions	*19.9*	*23*	*20.3*	*27.1*	

Reported figures for capital and reserves also include subordinated loans, if any.
Source: Insurance Supervisory Authority.

Restructuring of the Finnish insurance market proceeds.

The interest assumption for investment by employee pension insurers, ie the required nominal rate of return, is currently 5.5%. The average annual nominal rate of return on investment by employee pension insurers was 6.3% for the years 1998–2004, with the real rate of return for the corresponding period amounting to 4.7%.[13]

Insurance companies' key risks are related to price developments in the securities markets. A pronounced decline in share prices is immediately reflected in the performance of most companies. Solvency therefore also tends to deteriorate rapidly. However, the solvency of Finnish insurance companies is good and well above European level, and hence the industry is able to respond to relatively big changes in the price of securities. The profitability of the insurance sector would deteriorate if premiums written were to decline due to increasing competition.

Over a short period of time, the Finnish insurance market has undergone structural changes that may step up competition in the market. Although, so far, foreign companies play a minor role in the Finnish insurance market, interest in the Finnish insurance market is mounting. The non-life insurance business is currently the only exception. The Swedish, albeit Finnish-owned, company If holds a market share of nearly one-third of premiums written on non-life insurance in the Finnish market. Foreign life insurance companies account for a market share of only a few per cent of premiums written. Companies operating statutory employee pension schemes must be Finnish owned. Because of the statutory nature of the employee pension insurance business, the scope for competition is limited anyway.

The number of foreign representative offices of insurance companies domiciled in other EEA countries, operating in Finland, has grown within a few years' time from 14 in 2000 to as many as 21 at the end of 2004. This has coincided with a substantial increase in the number of notifications on the provision of insurance services filed with foreign insurance companies domiciled in EEA countries, from 302 in 2000 to 415 by 2004[14].

[13] For closer details, see the website of the Finnish Pension Alliance TELA at www.tela.fi

[14] Insurance Supervisory Authority. Annual Report 2004.

Box 4.

Foreign banks operating in Finland

For a long time, the Finnish banking sector was closed to foreign credit institutions, but the 1980s and 1990s saw a fundamental change in legislation. The first foreign banking groups started operating in Finland in 1982 through the establishment of subsidiaries. At that time, it was not yet possible to establish a foreign branch in Finland. Even today, there are subsidiaries owned by foreign banks operating in Finland, one of which has a significant position on the Finnish market. In terms of balance sheet, the biggest bank authorised in Finland is Nordea Bank Finland Plc, a subsidiary of Nordea Bank AB (publ) Sverige authorised in Sweden.

Foreign banks have been allowed to establish branches in Finland since 1991. Nowadays, a credit institution authorised in an EU country or another country belonging to the European Economic Area (EEA) does not need a separate authorisation in order to establish a foreign branch in the EEA. It has automatically the right to establish branches and engage in authorised business activities in all EEA countries. It only has to notify its home-country authorities of the establishment of a branch. The host-country authorities receive an official notification of the branch from the home-country authorities of the credit institution. Banks authorised outside the EEA can open branches in Finland on the basis of an authorisation granted by the Finnish Financial Supervision Authority (FIN-FSA). There are, as yet, no such foreign branches in Finland.

Currently, in all 21 foreign credit institutions have branches in Finland. Of these, 11 are authorised to receive deposits and 10 are merely engaged in other credit institution activities. Of deposit banks that have opened a foreign branch in Finland, two belong to a group, the parent company of which is domiciled outside the EEA, although the subsidiary that opened a branch in Finland was authorised in an EU country. In addition, there are domestic credit institutions operating in Finland which are in foreign ownership and operate as separate companies.

The integration of Nordic banking markets is also reflected in the home-country-composition of subsidiaries. From the 11 foreign deposit banks operating in Finland, six have been authorised in another Nordic country. Swedish banks have had a relatively wide scope of operations in Finland ever since the 1990s. In the 2000s, German banks in particular have expanded their activities by opening branches in Finland. There are currently three German banks operating in Finland.

A branch of a foreign credit institution is in many ways fairly strongly linked to the systems in its home country. For example, deposits are covered by the home-country deposit protection scheme. The FIN-FSA has fairly limited supervisory powers. For instance, Finnish authorities can collect information for statistical purposes, but the actual supervisor is the bank's home-country financial supervisory authority.

There is not much public statistical data on the scope of activities of individual credit institutions' branches, but Statistics Finland has published aggregated income statement and balance sheet data on branches. At the end of 2004, foreign credit institutions' claims on the public and public sector entities totalled EUR 6.2 billion, which was 5.9% of corresponding claims by all credit institutions. Their deposits from the public and public sector entities totalled EUR 2.0 billion, representing about 2.7% of the stock of deposits. Hence, branches of foreign credit institutions play a relatively bigger role in lending than in deposit-taking. In 2004 they accounted for 4.6% of MFI sector net interest income and 5.3% of fee income.[1]

Those branches of foreign credit institutions that are not

[1] Statistics Finland, 'Rahalaitokset 2005' and 'Rahoitus 2005:8'.

authorised to collect deposits from the public are engaged in leasing in particular. Their net income from leasing in 2004 totalled EUR 63 million, ie as much as 44.7% of net income from leasing for the whole sector.

According to the Finnish Bankers' Association, branches of foreign banks employed 908 persons in a total of 45 individual offices at the end of 2004. Only Svenska Handelsbanken had more than one office. Most foreign banks have concentrated their activities very strongly on the Helsinki region. Most foreign banks are not engaged in retail banking, rather they serve large customers.

The concentration on large customers becomes evident for example from the latest Survey on Business Finances.[2] About half of large industrial companies have used services of a foreign bank operating in Finland. In case of the biggest services companies, the corresponding share was under 40%. Only very few of the smallest companies had used these services.

In addition to credit institutions, foreign investment firms can also establish branches in Finland. There are currently only five such branches in Finland. An investment firm authorised in an EEA country only needs to make a notification when opening a branch in Finland, but investment firms authorised in other countries need an authorisation granted by the FIN-FSA.

[2] Confederation of Finnish Industries, Ministry of Trade and Industry and the Bank of Finland (December 2004).

Infrastructure

The infrastructure of the Finnish financial markets fulfils the requirements of domestic operations and the near-term outlook is good. The biggest challenges are created by the need to improve the efficiency of the EU's financial markets and by the adjustment to the global economy.

The infrastructure of the financial markets, composed of payment systems, securities clearing and settlement systems and payment instruments, has operated reliably and fostered financial market stability. Only a small number of disturbances were experienced in the services important to Finnish customers. The occasional incident has been handled by means of foreseen contingency measures. These nevertheless require extra resources and thus hamper the efficiency of financial markets.

The creation of an internal market for financial services has progressed at a fairly different pace in the various sectors of financial market infrastructure. There are increasing challenges to the provision of services to the ever-more international market participants and markets. Over the longer term, the efficiency of the EU-wide infrastructure must be enhanced, and the basic services provided through the infrastructure must more effectively support the improvement of productivity in the corporate sector. The efficiency of the EU's financial markets must be promoted in many ways. Due to harmonisation objectives, Finnish infrastructure will probably have to partly adjust to common solutions even though the domestic solutions would be more efficient.

In the increasingly globalised economy, a common infrastructure has not yet been created despite the development of one or two global solutions. Many of the services provided nationally by central securities depositories or payment systems are provided on a more global basis only by the correspondent and custodian networks of the most international banks. Such arrangements may be less transparent than corresponding national solutions.

No integrated financial market infrastructure has yet been created to support the increasingly global economy.

In some cases, sectoral drift highlights the problems of the operating environment while regulatory initiatives aimed at harmonisation may prompt a shake-up in the competitive situation in general and pose a threat to the competitive edge of individual institutions. For example, the division of tasks between central securities depositories and custodian banks involves significant disgruntlement, due to unharmonised regulation in the EU countries. Infrastructure operators have to take several, often conflicting, external expectations into consideration in their plans. There is often a mismatch between owners' and users' expectations, which results in impediments to the development of business strategies. Development is also hampered by the fact that both regulatory initiatives and IT system projects let alone mergers are, by nature, extremely time-consuming ventures. It takes several years for the benefits to materialise even in successful projects.

Banks operating in Finland have focused on the Nordic marketplace, at the expense of euro area integration. Developments in the Nordic market-

Box 5.

Efficiency according to the oversight standards

In 2001, the Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten Countries (G-10) issued ten Core Principles for Systemically Important Payment Systems. According to these Core Principles, the system should provide a means for making payments which is practical for its users and efficient for the economy.

Efficiency is a broad concept and may for example refer to the technical indicator of production (number of payments processed per hour) or cost effectiveness, or to the fact that the services in demand could not be produced at a lower cost. Numerous problems are associated with the measurement of efficiency. Poor operational performance, long processing times, continuous overcapacity or high costs compared to other systems offering similar services are cited as examples of inefficiencies. The Core Principles also emphasise that system governance arrangements should be effective, accountable and transparent. The tools to achieve this include written strategic objectives, clear lines of responsibilities and risk management independent of operations.

The European System of Central Banks (ESCB) has applied the Group of Ten's Core Principles to large-value payment systems since 2001 and, based on them, drafted and released standards on small-value payments in 2003. These standards incorporate the same efficiency objectives. According to the standards, payment systems should provide means of making payments which is practical for its users and efficient for the economy. Resources should be used efficiently and system governance should be effective, accountable and transparent. Particular consideration should be given to the implementation of the use of international standards to allow for straight-through processing of domestic as well as cross-border payments.

Standards for securities clearing and settlement systems have been prepared by the market participants themselves as well as the authorities. The European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR) together released draft standards for securities clearing and settlement in the European Union in 2004. These standards are based on the recommendations of the G-10 prepared in cooperation with the International Organisation of Securities Commissions (IOSCO), published in 2001. In comparison with the CPSS-IOSCO recommendations, the ESCB-CESR standards highlight the importance of efficiency in the context of European integration as well as at the domestic level. They also emphasise system interoperability. Interoperability may be achieved through standardisation of both technical aspects of the systems and their business practices. Entities providing securities clearing and settlement services should be subject to transparent, consistent and effective regulation, supervision and oversight. Relevant authorities should endeavour to agree formal MoUs in areas not yet covered by European legislation. Cooperation between the authorities should be geared to minimising the regulatory burden. Standards on communication procedures, messaging standards and straight-through processing, as well as on governance, are also related to efficiency.

The definition of efficiency is not unambiguous. The oversight standards highlight the aspect of efficiency that complements the security and operational reliability of the systems. However, reliability and efficiency may also be conflicting goals.

place have intensified particularly over the last couple of years. The currency area has, however, a role in the policy of the EU. For example, in payment system development, progress is being achieved particularly in the euro area. It is important that euro area citizens are able to benefit from smoother payment services within the next few years.

Services provided in the Finnish financial market are generally of high quality. However, due to integration and changes in the competitive situation the future quality of financial services cannot be taken for granted. These aspects are discussed below in the light of the following questions:

– How does the Finnish economy benefit from the integration of the financial infrastructure?
– To what extent will citizens be able to use their payment instruments abroad?
– What will the costs and risks of payment services be to customers?
– What types of services will be available for issuers of securities in Finland and at what cost?
– How many alternative marketplaces will there be available for securities trading?
– Where and by whom will securities settlement services be offered and what is the ability of those securities settlement systems to withstand disruptions?

The efficiency and European integration of payment systems and the financial system are amongst the primary objectives of the Bank of Finland's oversight function (Box 5).

Payment systems

TARGET and EURO1 are still the most crucial payment systems within the EU in terms of the number and value of payments handled. The bulk of large-value payments has been concentrated into these systems (Chart 31).

The number of intra-Member State TARGET payments continues to grow, whereas the number of inter-Member State payments has remained fairly stable. The average size of the latter has increased slightly. By contrast, the number of payments processed via the EURO1 system of the Euro Banking Association (EBA)[1] is growing more rapidly than the euro value of payments, which is reflected in the falling average value of these payments. It therefore seems that extremely large payments are processed in the systems run by central banks and other large payments in EURO1.

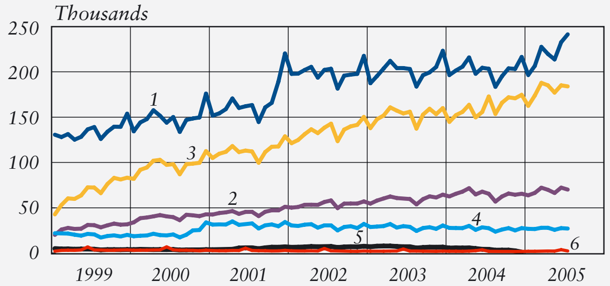
Finns use the latest payment technology.

TARGET is used to process both intra-Member State and inter-Member State payments, as well as interbank

[1] Euro Banking Association.

Chart 31.

Volume of transactions in EU area large-value payment systems, daily average



1. National TARGET payments
2. Cross-border TARGET payments within EU
3. EBA (Euro Banking Association) EURO1 and STEP1
4. PNS (Paris Net Settlement)
5. SPI (Servicio de Pagos Interbancarios)*
6. POPS (Finnish interbank express transfer and cheque system)

* SPI ceased operations on 15 Dec 2004.

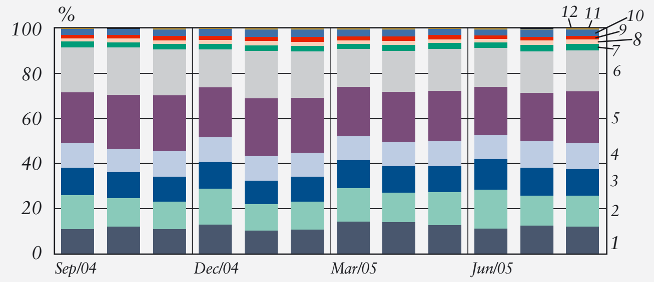
Sources: European Central Bank and EU area banks.

payments and customer payments. Intra-Member State payments account for nearly 80% of the total volume and for approximately 66.5% of the total value of TARGET payments.

It should be noted, that the average value of individual outgoing payments processed via the Finnish component of TARGET is higher than the value of corresponding incoming payments. Of outgoing TARGET payments, approximately half are for more than EUR 250,000 (Chart 32), whereas only one third of incoming payments are bigger than that. This reflects the increasing use of TARGET for transmitting customer payments, particularly in other European countries.

Chart 32.

Outgoing TARGET payments in Finland: proportion of total volume and breakdown by size

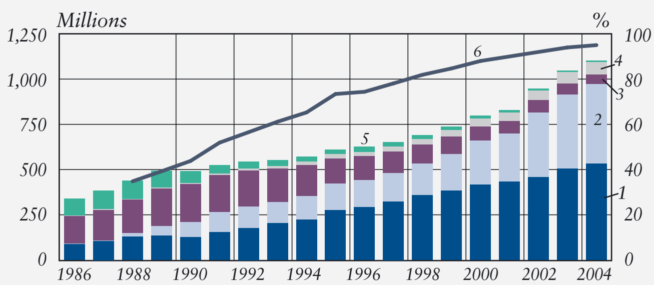


1. < EUR 1,250
2. >EUR 1,250–12,500
3. >EUR 12,500–50,000
4. >EUR 50,000–250,000
5. >EUR 250,000–1 mill.
6. >EUR 1–10 mill.
7. >EUR 10–25 mill.
8. >EUR 25–50 mill.
9. >EUR 50–100 mill.
10. >EUR 100–500 mill.
11. >EUR 500 mill.–1 bn
12. >EUR 1 bn

Source: Bank of Finland.

Chart 33.

Banks' payment transfers and automation degree



1. Electronic transfers
2. EFTPOS transactions (domestic debit cards only)
3. Paper-based transfers
4. Direct debits
5. Sales slips and cheques
6. Degree of automation (right-hand scale)

Source: Finnish Bankers' Association.

The use of modern technology promotes the efficiency of the entire payment system. A number of indicators show that Finns tend to use the latest payment technology. This is clearly evident from statistics published by the Finnish Bankers' Association in spring 2005.[2]

Statistics show that in 2004, 95% of payments were transferred by using information technology (Chart 33). This 'degree of automation' of payments has risen by 22 percentage points since 1995. Due to the use of various types of electronic banking software, electronic file transfer is the most important method of transfer used by companies. A technical standard agreed jointly by domestic banks is used in these file transfers.

Households mainly use online banking applications. The number of multi-service agreements, which include online banking solutions has increased considerably. In 2004, the number of multi-service agreements totalled 3,239,000. The number of transactions covered by multi-service agreements has also grown significantly: in 2004, their number totalled over 205 million. This corresponds to approximately half of the amount of EFTPOS transactions effected by using domestic debit cards. The number of customers' paper-based transfers, as well as that of sales slips and cheques, is marginal.

[2] See http://www.pankkiyhdistys.fi/sisalto_eng/upload/pdf/statistics.pdf.

Operational reliability and liquidity of payment systems

TARGET's operational reliability has improved continuously since it started operating, and its availability rate was 99.73% in the first half of 2005. Although the number of disruptions has decreased, their average duration has increased slightly. The incidents did, however, not jeopardise the functioning of the financial system. Statistics indicate that ensuring data communication links in particular is important in further improving system availability. Of the NCBs, the Deutsche Bundesbank, which processes a large volume of payments, experienced the most disruptions. The Bank of Finland's Real-Time Gross Settlement system (BoF-RTGS), the Finnish TARGET component, has operated commendably: in 2005, its availability rate has been 99.8% and from April onwards, a full 100%.

If a market participant is unable to send its messages electronically to the Bank of Finland due to a disruption, the central bank can execute the payments manually on its behalf. The number of manual payment orders caused by such incidents has stabilised to a very low level. Manually processed transactions, in turn, can be used to assess the operation of account holders' IT systems. The Bank of Finland has tested the contingency procedures prepared, together with market participants, in case of problem situations. It is justified to say that the systems of Finnish market participants function in a stable and reliable way. In future, even more detailed information should be available, due to new regulations issued by the Financial Supervision Authority (FIN-FSA), which obligates banks to report disruptions in their systems.

The Euro Banking Association, the members of which are banks operating in the EU, offers also a separate system (STEP2) for the transmission of small-value cross-border payments in euro to virtually any bank in the EU. A participant can send a file of bulk payments to the STEP2 system. STEP2 will transmit the payments to the recipient country. It is an important system as it is the first one able to offer this kind of service for cross-border payments. EU-area banks have publicly and jointly committed themselves to offering this kind of uniform service. The operational reliability of STEP2 is dependent on the EURO1 system, through which settlement is made. No significant disruptions have been observed in the STEP2 and EURO1 systems.

The Finnish Financial Supervision Authority obligates banks to report incidents in IT systems.

STEP2 is not yet fully competitive with all existing domestic systems due to the slowness of crediting the recipient's account and the costs being higher than in existing domestic systems. The number of payments transferred through STEP2 has, however, grown within the past 12 months. The average monthly volume of payments transmitted is approximately 180,000 transactions. The number and value of payments would increase significantly if the system could also be used for transferring domestic payments.

In spring 2005, the Euro Payments Association announced that Spanish and Italian banks are currently studying the possibility of transferring their domestic payment traffic to the STEP2 platform.[3]

[3] See www.abe.org.

The objective of integration is to improve efficiency …

… the mere process of change nevertheless entails risks.

If these plans materialise, it may increase the importance of STEP2 as a pan-European automated clearing house. Only credit transfers can be processed through STEP2, but the objective is to increase the number of payment instruments available. The system is apparently being developed to include direct debits and domestic credit transfers. Finnish banks have started to route at least some of their small-value cross-border payments in euro to the EU area through the STEP2 system.

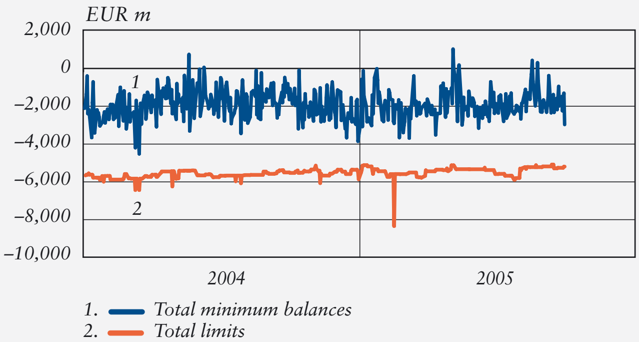
The Continuous Linked Settlement (CLS) system is a foreign exchange (FX) settlement system aimed at reducing banks' risks in settlement of foreign exchange trades. The number of transactions settled through it has risen significantly. The number of settled trades is significant despite the fact that many FX transactions are still settled outside the CLS system. Despite some disruptions, the system has operated satisfactorily. The operational reliability of the CLS system is ultimately dependent on the operation of the TARGET system and on the corresponding systems of all the currencies handled in it. A disruption in TARGET may be contagious to the national systems of currencies eligible for CLS, which may threaten the liquidity and stability of local financial markets. If these systems do not operate satisfactorily, it may cause a crisis in the global financial system.

Domestic systems used in interbank funds transfer (the POPS system for large-value transfers and cheques and the PMJ system for retail payments) have – with the exception of a few minor disruptions – operated satisfactorily. The ATM and payment card networks, which are an essential part of domestic payments, have operated without major disruptions.

System liquidity contributes to the reliable operation of payment systems. Data on the BoF-RTGS system shows that the system participants have had a substantial amount of liquidity for settling their payments. The liquidity available in the BoF-RTGS for participants' payments consists of their assets and intraday credit granted by the Bank of Finland (Chart 34).

Chart 34.

Participants' minimum balances and intraday credit limits, total in BoF-RTGS



Source: Bank of Finland.

Prospects for development

Within the past year, European integration has progressed but there is still much that needs to be done. The objective of integration is to improve the efficiency of payment systems. The current systems' ability to transfer payments swiftly throughout the entire euro area remains inadequate. Market participants and authorities are therefore seeking new solutions for developing payment systems that cover the euro area as a whole. This is reflected in the development projects of banks' and other market participants' as well as NCBs' systems.

This extensive process of change entails significant risks to the reliable operation of payment systems. A key issue is whether the new systems fulfil the needs of the users. The completion of development projects is often delayed and compromises have to be made between various demands. This increases the risks of the finalised systems not being based on contemporary and efficient technology with high availability. Current Finnish infrastructure is already quite efficient, and therefore European developments may not provide desired benefits to Finnish market participants or improved services to Finnish customers.

The authorities support integration by several means in order to achieve the optimal result. The European Commission has created conditions for the operation of the new systems. It has, for example, prepared a new legal framework for payments in the internal market to harmonise EU legislation. The new legal framework will be issued in late autumn. Also, for example, the Eurosystem actively supports banks' efforts to create a Single Euro Payments Area (SEPA), although this complex and demanding work progresses only slowly.

The Eurosystem's work towards developing a new large-value payments system has proceeded. The schedule is, however, quite challenging. According to current information, TARGET2, the second generation of TARGET, will be introduced in the second half of 2007. The project will be executed by a development group consisting of the central banks of three large member states, Germany, France and Italy. The reliable operation of both the new and current system also in the transition period is of the utmost importance to the financial system because they form the backbone of the entire infrastructure.

Creating a new system is an extensive and demanding task. Prior to system introduction, several issues must still be agreed on, for example, the way in which securities settlement systems use TARGET2 and the pricing of services. If the pricing scheme of the future system is not competitive, banks may stop using services provided by central banks, this having a potential impact on their risk management.

The objective is to establish common payment methods for all EU citizens by 2008.

Finnish banks have started to adapt their interbank payment systems so that in future, the transactions are settled in the TARGET2 system. The POPS system's payment instructions would be transferred through the SWIFT system. Technically this is not a major change; the challenge lies more in, for example, introducing the English language into banks' processes. The operations of the PMJ system will also be affected to some extent. The level of service provided to customers seems to, however, remain unchanged.

Preparations for a Single Euro Payments Area (SEPA) are taking place within the framework of the banking sector's joint forum, the European Payments Council (EPC). Its working groups – the members of which include representatives of Finnish banks and the Finnish Bankers' Association – have been preparing initiatives on the introduction of pan-European payment instruments. The original objective was to establish a Single Euro Payments Area for citizens by the year 2008, from which time common payment methods should be available to all Europeans. Domestic payment methods would, nevertheless, still be available. A fully integrated Single Euro Payments Area should be achieved by 2010. The common payment methods included in the initiative are credit transfer, direct debit and card payment.

Is SEPA obsolete before it has even begun?

A key issue in developing a pan-European direct debit system is to define the data that would be transferred in the payment transaction. The transferred data must be compatible with the automated business processes of both the payer and the payee. In this development, Finnish banks are well advanced by international comparison. In order to improve efficiency of the European corporate sector in line with the Lisbon strategy, European banks should invest in improving their clearing and settlement systems as a whole. Otherwise we will be forced to accept the limitations of the least advanced national system as part of pan-European operations and thus not achieve the efficiency gains required.

The concept of the pan-European direct debit being prepared differs from the one currently used in Finland. It covers also non-recurring payments which in Finland are usually paid using a debit card. Moreover, payment authorisation will take place between creditor and debtor, without banks' control. Nor is European direct debit transaction final after settlement. Instead, according to the SEPA Direct Debit scheme, payment can be cancelled as late as three months after the settlement day. Electronic invoicing, which is rapidly gaining ground, is a suitable next generation solution in Finland. If regulation does not affect development, the role of the SEPA Direct Debit scheme is likely to remain of minor significance in Finland.

The SEPA programme requires that euro area payments and domestic payments should be congruent. Consequently, domestic payment cards and payment card systems should be given up. Moreover, there are pressures to introduce a harmonised retailer commission for each card scheme in the euro area. In Finland, the acquisition of card transactions is efficient and retailer commissions are low by international comparison. Therefore, the changes are unlikely to benefit Finnish retailers.

The European Payments Council's objective is to define, together with SWIFT,[4] standards for payment instruments included in the SEPA programme, and their use. This enables the creation of a level playing field for services and ensures a high-level of compatibility between new and existing systems. On the other hand, this may be a slow way of creating standards, which may in turn slow down migration to new solutions.

The payment transfer infrastructure included in the SEPA programme may be one of the most difficult issues market participants have to agree on in order to create a Single Euro Payments Area. An efficient infrastructure would seem to require large operators. This, in turn, threatens the operating conditions of

[4] A financial industry-owned co-operative supplying messaging services and interface soft-ware.

Box 6.

Arguments for creating a single euro payments area

In 1999, at the start of Stage Three of EMU, the euro was introduced as scriptural money, and three years later in 2002 the changeover to euro cash was made. This, however, did not result in the harmonisation of payment transmission or in a pan-European provision of payment services. In payment services, inefficiency and deficiencies are mainly due to[1]

- inadequate interbank infrastructure
- inefficiency of banks' internal processes
- inefficient communication between bank and customer
- incomplete standardisation
- unwillingness to invest in payment systems.

The benefits brought to citizens and the European economy by the euro could be better realised by creating integrated payment services and open payment systems, by lowering the fees on payments effected in the euro area, by shortening the time used for payment transfers, by clarifying the charges levied for payments, and by introducing existing standards. The premise of the ECB is primarily that the banking sector acknowledges the benefits of a Single Euro Payments Area (SEPA) and wants to realise them. Regulation can be only a secondary option.

The European Parliament and the Council issued Regulation No 2560/2001 on cross-border payments in euro. Under this regulation, as of July 2002, the charges levied for cross-border payments of less than EUR 12,500 (in practice ATM withdrawals) must be the same as those levied for corresponding domestic payments. The regulation has applied to cross-border credit transfers as of July 2003. This type of euro payment must fulfil the following criteria: it must be executed in electronic form and it must be routed to the recipient using an International Bank Account Number (IBAN) and an international Bank Identifier Code (BIC). As of 1 January 2006, euro payments must be less than EUR 50,000. The regulation also includes a provision on notifying the customer of the charges to be levied.

In 2002, the Euro Banking Association (EBA), three European associations of credit institutions[2] and 42 European banks established the European Payments Council (EPC) to improve payment transmission. EPC member banks are committed to creating a Single Euro Payments Area (SEPA) by the year 2010. The objective applies primarily to the euro area and euro-denominated payments effected in the euro area. Non-euro area countries may participate and introduce the practices created as part of the initiative.[3]

As the work of the European Payments Council progresses, the following foundations for a Single Euro Payments Area have been specified

- common payment instruments: credit transfer, direct debit and payment cards
- the application of common standards, such as the International Bank Account Number (IBAN) and the electronic Payment Initiator (ePI)
- the definition of a Pan-European Automated Clearing House (PEACH).

The time-table for creating a Single Euro Payments Area – available to all citizens by the year 2008 and full harmonisation by 2010 – is extremely challenging.

[1] Improving cross-border retail payment services – The Eurosystem's view, September 1999.

[2] European Association of Co-operative Banks (EACB), European Savings Banks Group (ESBG), European Banking Federation (FBE).

[3] Here, Europe refers to the 25 member states of the EU, Iceland, Norway, Lichtenstein, and Switzerland.

Can the EU take advantage of the opportunities offered by modern technology?

small regional and national financial service companies. Their resources to network as part of the pan-European clearing mechanism are limited. Successful standardisation could, however, improve the position of small operators. In terms of a Single Euro Payments Area, it might therefore be beneficial to proceed in stages. The first stage could see the creation of common standards and payment instruments. Only at the second stage would changes in infrastructure be assessed to see if they require acceleration by means of regulation.

Adjusting to the services and infrastructures covered by the SEPA programme and roadmap will be challenging to all parties concerned. In this project, as in all projects where the parties come from different operating cultures, outcomes are not always based on the best criteria in terms of the quality of services. Instead, the parties – while well aware of the shortcomings – are required to reach a solution that is based on the practices of the most powerful members. A crucial issue is how to define efficiency and whether the parties recognise the differences between short- and long-term efficiency. There is a clear difference between optimising the current situation and creating the best possible framework for future development. Currently, there seems to be insufficient incentive to create new streamlined operating practices that require new technology or significant structural changes. It is essential that the process of creating a Single Euro Payments Area does not end with the plans currently being drawn up, but that it continues beyond the existing deadlines.

Within ESCB cooperation, the objective of the Bank of Finland is to shed light on the opportunities provided by automated payment processes and introduce into the discussion a Nordic perspective on efficiency. Finnish banks and the Finnish Bankers' Association participate in the work of the European Payments Council. It is to be hoped that they can allocate enough resources to this work, only then may the future look more like the one we have been striving for and we as an economic area do not simply have to be conformist.

An increase in use of electronic money could improve efficiency if electronic money replaced cash, which is an expensive means of payment in macroeconomic terms. Recent statistics show that the amount of banknotes issued in Finland since the introduction of the euro has doubled.[5] At the same time, the number of card payments has also increased. A similar trend has been observed in the other countries of the euro area. In Finland, debit cards are the most popular payment cards. We may see changes in the use of payment cards as debit cards restricted to domestic transactions are within the next few years replaced by international payment cards that are linked to the payer's bank account. Other instruments of electronic payment include mobile payment solutions. There has been little use of such solutions either in Finland or elsewhere in the euro area. They are, however, expected to improve efficiency in the long term.

[5] See www.bof.fi/eng/5_tilastot/5.2_Tilastojulkaisut/index.stm.

Securities clearing and settlement systems

Operating environment

Integration of the securities market infrastructure continues – through both systems integration and ownership arrangements. Both the European and the global operating environments are undergoing a process of change in which efficiency gains are sought after. While stock exchange integration has made rapid progress, integration of post-trade processes has been slower and the operating field is still fairly fragmented.

The consolidation of regional stock exchanges into increasingly larger entities is important from the point of view of enhancing their competitiveness. The primarily Swedish-owned OMX AB has pursued a Nordic-Baltic integration strategy. The Copenhagen Stock Exchange's joining the OMX Group in February is an example of efforts to obtain cost savings through larger units and to increase trading volumes, thereby ensuring continued presence in the knockout competition between European stock exchanges. The OMX Group has grown in size, but is it large enough to face European competition?

Exploitation of the economies of scale was also behind the arrangements, completed at the end of 2004, in which the Helsinki Stock Exchange's euro-denominated derivatives trading, based on Finnish underlying assets, was concentrated on the Stockholm Stock Exchange. As a result of this transfer, there is no central counterparty (CCP) clearing house operating in Finland any longer, although they are widely used in European derivatives and cash markets. In contrast, an individual commercial bank acts as a Finnish link to the Stockholm Stock Exchange, which ensures central counterparty functions for derivatives clearing. This provides an example of a situation where Nordic integration developments create pressures on central banks for the provision of services. If central banks fail to meet the expressed wishes, eg in connection with TARGET2, the markets draw their own conclusions and start using commercial bank money as a settlement asset. This will lead to higher risks, which cannot be regarded as a desirable development trend.

Integration via ownership arrangements is a difficult and slowly advancing process. As a result of consolidation developments, the number of euro area central counterparties has decreased from 14 to seven in the period from January 1999 to May 2005, whereas the number of central securities depositories has diminished by only four to 19. However, the majority of central securities depositories operate as part of holding companies (Euroclear Group, Clearstream International, Spanish BME-Group).[6] While, so far, the number of central securities depositories has not actually fallen, efficiency gains have been sought by developing common systems and concentrating their operations.

There is no central counterparty clearing house any longer in Finland.

Irrespective of the degree of integration in clearing and settlement systems, inefficient systems pose a threat to market developments. They weaken the ability and willingness of market participants to

[6] ECB (June 2005) Financial Stability Review.

Serious disturbances in APK systems avoided.

engage in EU-wide securities trade. They also reduce financial market liquidity and unnecessarily increase the price of capital. Straight through processing (STP) and interoperability are the key challenges in both Finnish and international markets. It must be possible to provide services effectively in terms of both costs and operations.

The aim in the establishment of the Nordic Central Securities Depository (NCSD) group is also to exploit the economies of scale. Although the group is for the present composed of only the Swedish Värdepapperscentralen (VPC) and the Finnish Central Securities Depository (APK), its viewpoint is pan-Nordic. Market support is a key precondition for a successful completion of this project known as a Nordic CSD model. Shareholdings of the largest market participants are likely to guarantee support, but their mutual competition may act as a constraint on decision-making. Sound governance takes issuers into account and ensures support for decisions through public consultation. A year ago, the Bank of Finland already called attention to the weak role of issuers within management structures. It remains to be seen whether the Nordic CSD model will resolve the problem. While there is an agreement in principle that the markets will benefit from a Nordic market area, the slow opening up of old 'bastions' to competition may provide an obstacle to achieving economies of scale. The Danish bond market's strong links with Euroclear Bank, in particular, keep up incentives which may not be supportive of wider Nordic integration in the short term, although the Copenhagen Stock Exchange is part of the OMX Group.

Operational reliability of systems

Still quite considerable differences exist between various securities clearing and settlement systems in the EU. The objective is to harmonise these systems via the actions of authorities and market participants alike. Differences in design have a direct impact on the operational reliability of the systems; the significance of risks varies from one system to another. The APK's systems have functioned reliably in the course of the current year.

As part of the Eurosystem, the Bank of Finland has for several years assessed the APK's clearing and settlement system for debt instruments (RM system), in which the majority of collateral delivered to the Bank of Finland are registered. The RM system has met the requirements from the very beginning. No such assessment has been made in the current year, as the ECB has been waiting for completion and entry into force of standards and assessment methodology issued by the ESCB and the Committee of European Securities Regulators (ESCB-CESR).[7] These assessments are important for ensuring that the basic infrastructure of the financial markets does not itself act as a source of serious disruptions and that procedures protecting clearing parties are taken into account in the development work. ECB user standards[8] may also need to be updated to reflect market

[7] See Box 5.

[8] EMI (1998) Standards for the use of EU securities settlement systems in ESCB credit operations.

developments and the progress made in the area of oversight policy. During the review period until the end of August, the due-date settlement rate for money market trades was on average 99.6% and the availability rate[9] 99.8%. The availability rate for the centralised register was excellent at 99.9%.

The APK's equities clearing and settlement system, HEXClear, introduced at the end of 2003, has reduced the APK's risks and exposures from the operations and increased reliability in post-trade processing. Settlement of on-exchange trades within the standard settlement period has functioned well. By the beginning of September, on average 99.3% of on-exchange trades were settled on schedule; in value terms the corresponding figure was 98.9%. The availability rate for equities clearing and settlement was on average 99.6%. While there have even been intermittent occurrences of disturbance affecting clearing parties' operations, emanating from the APK and the clearing parties themselves, system flexibility has prevented incidents from causing more serious repercussions and market operations have at worst been hampered only for short periods of time. Both VPC and APK system operations – and notably the operation of communication systems between the two central securities depositories – are critical, as the number of members participating from abroad has increased and, for instance, part of Swedish clearing parties act in the APK via intra-NCSD communication systems.

Participation on a remote basis has become increasingly important for the Helsinki Stock Exchange and the APK, but this has not led to entirely positive developments. There is a comparable number of remote members in central securities depositories in Finland and Sweden (Table 7). The number of remote members is an indication of interest shown in the market. However, while on-exchange trades settled in the APK's HEXClear are, on average volume terms, in line with the recommendations issued by ISSA[10] for clearing and settlement (>97.5%), certain – often the very same – remote brokers recorded the majority of below-norm performances in the period from January to August 2005 (Chart 35). Accordingly, it would appear that not all clearing parties make use of the possibility of share lending against

[9] The availability rate is determined by the targeted operating time of a service and by the scope and duration of a disruption.

[10] International Securities Services Association, an international cooperation forum for securities depositories, has issued recommendations for a minimum settlement level (in volume and value terms).

Table 7.

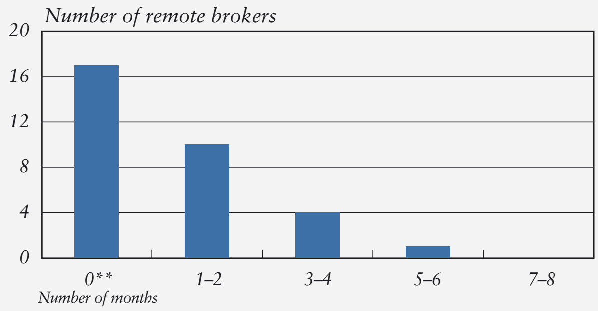
Number of CSD remote members relative to all clearing members

	Finland		*Sweden*	*Denmark*	*Norway*
Type of member	*APK OM*	*APK RM*	*VPC*	*VP*	*VPS*
Clearing party	*6/23*	*0/15*	*2/38*	*31/199*	*20/42*
Account operator	*2/11*	*0/15*	*3/41*	*n.a*	*n.a*
Broker	*33/48*	*n.a*	*47/81*	*n.a*	*n.a*

n.a. = not available / not applicable.
Sources: APK, Central Bank of Norway and Central Bank of Denmark.

Chart 35.

Number of months in which remote brokers on the Helsinki Stock Exchange failed to fulfil the international settlement norm*, January–August 2005



* ISSA norm 97.5% (based on number of on-exchange trades).
** Calculated on the basis of the number of remote brokers in August 2005.
Sources: APK and Bank of Finland.

delivery failures. High failure rates in mainly stable market lead to weaker efficiency in the market conditions and a lower settlement rate. Settlement delays and failed trades cause plenty of additional work for the back office operations of market participants. In the longer term, central counterparty clearing could ease the problem in providing automatic lending services or covering settlement failures directly from the market on behalf of the delayed clearing party.

System efficiency

The NCSD aims at truly pan-Nordic markets.

Measuring infrastructure efficiency is cumbersome, but inefficiently operating systems are not optimal from the point of view of the national economy, under any circumstances. On the basis of the above-mentioned measures of reliability, both the RM and the OM system continue to meet last year's sound performance levels. Even so, isolated cases of disruptions may trigger the launch of continuity and contingency measures, which call for extra resources, thereby taxing financial market efficiency.

The Nordic Central Securities Depository group, having completed the initial stages of operations, sets its sights on advantages offered by the economies of scale. Completion of the joint Nordic CSD model – and the related common platform – is likely to pose one of the main challenges for the near future. Project timetables may prove critical; the question is whether the necessary efficiencies will be gained quickly enough, considering consolidation pressures in the operating environment. If such gains remain unattainable, the marketplace may wither, as users move elsewhere or the market disappears from Finland as a result of a merger.[11] Although the advantages of a common system are apparent, user inclination to implement large system investments may be fairly low, as new clearing and settlement systems have only recently been introduced in both Finland and Sweden. Existence of clear strategies is important. They enable long-span activity and may reduce clearing party costs in the longer term.

While only the Finnish and Swedish central securities depositories are currently involved in the NCSD, a wider Nordic CSD participation can be regarded as desirable for the objective of a truly pan-Nordic market.

Despite the fact that there are no significant problems in the Finnish securities market infrastructure, considerable inefficiencies arise from using different systems for processing trades in debt instruments and equities. The RM system, which is mainly based on manual

[11] Finnish legislation requires that the registrary function be located in Finland.

input of data, is not conducive to financial market efficiency, except for the use of internal liquidity.[12] The RM system has proved sufficient for the time being, as the number of trades settled in the system has been decreasing for a fairly long period of time. A hike in interest rates would however be likely to lead to increasing activity in the debt instruments market, thereby challenging the adequacy of the RM system and back-office staff. Transfer of all instruments into a single clearing and settlement system should be made a priority. Such a new system should be designed so as to include collateral management services equalling, at the minimum, the service level that is currently provided.

The HEXClear system enables a more flexible market entry for new clearing parties in connection with equities clearing and settlement, thus enhancing market efficiency. However, the strong concentration of settlement transactions on a few clearing parties can still be regarded as an operational challenge in Finland. Concentration may pose risks to the smooth functioning of post-trade processing. There have been no significant changes in the degree of concentration in the course of this year (Chart 36).

The opening days and hours of HEXClear do not fully correspond to those of TARGET. In this respect, HEXClear does not meet the recommendations issued by the European Central Securities Depositories Association (ECSDA) for enhancing market harmonisation.[13] Similarly, the APK does not offer overnight clearing and settlement facilities, which some EU countries consider capable of increasing market efficiency. In contrast, Finnish clearing parties have in place sophisticated information systems that enable

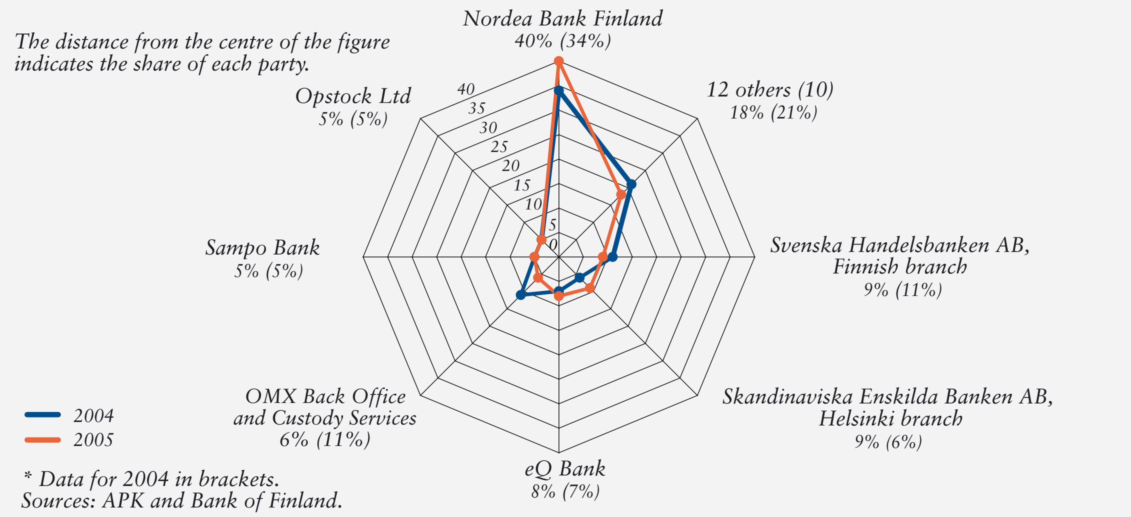
The size of Helsinki as a marketplace provides a surprise, but its future will be weighed in development projects.

[12] See 'Stress testing of the clearing and settlement system of Finnish bonds – a simulation approach' in the Bank of Finland Bulletin Financial Stability special issue 2004 (Box 9).

[13] ECSDA (2004) The European Central Securities Depositories Association's response to the Giovannini Report.

Chart 36.

Clearing party shares in exchange trading, % transaction volumes, January–August 2004* and 2005



* Data for 2004 in brackets.
Sources: APK and Bank of Finland.

The NCSD's common platform should serve euro area needs.

processing of trading volumes during the day. Some European central securities depositories grant credit as part of their post-trade processing operations – this is not the case at the APK, as – according to law – it should avoid risks from functions auxiliary to book-entry register and settlement activities.

Investor-specific book-entry accounts are a typically Finnish feature. Settlement of trades through these accounts is sometimes perceived by foreign participants as constituting a burden, especially because this is not a continental practice. On the other hand, the accounts facilitate control of insider trading and prevent abuse of customers' book-entry securities. Some clearing parties have also managed to bring greater efficiency to their own procedures, as settlement takes place via the end-customer's account.

In the course of this year, Helsinki's role as a marketplace has been actively debated in Finland. The discussion has been motivated by the reform of lists on the Helsinki Stock Exchange. The Stock Exchange seeks to improve market efficiency by revising the structure of its lists. Early July saw the introduction of an industry classification already used by the other NOREX stock exchanges,[14] the global industry classification.[15] The new classification enables a better comparability between Nordic stock exchange lists. Both foreign and domestic investors should benefit from the new classification, as it enables comparison of Finnish issuer companies against a more harmonised and wider reference group. Despite this, small listed companies have expressed concern about the loss of visibility because of extended lists.

It is hoped that the new list structure will also have an impact on new companies' listing behaviour. During the first six months of the current year, the Helsinki Stock Exchange recorded five new listings and three delistings. Tighter dividend taxation following listing can be one reason for the small amount of new listings. In addition, the financial standing of many Finnish companies is currently very good, and therefore they have no major need for capital. On the other hand, this pattern may illustrate strong corporate earning capacity, reluctance with regard to investment and risk-taking or, simply, owners' willingness to remain as company owners and managers. Tighter regulation of listed companies does not encourage listing either.

A number of internationally interesting issuers lend support to the marketplace status of Helsinki. These issuers make the local market accessible to smaller companies and attractive to foreign investors, inviting them to familiarise themselves with other Finnish companies. The statistics for country-specific SWIFT message volumes, according to which Finland is the 14th largest sender of securities messages, show either the importance of the marketplace or the fact that international standards have been well adopted in the Finnish market.[16]

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14 The NOREX group includes the Helsinki, Iceland, Copenhagen, Oslo, Riga, Tallinn, Stockholm and Vilnius Stock Exchanges.

15 Global Industry Classification Standard (GICS).

16 SWIFT country Watch 2005Q2: Finland, by permission from SWIFT.

While the Copenhagen Stock Exchange's joining the OMX Group and the establishment of the Nordic Central Securities Depository group can be considered a positive signal in favour of North European consolidation developments, achievement of genuine efficiency benefits is still nascent. All OMX stock exchanges have, however, access to a shared trading system. Would efficiency improve if OMX stock exchange operations were fused under a single stock exchange licence? According to the Helsinki Stock Exchange, there are no reasons why efficiency would increase if operations took place from one single stock exchange; even so, existing arrangements leave consolidation 'incomplete'. Nordic and Baltic stock exchanges are being developed as separate entities, which cannot necessarily be regarded as efficient from the perspective of emerging Baltic markets. The different nature of the small Baltic markets within the OMX Group is also illustrated by the fact that their national central securities depositories continue to be owned by stock exchanges, contrary to Finland, which saw OMX selling its national central securities depository APK to VPC. A similar 'partial' consolidation strategy is also apparent from developments within the NCSD; APK and VPC are separate legal companies inside the NCSD group and will also remain so under current legislation. The goal of systems integration is to have a common platform in place, but it will still take time. It is imperative that, once in operation, the platform would contribute to favourable developments in Finnish and euro area financial markets.

System liquidity

Introduction of the RTGS-based HEXClear system has increased flexibility in the liquidity management of stock market clearing parties and brought greater reliability and efficiency to equities clearing and settlement. The new system has proved useful, particularly in connection with some delays experienced by clearing parties in fulfilling their payment obligations.

Common system projects should not pose risks to the APK.

According to its operational model, HEXClear absorbs liquidity, but also enables liquidity savings, as the majority of trades are settled in the day's first optimisation run. The rest of the trades can be completed either in other optimisation runs during the day or in a real-time trade-by-trade settlement. In the period from January to August 2005, on average 97.4% of all trades were completed in optimisation runs in volume terms, which points to an increase of just under one percentage point from the year-ago level. The efficiency of liquidity usage can be measured by dividing the value of total pay-ins to the APK's settlement account at the Bank of Finland by the value of all trades settled. Clearing parties could withdraw the majority of their assets deposited with the system after the morning optimisation run, but this does not appear to happen.[17] This suggests that clearing parties hardly face liquidity shortages. Liquidity required for the clearing and settlement process is described in Box 7.

The importance of bond and money market settlement (RM system) and the

[17] See 'Liquidity tied to equities clearing and settlement by hour in April 2004' in the Bank of Finland Bulletin Financial Stability special issue 2004 (Chart 47).

Box 7.

Efficiency of liquidity usage and the use of risk-reducing practices in equities clearing and settlement

HEXClear system's optimisation process saves liquidity. Simulations performed by the Bank of Finland, using data supplied by the APK,[1] give more accurate results than previously on liquidity usage in equities clearing and settlement.

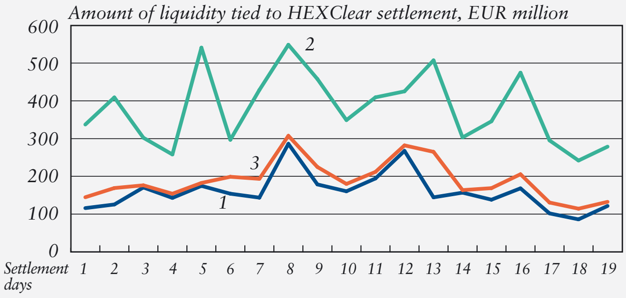
The results were achieved by comparing the actual amount of liquidity tied to equities clearing and settlement to a simulated[2] situation in which trades are settled trade by trade. In practice the liquidity requirement in the trade-by-trade process would be higher unless the bookings of fund transfers were made directly on the clearing parties' RTGS accounts. The compared value was the maximum total daily amount of liquidity tied to settlement at a given moment was compared. The order of settling transactions corresponded to a situation in which the transactions would be submitted to be settled by the APK's trade-by-trade process, if the optimisation process is not available. In reality, the order of settlement may differ slightly due to parallel processing available at APK. In trade-by-trade settlement the order of transactions is essential because it may have a key impact on both the liquidity needs and on the outcome of the settlement process.

A shortage of securities that is due to the removal of the netting impact of optimisation runs and to the order of transactions in trade-by-trade settlement was handled in the modelling so that the clearing parties were given the opportunity to borrow the required securities from efficient repo markets at market value.[3] In the Finnish model, shortages can become significant because trades are settled directly on the accounts of individual investors. In reality, there is a variety of securities lending products available. Moreover, the availability of individual securities differs by the type of security and the size of the investor. An efficient securities lending system promotes smooth post-trade processing. However, a shortage of securities cannot be covered free of charge, and thus the use of the system usually has at least a marginal cost effect. The results show that an efficient clearing and settlement method may save close to EUR 400 million of liquidity per day (Chart A). In trade-by-trade settlement, the order of transactions may momentarily cause a major shortage of securities, which explains individual large variations in the efficiency of clearing and settlement methods from one day to another.

When the securities shortage was not taken into consideration, the difference between amount of liquidity required in various settlement methods was generally smaller. Daily liquidity savings amounted to 21% on average, with savings totalling 83% on the busiest settlement day.

Chart A.

Comparison of the amount of liquidity required per day in the optimisation process and in trade-by-trade settlement



1. Maximum actual amount of liquidity tied to HEXClear in the optimisation process.
2. Maximum amount of liquidity required momentarily in trade-by-trade settlement. Securities shortages based on market values.
3. Maximum amount of liquidity required momentarily in trade-by-trade settlement. Fund transfers only taken into consideration.

Sources: APK and Bank of Finland.

[1] The detailed data included all transactions on 19 settlement days in June–July 2005.

[2] In the simulation, the Bank of Finland BoF-PSS2 simulator was used. See www.bof.fi/sc/bof-pss.

[3] Some of the direct asset transfers made between book-entry accounts are not included in the modelling. This may have had an impact on the volume and timing of securities shortages in the simulation.

It is important to note that settling securities transactions on the trade date (T+0) increases efficiency and decreases replacement risk. In Finland, on-exchange trades are matched and recorded in the clearing and settlement system automatically, whereas other settlement transactions are recorded by the clearing parties. In the case of the latter, the HEXClear system continously searches for corresponding transaction pairs based on the trade data in order to match them for further processing. The system enables the processing of trades already on the day the trade was closed if the clearing parties so decide and if the settlement criteria are fulfilled. In 2005, as many as 2.7% of OTC trades and settlement transfers (monthly, based on volumes) were settled already on the day of the trade. The majority of on-exchange trades are processed in three days, as per market practice, (99% on average, based on volume). However, a small number of on-exchange trades are settled already on the trade date.

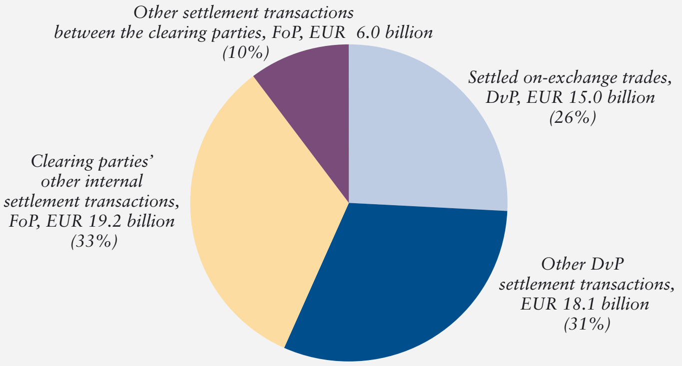
The HEXClear system is structured so that securities are delivered to the buyer against payment, which fulfils the DvP (delivery versus payment) requirement. The system also settles transactions without counter-performance, ie free of payment (FoP). FoP transactions include asset transfers in which book-entries are transferred between a clearing party acting as a custodian and a clearing party acting on behalf of the buyer or the seller. If a FoP transaction entails a payment, it is settled outside the clearing and settlement system. In such a case, the DvP requirement can be fulfilled in a system other than the one of the central securities depository. It is nevertheless difficult to verify the fulfilment in the system of other service providers. For example, the requirement is fulfilled if a custodian bank acting on behalf of its customer hands an asset over to its customer against a credit limit. However, the requirement is not fulfilled if the securities and cash are simultaneously held by the same clearing party.

A key question is whether FoP transactions processed in the central securities depository's system create risk. This was analysed by separating FoP transactions from DvP transactions, and by examining how large a proportion of the FoP transactions are between clearing parties. At the same time, market prices were used to assess the importance of FoP transactions.[4] In the HEXClear system, a total of 57% of settlement transactions were executed in accordance with the DvP principle (Chart B). Some of the FoP transactions represent asset transfers executed in connection with on-exchange trades settled in accordance with the DvP principle. The risks that are possibly involved in FoP transactions, however, require deeper analysis.

[4] Closing prices were used as reference price. They corresponded very closely to the settlement price (if stated in the clearing and settlement system). Standard deviation of the difference between the reference price and the settlement price, relative to the settlement price was less than 1%.

Chart B.

Value of settlement transactions in HEXClear during the review period



DvP = Delivery versus Payment.
FoP = Free of Payment.
Sources: APK, Reuters and Bank of Finland.

amount of liquidity tied thereto have diminished in response to lower volumes. Settled trades have decreased in recent years in terms of both value and volume (Table 8). This development is explained by stable low interest rates and changes in benchmark government bond trading. If interest rates rise, activity in the debt instruments market will apparently pick up, too.

Both HEXClear and RM settlement can operate on an intra-day basis without any connection to the central bank, which is efficient in exceptional situations, in particular.

Benefits from structural changes will be gained slowly.

APK and VPC, forming the Nordic Central Securities Depository group, have traditionally handled the payment transactions of securities trade through central bank accounts at their disposal. Having decided not to participate in TARGET2, the Swedish central bank launched a project for reforming its RTGS system based on the Swedish krona. The new system will replace the existing one during the first quarter of 2007, and the aim is to close the euro-based system (E-RIX) by the end of 2006. This will have a direct impact on the way in which VPC will manage euro-denominated clearing and settlement in the future. Finding an effective solution – without increasing risk – is a time-critical, financial stability-related task. Although euro-denominated VPC volumes are fairly small, no such situation may arise in which the APK would incur risks in connection with VPC processes.

Table 8.

Nominal value and number of settled trades in money market instruments (RM)

	EUR bn	Number
1999	486	57,937
2000	489	55,458
2001	406	45,726
2002	294	35,767
2003	167	22,567
2004	159	19,556

Source: APK.

Development prospects

Transformation of stock exchanges into listed companies means increasing competition, and from which not all stock exchanges can come out on top. Ownership arrangements between Deutsche Börse, Euronext and the London Stock Exchange will determine the future European market model. What the position of Nordic and Baltic stock exchanges will be in this competition remains to be seen. A global addition to this competition comes from US and Asian stock exchanges.

Structural arrangements and systems integration will continue in Northern Europe. Although only the Finnish and Swedish central securities depositories are presently involved, the aim of the NCSD is to be a genuinely Nordic group. The group seeks to benefit depository bank customers and stock exchange trading customers in Nordic marketplaces, in particular. This will not suffice in the long term, as achievement of macroeconomic gains requires that issuer needs, in particular, be taken into account better than they presently are. The current NCSD ownership structure is not ideal for supporting this. The owners – OMX and large Swedish banks – benefit from the group's profitable performance, but if these benefits are not channelled further to issuers, thus remaining mere payers of NCSD costs, companies' willingness to arrange issues may diminish or they may apply for listing in other EU or US marketplaces. This sort of development would not be conducive to the objective of financial market efficiency.

Market participants also seek more effective solutions outside the traditional regulated markets. OTC trading has recently become increasingly popular in Europe; notably OTC derivatives are favoured by final investors.[18] Interest in electronic marketplaces has grown following the success of the European electronic marketplace EuroMTS.[19] The directive on markets in financial instruments (MiFID) extends EU regulation so as to cover off-exchange marketplaces, too, thereby providing market participants with a more level playing-field. Transposition of the directive into Finnish national legislation aims at providing scope for the emergence of competing marketplaces for the Stock Exchange.[20]

Swedish ownership dominates the Finnish securities market infrastructure. The largest owners of OMX (June 2005), occupying a dominant position on the Helsinki Stock Exchange, are Investor AB, Robur AB, the Swedish government and Nordea AB. Among the ten largest owners there are no Finnish ones.[21] The Finnish Central Securities Depository (APK) became a fully owned subsidiary of the Swedish Central Securities Depository (VPC) after OMX had sold APK to VPC at the end of 2004. The principal owners of the Nordic securities group are OMX and large Swedish banks with equal holdings (about 20%). The central securities depositories act as independent legal units, under the laws of their respective countries and on the basis of their national licences. The national dimension is important, and legislation often sets limits on harmonisation of practices.

Structural changes, profitable performance and efforts to expand in size reinforce the authorities' continued need to ensure that the overall risk management function as well as the APK's clearing party control, as part of its self-regulation, are on a sound basis from the point of view of clearing and settlement reliability. Detachment from the OMX Group has reduced the APK's exposures and eventual future risks from other operations.

The NCSD group's outlook, competitive position, reliability and efficiency will be essentially affected by the accomplishment of a shared operating environment and system platform in the near future. Owner commitment to the project is important. Clearing and settlement as a whole constitutes the most expensive part of all functions related to book-entry securities, and the attainable cost

[18] See eg BIS (2005) Triennial Central Bank Survey. Foreign exchange and derivatives market activity in 2004 and Bank of Finland Financial Market Report 2/2005.

[19] EuroMTS Ltd is a private London-based company offering an electronic trading platform for trading mainly in government debt instruments, see www.euromts-ltd.com/.

[20] The directive must be implemented in national legislation by October 2006.

[21] OMX Ab's Interim Report (January–June 2005).

Authorities focus on competition issues in the payments area.

savings are a common goal, irrespective of costs involved in development. Following the establishment of the NCSD group, the APK's overhead costs have fallen, which enables allocation of operating profits to system investments.

A competitive and efficient market can scarcely operate in the future without a central counterparty clearing entity covering both derivatives and cash markets – recently, the idea of a single European central counterparty has even resurfaced.[22] The ESCB-CESR standards will also include assessment criteria for central counterparties. Assessments to be carried out in the future on the basis of these criteria are expected to include market participants' evaluations of the costs and benefits involved in central counterparty clearing. Remote brokers outside the Nordic countries are already familiar with central counterparty clearing, which forms an integral part of post-trade processing in their home countries. In contrast, as part of the euro infrastructure, the location of a potential Nordic central counterparty clearing house could pose a wider problem, as the Eurosystem has required location in the euro area.[23] This way of thinking supports the idea of Helsinki's status as a marketplace, at least in theory.

The Finnish securities market infrastructure is maintained by two separate institutions, the Helsinki Stock Exchange and APK, with shared history from the time of the HEX Group. The common background may be an advantage; on the other hand, problems may arise more easily than before, as their own separate ways of operation are still in the process of finding their final forms. The different time spans for operations may also prove a challenge. It is to be hoped that convergence of operations and development of markets will move ahead as smoothly as possible, not forgetting the importance of financial market diversity.

Developments in regulation and oversight, the role of authorities

In spring 2005, the European Commission published a policy consultation (post-FSAP Green Paper), which deals with regulation and supervision of financial services (see section 2). The aim is to find new solutions for coordination of supervisory cooperation between banking and securities market supervisors as well as central banks. This is a highly welcome initiative.

The new legislative framework for payments prepared by the Commission will have implications for integration. This framework harmonises the very different types of legislation related to payments within the EU and promotes transparency in payment services. It seeks to increase competition in the provision of payment services, thereby bringing greater efficiency to the payment process. It also provides minimum security to consumers eg by defining the terms and conditions for cancellation, issuing rules for disclosure of prices and limiting the responsibility of consumers in the case of

[22] Speech by Commissioner McCreevy. See europa.eu.int/rapid/pressReleasesAction. do?reference=SPEECH/05/503&format=HTML&aged= 0&language=EN&guiLanguage=en.

[23] ECB (2001) The Eurosystem's policy line with regard to consolidation in central counterparty clearing (www.ecb.int/press/pr/date/2001/html/pr010927_2en.html) and ECB Monthly Bulletin, August 2001.

Box 8.

Assessing the EU's clearing and settlement initiative

The objective of the European Commission's initiative on clearing and settlement is to enhance integration and the liberalisation of this sector. The initiative is of significant importance in terms of the competitiveness of the EU due to the impact on the functioning of securities markets and the cost of capital brought about by infrastructure arrangements.

In its communication[1] the Commission has declared that the objective of the initiative is to promote the efficiency and safety of EU securities clearing and settlement systems, systems which ensure a level playing field for all service providers. In this context, competition policy is applied even more consistently to prevent restrictive market practices. It is easy to agree on these objectives. Based on the responses it has received, the Commission has clarified[2] certain measures for achieving the objectives. The scope of a possible framework directive has, however, not been announced yet.

The Commission has indicated that a concise proposal for a directive would address the following key issues: open access to systems and freedom of choice of systems, as well as a common regulatory and supervisory framework. A more extensive proposal would also include appropriate governance arrangements. The evidence produced by the Commission's impact assessment outlines how big a problem each of the issues (included in the possible directive) is in the EU, and how certain measures would improve the situation in each case, before taking a decision on the contents, nature and scope of the directive.[3]

The initiative includes several issues that cause legitimate concerns for various national authorities. One of them is the definition of a regulatory and supervisory framework that is appropriate and adequate for the clearing and settlement systems as a whole. In this context it is important to note that even though the market is dominated by a group of very few, but nevertheless powerful institutions, the operators differ in many ways.

It is important that the policy initiatives being prepared in the EU are made a topic of public debate and are discussed by expert groups. Interaction between the public and private sector is of utmost importance not least because market operators may by their own actions – for example by self-regulation – have an impact on the development of certain issues already in advance. In recent years, the issues included in the possible framework directive have been the topic of lively debate in several fora, the most important of which is the European Parliament and the so-called CESAME Group established on the initiative of the Commission.

In its communication, the Commission proposes that central counterparties and securities settlement systems provide for accounting separation and unbundle different types of services.[4] As a result, the interested parties have started discussing ways of executing good governance and ex-ante competition measures.

Few market operators would want the measures to be aimed at themselves. The segregation of non-core services from core services would, however, be justified in terms of efficiency if it provided system users the possibility to compare services and choose, on demand, only those services they require.

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1 Communication from the Commission to the Council and the European Parliament – Clearing and Settlement in the European Union - The way forward COM(2004)312. See europa.eu.int/comm/internal_market/financial-markets/clearing/index_en.htm

2 Summary of the Responses. See europa.eu.int/comm/internal_market/financial-markets/docs/clearing/2004-consultation/reponses_en.pdf

3 Clearing and settlement: Outcome of consultation IP/05/346, 21 March 2005. See europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/346&format=HTML&aged=0&language=en&guiLanguage=en.

4 Communication from the Commission to the Council and the European Parliament – Clearing and Settlement in the European Union – The way forward COM(2004)312.

In this context, it would also be important to clearly define the core services. Accounting separation and the unbundling of services may have positive impacts but the measures are acceptable only if they are equal.

Competition aspects in EU clearing and settlement have recently been analysed by, for example, assessing the various types of services available and the service providers operating in the market. Parallels have been drawn with the regulatory framework applied to sectors that have the same competitive aspects as clearing and settlement, such as network economics-related benefits or a monopolistic competition situation. For example, transparency is a prerequisite for effective competition in industries that are fairly concentrated, because investors have to be able to choose their service provider based on their risk appetite and the expected costs.

These types of analyses have provided a basis for assessing, for example, barriers to entry. The situation differs significantly across various services.[5] Investors and issuers have limited choice in central counterparty clearing and settlement services, due to the low level of competition between service providers. By contrast, competition and choice seem to be available in custody services, despite consolidation. On the whole, it may be important to note that the Commission has pointed out that central securities depositories and custodian banks do not provide the same type of services: the services provided are not substitutes, rather there are considerable differences in their contents[6].

In the current situation, there is considerable pressure to system reform. There seems to be motivation to improve the efficiency of cross-border services through the interoperability of systems. The European Commission will, however, take action if changes do not take place in the market very soon[7]. Transferring to large units providing pan-European services has its benefits, but also clear disadvantages. The cost efficiency and innovativeness, and thus the technically high level of service provided by a consolidated service provider may weaken. The operating conditions of the current market areas of various sizes – they may be internally efficient and operate well in terms of, for example, legal certainty – must not be ignored. If a directive is adopted, it should be ensured that also other operators besides the largest ones have the possibility to operate as direct system participants.

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[5] See eg Branch – Griffiths, Clifford Chance (Competition Aspects of Clearing and Settlement: Learning the lessons from the Regulated Industries).

[6] Case COMP/38.096, Clearstream.

[7] Charlie McCreevy, Fund Management – Regulation to facilitate competitiveness, growth and change, Speech/05/503 13 September 2005.

abuse. The framework can thus be assumed to improve overall confidence in payment arrangements. It also sets stricter requirements on delivery times of payments. Standard payments should reach their destination in three banking days, irrespective of payer and payee domicile. This creates pressures on banks to accomplish a European payment system operating on harmonised standards. Transposition into national law of provisions contained in the framework is likely to take place within two to three years.

As part of international efforts to prevent criminal abuse of the financial system, the European Commission has issued a regulation[24] on transmitting payer information together with payment data. In intra-EU payments, complete payer information should be available from the relevant bank within three days. As regards payments going out of the EU, such payer information must be provided together with the actual payment. For Finnish banks, the entry into force of the regulation primarily entails changes in systems processing cross-border payments. The Financial Supervision Authority has specified its anti-money laundering guidelines through revisions to its set of banking regulations.[25]

Some of large Eurosystem central banks provide retail payment services in addition to their traditional payment services. These central banks also offer services to banks for cross-border retail payments by acting as payment service providers within the STEP2 system. Users of this service are typically small local banks. When central banks offer these types of services, other market participants have expressed concern about this possibly leading to distortions in competition. Therefore, on 4 August 2005, the Eurosystem formulated its policy line concerning euro-denominated retail payment services provided by central banks. Pursuant to article 22 of the ESCB Statute, the Eurosystem may provide facilities to ensure efficient and sound clearing and payment systems. Competition in payment services is, however, important for efficiency and for a Single Euro Payments Area. Therefore, central banks providing retail payment services must take market requirements and the competitive environment properly into account, at the same time devoting attention to cost recovery.

The TARGET system's market share and large quantity of customer payments may suggest that TARGET is competing with private-sector systems handling large-value payments. Comparison is difficult, as TARGET pricing is not directly based on cost recovery. The amount of processed customer payments has continued to grow, while interbank payments have remained stable in terms of both value and volume. Customer payments are rather infrequently transmitted via TARGET in Finland. Almost 50% of

[24] See europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/1008&format=HTML&aged=0&language=EN&guiLanguage=fr.

[25] The Financial Supervision Authority's Standard 2.4: Customer identification and Know-Your-Customer (KYC) procedures, prevention of money laundering and financing of terrorism, including market manipulation.

payments received from abroad in Finland are customer payments, whereas only 20% of payments sent abroad from Finland are customer payments (Chart 37). It is important that the central bank itself takes care of ensuring that payments are processed in an environment of adequate and equitable competition.

The Bank of Finland's payment and settlement system simulator improves oversight tools on a global scale.

Development of oversight

Market integration poses a great challenge for the development of oversight, as overseers should exercise oversight over increasingly large entities in cooperation with the authorities of a number of other countries.

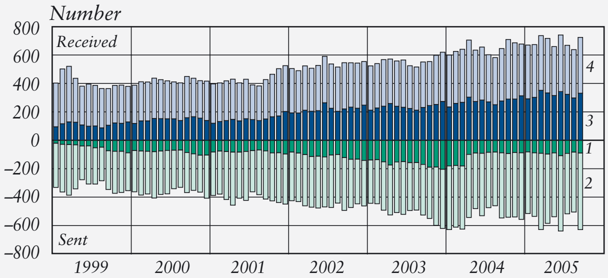
SWIFT is a global messaging network provider and serves as a framework for the development of standards for payment transmission. Such standards are likely to be applied to domestic payments on an increasingly wider scale. Therefore, the system gains greater significance. Oversight over the SWIFT system has been strengthened, and the new policy lines are leading to Eurosystem central banks working more closely together in this area.

The organisation of the ECB has been reshuffled so that there is now a separate oversight division within the Directorate General for Payment Systems and Market Infrastructure. The Bank of Finland has also developed its oversight function in a number of areas. The Bank's organisation was changed by setting up the Financial Markets and Statistics Department, with the Oversight of Market Infrastructure Division (former Payment Systems Division) operating in close liaison with it. A working group guiding the oversight function was also set up within the Department. In addition, the division of responsibilities was redefined, and a detailed internal TARGET oversight guideline was issued. It is based on the application of jointly agreed Eurosystem principles. This ensures that oversight over the various TARGET components will be exercised on the basis of harmonised principles.

The Bank of Finland has also made a contribution to oversight exercised by other central banks in providing them access to the Bank's payment and settlement system simulator, which enables assessment of payment and settlement system behaviour in different situations. The simulator adds a quantitative approach to oversight, and user training has been organised to ensure effective application of the simulator in various central banks. Results of the use of the simulator have been released in the Bank of Finland publication series.[26]

Chart 37.

Monthly volume of incoming and outgoing cross-border TARGET payments in Finland, daily average



1. Customer payments sent abroad
2. Interbank payments sent abroad
3. Customer payments received from abroad
4. Interbank payments received from abroad

Source: Bank of Finland.

[26] See www.bof.fi/eng/6_julkaisut/6.1_SPn_julkaisut/6.1.4_tutkimuksia/E31.pdf.

As part of its ongoing oversight, the Bank of Finland has paid attention to the importance of risk management, in particular, in the assessment of reliability in clearing and settlement, when issuing opinions to consultations by the Ministry of Finance, as required by law, in the course of this year. According to Finnish legislation, the APK's risk-bearing capacity must not become a secondary consideration in relation to parent company risk management. A prospective change in the scale of operations and organisational structure must be taken into account, which means that, for instance, the appropriateness of risk management and the ability to assume responsibility need to be reconsidered in the event of further consolidation.[27]

In line with its strategy, the Bank of Finland seeks to contribute to cooperation between the authorities both at home and at global scale. As promoter of overall financial market stability, the Bank of Finland considers it essential that the Finnish authorities have adequate competences for supervising and overseeing significant financial companies operating in Finland, irrespective of their place of registration. Such objectives are furthered, for example, through cooperation with the Financial Supervision Authority, Memoranda of Understanding and commitment to common recommendations and standards. Efficient, sufficiently flexible operational arrangements are of key priority for supervisors and relevant public authorities so as to enable them to respond to market changes and to ensure management of crises and emergency situations. The Bank of Finland has started NCSD-related oversight cooperation with the Swedish central bank. A bilateral Memorandum of Understanding is currently being drafted, and its functioning at practical level may prove particularly important for a successful oversight in this area.

The Bank of Finland implements its strategy in promoting cooperation between the authorities.

[27] The Bank of Finland's opinions to the Ministry of Finance: Preconditions for clearing house and central securities depository licences granted to the APK (15 April 2005) and Bond settlement in HEXCLEAR and closure of the settlement fund (11 May 2005).

Organisation of the Bank of Finland

28 September 2005

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