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# BANK OF FINLAND DISCUSSION PAPERS

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15/2000

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Financial Markets Department  
26.10.2000

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The views expressed are those of the authors and do not necessarily correspond to the views of the Bank of Finland

ISBN 951-686-679-4  
ISSN 0785-3572  
(print)

ISBN 951-686-680-8  
ISSN 1456-6184  
(online)

Suomen Pankin monistuskeskus  
Helsinki 2000

# Recent Developments in the Finnish Banking Sector

## Bank of Finland Discussion Papers 15/2000

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### Abstract

In this paper we discuss recent developments in the Finnish banking sector. Our specific aim is to examine whether and to what extent recent developments in Finland are broadly in line with the trends common to banking sectors in Europe and also worldwide.

We focus on developments in banks' profit and loss accounts, balance sheets and the market structure of the banking sector. In addition, technological developments are surveyed. As regards consolidation, the Finnish banking sector is a trendsetter. The emphasis in structural development has moved to cross-border banking and bankassurance. On the other hand, it turns out that it is difficult to track some of the trends that are believed to characterize European banking sectors using Finnish data. For instance, disintermediation has thus far been moderate in Finland, as the role of banks as providers of financing to households and companies is still significant and generally shows no signs of diminishing. Tougher competition in lending does not seem to have reduced Finnish banks' profitability, which was at a record high in 1999 and in the first half of 2000.

The Finnish banks have fully recovered from the banking crisis of the early 1990s. Improved profitability is largely due to enhanced efficiency as well as recent favourable economic performance. The banking sector has experienced a rapid process of consolidation during the 1990s and currently banks are in the middle of a period of intensive launching of new technology-based products. It can be argued that as a result of developments in the 1990s the Finnish banking sector is among the most profitable and efficient in Europe.

Key words: banks, financial system, stability

# Pankkisektorin viimeaikainen kehitys Suomessa

Suomen Pankin keskustelualoitteita 15/2000

Atso Andersen – Ari Hyytinen – Jussi Snellman  
Rahoitusmarkkinaosasto

## Tiivistelmä

Tässä keskustelualoitteessa selvitetään Suomen pankkisektorin viimeaikaista kehitystä. Tarkoituksena on erityisesti tutkia, missä määrin suomalaisen rahoitus- ja pankkijärjestelmän kehityksessä voidaan havaita kansainvälisesti yleisiä trendejä.

Tutkimuksessa analysoidaan erityisesti pankkien tuloslaskelma- ja taseinformaatiota sekä pankkisektorin rakenteen viimeaikaisia muutoksia. Lisäksi tarkastellaan suurimpia tietotekniikan mukanaan tuomia muutoksia. Rakenteellisesti kehityksen painopiste on siirtymässä keskittymisestä maasta toiseen ulottuvaan pankkitoimintaan ja finanssitavaratalojen muodostamiseen. Myös tietotekniikan kehityksen merkitys on ilmeinen. Muut pankkitoiminnan trendit eivät ole yhtä selkeästi havaittavissa. Arvopaperistuminen ei esimerkiksi ole edennyt Suomessa kansainvälisen kehitystrendin mukaan. Myöskään kilpailun kiristyminen ei ole näkynyt pankkien kannattavuudessa.

Suomen pankkisektori on kokonaisuudessaan ohittanut 1990-luvun alun pankkikriisin. Tehokkuuden lisäämisen ja hyvän taloudellisen kehityksen ansiosta pankkien kannattavuus on parantunut. Voidaan väittää, että keskittymisen ja tietotekniikan käyttöönoton lisääntymisen myötä suomalaiset pankit ovat Euroopan tehokkaimpien joukossa.

Asiasanat: pankit, rahoitusjärjestelmä, vakaus

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# 1 Introduction

A number of international and EU-wide trends have been identified, which are currently causing changes in EU banking systems. Among the most important of these trends are disintermediation, internationalization, increasing reliance of banks' operations on information technology, as well as heightened competition and structural changes in the form of increased conglomeration, mergers and acquisitions and bankassurance. The threats and opportunities to EU banking systems that come with the Economic and Monetary Union (EMU) have received considerable attention, as they are widely believed to reinforce several of the underlying trends that are causing changes in the national banking sectors.<sup>1</sup> Though identifying common trends can be useful in illustrating overall developments, there remain many sources of differences between EU countries, and even within countries<sup>2</sup>. In this paper, we consider recent developments in the Finnish banking sector. We ask in particular how the Finnish banking sector trends compare to certain common EU-wide banking trends in light of the recent developments.

If banks' operating environment is changing, this is a matter that they must face up to. However, it is not just that there are several forces driving industry developments; it is their combined multilaterally-reinforcing effect that is fundamentally changing the business of banking<sup>3</sup>. Technological progress is a prime example in this regard, as it complements most of the other trends, such as internationalization and new patterns of competition. In addition to responding to changes in their environment, banks also are actively impacting the future of the finance industry. Thus we cannot with certainty single out a single underlying trend that explains the data used to describe and evaluate recent developments in the Finnish banking sector. The purpose of the present paper is thus to examine whether recent developments in Finland are *broadly* in line with generally-cited banking trends. Among the areas considered are developments in the business operations of the Finnish banks, which should primarily be reflected in their financial accounts, as well as changes in the market structure of the banking industry and in competitive conditions. We also consider patterns in the adoption of new technology and developments in 'traditional' capacity measures.

The structure of the paper is as follows. Section 2 summarizes developments in Finnish banks' aggregate profitability and balance sheet and examines the extent to which these reflect the general patterns in banks' income, asset and liability structures that are frequently claimed to result from such trends as disintermediation, heightened competition and internationalization. This is followed in section 3 by a consideration of developments in market structure, banking capacity and banking technology. In section 4 we provide a series of tentative views on the short- and mid-term prospects for the Finnish banking sector.

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<sup>1</sup> See eg White (1998), ECB (1999) or Koskenkylä (2000).

<sup>2</sup> For instance, in their study on disintermediation and the role of banks in Europe, Schmidt, Hackethal and Tyrell (1999) find that the financial systems of the three major European economies, France, Germany and the United Kingdom, are characterized by quite a few differing trends and seem not to be converging.

<sup>3</sup> See Llewellyn (2000).

## 2 Banking Sector Profitability and Balance Sheet

In this section, we consider recent developments in Finnish banks' financial accounts. We attempt to interpret the data from the viewpoint of the often heard argument that deregulation, disintermediation, internationalization and adoption of new technologies should result, on the one hand, in fiercer competition and increasing efficiency. On the other hand, these trends should show up in one form or another in the structure of banks' balance sheets.

In what follows, we focus entirely on sector-level developments. Presently the Finnish banking sector is highly concentrated, as it consists of three major banks / banking groups, which account for about 90 % of the total assets and have a combined market share of over 85 % in loans and deposits. There are also smaller commercial banks, savings banks and branches of foreign institutions (see section 3.1 for a more detailed description of the structure of the sector).

### 2.1 Recent Developments in Key Profit and Loss Account Items

#### 2.1.1 Income Structure

It has been argued that since banks are no longer monopoly suppliers of financial services, increasing competition between deposit banks, new competition from non-bank financial institutions and, more generally, a more *contestable* banking market lead to lower intermediation margins and reduce banks' net interest income.<sup>4</sup> In responding to this, the banks are expected to shift to other sources of income, such as fees and commissions. Figures 1- 10 in Appendix 3 describe recent developments in Finnish banks' key profit and loss account items and some of their determinants.

Figures 1 and 2 in Appendix 3 reveal that the income level and structure have been fairly stable throughout the 1990s. Net interest income has stabilized at a level of EUR 2 billion to EUR 2.3 billion and other income at a level of about EUR 1.4 billion (see table 1 in Appendix 2). The shares of net interest income and non-interest income in total income have been around 60 % and 40 % respectively. Why have these two income sources remained relatively stable?

Let us first consider interest rate margins (figure 3 in Appendix 3). The declining trend in the aggregate margin, ie the average gap between euro-denominated lending and deposit rates, is evident. It is however by no means attributable entirely, if at all, to increased competition. Rather, the margin seems to be correlated with market interest rates and hence reflects the fact that banks' lending rates are for the most part tied to short-term market rates or prime rates, whereas about half of deposit volume is subject to fixed rates. Evidence on inter-

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<sup>4</sup> According Llewellyn (2000), a market is contestable if entry and exit barriers are relatively low so that firms can easily enter or exit the industry. In such a market, incumbent firms are pressured to behave as if they were competing with many rivals since if their profits and prices are 'too high', or if they operate inefficiently, new firms enter. Thus the threat of entry is likely to drive the behaviour of the incumbents.



est rate linkages can be found in figures 4 and 5 in Appendix 3. Also the interest rate margins on new lending have narrowed, which might better reflect increased competition between the banks as well as from non-bank financial institutions and markets. That foreign branches operating in Finland have thus far generally charged lower interest rates is a potential source of pressure on the pricing policies of Finnish banks. It might also be a consequence of foreign banks focusing on better quality customers, or of a market structure characterized by vertical differentiation. The latter situation is said to prevail if the Finnish customers prefer domestic banks to foreign banks when charged the same interest rate. Figures 6 and 7 in Appendix 3 present Euro-denominated lending to the Finnish public by creditor and new lending to households by purpose. These figures suggest an explanation for the stability of interest income. The lending volumes for Finnish banks have increased since 1997 and have thereby contributed to interest income. Housing loans have been a particular source of lending growth. Recently households' lending growth has accelerated to 10 % to 15 %. Figure 6 in Appendix 3 also shows that domestic banks still are the dominant lenders in the Finnish economy. An additional underlying reason for interest income growth is the decline in non-performing loans since 1994. This has contributed positively to interest income despite narrowing lending margins.

As to non-interest income, a study by the ECB (1999) on EU banks' income structure reveals that for most of the 1990s, ie for the period 1993 - 1998, Finnish banks' income from fees and commissions has on average accounted for 52 % of their non-interest income. The study also reveals that during 1980-1997 Finnish banks' non-interest income was quite stable (also in comparison to other EU-countries). The stability of non-interest income during the 1990s hides the fact that there have been some changes in the structure of non-interest income. At the beginning of the 1990s it was foreign exchange and securities trading that were the most important sources of non-interest income. However, for a year or two after the mid-1990s trading income, particularly capital gains from equities trading, was a major income contributing item. These developments followed mainly from the Finnish EU membership and the intention to join EMU as well as accelerating technological progress, which was reflected in the equity markets. Finally, most recent numbers suggest that fees and commissions from payments, asset management and other services have gained somewhat in relative importance.

### 2.1.2 Cost Structure and Efficiency

Another effect of the changing environment is that it is increasing the pressure to eliminate inefficiencies, cut costs and reduce overcapacity. Moreover, evidence presented in Koskenkylä (2000) suggests that country differences in efficiency are large. The severe banking crisis at the beginning of the 1990s forced the Finnish banks to restructure and to reduce costs and operating inefficiencies. In this subsection we consider the picture portrayed by recent Finnish data.

Turning back to figure 1, we observe that the cost structure of Finnish banks experienced a major change in the 1990s and that the recent good financial results are largely attributable to reductions in loan losses and costs. Loan losses, which peaked in 1992, have steadily and dramatically declined since the crisis (figure 9 in Appendix 3), largely as a result of a steady decline in bankruptcies (figure 10 in Appendix 3). Loan losses have now largely disappeared. In fact, for some banks recoveries from loan losses have recently exceeded losses, and the improving trend has continued during the first half of 2000.

Large cost reductions have also been achieved. These probably reflect the halving of numbers of employees and branches, as compared to the early 1990s (see the next section). However, considering the argument that there currently is a strong impetus to cut costs because of intensified competition, it is of interest to observe that during the past three or four years there have been no major reductions in expenses. During 1996-1999, administrative expenses increased roughly from EUR 1.3 billion to EUR 1.6 billion whereas other operating expenses decreased from around EUR 0.6 billion to EUR 0.3 billion.

A widely used indicator of bank efficiency is the cost-to-income ratio. However, interpretation of the ratio is difficult since a decrease in it could reflect, among other things, higher operational risks rather than increased efficiency. Despite the deficiencies of the ratio as a measure of banking efficiency, we present in table 3 in Appendix 2 a set of traditional efficiency measures and consider whether they are broadly in line with increased efficiency in the Finnish banking sector.

As measured by the cost-to-income ratio, efficiency in the Finnish banking sector is good. The aggregate ratio has been under 60 % for the last couple of years. Improvements in efficiency reflect continuing reductions in loan losses and operating costs rather than improved income levels, which have been stable. Bank restructuring, rationalization and improved economic conditions are among the forces that have led to improvements in efficiency. Alternative efficiency measures (see table 3 in Appendix 2) portray by and large the same picture.

### 2.1.3 Profitability

It has long been argued that there are presently several factors putting downward pressure on deposit banks' intermediation profits, which are likely to cause a reversal in the positive trend in profitability. However, there are still no signs that the turn is at hand for Finnish banks. Operating profit turned positive in 1996, and the upward trend has continued since then. By the end of the 1999 banks' aggregate operating profit was EUR 1.4 billion (incl. Nordbanken, EUR 2.2 billion; see figure 1). Table 2 in Appendix 2 presents some additional details on Finnish banks' financial results for 1993-1999, and their return on equity (ROE) can be found in figure 11 in Appendix 3.

The latest results for the first half of 2000 show that profitability is still improving (see appendix 1). So far this year, rising market interest rates have widened the gap between average lending and deposit rates. ROE for the whole sector was a record high 29 % for the first half of 2000. Besides the growth in net interest income, improvements in profitability are based on increasing fee and commission income as well as further declines in loan losses.

### 2.1.4 Comparison with Other European Countries

Profitability for the Finnish banking sector is also good relative to other European countries (figure 12 in Appendix 3 and table 3 in Appendix 2). Since 1996 both ROE and ROA (return on assets) for the Finnish banking sector have been well above the weighted average for the euro area. Finnish banks' financial performance depends more on net interest income than is the case for banks in other European countries. Even though the role of fees and commissions has increased in Finnish banks' P&L accounts, it still lags clearly behind the level that is com-

mon in the euro area. Furthermore, structural developments and consolidation seem to have increased banks' balance sheet related efficiency, contrary to the common European trend. While the aggregate ratio of operating income to total assets decreased from 2.7 in 1995 to 2.5 in 1999 for the euro area as a whole, it increased from 2.9 to 3.3 for Finland (see table 4 in Appendix 2).

## 2.2 Banking Sector Balance Sheet

In this section, we ask whether Finnish banks' balance sheet data shows signs of such trends as disintermediation and securitization. Specifically, it has been suggested that there is currently a changeover in progress from a bank-oriented to a market-oriented environment. Has the role of banks diminished in the financing of households or as a source of companies' external finance? In recent years European banks' trading activities have generally been on the increase (see eg ECB 2000) and this has been seen as a response by banks to disintermediation. Does this apply to Finland? As to the liability side, a common trend is that banks are increasingly competing with other financial intermediaries and non-financial intermediaries as a repository for savings. If that is the case, do the data support the view that the role of deposits as a source of bank funding is declining in importance? Moreover, it has been suggested that banks attempt to maintain their profitability by increasing their off-balance sheet activities. These activities have been growing in many EU countries. What is the situation regarding Finnish banks' off-balance sheet activities? To address these issues, we present table 5 in Appendix 2 and figures 14-17 in Appendix 3, which give a picture of recent developments in Finnish banks' aggregate on- and off-balance sheet items.

Over the course of the 1990s the aggregate balance sheet for the Finnish banking sector did not show an increasing or decreasing trend (see figure 12 in Appendix 3). The banking sector shrank in terms of balance sheet total due to the banking crisis (Koskenkylä 1998), and reached a minimum in 1996. After this, the total grew slightly, to EUR 117 billion in 1999. The size of the banking sector (again in terms of balance sheet total) relative to GDP has grown since 1996.

Even though the role of loans and deposits has remained central for banks, their importance in the overall economy, ie relative to GDP, diminished somewhat during the 1990s. With economic activity picking up in the latter part of the decade, loans have gained in relative importance. However the role of deposits seems to have continued on a declining trend, which reflects the ongoing diversification of the financial system (see figure 19 in Appendix 3). More generally, Finnish credit institutions' non-bank deposits as a percentage of GDP seem to be below the EU average (see table 7 in Appendix 2). Recently in Finland, the ratio of deposits to total financial assets has declined dramatically. Although bank deposits have increased somewhat, the increase in market capitalization of shares has been so overwhelming that it has undermined the role of deposits in particular (see figure 20 in Appendix 3).

The volume of aggregate off-balance sheet items decreased around the end of the 1990s. Particularly the role of derivatives contracts has diminished in recent years, from a total of EUR 628 billion in 1997 to EUR 163.5 billion in the first quarter of 2000. The declining trend derives from the fact that with the launch of the euro trade in interest derivatives such as FRAs, futures, IRSs and interest rate options moved from Helsinki to the Eurex in Frankfurt. As a result, the role of Finnish banks as market makers has diminished. The decline in the Finnish government's borrowing activity has also reduced trading activity in derivatives (see figure 17 in Appendix 3).

### 2.2.1 Assets

The banks' asset side seems to have undergone only minor structural changes since 1995 (figure 15 in Appendix 3). Among those changes are the banks' reduced holdings of debt securities and bills and the moderate expansion of the loan book relative to the balance sheet total. Neither of these changes lends pronounced support to the disintermediation trend. As in other European countries, the decrease in banks' holdings of debt securities is, at least to some extent, attributable to reduced government borrowing. It also reflects the fact that corporate bond markets are still relatively underdeveloped in Finland (see figure 23 in Appendix 3).

Overall, banks are the major lenders to households in Finland, as well as being an important source of external finance to companies (figures 21 and 22 in Appendix 3). The banks' share of lending to households is still high, ie about 73 %.

It has been argued, and there is some evidence, that banks' domestic claims on nonfinancial corporations as a percentage of banks' total assets are decreasing in many EU countries. In Finland, quite the opposite seems to hold. For 1989-1999 the percentage was about 12 % on average. However, the latest figures, for 1998 and 1999, are 14 % and 15 % respectively.

Finnish banks' cross-border exposures have increased quite steadily since 1996 and amounted to EUR 32.6 billion at the end of 1999 (Financial Supervision Authority 1999). The largest exposures are to other EU and EMU countries and to the United States. The banks' exposures to Asia increased to EUR 2.3 billion in 1999. Among other things, this growth is related to financing Finnish companies' growing trade with Asia.

### 2.2.2 Liabilities

The structure of banks' liabilities reflects moderate changes in banks' funding behaviour (figure 16 in Appendix 3). For one thing, the relative importance of debt securities issued has increased slightly. For another, the deposit share of banks' liabilities has decreased. However, in absolute terms, the recent credit growth has been financed by collecting more deposits as well as by issuing debt securities to the public. Surprisingly, the deposit growth in absolute terms was close to 10 % in 1999, despite the increasing popularity of other savings instruments such as mutual funds, retirement schemes and life insurance.

### 2.2.3 Solvency and nonperforming loans

During the late 1990s there were no major changes in banks' aggregate capital adequacy. While the Finnish banks' risk-weighted assets have grown since 1995, their own funds have grown at a comparable rate. Capital adequacy increased to 11.7 % by the end of 1999 and has continued to rise in the early part of 2000 (see figure 8 in Appendix 3). After the first half of 2000 capital adequacy in the Finnish banking sector was 12.8 %.

Figure 9 in Appendix 3 shows that banks' nonperforming loans have been decreasing since 1993. This probably reflects the favourable economic developments in Finland. On the other hand, banks have apparently learned from their experiences in the banking crisis and have applied strict lending terms despite increasing competition.

## 3 Structural and Technological Developments

### 3.1 Structural Developments in the Banking Sector

After the liberalization of the Finnish financial markets in the late 1980s and the banking crisis of the early 1990s, the structure of the Finnish banking sector changed fundamentally (see figure 14 in Appendix 3). Presently the Finnish banking system is highly concentrated, and the three major banking groups – Nordic Baltic Holding (Merita Bank plc), the OKOBANK Group with its 243 local cooperative banks and Leonia plc - dominate the market. The consolidation trend has continued since the banking crisis, which resulted in extensive bank reorganizations and reductions in overcapacity. The onset of Stage Three of EMU and rapid technological progress have more recently contributed to structural developments in the Finnish banking sector. In this sense, the consolidation trend - toward larger financial companies - that characterizes the European banking sectors has been present in Finland for a some time now. In recent years, foreign (particularly Swedish) banks have become increasingly active in Finland, albeit their market shares are still small.

At present, there are five smaller commercial banks besides those associated with the three dominant banks/banking groups, 43 local cooperative banks, 39 savings banks, 15 Finnish branches of foreign credit institutions, and five Finnish representative offices of foreign credit institutions. In total, there are about 1,540 bank branches presently in Finland (see tables 8 and 9 in Appendix 2). Domestic commercial banks have a total of 17 foreign branches, subsidiaries and associate banks and 17 representative offices abroad.

Generally speaking, one could identify three phases in the Finnish consolidation trend: Finnish banks have consolidated primarily domestically, secondly across national borders and thirdly in the formation of financial conglomerates. Moreover, competition is becoming more important vis-à-vis foreign banks and non-banks. These developments are discussed next.

#### 3.1.1 Developments in Market Structure

*Domestic consolidation* has taken place in several steps, of which the most important ones are:<sup>5</sup>

- Merita Ltd came into being in 1995 as a result of the merger of Kansallis-Osake-Pankki and Union Bank of Finland, the two largest commercial banks.
- Another large domestic reorganization was implemented in 1997 when the state-owned Postipankki acquired Finnish Export Credit Ltd. The operations of the two companies were pooled under a new holding company and the name of the group was later in 1998 changed to Leonia plc. In this connection, the name of Postipankki was changed to Leonia Bank plc and Finnish Export Credit eventually became Leonia Corporate Bank plc.

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<sup>5</sup> For details of earlier developments in the market structure, see eg P Nyberg (1994), J Laakso (1995), and K Tuori (1996).

- The third large banking group was formed in July 1997 when the cooperative banks tightened solidified their relationship by creating an amalgamation of cooperative banks and when the OKOBANK Group Central Cooperative commenced operations. In this connection, certain cooperative banks decided not to participate in the amalgamation. They broke rank to establish a group of local cooperative banks, which presently consists of 43 local cooperative banks and Aktia Savings Bank Ltd, which acts as the group's central financial institution.
- In January 1998, the commercial bank Interbank Ltd and the investment bank Mandatum Bank Ltd merged to form Mandatum Bank plc.

*Cross-border consolidation* can be said to have begun as early as in 1995 when the healthy parts of the business operations of Skopbank - Finnish Real Estate Bank Ltd, SKOP Finance Ltd and Industrialization Fund of Finland Ltd - were sold to the Swedish bank Svenska Handelsbanken. The most significant cross-border consolidation has been that of Merita Bank:

- After its domestic consolidation, Merita Bank entered into ownership arrangements with the Swedish Nordbanken in 1997. The two banks established a new holding company, MeritaNordbanken, to own and control operations of both banks and their subsidiaries. The group simplified its ownership structure in 1999 when it began to operate under one holding company, Nordic Baltic Holding.
- During 1999 the MeritaNordbanken Group continued to expand in both the Nordic countries and the Baltic states. In September 1999 MeritaNordbanken made its initial bid for the Norwegian Christiania Bank. Subsequently, the bid has been renewed several times because the Norwegian government, which is a major owner of Christiania Bank, has not yet decided whether the bank should be sold.
- In March 2000 MeritaNordbanken and the Danish bank-insurer Unidanmark agreed to merge. In terms of balance sheet total, the new group will be the largest banking group in the Nordic countries.

*Financial conglomeration and bankassurance* have got underway only more recently as cross-sector consolidation and provision of insurance products by banks have become more widespread. At the end of 1999 there were in all 14 life insurance companies in Finland, three of which were owned by Finnish banks. Among the typical insurance products that Finnish banks offer are life and pension insurance. The Finnish markets for both life insurance and personal pension insurance grew in 1999. In terms of gross premiums written in direct domestic insurance, the market shares of the three largest firms/groups - Merita, Sampo Life and Pohjola Group - were in 1999 28.8 %, 19.0 % and 17.7 % respectively (source: Federation of Finnish Insurance Companies).

The consolidation of the Finnish banking and insurance sectors involves so far the following steps:

- In October 1999 the insurance company Sampo and the state-owned Leonia Bank agreed on the formation of a financial conglomerate. Operations for the new financial conglomerate, Sampo-Leonia, will commence at the start of 2001.
- At the end of 1999 OKOBANK group and the Finnish insurance companies Ilmarinen, Suomi, A-Vakuutus and Pohjantähti signed an agreement to form a loose alliance and to begun cooperation in the provision of banking and insurance products. The OKOBANK Group, in this connection, acquired a significant ownership share of the insurance company Pohjola.

*Cross-border competition and foreign entry:* At present, 15 branches of foreign-owned banks offer banking services in Finland. The largest of the foreign-owned branches operating in Finland is the Swedish Svenska Handelsbanken. The bank has also opened some branches outside the Helsinki metropolitan area. Other foreign banks actively operating in Finland are the Swedish SEB, Credit Agricole Indosuez, Citibank, and Den Danske Bank. There are also six representative offices of foreign credit institutions in Finland: ABN Amro, Credit Suisse First Boston, Intourbank, Landesbank Schleswig-Holstein Girozentrale, Nordfinanxz Bank Zurich and Société Générale. Traditionally foreign-owned banks' operations have focused on internationally active corporations. However, more recently foreign owned banks have begun competing in the smaller firms and in retail segments of the market.

*Non-bank competition:* At present, there are three larger insurance groups besides the insurance firms associated with banking groups: Pohjola-group, Tapiola-group and Fennia-Group.<sup>6</sup> As mentioned, one of the largest insurance groups, Sampo-group, is going to form a financial conglomerate with Leonia. Traditionally the role of insurance companies has been significant in the Finnish lending markets. However, their share of total lending decreased during the 1990s (see eg figure 22 in Appendix 3). The life and pension insurance firms are becoming increasingly interested in competing for households' growing financial assets. This enhances competition in asset management-related services.

Although the mutual fund industry is growing rapidly, its role is still quite modest, as Finnish households have mainly invested directly in stocks. At the end of 1999, bank-controlled funds had in total a market share of about 70 %, with Merita Fund Management Ltd being the market leader (source: Finnish Association of Mutual Funds).

As regards trading and asset management, the growth of online trading firms do pose a threat to deposit banks' retail trading business. There are now eight brokerages offering online trading services in Finland.

Payment systems service providers have not faced any significant non-bank competition, as banks have increased their cooperation eg with retailers, car brokers etc in order to serve customers on a larger scale. Finally, the role of finance companies in the loan market has remained subdued, nor has bond issuance yet gained popularity among Finnish corporations.

### 3.1.2 Market Shares

In recent times the dominance of the largest Finnish bank (Merita) has diminished somewhat as measured by market shares in loans and deposits (figures 24 and 25 in Appendix 3). Smaller banks, and particularly foreign banks, have increased their market shares. By the end of the 1999 the market shares of foreign banks had increased to 4.7 % and 1.7 % in the loan and deposit markets, and the trend is expected to continue. Deposit competition has remained moderate, partly due to the tax exemption of interest on deposits. As the tax exemption was abolished at the start of June 2000, competition in deposits is expected to intensify.

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<sup>6</sup> In Finland in spring 2000, there were 51 licensed Finnish insurance companies: 14 life insurers, 31 non-life insurers and re-insurers, and 6 employee pensions insurers.

## 3.2 Developments in Traditional Capacity Measures

### **Branch Networks**

Despite discussions on excess capacity of banks' branch networks in Europe, no uniform trend of branch network reduction took place in Europe in the 1990s, as can be seen from figure 26 in Appendix 3. In several countries the number of branches has declined, eg in Belgium and Germany; but there are also examples of increased branch density, as in Ireland, Italy and, most notably, Portugal, where branch density doubled between 1990 and 1998. Overall branch density (weighted by GDP share) in euro countries remained exactly the same in 1998 as it was in 1990. The same holds for the United States, but there the number of branches per capita is only 50 % of the euro-area average.

Compared to this relatively stagnant overall picture, the situation has been markedly different in Finland, where downsizing of bank branch networks has been both rapid and dramatic, as shown in figure 27 in Appendix 3. The total number of bank branches in Finland declined from 3,300 in 1990 to about 1,500 at end-1998. During the same period the number of bank employees was also roughly halved, from 50,000 to 25,000. Total employment in the banking sector is still declining, albeit at a slower pace than in the early 1990s. Due to the reductions in branches, bank branches per capita in Finland have dropped from above the euro-area average to substantially below it. The ratio however is still slightly above those eg for Sweden and the United States.

During the last few years the pace of branch network downsizing has slowed. Is the peak phase of downsizing already over, or will the rise of internet- and mobile phone-enabled banking and other non-location-specific services lead to a new scale shift in branch density?

### **ATM networks**

Another method of providing certain banking services is via ATMs. Like bank branches, ATMs can only be used to provide services in fixed locations. Figure 28 in appendix 3 displays the number of ATMs in several European countries in 1990 and 1998. As can be seen, throughout Europe ATM densities increased substantially in the 1990s.

Developments in Finland over the last few years have differed from those in most other countries. As can be seen from figure 29 in Appendix 3, during the 1990s the amount of ATMs rose rapidly, but this trend has been reversed. The number of giro ATMs peaked in 1997, at nearly 2500, and has since declined slightly. Banks have prompted customers to use the new substitute services, which include Internet banking agreements with customers and new Internet-based payment terminals installed in place of giro ATMs.

In cash ATMs the trend reversal has been more pronounced, as the cash ATM network peaked in size already in the early 1990s and has since declined substantially. From the peak of 3000 ATMs in 1993, the number declined to about 2,100 in 1999, as banks reduced the overlapping of ATM networks as well as the number of bank branches. Downsizing of the ATM network is likely to continue for some time yet. Automatia (owner and operator of the biggest ATM network) is planning to renew only 1,500 of 1,900 currently operating ATMs. Automatia is owned by the largest banking groups, a fact that might partly explain the downsizing and efficiency in Finland compared to other countries.



### 3.3 Technological Developments

Arguably the most significant technological development during the last few years is the rise of the Internet, which is viewed by banks as both a threat and an opportunity. Some have predicted that the rise of Internet will lead to a rapid increase in the number of solely internet-based start-ups, also in the area of banking services. This is due eg to significantly reduced entry costs, as less physical investment is needed. It has even been claimed at times that the days of 'ordinary' banks are numbered.

The potential impact of the Internet has been recently discussed eg by Koskenkylä (2000) and Llewellyn (2000). According to Llewellyn, for banking the basic nature of the Internet implies significant changes in two areas: provision of information and delivery of financial products. This is due to the basic nature of the Internet:

- The marginal cost of transaction is close to zero
- Distance between consumer and supplier may become virtually meaningless
- Searching costs for the consumer with respect to services and pricing of services are significantly reduced
- Switching costs are likely to be reduced
- The necessity of having an extensive branch network is reduced.

The world-wide trend has been the rapid increase of Internet-based banking services. For example, according to a report on online banking, the number of US banks offering Internet services increased from one in 1995 to 3,000 at mid-2000. According to the same report, some 11 million Americans use Internet banking services at least to some extent. However, despite this rapid growth in the provision of Internet banking services, not all banks have yet taken initiatives in this direction. In the United States over 7,000 of some 10,000 FDIC-insured depository institutions have yet to offer any online services. Even of the top 100 bank holding companies, 40 % only have 'brochureware' Internet sites, ie sites that function mainly as information sources for customers but offer few other services (TowerGroup Research).

In Finland the scaling down of banks' branch networks has reduced the availability of services tied to a fixed location, ie face-to-face services. To compensate, banks have been active in promoting the use of other, self-service-based methods, notably Internet banking. The self-service technology has long roots in Finland. Phone-based home banking was introduced in 1982, PC banking (home computer plus modem) in 1984, giro ATMs in 1989, Internet-based banking and mobile phone banking (SMS ie text-message-based) in 1996, and WAP-phone banking in 1999.

All banks offer Internet banking services, and already now virtually all banking services can be used via the Internet without visiting a physical bank branch. Due eg to convenience and pricing incentives, the use of these Internet services has expanded rapidly. Currently over a third of all banking customers in Finland have Internet banking agreements and about half of these use the Internet as their main channel for executing banking transactions.

A notable feature in the Finnish situation is the ability of established banks to maintain their positions despite the advances in Internet technology. In fact, as of mid-2000, not a single solely internet-based bank has emerged in Finland (although there are a number of solely net-based stockbrokerages). Thus develop-

ments in Finland have been somewhat different from those in several other countries, notably the United Kingdom and United States, where a number of purely Internet-based banks have emerged. However, even in those countries traditional banks have been able to a large extent to maintain their positions and new start-ups have been unable to capture significant slices of market share.

Advancements in mobile phone technology have enabled the development of wireless banking services. The three largest Finnish banks already offer WAP banking services. The same services that are available via the Internet either are or will be available via WAP phones in the near future. Unfortunately, data on the use of these services is scarce. Some of the earlier, text-message-based mobile phone banking services (available since 1996) have been popular, especially the balance check service, but banks have not released any exact figures on the actual use of the new WAP services.

*New Types of services and channels.* The technology related to Internet services continues to develop. Some banks have recently adopted PKI (Public Key Infrastructure) technology to form a new security architecture for Internet banking services. For WAP services, standardized security solutions are still under development. Banks have, at least partly for security reasons, been using their own gateways to WAP and Internet services. However, in the future the role of internet portals as critical links between access devices (eg computers and internet-enabled mobile phones) and financial service providers is likely to be enhanced. Portals typically offer users access to a wide variety of services. Typically, most of these services are actually provided by companies other than the company that manages the portal itself.

In several countries, the companies associated with portals are already developing strategic relationships with financial service companies. An example of this is the cooperation of Yahoo, one of the best known and most widely used Internet portals, with Bank of East Asia. These developments are taking place also in Finland. Sonera Plaza, the Internet portal of Sonera, has publicly announced its intention to start providing financial services that will complement the current array of services. As a first step Sonera Plaza announced plans to launch an 'internet account' at the start of 2001. The basic idea is that Sonera Plaza accumulates funds from an individual investor and deposits the whole amount in a conventional bank. Due to lower costs and larger amounts deposited, Sonera Plaza is able to offer a higher interest rate. The actual account management will be bought from some established bank. Currently these matters are under discussion with the banks, but as yet there have been no announcements of agreements.

In the future the banks may face increased competitive pressures also due to the emergence of so-called aggregator service providers. Aggregator service providers are companies (software programmes) that help customers eg to compare the prices of different financial services. Their importance of aggregators lies in the fact that they reduce searching costs for individual customers, and thus help them to find the most attractive services.

There are several financial aggregator service providers around the world, eg InsuranceCity, which operates in Germany. So far there are no financial aggregator service companies in Finland, but there are several non-financial aggregator services already available. An example of these, and of the operating principle of an aggregator service, can be found eg in SoneraPlaza, which provides a service that aids in searching for the cheapest petrol prices in several Finnish areas.

## 4 Concluding Remarks and Future Prospects

In terms of the consolidation trend, the Finnish banking sector is among the leaders in Europe. The emphasis of structural development has changed to cross-border banking and bankassurance. On the other hand, it turns out that it is quite difficult to track some of the trends that are believed to characterize European banking sectors from the Finnish data. For instance, disintermediation has thus far been modest in Finland, as the role of banks as providers of financing to households and companies is still significant and shows no significant signs of diminishing. In fact, asset management and life insurance activities have increased banks overall market share in financial services. Tighter competition does not seem to be hurting Finnish banks' profitability, which was at a record high in 1999.

The Finnish banks have fully recovered from the banking crisis of the early 1990s. Improvements in profitability are largely due to rationalization and enhanced efficiency as well as the recent favourable economic performance. It is likely that Finnish banks will continue to achieve strong profitability over the near horizon, provided that the favourable economic situation continues and that banks can eg take the advantage of rising interest rates, which have recently had a positive impact on their net interest margin.

On the other hand savings disintermediation is likely continue. The banks will therefore become increasingly dependent on market funding. Moreover, the abolishing of tax exemption on deposits is likely to undermine Finnish banks' ability to attract deposits at presently prevailing deposit interest rate levels. Thus there is room for deposit competition, which could undermine bank profitability. Loan spreads are already highly competitive. The long period of declining expenses in the banking sector is about to end, since the major reductions in the branch networks have probably been already realized and since the banks are in great need of highly skilled employees in order to get on the bandwagon to the world of the Internet and the mobile phone.

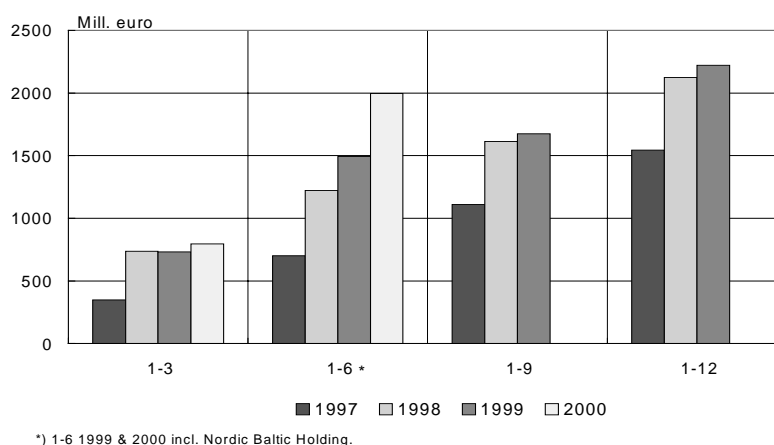
The long-run effect of technology on bank profitability is ambiguous. On the one hand, technological progress has enabled reductions in location-specific distribution channels (eg ATMs and branches) by enabling banks to offer alternative, cheaper channels for services and has helped to reduce costs of creating new services. However, technological progress also lowers entry barriers and increases competition, which will in turn reduce the banks' ability to maintain current levels of interest rate margins and service fees.

## References

- Bank of Finland (2000): **Financial Stability in Finland**, Bank of Finland Bulletin, Vol. 74, No. 2, 2000.
- European Central Bank (1999): **Possible Effects of EMU on the EU Banking Systems in the Medium to Long term**. ECB, February 1999.
- European Central Bank (2000): **EU Banks' Income Structure**. ECB, April 2000.
- Koskenkylä, Heikki (2000): **Threats and Opportunities for Today's European Banks**, Bank of Finland Working Papers 7/00, June 2000.
- Koskenkylä, Heikki (1998): **The Nordic Countries' Banking Crises and the Lessons Learned**, Bank of Finland Working Papers 6/00, June 2000.
- Laakso, J. (1995): **Finnish Credit Institutions in a Changing Environment**, Bank of Finland Bulletin, Vol. 69. No. 5.
- Llewellyn, D. T. (2000): **The New Economics of Banking: Strategic Implications**, Paper Presented at SUERF Colloquium, Vienna 28<sup>th</sup> April, 2000.
- Nyberg, P. (1994): **Decision on the Restructuring of the Savings Bank Sector**, Bank of Finland Bulletin, Vol. 68, no. 1.
- Schmidt, R. H., Hackethal, A., and Tyrell, M., (1999): **Disintermediation and the Role of Banks in Europe: An International Comparison**, Journal of Financial Intermediation, Vol. 8, pp. 36-67.
- Tuori, K. (1996): **Credit Institutions**, Bank of Finland Bulletin, Special Issue on Financial Markets In Finland.
- White, William (1998): **The Coming Transformation of Continental European Banking?**, BIS Working Papers, No.54, June 1998.

## Appendix 1. Bank results 30 June 2000

**Figure 1. Banking sector profitability**



Banks' operating profit in the first half of 2000 was approximately EUR 2.2 billion. The high profitability was based on high net interest income and fee income. Rising interest rates widened banks' margins, which led to an increase in net interest income. The largest banks reported increased incidental incomes due to transactions connected with ownership arrangements for the insurance company Pohjola. Banks' operating expenses increased by over 10 % p.a. Loan losses remained at a very low level. Non-performing loans increased slightly. Despite an increase in expenses, banks' efficiency measured by the cost-to-income ratio increased to a level that is among the best in Europe. Credit growth receded to a modest level as interest rates rose. Deposits grew despite the abolishment of tax exemption for deposits at the start of June. The nature of domestic banking is continually changing. Online banking continued to grow, and banks offered a constantly expanding assortment of online banking services. Also mobile banking applications have been launched. On the other hand, especially small banks increased their physical presence in growth centres by expanding branch networks. Bank competition is intensifying too. Both Merita and Leonia have lost market share to cooperative banks and small local banks.

Operating profit for Nordic Baltic Holding increased 29 % to EUR 1.4 billion. Return on equity was 18.6 %. Operating profit for Merita Bank was EUR 0.5 billion. Net interest income rose by 8 % (18 % for operations in Finland). Trading profits turned positive, amounting to EUR 236 million. Fee and commission income rose 42 % to EUR 761 million. Loan losses decreased further to EUR 37 million, and the amount of non-performing loans decreased to EUR 0.7 billion. Nevertheless non-performing loans increased in Finland. Expenses for the group increased 10 %, mainly due to personnel costs. Credit growth was about 10 % p.a. Deposits increased at 3 % pace. Merita's market shares in both loans and deposits decreased in Finland. Capital adequacy remained good at 10.8 %. Growth in online banking continued strong. At the end of June the group had 140,000 online equity trading customers.

Operating profit for Leonia tripled to EUR 0.4 billion. The share of Pohjola-related profit was EUR 0.24 billion. Return on equity was 33.8 %. Excluding items affecting comparability, Leonia's operating profit was EUR 147 million, which was double that of last year. Return on equity was 12.5 %. Net interest in-

come rose by 10 %. Trading income increased from the zero level of last year to EUR 60 million. Profitability in equity trading remained good. Fee and commission income increased by only 3 % p.a. Other income declined substantially. The bank's efficiency level was good, the cost-to-income ratio being 39 % (65 % excl. Pohjola-effect). Administrative expenses increased by 4 %, although the bank managed to cut other costs. Loan losses increased slightly but remained at a low level. Non-performing assets decreased further, to EUR 65 million. Credit growth was only on the 2 % level, and deposits declined by 8 %. The decline in deposits was based on termination of cooperation between Leonia Bank and the postal service, which led to a loss of 30,000 customers for Leonia. The group's capital adequacy remained good at 12.6 % (11.4 % excl. Pohjola). About 80 % of retail equity customers trade online.

Operating profit for the group of cooperative banks rose by 70 % to EUR 0.4 billion. Return on equity was 31.4 %. Net interest income increased by 11 % and fee and commission income by 35 %. Contrary to other banks, trading income decreased 65 % to EUR 5 million. Other income also declined. The group's operating expenses increased 4 %, mainly in connection with personnel expenses. Loan losses decreased to zero and non-performing loans increased by 20 % to EUR 0.2 billion. Efficiency increased, and the cost-to-income ratio decreased to 42. Cooperative banks face declining credit growth; the outstanding amount of credit increased by 12 %. Deposits increased 4 % while capital adequacy improved to 12.9 %. The group of cooperative banks has a strategic 9.4 % ownership share in the insurance company Pohjola. In June 55 % of all equity transactions in the group were made via online connections.

Operating profit for the small banking groups totalled EUR 0.1 billion. Return on equity was slightly over 20 %. Incomes increased faster than for the largest banking groups, as loans and deposits grew faster than the average. Small banks managed to gain customers from larger banks.

## Appendix 2. Tables

**Table 1. Deposit banks: Financial results 1993-2000Q2\***

EUR billion	1993	1994	1995	1996	1997	1998	1999	2000 Q2	1997	1998	1999	2000 Q2
									Incl. Nordic Baltic Holding			
Net interest income	2.2	2.3	2.1	1.9	2.1	2.3	2.3	1.3	3.1	3.2	3.1	2.2
Other income	1.6	1.4	1.4	1.7	1.3	1.4	1.4	1.3	2.1	2.4	2.2	2.5
Total income	3.8	3.8	3.5	3.6	3.4	3.7	3.7	2.6	5.2	5.6	5.3	4.7
Operating expenses	2.6	2.8	2.6	2.2	1.9	2.0	1.9	1.0	2.8	2.9	2.8	2.3
Depreciation	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2
<b>Profit before loan losses</b>	1.0	0.8	0.5	1.2	1.4	1.6	1.5	1.4	2.2	2.3	2.3	2.2
Loan and quarantine losses	2.5	1.9	1.0	0.6	0.4	0.3	0.1	0.0	0.5	0.2	0.1	0.0
<b>Operating profit</b>	-1.5	-1.1	-0.5	0.6	1.0	1.3	1.4	1.4	1.7	2.1	2.2	2.2

\* The figures for Nordic Baltic Holding group include only Merita Bank Group unless otherwise indicated. Source: Financial Supervision Authority and Bank of Finland

**Table 2. Deposit banks' financial results, EUR million**

	2000Q2	1999	1998	1997
<b>Merita Bank (groups consolidated)</b>				
Net income from financial operations	551	931	893	690
Other income	382	545	577	891
Total income	934	1 475	1 470	1 581
Operating expenses	372	734	706	742
Deprecation	27	47	57	177
Operating profit before loan and quarantine losses	534	695	706	663
Loan and quarantine losses	6	57	167	252
Operating profit	528	638	539	410
<b>Leonia Bank (groups consolidated)</b>				
Net income from financial operations	214	331	369	376
Other income	377	242	215	155
Total income	591	573	585	532
Operating expenses	203	377	402	395
Deprecation	15	44	42	34
Operating profit before loan and quarantine losses	373	153	141	103
Loan and quarantine losses	-3	-4	11	-9
Operating profit	376	156	130	112
<b>Leonia Corporate Bank</b>				
Net income from financial operations	34	62	62	62
Other income	5	16	17	12
Total income	39	78	79	74
Operating expenses	9	17	17	17
Deprecation	0	5	2	2
Operating profit before loan and quarantine losses	30	57	61	55
Loan and quarantine losses	0	0	-2	8
Operating profit	30	57	62	47
<b>OKOBANK Group Central Cooperative</b>				
Net income from financial operations	376	678	691	619
Other income	449	447	483	427
Total income	825	1 126	1 173	1 046
Operating expenses	294	574	595	557
Deprecation	139	76	56	89
Operating profit before loan and quarantine losses	392	475	522	400
Loan and quarantine losses	0	26	128	281
Operating profit	393	450	395	119

Source: Financial Supervision Authority.



**Table 3. Alternative Efficiency Measures 1993-2000Q2, %**

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Q2
1)	Cost-to-Income	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5
2)	Branches / 1000 inhabitants	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3
3)	Employees / 1000 inhabitants	10.1	9.4	8.3	7.3	7.1	6.2	5.5	5.1	4.7	4.7	4.7
4)	Staff costs / non-bank deposits	2.1	2.2	2.0	1.9	1.9	1.9	2.0	1.5	1.7	1.6	0.9
5)	Staff costs / operating expenses	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.5	0.5	0.5	0.5
6)	Employees / total assets	378	349	364	304	321	307	289	238	227	208	206

1) Source: Financial Supervision Authority (FSA)

2) & 3) Sources: The Finnish Bankers' Association and Statistics Finland

4) & 5) Sources: For 1990-94 OECD, all banks incl. foreign banks; for 1995-99 FSA, all banks excl. foreign banks

6) Sources: The Finnish Bankers' Association and FSA

Figures include Merita Bank

**Table 4. Finnish Banks in Comparison, 1995-1998, %**

Year	1995	1996	1997	1998
FINLAND				
Net Interest Income / Total Assets	1.80	1.81	1.78	1.92
Non-Interest Income / Total Assets	1.02	1.34	1.18	1.39
Net Income from Fees and Commissions / Non-interest Income	0.57	0.51	0.52	0.48
Operating Income / Total Assets	2.89	3.15	2.99	3.31
Operating Cost / Operating Income	0.69	0.65	0.56	0.57
ROE	-8.3	13.8	22.2	27.4
ROA	-0.25	0.49	0.89	1.20
EURO AREA				
Net Interest Income / Total Assets	1.91	1.80	1.63	1.53
Non-Interest Income / Total Assets	0.80	0.87	0.93	1.09
Net Income from Fees and Commissions / Non-interest Income	0.55	0.53	0.53	0.50
Operating Income / Total Assets	2.72	2.65	2.57	2.49
Operating Cost / Operating Income	0.65	0.65	0.65	0.65
ROE	10.2	11.2	11.4	15.8
ROA	0.46	0.50	0.49	0.69
EU -AREA				
Net Interest Income / Total Assets	1.96	1.87	1.72	1.63
Non-Interest Income / Total Assets	0.94	0.98	1.00	1.15
Net Income from Fees and Commissions / Non-interest Income	0.58	0.57	0.57	0.54
Operating Income / Total Assets	2.90	2.85	2.72	2.79
Operating Cost / Operating Income	0.64	0.64	0.64	0.63
ROE	11.4	14.2	13.9	17.4
ROA	0.54	0.62	0.62	0.78

Source: ECB, April 2000

**Table 5. Banking Sector Balance Sheet 1996-2000Q2\***

(EUR million)	1996	1997	1998	1999	2000 Q2
<b>Assets:</b>					
Securities justifying to central bank financing	-	-	-	8 525	7 106
Liquid assets	1 380	1 562	2 505	5 303	1 747
Loans to credit institutions	14 011	17 099	13 050	15 309	20 112
Loans to the public	51 754	55 981	61 555	67 062	68 556
Securities	18 254	23 056	18 955	10 015	9 803
Shares and participations	3 641	3 221	1 185	1 285	967
Other items	8 531	9 376	10 472	9 605	10 123
<b>TOTAL</b>	<b>97 572</b>	<b>110 295</b>	<b>107 722</b>	<b>117 104</b>	<b>118 415</b>
Non-performing loans and guarantees	2 069	1 431	921	803	701
<b>Liabilities:</b>					
Due to credit institutions and central banks	12 282	14 852	11 881	12 135	14 480
Deposits from the public	53 292	56 175	57 348	62 939	60 433
Debt instruments outstanding	18 089	23 446	23 945	26 434	26 776
Other borrowing from the public	2 208	2 461	3 403	3 559	3 953
Other liabilities	6 271	7 802	5 598	5 464	5 569
Shareholders' equity	5 430	5 560	5 549	6 572	7 204
<b>TOTAL</b>	<b>97 572</b>	<b>110 295</b>	<b>107 722</b>	<b>117 104</b>	<b>118 415</b>

\* The figures for MeritaNordbanken group include only Merita Bank Group.  
Sources: Bank of Finland 1996-99 and Financial Supervision Authority 2000Q2

**Table 6. Capital adequacy in deposit banks, 1993 – 2000Q2, % / EUR billion\***

Year	1993	1994	1995	1996	1997	1998	1999	2000 Q2
Capital adequacy ratio (BIS)	10.7	11.7	12.0	11.4	11.9	11.5	11.9	12.7
Risk-weighted assets	82.2	70.6	62.5	62.6	67.6	69.8	71.8	73.3

\* The figures for MeritaNordbanken group include only Merita Bank Group.  
Source: Financial Supervision Authority and Bank of Finland.

**Table 7. Credit institutions' non-bank deposits as a percentage of GDP**

	1980	1985	1990	1995	1996	1997
UK		136.79	187.35	215.80	209.80	222.50
DK	138	142.00	158.00	148	151.00	154.00
IE	75.83	56.77	72.63	93.07	101.33	122.11
PT	91.0	105.00	87.00	113.00	113.00	116.0
BE	65.65	75.30	90.93	98.47	104.61	110.93
DE	83.33	89.42	100.47	98.52	104.07	101.09
AT	72.03	84.66	95.16	100.51	100.19	98.71
NL	57	61.0	91.00	90.00	90.00	93.00
GR	43.40	64.94	72.22	69.36	69.75	76.33
ES		90.52	74.53	79.09	76.25	73.86
FR	25.40	58.80	73.70	62.70	64.00	67.30
SE		46.77	48.24	46.76	50.99	52.93
FI	39.80	47.38	51.46	56.04	52.14	49.11
IT	66.20	59.70	53.30	37.80	37.40	38.30
LU	497.03	775.34	1 451.09	1 417.59	1 442.55	1 389.32
<b>EU Weighted average</b>		84.44	98.85	98.81	99.95	101.95

Source: ECB, February 1999.

**Table 8. Structure and size of banking groups**

	30.6.2000	31.12.1999	31.12.1998	31.12.1997
	Assets, mill. Euro	Assets, mill. Euro	Assets, mill. Euro	Assets, mill. Euro
Meritanordbanken Group	103 678	104 039	96 096	..
Merita Plc, group of companies	..	..	..	50 243
Merita Bank Plc, group of companies	55 581	52 736	50 736	49 441
Merita Bank Plc	55 700	52 471	50 583	49 195
<i>Merita Finance Group Limited</i>	3 541	2 394	2 096	1 841
<i>Merita Customer Finance Ltd.</i>	..	981	863	712
<i>Suomen Teollisuuspankki Oyj</i>	..	..	..	390
<i>Merita Real Estate Ltd</i>	1 454	1 739	2 754	2 709
<i>Merita Life Insurance Ltd</i>				
Leonia Plc, group of companies	24 818	28 229	24 904	..
Leonia Bank Plc, group of companies	18 985	22 028	18 544	21 067
Leonia Bank Plc	18 828	21 869	18 383	20 870
Leonia Corporate Bank Plc	6 998	6 999	6 858	9 237
<i>Leonia Municipality Bank Plc</i>	357	364	380	409
<i>Leonia Finance Ltd.</i>	696	627	561	417
<i>MB Finance Group Limited</i>	29	26	22	32
<i>Suomen Tilirahoitus Oy</i>	..	..	..	27
<i>Life Insurance Leonia Ltd</i>				
OKOBANK Group Central Cooperative, group of companies	27 147	26 024	23 332	22 816
OKOBANK, group of companies	11 602	8 930	8 936	10 836
OKOBANK	9 873	7 359	7 437	9 237
<i>Okobank Ltd</i>	1 670	1 161	1 296	1 567
<i>OKO-Investointiluottopankki Oyj</i>	920	765	806	891
<i>OP-Finance Ltd</i>	1 021	955	684	538
<i>OP-Kotipankki Oyj</i>	136	100	92	113
<i>Aurum</i>				
Ålandsbanken Abp, group of companies	1 639	1 507	1 078	859
Aktia Sparbank Abp, group of companies	2 980	2 738	2 387	1 888
Interbank Osakepankki, group of companies	..	..	..	488
Mandatum Pankki Oyj, group of companies	923	781	546	..

Source: Financial Supervision Authority

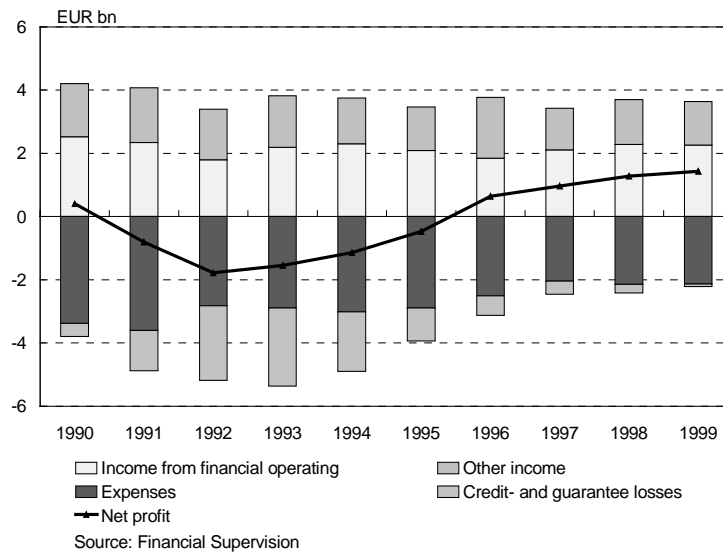
**Table 9. Foreign branches in Finland, total assets, EUR billion**

	30.6.2000	31.12.1999	31.12.1998
Citibank International plc	11	27	13
Credit Agricole Indosuez	166	90	141
Den Danske Bank Aktieselskab	2 274	1 374	1 385
Skandinaviska Enskilda Banken AB (publ)	1 616	1 339	2 331
Svenska Handelsbanken AB (publ)	6 835	6 497	3 837
Treviso Bank AB (publ)	0	4	0
Unibank A/S	570	1 278	521
BMW Financial Services Scandinavia AB	14	6	0
FCE Bank plc	373	172	146
GE Capital Equipment Finance Ab	17	16	2
Handelsbanken Finans Aktiebolag (publ)	100	69	38
Scania Finans Aktiebolag	64	68	0
SEB Finans AB (publ) Helsingforsfilialen	18	..	..
Telia Finans Finland	17	17	0
Xerox Credit Aktiebolag	77	74	65

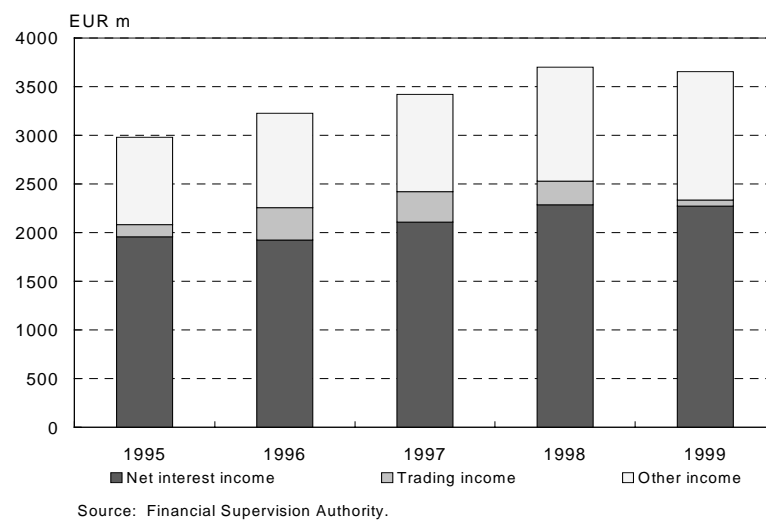
Source: Financial Supervision

## Appendix 3. Figures

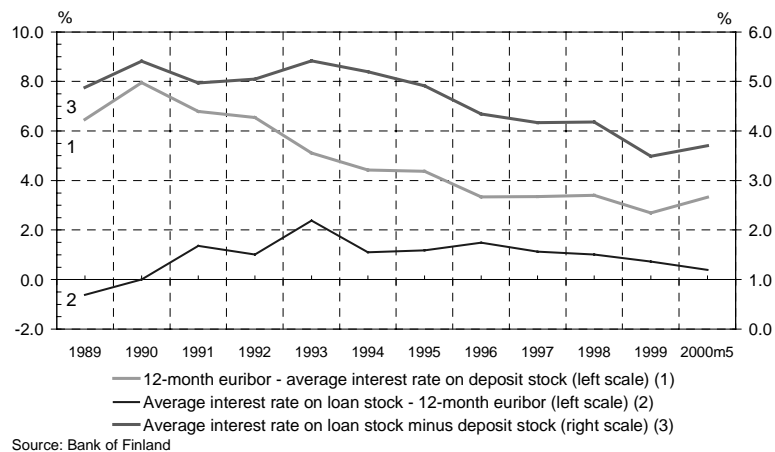
**Figure 1. Profitability of Finnish deposit banks**



**Figure 2. Deposit banks' income structure**

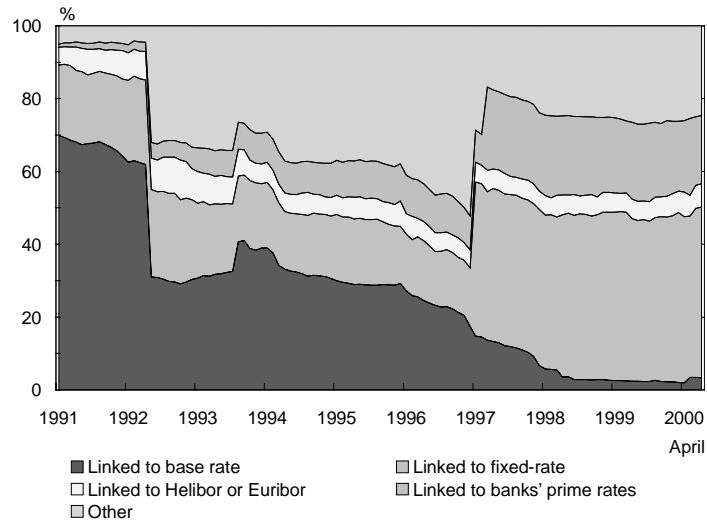


**Figure 3. Deposit banks' interest rate margins**



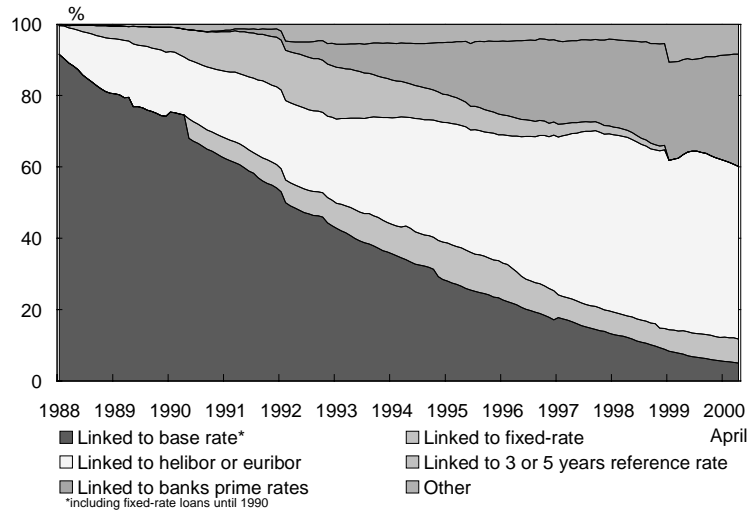
**Figure 4.**

**Banks' euro-denominated deposits by interest rate linkage**



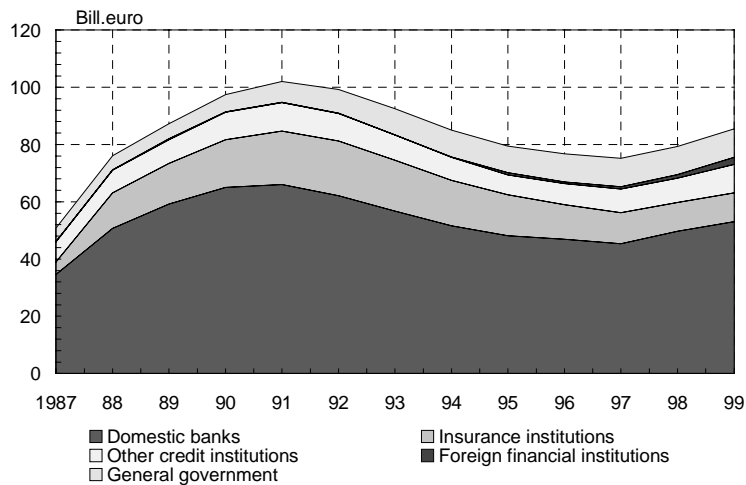
**Figure 5.**

**Banks' loans to public by interest rate linkage**



**Figure 6.**

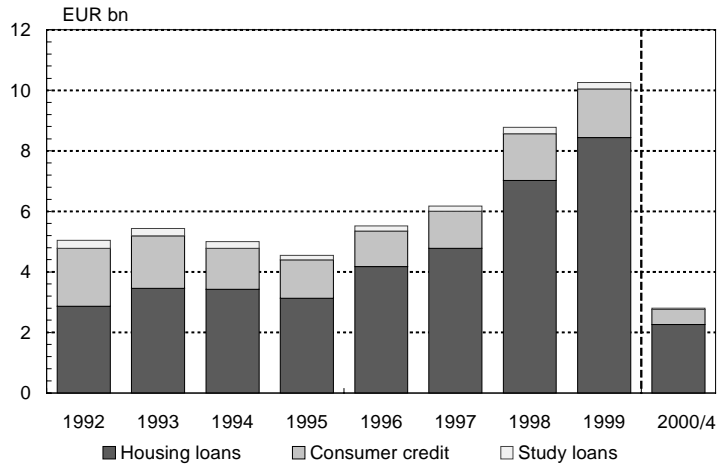
**Euro-denominated lending to the public by creditor**



Source: Statistics Finland

**Figure 7.**

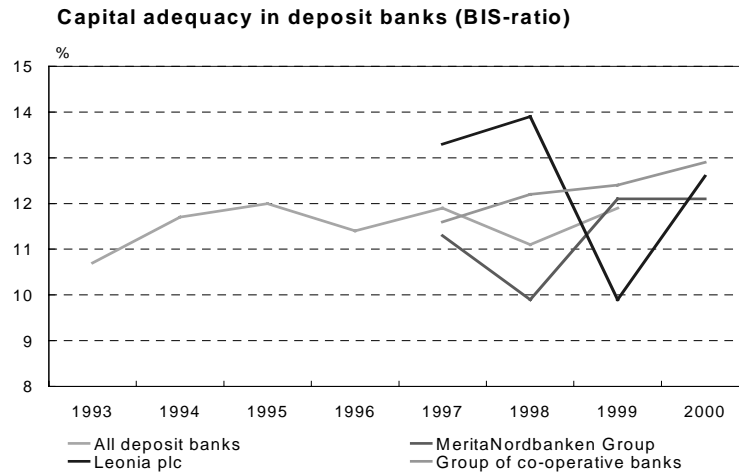
**New lending to households by purpose**



Source: Bank of Finland

**Figure 8.**

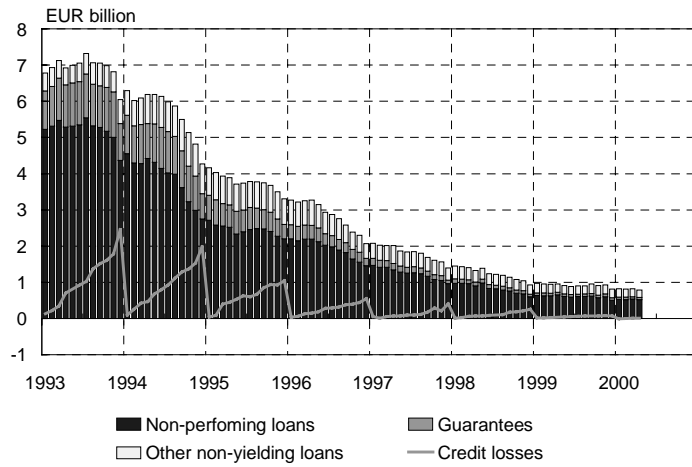
**Capital adequacy in deposit banks (BIS-ratio)**



Source: Deposit banks.

**Figure 9.**

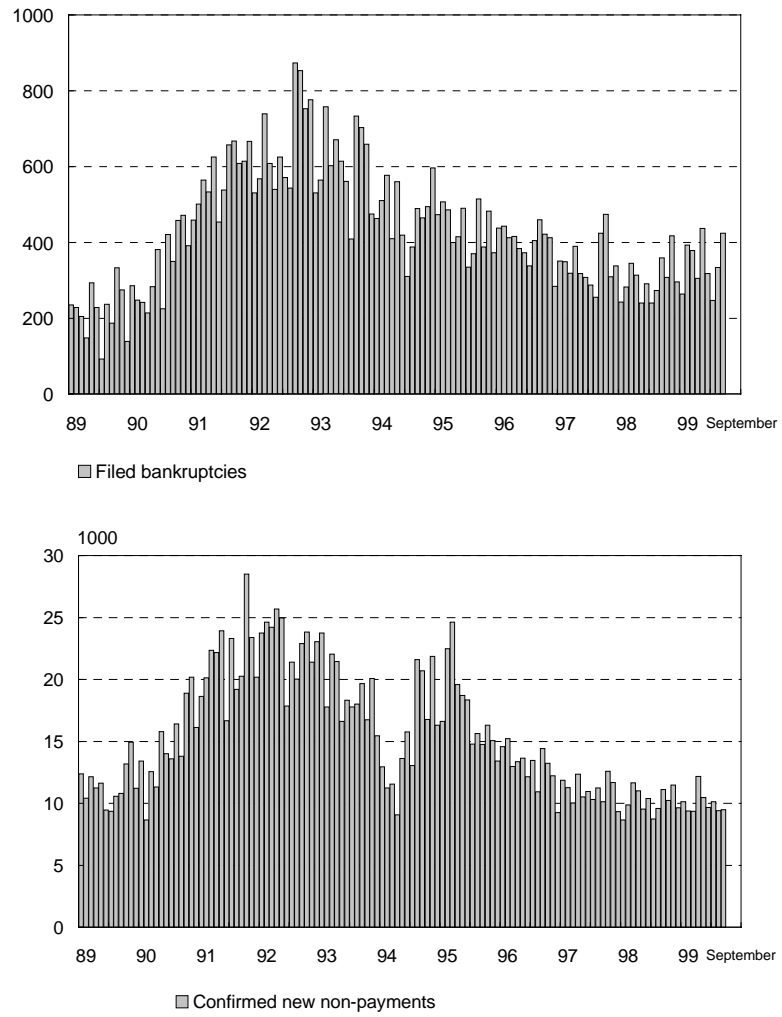
**Banks' non-performing assets and credit losses**



Source: Financial Supervision

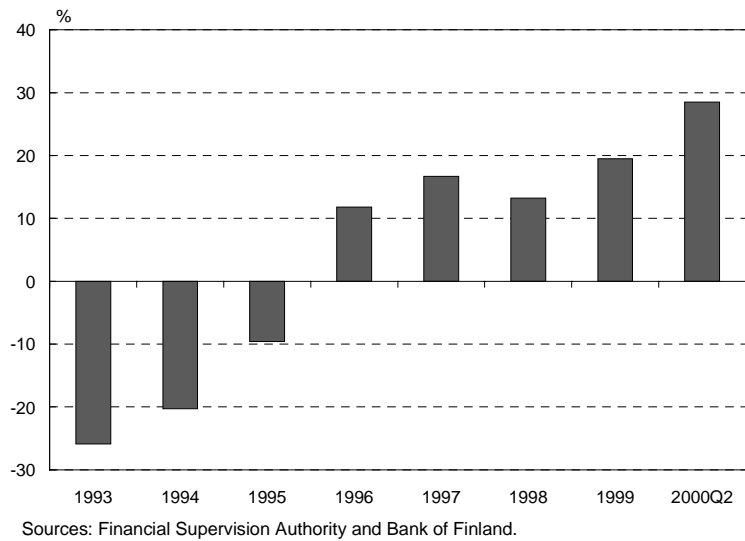
**Figure 10.**

**Filed bankruptcies and new non-payments**



**Figure 11.**

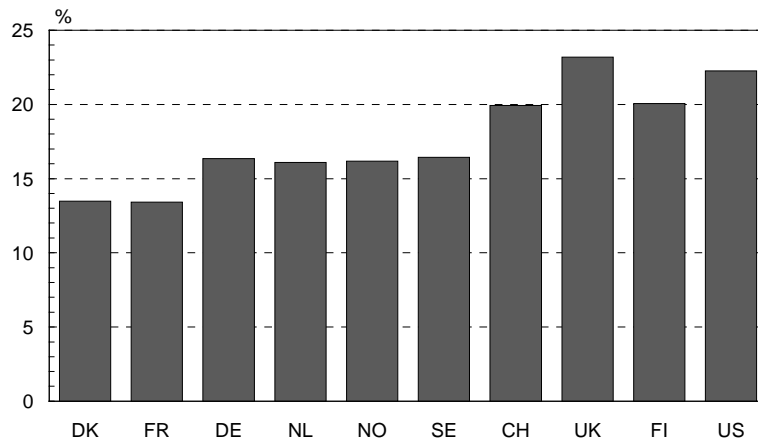
**Return on equity in deposit banks (ROE)**





**Figure 12.**

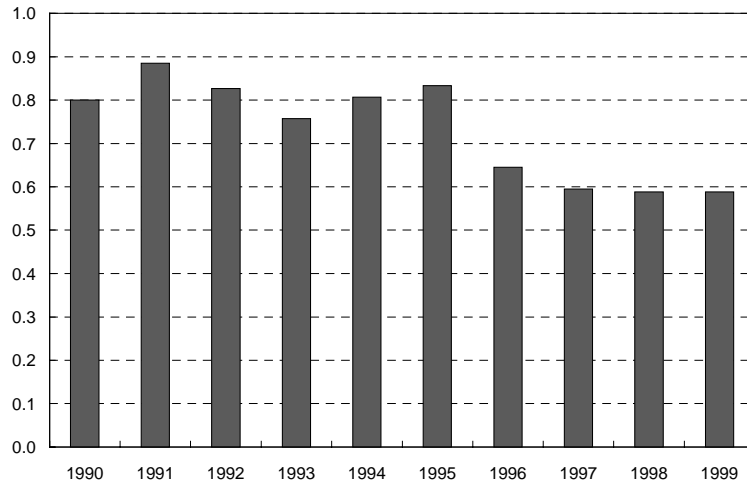
**Return on equity (ROE), large European and US banks, December 1999**



Source: SalomonSmithBarney

**Figure 13.**

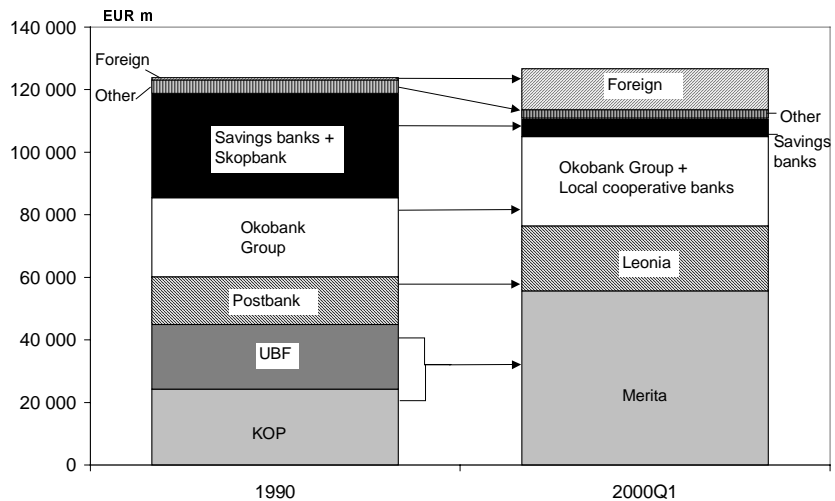
**Cost-to-income ratio 1990-1999 in Finland**



Sources: Financial Supervision Authority and Bank of Finland.

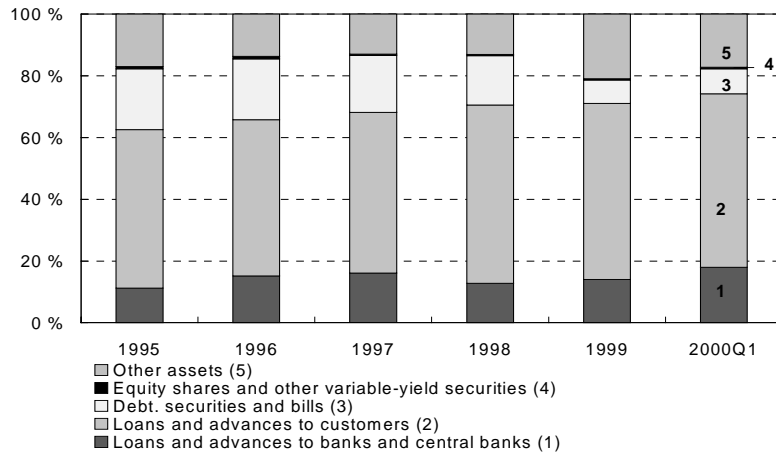
**Figure 14.**

**Total Assets**



**Figure 15.**

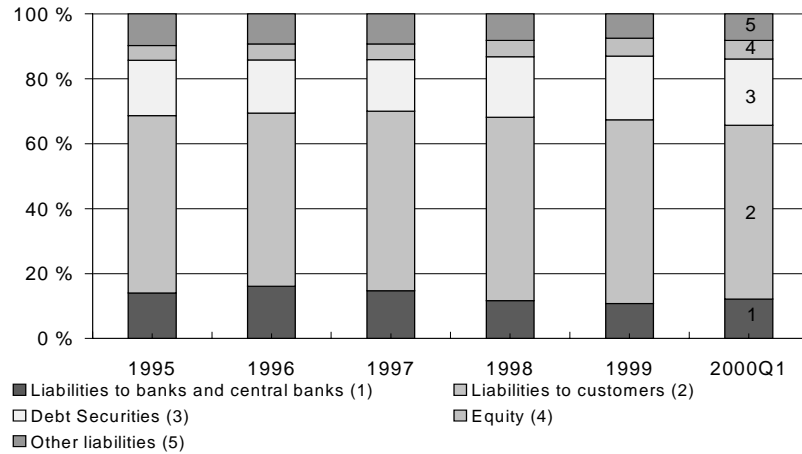
**Deposit banks' asset structure**



Source: Financial Supervision Authority

**Figure 16.**

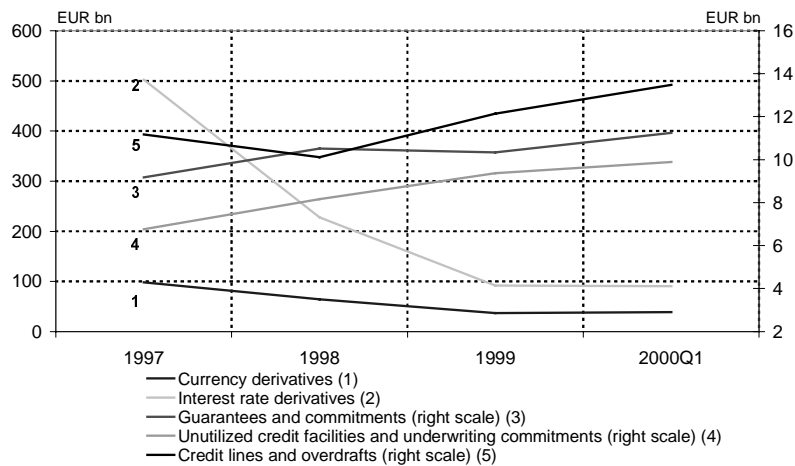
**Deposit banks' liability structure**



Financial Supervision Authority

**Figure 17.**

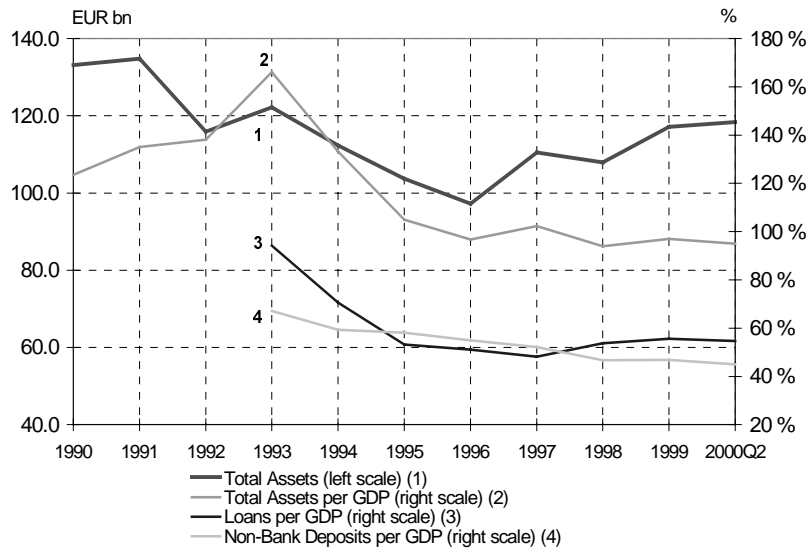
**Deposit Banks' derivative contracts and other off-balance sheet items**



Source: Financial Supervision Authority

**Figure 19.**

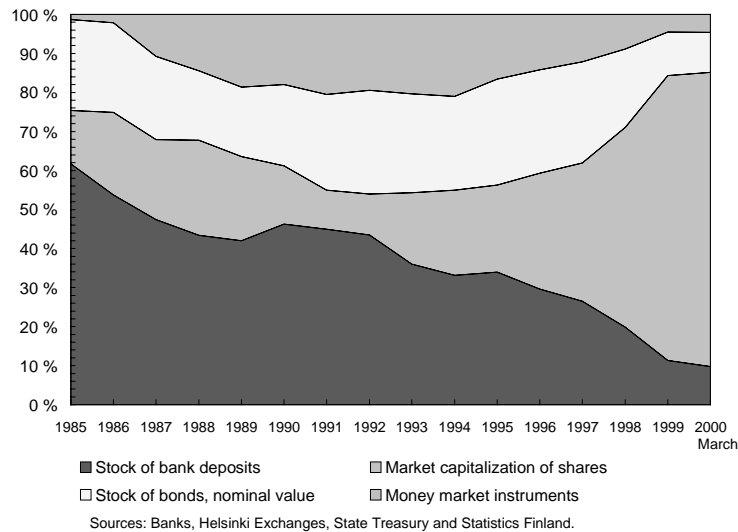
**Selected indicators of the relative size of the banking sector**



Sources: Financial Supervision Authority and Eurostat

**Figure 20.**

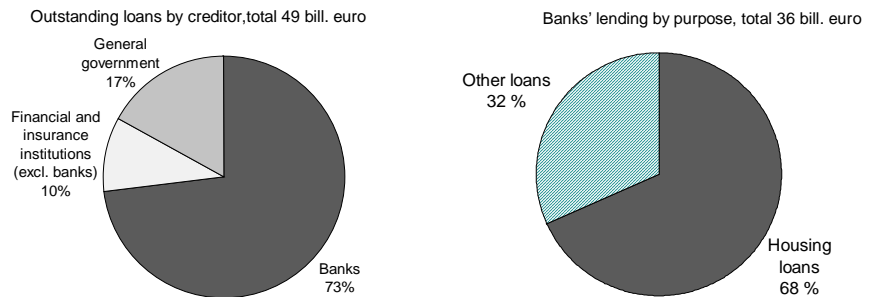
**Financial assets in Finland, percentage breakdown**



Sources: Banks, Helsinki Exchanges, State Treasury and Statistics Finland.

**Figure 21.**

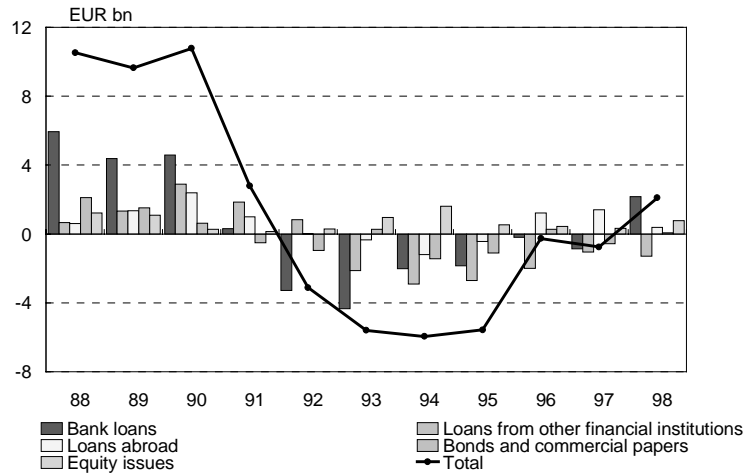
**Euro-denominated lending to households by creditor and purpose 1999**



Source: Statistics Finland

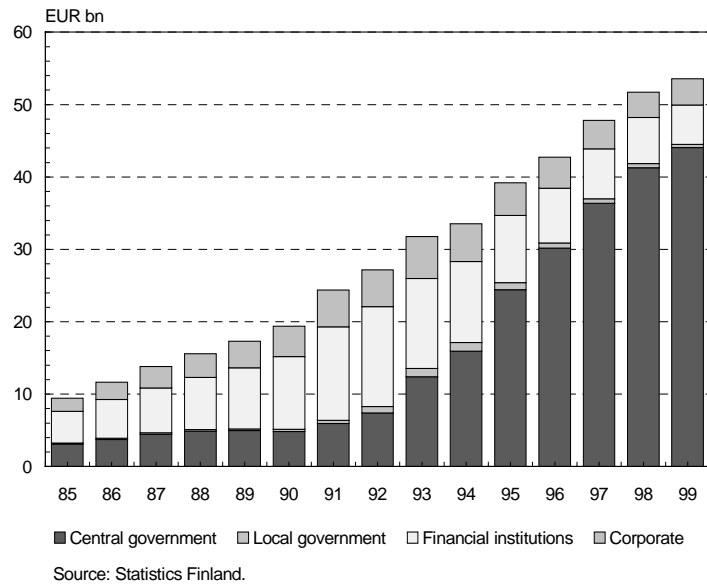
**Figure 22.**

**Sources of companies' external finance, net flows**



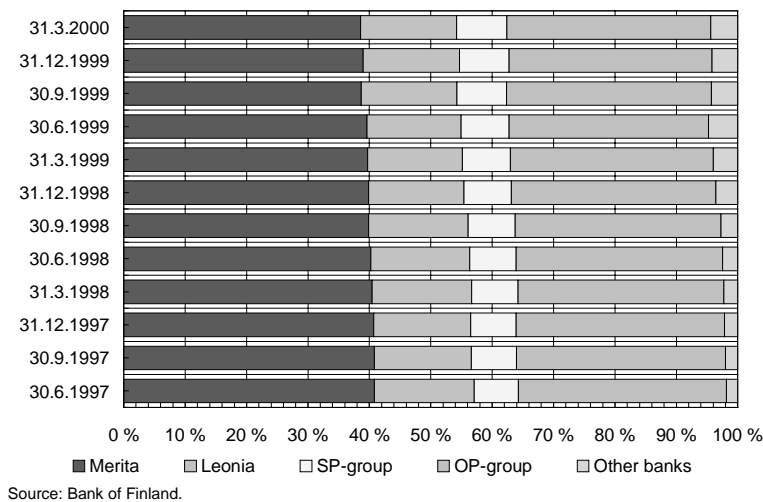
**Figure 23.**

**Bonds issued in Finland, end-month stock by issuer sector**



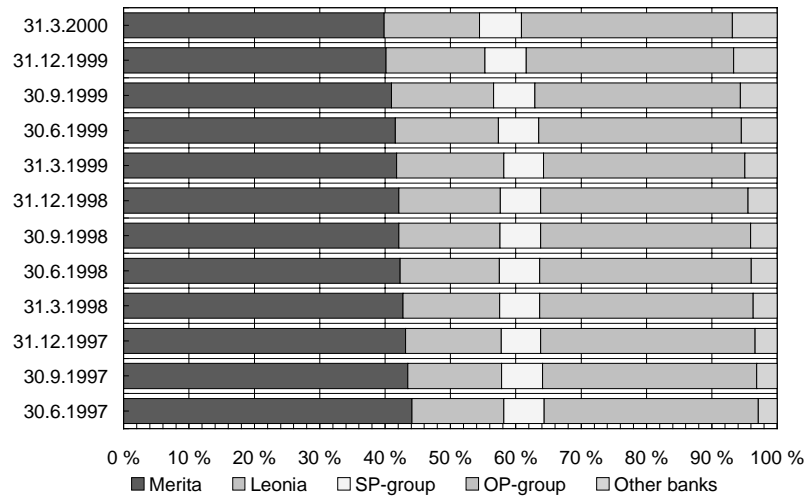
**Figure 24.**

**Banks' market shares in deposits**



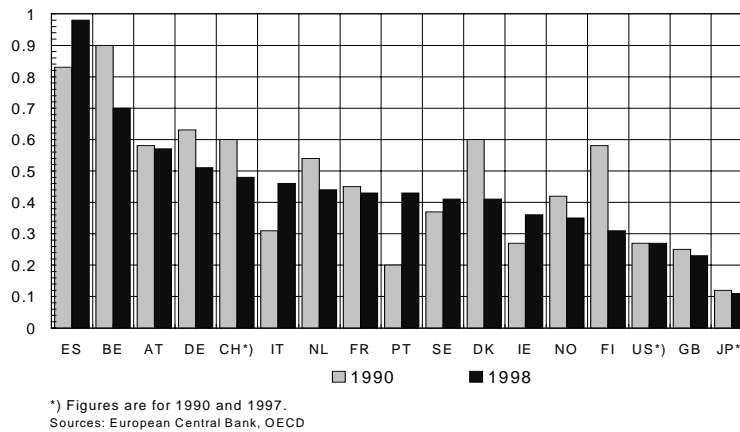
**Figure 25.**

**Banks' market shares in loans**



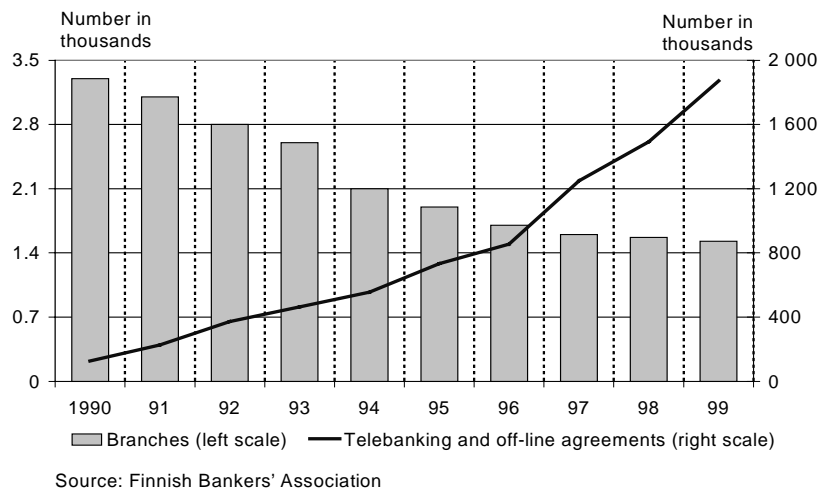
**Figure 26.**

**Bank branches per 1000 inhabitants in selected countries**



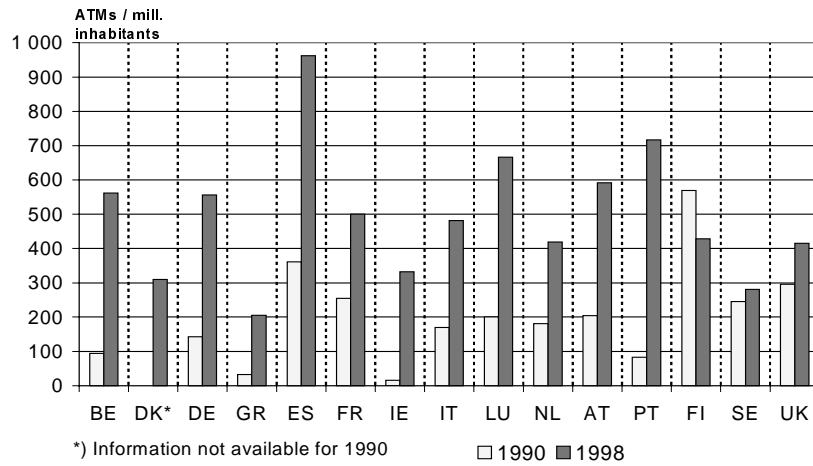
**Figure 27.**

**Bank branches and data connections between banks and customers in Finland**



**Figure 28.**

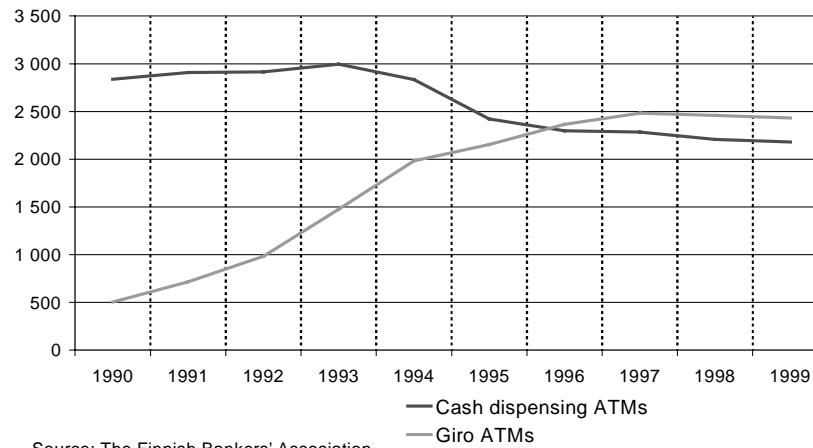
**Number of ATMs per capita in EU countries**



Source: ECB

**Figure 29.**

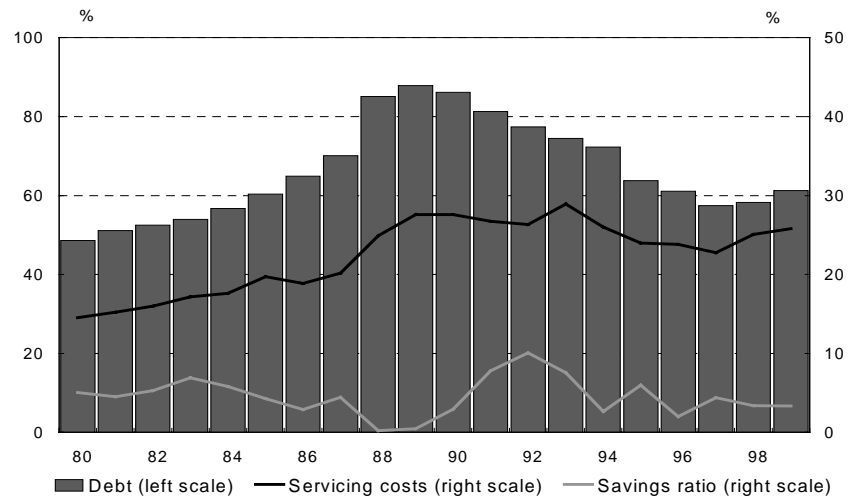
**Number of cash ATMs and giro ATMs in Finland in 1990-99**



Source: The Finnish Bankers' Association

**Figure 30.**

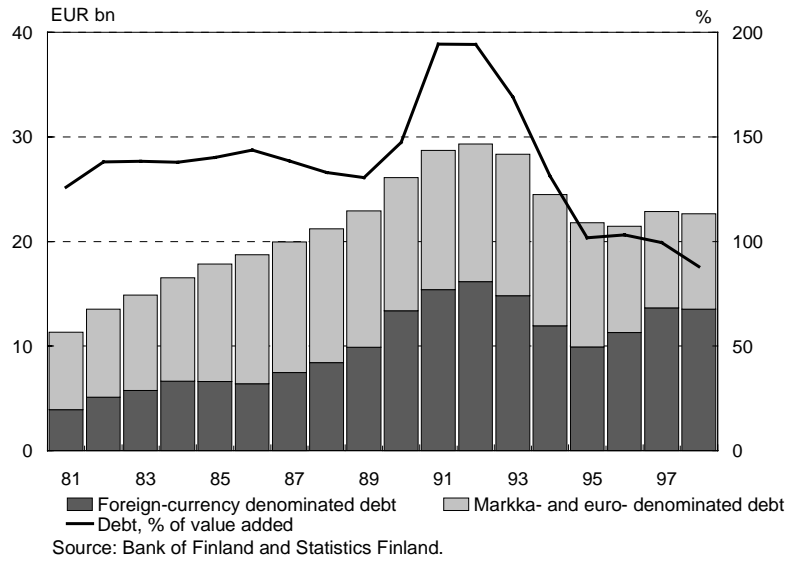
**Household debt, savings ratio and servicing costs, % of disposable income**



Source: Statistics Finland

**Figure 31.**

**Debt in industry and percent of value added**



**Figure 32.**

**Debt in other sectors and percent of value added**

