BANK OF FINLAND DISCUSSION PAPERS

10/93

Johanna Pensala — Heikki Solttila

Financial Markets Department

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Banks' Nonperforming Assets and Write-Offs in 1992

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Suomen Pankki
Bank of Finland
P.O.Box 160, SF-00101 HELSINKI, Finland
☎ + 358 0 1831

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Abstract

In this paper we present data collected by the banking supervision authorities on banks' nonperforming assets and loan losses with a view to establishing a consistent database for analysing the condition of Finnish banks and firms.

Over the past couple of years some FIM 100 billion's worth of banks' exposures have been nonperforming, for shorter or longer periods of time. At the end of 1992 banks' nonperforming assets amounted to FIM 55 billion, after write-offs of FIM 22 billion for the year. Firms in the domestic sector of the economy are facing the most difficult debt-servicing problems; nonperforming assets amounted to some 15 per cent of exposures on average. For manufacturing firms, the figure was less than five per cent.

The relatively stronger position of manufacturing firms is also clearly seen in the breakdown of loan losses by industry. These firms accounted for only just over 10 per cent of loan losses attributable to domestic firms. Construction and real estate business accounted for 45 per cent of the total. Although a fifth of nonperforming loans were accounted for by households, these loans have not caused the banks' loan losses to any great extent so far. In 1992 they accounted for less than seven per cent of the total.

Contents

1 Introduction

After the economy had entered into a deep recession at the beginning of the 1990s, the banks' financial problems began to worsen, as more and more of their customers ran into debt-servicing difficulties. Excessive investment by firms in the domestic sector has proven to be a particularly high-risk area. Lending by domestic financial institutions to finance these investments expanded by some FIM 100 billion after the mid-1980s. The vast majority of this amount was lent by banks. In competing for market share, the banks relaxed their credit-granting standards and partly lost control of the credit risks attached to banking.

Economic policy also had a significant impact on economic development in the late 1980s and early 1990s. The deregulation of financial markets, together with a fiscal policy that was too loose considering the conditions prevailing at the time, led to an overheating of the economy, particularly in 1988 and 1989. At the same time, increased domestic demand led to a widening of the current account deficit. The subsequent tightening of monetary policy was too late to adequately check the overheated economy.

With the onset of the 1990s, domestic demand began to decline as a result of a sharp rise in real interest rates and adjustment to over-indebtedness, at the same time as trade with the Soviet Union collapsed. Because firms' competitiveness had eroded during the boom years and demand was slack, exports to western markets could not compensate for the loss in domestic demand. Output began to decline.

With the decline in demand, many firms have had to face the fact that their expectations concerning the future had been over- optimistic. For those providing the financing, this has meant an increase in nonperforming assets and falling collateral values.

The decline in bank profitability, which started in 1989, came to a head in 1992 when banking groups' combined losses amounted to more than FIM 20 billion. The prime reasons for the losses were writedowns on loans and guarantees as well as lower net income from financial operations due to the increase in nonperforming assets.

This paper examines banks' risk exposures and credit losses by sector and industry. The banking groups report monthly to the Banking Supervision Office on their nonperforming loans and bank guarantees and other zero-interest assets. They report to the Bank of Finland three times a year on their nonperforming assets, by industry.

2 Definitions

2.1 Nonperforming loans and guarantees and other zero-interest assets

Nonperforming loans and guarantees and other zero-interest assets are defined by Banking Supervision Office regulation 5.07/5.2.93. If the payment of interest, principle or any part thereof on an asset has been in arrears for three months, the entire principal is to be classified as nonperforming, regardless of the financing instrument or balance-sheet item involved. Claims on bankrupts' estates are to be classified immediately as nonperforming. For statistical purposes, other zero-interest assets, i.e. separately reported claims originally agreed to bear no interest, are treated as nonperforming assets.

If a customer has not been able to make principal payments on a loan but has paid the interest as due and there is a written agreement between the bank and the customer on a new payment schedule, the asset is not classified as nonperforming. If a court of law has approved a reorganization plan or debt rescheduling for the customer, the asset is removed from the nonperforming category. The asset is reclassified, in accordance with the above criteria, if the customer is unable to carry out the approved plan.

A bank guarantee is classified as nonperforming immediately after the bank has effected the payment arising from it. If the bank has made only a partial payment in respect of a guarantee, only the paid amount is classified as nonperforming.

2.2 Loan losses

The regulations issued by the Banking Supervision Office also mention actual and probable loan losses, which are deducted from nonperforming assets. Changes during the year in nonperforming assets are thus to be monitored together with the related write-offs on loans and guarantees, i.e. as gross figures (Chart 1).

According to accounting regulation 3.01/23.12.92 on financial statements, a loan loss must be written off when it has become clear that the claim is not collectable. Loan losses must also be written off if

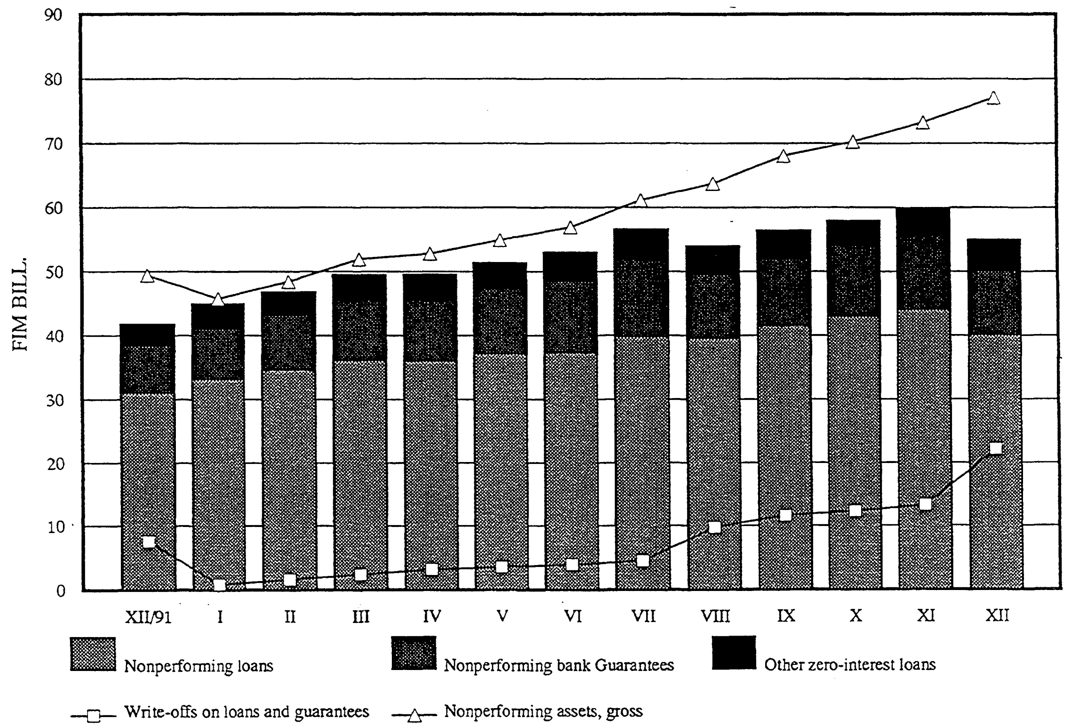
the asset is nonperforming and the customer's ability to pay is not expected to improve within two years and

the probable market value of the collateral does not cover the claim and the value is not expected to increase sufficiently within five years.

This means that accounting regulations define not only actual loan losses but also probable loan losses which are deducted from the asset portfolio. Currently, all Finnish banks writedown their loan portfolios at least three times a year.

In 1992 for the first time, the banks wrote off a significant portion of their probable loan losses in addition to their actual loan losses. The banks applied the accounting regulations of the Banking Supervision Office in accordance with their own practices.

Chart 1. **Nonperforming assets and write-offs on loans and guarantees of banking groups (incl. savings and cooperative banks) in 1992**



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2.3 International comparison of definitions

Nonperforming assets

According to Finnish and Norwegian definitions, an asset is to be classified as nonperforming if interest or principal payments are in arrears for at least three months. In Sweden a payment disruption is allowed for only two months. In Japan an asset is nonperforming if the interest has been in arrears for at least six months. In the United Kingdom nonperforming assets are only mentioned in accounting instructions; there is no precise definition.

In the Nordic countries an off-balance-sheet bank guarantee becomes a nonperforming asset immediately the bank effects payment on the basis of the guarantee.

Accounting regulations in Sweden and Norway recognize the concept of a "soft loan". This is a loan on which a bank has agreed to set the interest payable at a rate substantially below the market rate because of the customer's inability to pay. The concept of other zero-interest assets is not recognized outside of Finland. These can, however, be considered as soft loans.

In Sweden problem assets are reported as the sum of nonperforming assets and soft loans. In Norway soft loans are not included in nonperforming assets. In Finland other zero-interest assets (soft loans) are included in the concept of non-performing assets. The Swedish concept of problem assets is thus the broadest concept applied in the Nordic countries.

The Japanese Ministry of Finance defines narrow and broad concepts of banks' nonperforming assets. The narrow concept includes only assets on which the interest has been in arrears for a specified period. The broad concept also includes soft loans.

Writing off loan losses

International accounting treatment of loan losses recognizes the concepts of actual loan loss, probable loan loss (i.e. specific loan loss provision) and a general loan loss provision. These three items reduce the size of the loan portfolio in the financial statements and are written off as loan losses. Although the general loan loss provision is deducted from assets and therefore also from the balance sheet, it can be included in supplementary (Tier 2) capital in a bank's capital adequacy calculation[1]. The practice thus increases the amount of write-offs and reduces the amount of risk-weighted assets.

In Finland, under current accounting regulations actual and probable loan losses are not reported separately. The Finnish concept of loan loss reserves on the liabilities side of the balance sheet is not recognized as such elsewhere.

A comparison of current accounting standards in different countries shows that rules as to when loan losses can or must be written off are often ambiguous. Nor do the rules set upper limits on the amount of write-offs.

Because of this "flexibility" in accounting standards, the write-off policy applied by a bank largely depends on the discretion of the banks' management and auditors. This makes comparison difficult even between banks operating in the same country. Variations in the way loans are written off affect not only banks' financial results but also their capital adequacy.

The rules for writedowns on loan losses are, however, considerably more stringent in Norway than in Sweden or Finland. For example, in Norway the interest revenue lost in "soft loans" must be written off.

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1 This is the practice applied in Norway, France, Germany, Italy, Luxembourg and the United Kingdom.

2.4 Data

Because definitions of nonperforming assets differ at least to some extent from country to country, precise international comparisons are impossible. With respect to the banking crisis in Finland, however, a breakdown by industry provides a good basis for an analytical study.

In the remainder of this paper, we use three different definitions for banks' assets and commitments. The balance-sheet item loans to the public includes banks' domestic and foreign loans. In addition, the stock of loans includes bonds held as investments. Exposures is the broadest concept, defined here as the total stock of loans plus guarantees[2].

The data on Finland have been collected from consolidated deposit banking groups, including the local savings and cooperative banks. As sectoral data on the small local banks is missing, we have made estimates based on data from other banks. In terms of the overall picture and conclusions to be drawn, the missing data is of no consequence. The data used for Nordic country comparisons are from parent banks.

3 Banks' nonperforming assets

3.1 Growth of nonperforming assets

After the write-offs of FIM 22 billion, banks' nonperforming assets amounted to FIM 55 billion at the end of 1992, or nearly 10 per cent of their loans and guarantees. Nonperforming assets stood at some FIM 42 billion at end-1991, which means that they grew by about FIM 35 billion in 1992, in gross terms[3].

The annual growth of nonperforming assets by sector and industry is based solely on data on some major commercial banks (Table 1). On the basis of this data, it appears that economic conditions affected firms and households with equal

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2 The definition used here is deficient in that it does not include guarantees issued by savings and cooperative banks in respect of loans made by their respective central monetary institutions (groups).

3 With respect to manufacturing, nonperforming assets grew by even more since the sales of collateral and restructuring decreased the stock of nonperforming assets. In some cases also the customer's ability to pay improved. Flow data are not available for nonperforming assets. On the basis of data on certain banks, we estimate the flow of new nonperforming assets for 1992 to be some FIM 50 billion.

force in 1992: gross nonperforming assets for both sectors grew by 50 per cent. Of course, in absolute terms, the debt problems of firms grew much more[4].

Foreign nonperforming assets doubled in 1992. This was mainly because loans to C.I.S. countries were classified as nonperforming in that year. The growth rate for other foreign nonperforming assets was below the corresponding domestic rate. Nonetheless, it is clear from the amount of such nonperforming assets that banks' foreign assets have not been risk-free. Even excluding the C.I.S. countries, the portion of loans and guarantees that was nonperforming was greater in the foreign category than in the domestic category.

Table 1. **Breakdown of Major Banking Groups' Nonperforming Assets and Write-offs, 1991–1992**

1991	Nonperforming assets		Write-offs on loans and guarantees	
Sector	FIM billion	%	FIM billion	%
Corporate	16	63.5	6	62.9
Household	4	14.4	0	3.9
Other domestic[1]	1	2.0	1	7.4
Foreign	5	20.1	2	25.8
All sectors	26	100.0	9	100.0
1992	**Nonperforming assets**		**Write-offs on loans and guarantees**	
Sector	FIM billion	%	FIM billion	%
Corporate	17	54.6	8	60.4
Household	5	15.5	1	6.1
Other domestic[1]	2	5.4	2	14.7
Foreign	7	24.5	2	18.8
All sectors	31	100.0	13	100.0

[1] Incl. financial institutions, general government and non-profit institutions.

[4] A more accurate picture of nonperforming assets as regards domestic firms is obtained by means of an industry breakdown. In percentage terms, the greatest increase in banks' nonperforming assets was due to construction. The growth rate for nonperforming assets was also above the average for manufacturers. On the other hand, the debt problem grew at a below-average rate for real estate business. This may largely be the result of the fact that real estate prices began to decline already in 1990, so that in this category the problem came to a head in 1991.

3.2 Structure of nonperforming assets

Nearly 60 per cent of the FIM 55 billion worth of nonperforming assets as of end-1992 was accounted for by domestic firms (Table 2). The share of households was slightly over 20 per cent; foreign countries accounted for some 14 per cent. FIM 10 billion worth of domestic nonperforming assets was denominated in foreign currencies.

An examination of nonperforming assets in relation to banks' overall exposures clearly reveals the problem areas and the division of the economy into open and domestic sectors. With respect to manufacturing, less than five per cent of the total amount of exposures is nonperforming, whereas, for example, the figure for construction is nearly 20 per cent (Table 3).

This situation may be partly explained by another factor: a simple bipartite separation of firms on the basis of size. Large firms are able to arrange their financing so that their loans do not become nonperforming. Of course, this does not necessarily mean that large firms are not facing profitability problems just as serious as those of small and medium-sized firms.

Table 2. **Breakdown of Banking Groups' Total Exposures, Nonperforming Assets and Write-offs on Loans and Guarantees, 31 December 1992**

	Total exposures		Nonperforming assets		Write-offs on loans and guarantees	
Sector	FIM billion	%	FIM billion	%	FIM billion	%
Corporate	268	45.1	32	58.9	17	71.8
of which						
Manufacturing	89	14.9	4	7.5	2	8.8
Construction	29	5.0	6	10.1	3	11.8
Trade, restaurants & hotels	58	9.7	7	13.4	3	14.2
Real estate business	34	5.7	9	16.4	5	20.5
Other	58	9.8	6	11.5	4	16.5
Household	192	32.3	12	21.1	1	6.6
Other domestic[1]	57	9.5	3	6.1	2	10.6
Foreign	78	13.1	8	13.9	2	11.0
All sectors	595	100.0	55	100.0	22	100.0

[1] Incl. financial institutions, general government and non-profit institutions.

Table 3. **Banking Groups' Nonperforming Assets and Write-offs on Loans and Guarantees, 31 December 1992**

Sector	Guarantees in relation to total exposures %	Nonperforming assets in relation to total exposures %	Write-offs on loans and guarantees in relation to total exposures %	Write-offs on loans and guarantees in relation to gross non-performing assets %
Corporate	28.7	12.1	5.9	32.7
of which				
Manufacturing	36.2	4.7	2.2	31.8
Construction	38.0	18.8	8.8	31.8
Trade, restaurants & hotels	24.4	12.7	5.4	29.8
Real estate business	16.8	26.8	13.4	33.2
Other	23.9	10.9	6.3	36.5
Household	2.6	6.1	0.8	11.2
Other domestic[1]	20.0	6.0	4.1	40.7
Foreign	10.6	9.8	3.1	24.0
All sectors	17.1	9.3	3.7	28.5

[1] Incl. financial institutions, general government and non-profit institutions.

A key factor in determining whether a firm's debt becomes nonperforming is the manner in which the financing entity responds to the problems involved. Hence, the relatively smaller share of nonperforming assets in manufacturing firms could also be explained by the fact that the banks' exposures to large firms in the manufacturing sector are much bigger than the average.

The debt problems of the economy's domestic sector are largely explained by the expansion of debt in the latter half of the 1980s; the greater the relative expansion of debt, the greater the difficulty now encountered by firms on average in that particular industrial sector. This is largely explained by the decline in real terms in domestic demand, which is now at the level of 1986-1987. As regards the current level of dwelling and real estate prices, one must go back even farther in time to find a corresponding level. The situation is worst in real estate business, where some 40 per cent of banks' exposures were either nonperforming or written off. In construction, the situation is scarcely any better, especially considering the restructuring of the sector.

Of households' (incl. self-employed) bank loans, some six per cent were nonperforming at end-1992. Thus, on the basis of available data, households' debt problems are relatively worse than those of manufacturing firms. The growth of unemployment and lengthening of its duration as well as the steps for consolidating state finances point to a further worsening of households' debt problems, at least for this and next year.

According to some estimates, the average debt of wage-earner households facing debt-service problems is some FIM 150 000; for self-employed the figure is two or three times higher. Using these figures it can be estimated that some 60 000 households are facing immediate debt-servicing problems.

4 Banks' loan losses

The worsening of banks' financial performance stems from the large write-offs on loans and guarantees, which reflect the plight of the Finnish economy as well as firms' profitability and debt-servicing problems. Banks' loan losses increased to some FIM 22 billion in 1992 as compared to FIM 8 billion in 1991. In 1992 write-offs accounted for 3.7 per cent of banks' nearly FIM 600 billion of exposures and 4.5 per cent of the stock of loans.

The divergence in the performance of the domestic and foreign sectors of the economy is also seen in the breakdown of loan losses by industry. Only somewhat more than a tenth of write-offs caused by domestic firms were attributable to manufacturing firms, even though they accounted for about a third of banks' exposures to firms. Relative to total exposures to manufacturing firms, only just over two per cent were written off in 1992, whereas the figure for firms in construction and real estate was some 10 per cent. Construction and real estate business accounted for nearly a quarter of banks' exposures to domestic firms and 45 per cent of the corresponding write-offs (Charts 2 and 3).

Banks wrote off slightly more than FIM 6 billion worth of guarantees to domestic firms in 1992. There are large differences between industries in banks' write-offs on the loans and on the guarantees. Real estate business accounted for the greatest relative amount of guarantee losses. This could indicate a reluctance on the part of at least some banks to disclose on the balance sheet a form of activity that is now seen to be partially speculative.

By contrast, in the case of manufacturing firms, a relatively smaller portion of the amount of guarantees, as compared to loans, was written off. This could stem largely from the fact that guarantees are granted primarily to large firms. Another possible explanation is that nonbank lenders have been more careful than banks in analysing credit risk.

The household sector has thus far caused a relatively small amount of write-offs. There appear to be a number of reasons for this. First, the collateral/loan ratio on these loans is usually adequate from the bank's standpoint. Second, households cannot go bankrupt and thus cannot escape from their debts even when the collateral is realized. This forces households to deal with their debts to the very end. Third, households' income has not yet fallen very significantly relative to debt service costs.

Of the year-end total of nonperforming assets and write-offs (gross nonperforming assets), banking groups wrote off slightly more than a quarter[5]. The corporate sector was marked by surprising uniformity since one-third of gross nonperforming assets were written off in each industry (Table 2)[6].

Only just over 10 per cent of households' nonperforming assets were written off. Loans to households accounted for less than seven per cent of banks' total write-offs.

Chart 2. **Breakdown of banking groups´ loans and guarantees nonperforming loans and write-offs, 31 Dec. 1992**

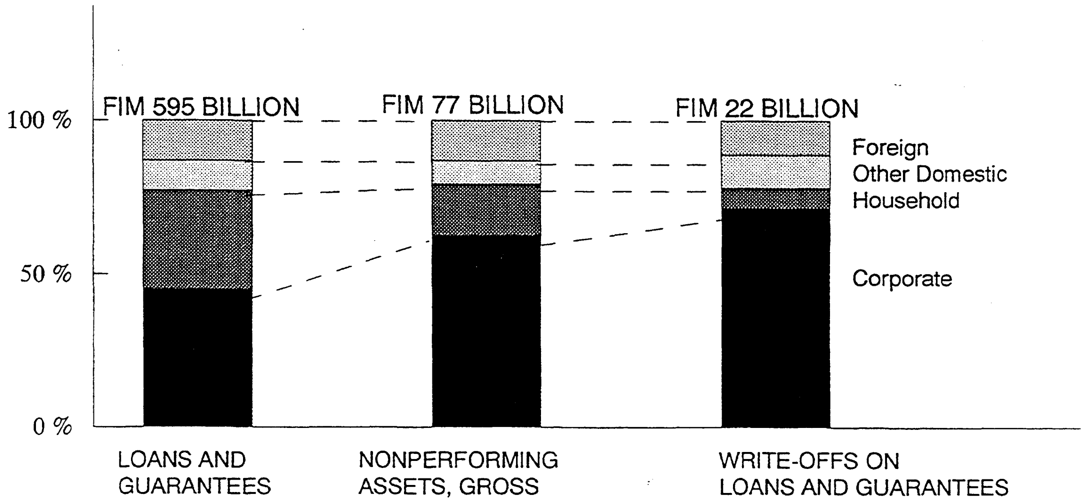

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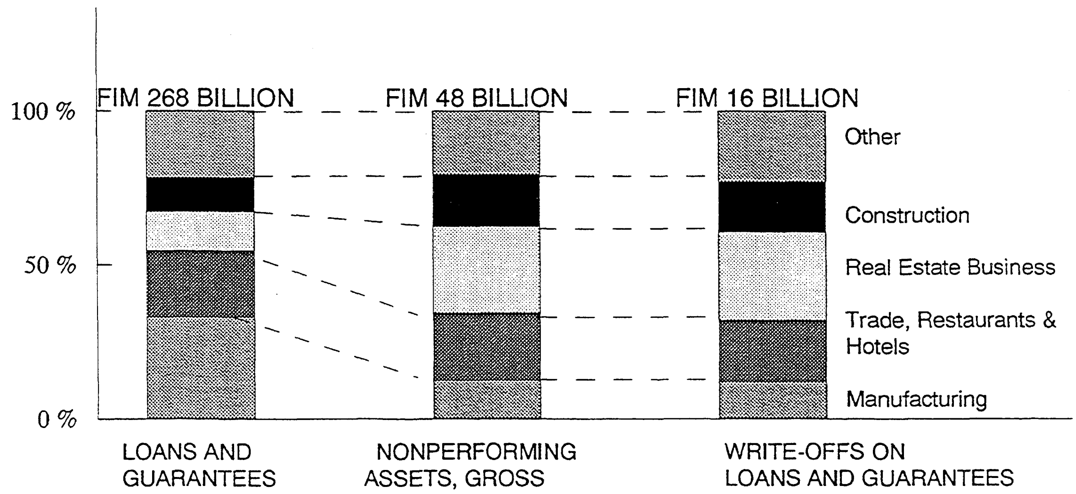
Chart 3. **Breakdown by industry of banking groups´ corporate loans and guarantees, nonperforming assets and write-offs, 31 Dec. 1992**



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5 For these calculations, it is assumed that all write-offs have derived from nonperforming assets.

6 Write-offs on loans and guarantees amounted to 13-37 per cent of gross nonperforming assets, depending on the bank. The variations by sector and industry were even greater.

5 Nordic comparison

In comparing the Nordic countries it was necessary to rely on parent-bank data, as consolidated data are not available for all the countries. Data on nonperforming assets are not published on Norwegian banks, and in Denmark the concept is not even defined as yet.

Nonperforming assets and soft loans of Swedish banks together totalled SEK 99 billion at end-1992. Write-offs on loans and guarantees amounted to SEK 70 billion. Problem assets and related write-offs, together with loan losses, amounted to 18.5 per cent of the loans to the public. These figures do not include SEK 30 billion worth of problem assets held by institutions that specialize in housing loans.

It is impossible to obtain ratios that are precisely comparable with those of Finnish banks. Finnish parent banks' gross nonperforming assets and other zero-interest assets amounted to 17.5 per cent of loans to the public. After write-offs of loan losses, net problem loans amounted to 10.8 per cent of Swedish banks' loans to the public; for Finnish banks the corresponding figure was 12.5 per cent.

Under the Banking Supervision Office's accounting regulations, Finnish banks were also obliged to write off probable loan losses at end-1992. For tax purposes, only write-offs on actual losses (claims that are proved to be uncollectable) are deductible from the loan portfolio. This probably did not have a significant effect on banks' writedown rates in 1992 because of their negative financial results. The manner in which individual banks have conformed to accounting regulations varies in Finland as in other countries, thus making interbank comparisons most difficult.

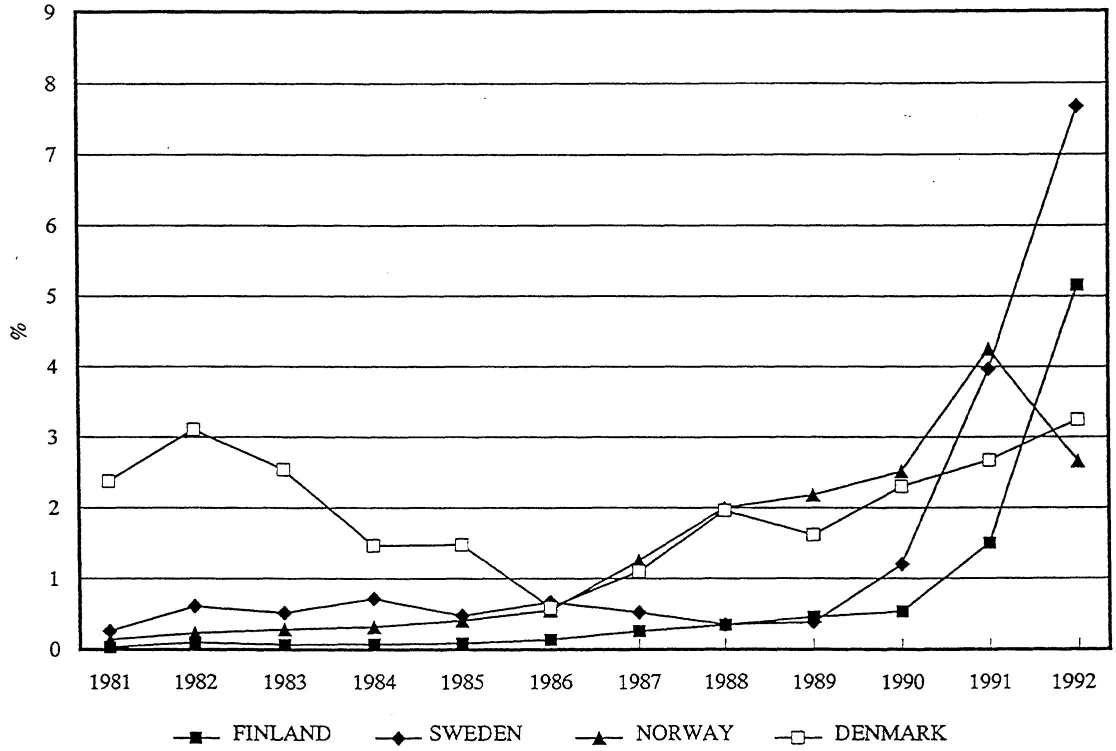
Of Swedish banks' total loan write-offs in 1991, 80 per cent represented probable loan losses; in Norway the comparable figure has been 50 per cent in recent years. In their notes to financial statements, Swedish and Norwegian banks include the amount of probable loan loss write-offs for prior years that have become actual losses during the year. The notes also show the amount of previously written off loans that has been recovered. The Banking Supervision Office in Finland does not require the breakdown of loan losses into actual and probable losses in connection with year-end financial statements.

Nordic parent banks' write-offs on loans and guarantees in relation to lending to the public are compared in Chart 4. It should be kept in mind, however, that percentage figures based on lending to the public are higher than those based on the stock of loans or total balance sheet, for example.

In Finland and Sweden loan losses have soared. Last year Swedish banks' loan losses amounted to nearly eight per cent of loans to the public, while for Finnish banks the corresponding figure was over five per cent. In Norway the trend in loan losses was reversed after the peak year of 1991, but even there the banking crisis is not considered to have ended. Danish banks' loan losses rose last year to their level of 10 years ago (Chart 4).

The timing of changes in loan-loss accounting regulations in the Nordic countries shows up clearly in the chart. In Norway the regulations were changed twice, in 1987 and 1991. Sweden's regulations were changed in 1991 and Finland's in 1992. In Denmark there were no changes in loan loss accounting in the 1980s and early 1990s.

Chart 4. **Parent banks´ write-offs in relation to lending to the public, 1981-1992, %**



6 Concluding remarks

Over the past couple of years some FIM 100 billion's worth of banks' exposures has been nonperforming for a shorter or longer period of time. Of this amount, banks have written off nearly FIM 30 billion in the course of two years. Despite the write-offs, banks' nonperforming assets still amounted to FIM 55 billion at the end of 1992, which will lead to substantial future loan losses for banks.

The most serious debt-servicing problems are faced by firms in the domestic sector of the economy, whose nonperforming assets amount to some 15 per cent of exposures on average. The corresponding figure for manufacturing firms is less than five per cent.

The analysis of loan losses in 1992 clearly indicates the comparatively stronger position of manufacturing firms in this respect. Only just over 10 per cent of total losses on loans to domestic firms are attributable to manufacturing firms. Construction and real estate business accounted for 45 per cent of the total. Loans to households have so far resulted in a comparatively small amount of loan losses for banks.

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