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Private Indebtedness and the Banking Crisis in Finland

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Abstract*

In Finland the private sector borrowing started to rise rapidly in conjunction with the liberalization of capital movements and deregulation of the domestic financial sector during the second half of the 1980s. The financial deregulation coincided with and amplified an economic boom marked by favourable income expectations, loose fiscal policy associated with improved terms of trade and anticipated reduction in income tax rates. All these factors contributed to the overheating of the Finnish economy that finally turned into a severe recession in the beginning of 1990s.

The reaction of households to financial deregulation in Finland was similar to that in the other Nordic countries. As in Norway and Sweden, household indebtedness started to rise in the mid-1980s, after the abolishment of lending rate regulations and prior savings requirements for housing loans. Measured by the ratio of household debt to annual disposable income, household indebtedness peaked in 1990 at more than 80 per cent of annual disposable income. Since then, it has fallen slightly.

Debt financing in the corporate sector started to increase rapidly in conjunction with the liberalization of capital movements, which enabled firms also in the domestic sector to raise loans in foreign currencies. During the 1980s debt financing grew most in the real estate business, construction and services. Despite increased borrowing, the debt with respect to equity of Finnish firms did not rise significantly until 1990–91, because a large part of the debt growth was matched by increases in corporate earnings and equity values during the late 1980s. Recession turned the situation for the worse as corporate earnings and the market value of assets plummeted. High indebtedness and overcapacity especially in the domestic sector will require several years of adjusting.

* We are very grateful to Vesa Vihriälä for clarifying and corrective comments and to Glenn Harma for checking and correcting the English.

Contents

1 Introduction

As in the other Nordic countries, the private sector borrowing expanded rapidly in Finland in the second half of the 1980s. The era of easy credit and economic growth ended in 1990 in an exceptionally severe recession marked by sharply falling real estate and stock prices, which has considerably weakened the financial position of borrowers. As inflation has declined while nominal interest rates have risen, the debt service burden has grown. With a higher real interest rate, business failures and bankruptcies have increased dramatically. Consequently, banks' credit losses have escalated, eroding their capital position and forcing them into greater dependency on government support to maintain their capital ratios and lending capacity. The Government has clearly stated that it will guarantee all deposits without limit and ensure the viability of the banking system in all circumstances.

Private sector overheating was due not only to loose fiscal policy but also to deregulation of capital movements and bank lending. Even though deregulation started in the early 1980s, the most important restrictions were lifted in 1986 and 1987. In 1986 the Bank of Finland removed interest rate ceilings on bank lending, and in 1987 corporate long-term borrowing from abroad was completely freed. Besides the liberalization of lending, regulation of deposit rates was eased in late 1980s.[1] All the remaining restrictions were lifted by 1991, so there are no longer any quantitative restrictions or interest rate limitations on lending.

Apart from the initial stock-adjustment to the new borrowing possibilities and to increased income expectations, private sector borrowing was fuelled by asset price developments. An upward spiral emerged as borrowing spilled over to higher domestic demand, profits, earnings and employment, which led to an upward revision of income expectations, skyrocketing stock prices, greater demand for housing and soaring housing prices. Increased equity values and asset prices in turn made it possible for banks to continue expanding credit. This paper reviews the growth of indebtedness and the adjustments in indebtedness due to money market deregulation.

The paper is organized as follows. We begin with a review of the recent boom in bank lending and its role in the onset of the debt problem. Next we consider the debt problem from the borrowers' point of view: how households and firms accumulated excessive debts. Finally we analyze the relationship between investment and savings and the need to improve the current account. Special attention is paid to the question to what extent debt financing has been used to enlarge productive capacity or improve efficiency: if investment in production and manufacturing proves to be profitable, indebtedness should be no problem. On the other hand, if increased funds were channelled mainly into the real estate, changes of residence or stock purchases, there is no increase in productive investment. Debt

[1] Limitations on deposit rates have been effected through tax regulations in the form of ceilings on allowable taxfree nominal return. This induced the banks to refrain from competitive pricing of such deposits. The maximum tax exempt return on deposits was tied to the central bank base rate. Currently, two-year time deposits with a return that is two percentage points less than the base rate are tax free. Three-year taxfree deposits with return one percentage point less than the base rate are available until end-1993. From the beginning of 1991 taxable bank deposits were also allowed, subject to a 10 per cent withholding tax. From 1992 the source tax rate was raised to 15 per cent, and for 1993–94 to 20 per cent.

and interest expenses simply increase without any increase in the ability to generate income. It would seem risky for a small open economy to invest heavily only in domestic production. The export/GDP ratio should be taken into consideration and policy should react more sensitively to changes in terms of trade in setting a proper limit to indebtedness.

2 Trends in banking and bank lending during the 1980s

Finnish financial markets have been dominated by the banks. For some decades this was supported by the tax-exempt low-yield deposits. The authorities kept interest rates low probably to encourage vigorous growth in investment. Apart from deposits, household saving could only go into government bonds and stocks. On the borrowing side, this meant that accumulated savings and the bank-customer relationship were the keys to credit access.

The deregulation of the Finnish financial markets in the middle of 1980s set off a boom in bank lending and a shift from a highly oligopolistic banking structure to a more competitive environment (Figure 1). One of the most important changes was the liberalization of foreign borrowing, which had formerly been tightly controlled by the Bank of Finland. Without this change, banks' ability to pump money into the economy and in particular into the service and home market sectors would have been considerably less than it was.[2] However, it should be emphasized that the regulation of capital movements was already loosening up because of the special payment arrangements with the former Soviet Union, that made the financing arbitrage possible. Another significant deregulation concerned bank lending rates. The Bank of Finland started the step-by-step dismantling of average lending-rate controls in 1983. This created the preconditions for diversified and more efficient financial markets based on almost free formation of interest rates. The interbank market actually started to operate after 1986, when the Bank of Finland introduced a spread between borrowing and deposit rates in the call money market.

Soon after deregulation banks started to increase their share of new net financing by the public. Other financial institutions lost some of their share in financial intermediation. Increased interest rate and exchange rate risks and the need to manage them acted as a spur to product development in the derivative markets (Malkamäki and Solttila, 1991). The overall structure of the capital market changed dramatically during 1980s. The abolition of interest rate controls quickly increased the volume of bank loans linked to money market rates. Currently, over 70 per cent of new bank loans are linked to money market rates or bear fixed rates of interest. A slowly decreasing portion of loans — mainly old housing loans — is still tied to the base rate.

Apart from the loosening of controls on interest rates and capital movements, a couple of other important decisions were made that affected the growth of bank lending. Deposit banks were allowed to issue certificates of deposits [3] (Figure 2). Furthermore, the Banking Supervision Office allowed banks to raise their own

[2] The annual growth rate of bank lending in real terms peaked in 1988 when loans outstanding increased nearly 20 per cent from the previous year. It should be noted, for example, that by the time deregulation was largely a fact of life, the US financial crisis involving mainly the savings banks was not visible. Roughly speaking, the same mistakes were made at about the same time in all the Nordic countries.

[3] The Bank of Finland started open market operations with certificates of deposits in 1987, and now most of the trading in the money market is in CDs. Bank Cds soon became the main instrument in the money market. CDs are crucial in the determination of short-term money market rates (Kontulainen, 1991).

capital by over FIM 4 billion through value adjustment.[4] This enabled the banks to increase their lending by some FIM 50 billion. Unfortunately, this new bank capital, largely in the form of stocks and real estate, was not as permanent as was believed.

The lending boom was further facilitated by buoyant asset markets, particularly by increasing real estate and housing prices, which reduced the importance of credit rationing. Furthermore, optimistic expectations concerning future economic development and low default rates diminished the importance of distinguishing between good and bad credit risks. Lending for real estate and housing purchases was considered almost riskless, since the purchased property was used as collateral.[5]

Intense competition for market share led many local banks, which had formerly focused on financing households and agriculture, to expand their activities into the corporate sector. Unable to find and finance new customers among the large and well-known export companies, the savings banks aggressively targeted small and medium sized firms that focused on the domestic market. This drew the big commercial banks into the competition for market share in the service, construction and property sectors. As a result, all banking groups increased their lending to home market industries. At the end of the 1980s commercial banks also ensured their ownership position in important Finnish insurance and manufacturing firms by taking part in the major restructuring.

The banks' exposure to domestic sector borrowers and increased funding from abroad made them vulnerable to movements in stock and real estate prices as well as the exchange rate. Real estate and housing prices are important because the property is normally used as collateral for lending.[6] Stock prices are also important for the banks' capital position because one of the principal components of bank capital is based on equity holdings. In Finland banks have significant holdings in large corporations, which sensitizes their own capital to variations in stock prices. The exchange rate has also become increasingly important because the share of foreign currency-denominated lending in banks' loan portfolios has increased dramatically since the mid-1980s. This does not, however, imply direct exchange-rate risk, since banks are not allowed to have significant open positions. Indirectly, through domestic sector borrowers' ability to service debt, foreign currency lending is a significant risk factor. Looking back, it may also be said that banks could not expect a devaluation of the markka by over 30 per cent, which underlines the fact that currency loans were intermediated too easily to borrowers with no foreign currency income.

During the last two or three years the capital position of Finnish banks has undergone a major change, and substantial credit losses have increased the

[4] The Banking Supervision Office in Finland is a separate body from the Bank of Finland, under the Ministry of Finance. The role of the office is currently under reorganization.

[5] Consumption function studies have shown that liquidity constraints on households were shifted away almost completely with respect to the broad consumer wealth concept (earnings plus wealth in market value less debt). The marginal propensity to consume from real wealth increased significantly during 1987–89.

[6] E.g. nominal housing prices have fallen about 50 per cent since the peak in spring 1989 to the end of 1992. In case of defaults the reduced value of collateral will cause a substantial worsening in the banks' capital position.

financial vulnerability of the entire banking sector. In 1992 alone credit losses amounted to some 4 percent of loans outstanding. This change is largely due to the collapse in Soviet trade, deteriorating terms of trade and sharply falling stock, real estate and housing prices. The central bank, of course, tried to guide and consolidate bank lending, e.g. by squeezing liquidity, by means of cash reserve requirements, base rate hikes, special investment deposit requirements and, finally, the revaluation of the markka in 1989. But the effect was only limited (Figures 3 and 4). The most aggressive lenders during the period of overheating were the savings and commercial banks. Therefore, it is no wonder that the amount of non-performing loans and credit losses incurred by these banking groups have been greater than those of the cooperative banks (Figures 5 and 6). Among the local savings banks, there was a group of open-handed lenders nicknamed the "dirty dozen".

Another important factor increasing the losses suffered by banks in the current recession has been the substantial rise in real interest rates. Average nominal rates on new loans rose from about 11 per cent in late 1988 to 15 per cent in autumn 1992, while inflation declined from five to three per cent. The problem with high loan rates is that they may lead to increasing credit losses through bankruptcies etc. and to lower profitability for banks. According to recent theoretical and empirical literature, there is a limit to the level to which a profit maximizing bank can raise interest rates without reducing its revenue. The reason for this is that as the interest rate is increased, the default rate increases. At some point the default rate is so high that any further increase in the interest rate actually reduces revenue. Furthermore, higher interest rates discourage borrowers with low risk low return projects (adverse selection), and encourages borrowers to take risks once they obtain loans (moral hazard). Consequently, the average credit quality of a bank's customers worsens and default rates rise as the interest rate rises.

Besides the problems associated with increased lending, deteriorating quality of customers and high default rates, Finnish banks fell into the interest rate trap, as one half of the volume of outstanding loans and only one third of deposit volume is based on the base rate, which is regulated by the central bank. Two-thirds of deposits is based on short-term money market rates. Even though the average interest rates on new loans increased rapidly after mid-1988 up to autumn 1992, the interest rate margin charged by banks has been relatively constant. Credit losses have forced banks to keep their interest margins wide[7] (Figures 7 and 8).

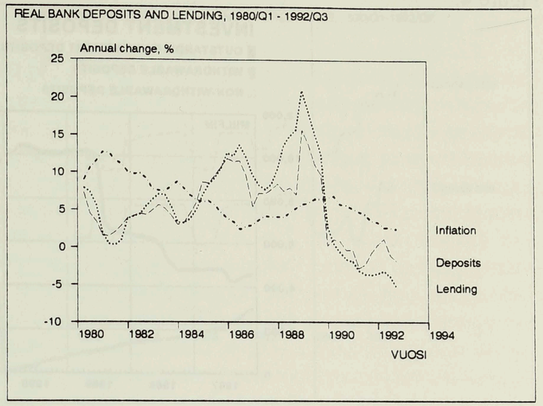
Financial distress and increasing credit losses have argued for stricter capital adequacy standards, more cautious borrower evaluation and measures to effectively control the growth in bank lending. In particular, collateral requirements have been tightened by the banks. More recently, a shortage of bank capital has become a threat to the credit supply. In response, the central government has been forced to provide substantial aid to banks so as to maintain their capital ratios. Support by the authorities was first used to rescue a major commercial bank in September 1991. In June 1992, central government support was provided to 41 savings banks under distress. In November 1992 a relatively small commercial bank (STS) was merged into one of the biggest commercial banks (KOP). The merger was

[7] For some borrowers it may have come as a surprise that inflation has not deflated their loans even after devaluations. Moreover, it seems reasonable to assume that through free capital movements we have shifted permanently to positive real deposit rates.

facilitated by the transfer of bad loans to the Government Guarantee Fund. A bill was drafted for the establishment of a bad bank, but it failed at the last moment in Parliament and the Government drafted a supplementary budget to handle bad loans. The only banking group that has not yet applied for capital support from the Government Guarantee Fund is the cooperative bank group. Total central government support reached some 4 per cent of GDP in 1992. Finnish banks' operating profit in 1992 was a negative FIM 21.5 billion, which accounts precisely for the volume of credit and collateral losses. The banking crisis is expected to continue in 1993.

The prolonged recession has rapidly reduced the demand for credit, reflecting the decline in demand for new construction, investment goods and consumer durable. However, lending during 1992 has been unusually weak because of the unusually high indebtedness of both the household and corporate sectors. Due to increasing unemployment and declining income levels, households' debt burden is still worsening, although on average household indebtedness has started to decrease slowly. The deterioration of corporate balance sheets and reduced collateral values has made it very difficult to apply for new loans. Hence, it may be that in the current recession the normal decline in credit demand has been exacerbated by a greater-than-normal erosion in the creditworthiness of potential borrowers.

Figure 1.



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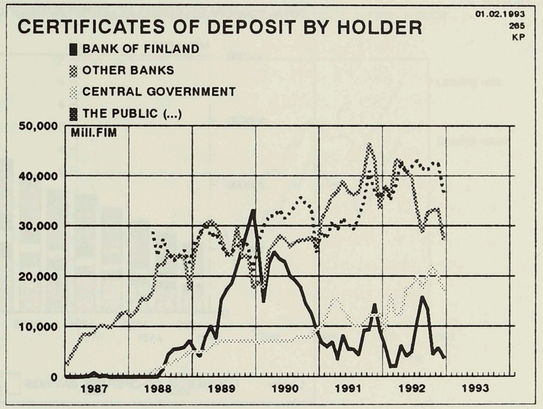

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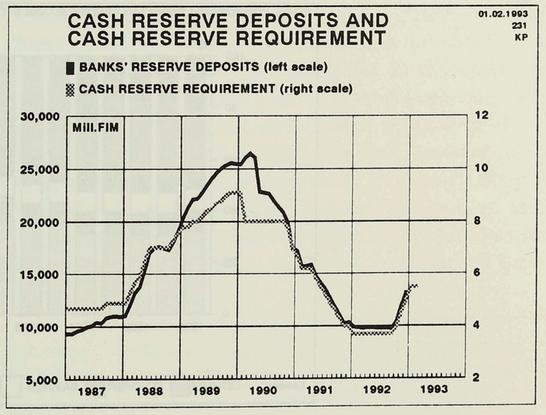

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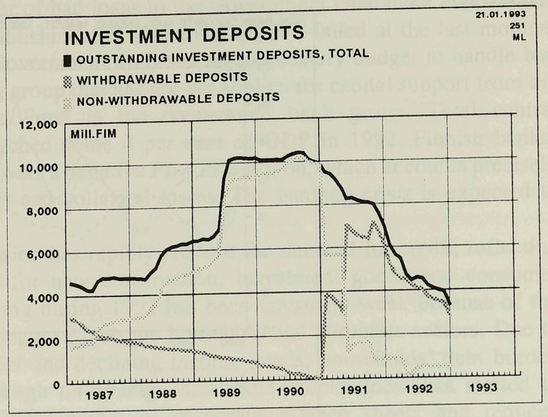

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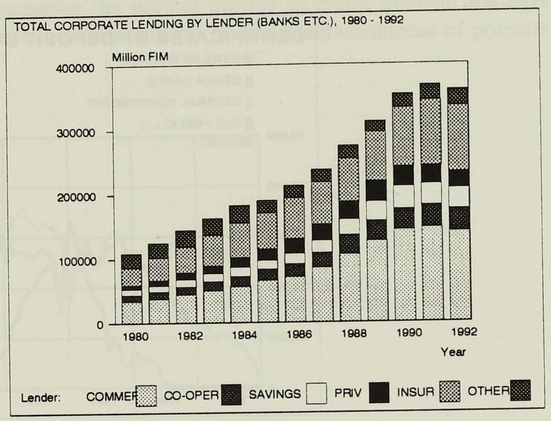

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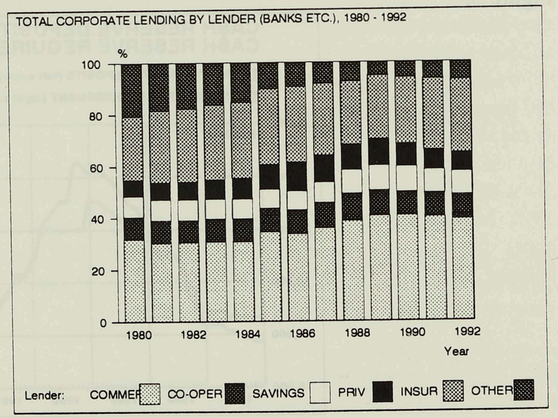

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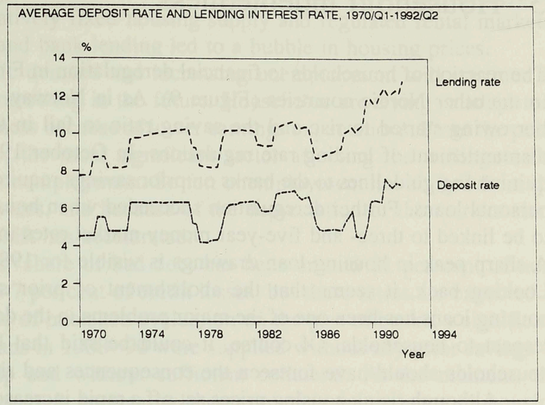

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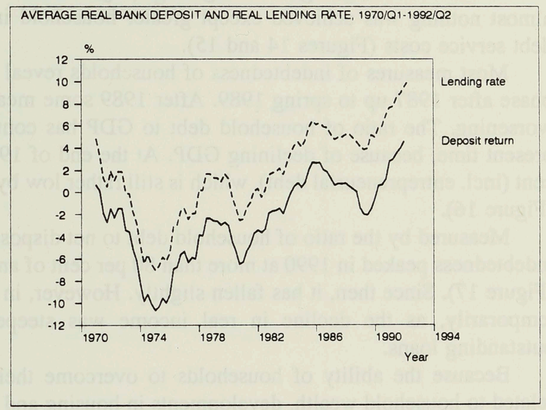


3 Household indebtedness

The reaction of households to financial deregulation in Finland was similar to that in the other Nordic countries (Figure 9). As in Norway and Sweden, household borrowing started to rise and the saving ratio to fall in the mid-1980s, after the dismantlement of lending rate regulations. In October 1987 the Bank of Finland quit issuing guidelines to the banks on prior savings required for housing and other personal loans. Further deregulation succeeded when housing loans were allowed to be linked to three- and five-year money market rates in the beginning of 1988. A sharp peak in housing loan drawings is visible for 1988 (Figures 10 and 11).[8] Looking back, it seems that the abolishment of prior saving requirements for housing loans has been one of the major problems in the deregulation process with respect to households. Of course, it could be said that banks and perhaps also households should have foreseen the consequences and risks in this decision.

Although rising housing prices set off a rapid increase in housing investment, the major part of housing market activity took place in connection with changes in residence involving larger housing loans (Figures 12 and 13). It can be said that almost nothing was achieved except greater household indebtedness and higher debt service costs (Figures 14 and 15).

Most measures of indebtedness of households reveal a clear and steep rising phase after 1987 up to spring 1989. After 1989 some measures indicate a further worsening. The ratio of household debt to GDP has continued to rise up to the present time, because of declining GDP. At the end of 1991 the ratio was 45 per cent (incl. entrepreneurial debt), which is still rather low by international standards (Figure 16).

Measured by the ratio of household debt to net disposable income, household indebtedness peaked in 1990 at more than 80 per cent of annual disposable income (Figure 17). Since then, it has fallen slightly. However, in 1992 this measure rose temporarily, as the decline in real income was steeper than the decline in outstanding loans.

Because the ability of households to overcome their debt problem is also related to household wealth, developments in housing and asset prices are crucial. The value of collateral and the willingness of banks to renegotiate debt contracts depend on them. Household indebtedness has clearly increased in relation to financial wealth, since the fall in asset prices (Figure 18). The ratio of household total debt to household financial wealth (excluding stocks) was 90 per cent in the second quarter of 1992. The deflation of household wealth can also be seen from wealth/income ratios (Figures 19 and 20).

In spite of the rapid increase in household's overall debt (incl. entrepreneurial loans) between 1987 and 1989, the composition of the debt did not change much (Figures 21 and 22). Housing loans and consumer loans both peaked in early 1988. Compared to e.g. Sweden, the Finnish housing market has concentrated more on owner-occupied housing. In 1988 about 72 per cent of Finnish households were living in their own dwellings. Although most of the housing loans were granted

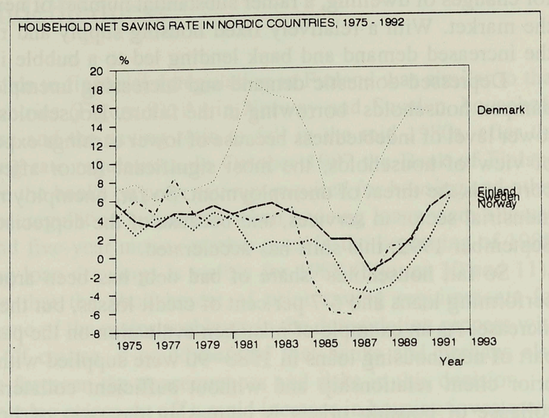
[8] Currency regulations were eliminated only gradually. Households were allowed to make direct foreign investments in 1990 and to raise foreign currency-denominated loans in October 1991, just before the devaluation of the markka.

for changes of dwelling, a rather substantial number of new borrowers emerged on the market. With a relatively fixed housing supply and regulated rental markets, the increased demand and bank lending led to a bubble in housing prices.

Depressed domestic demand and increasing unemployment will continue to dampen households' borrowing in the future. Households are trying to adapt to a lower level of indebtedness because of lower earnings expectations. From the point of view of households, the most significant factor affecting the willingness to borrow is the threat of unemployment. So far, unemployment has shifted from the industrial sector to services, and because of the depreciation of the markka since September 1992, this shift has accelerated.

So far, households' share of bad debt has been around 21 per cent of non-performing loans and 6-7 per cent of credit losses, but these ratios are expected to increase. As an example of mistaken evaluation on the part of banks, a significant part of new housing loans in 1988–90 were supplied without any prior savings or prior client relationship and without sufficient collateral. At the moment, the collapse of housing prices is increasing the ratio of housing loans to housing wealth, thereby lowering the value of collateral (Figure 23). The composition of household gross wealth is shown in Figures 24 and 25.

Figure 9.



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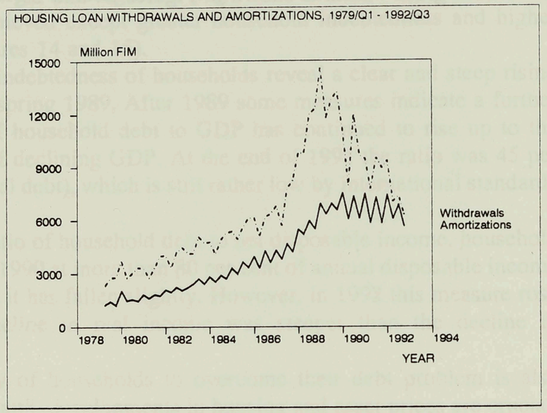

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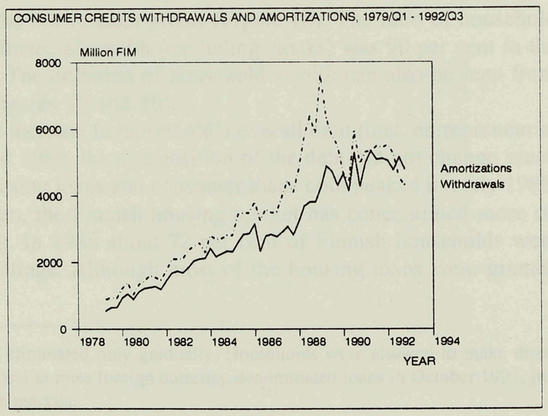

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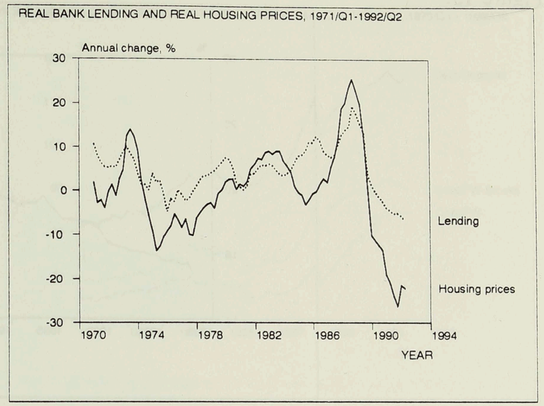

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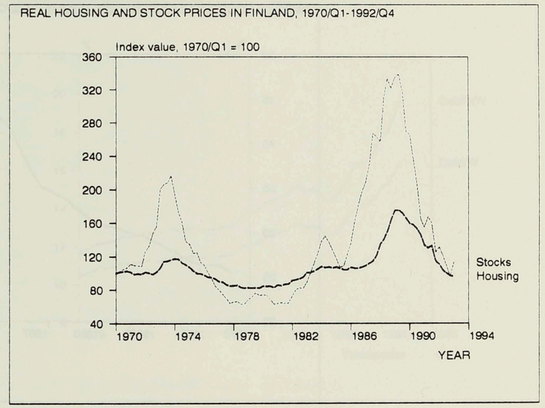

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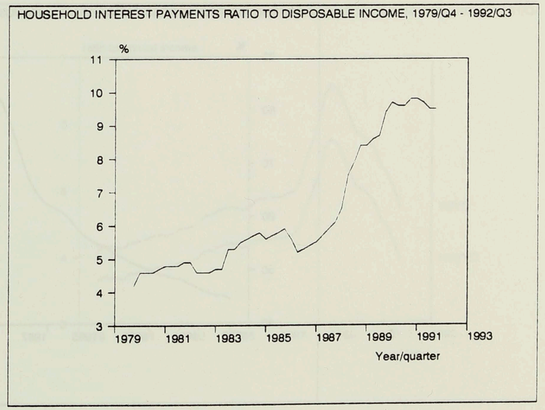

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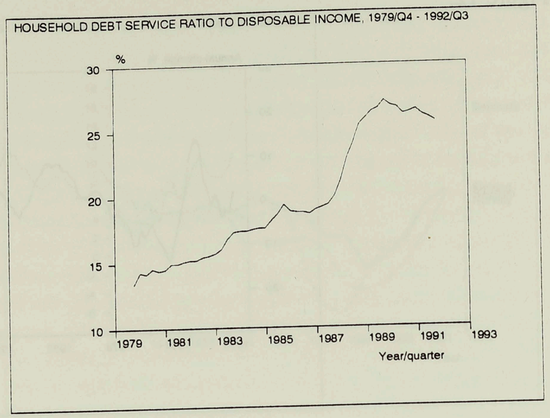

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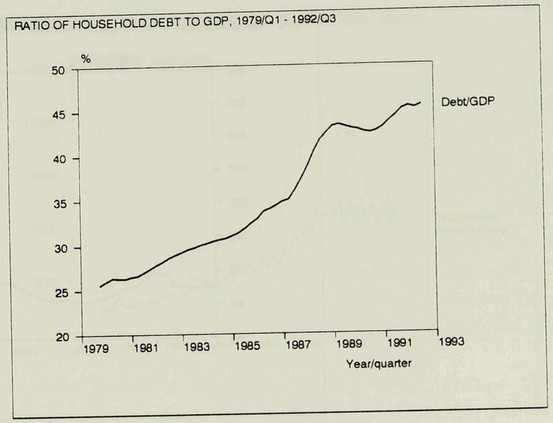

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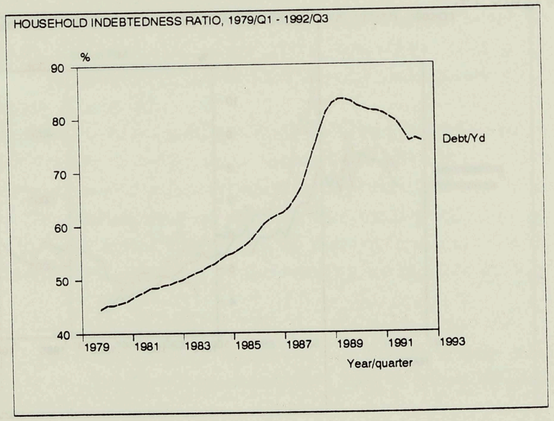

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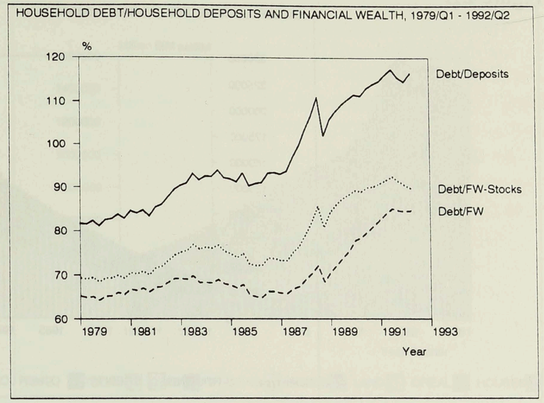

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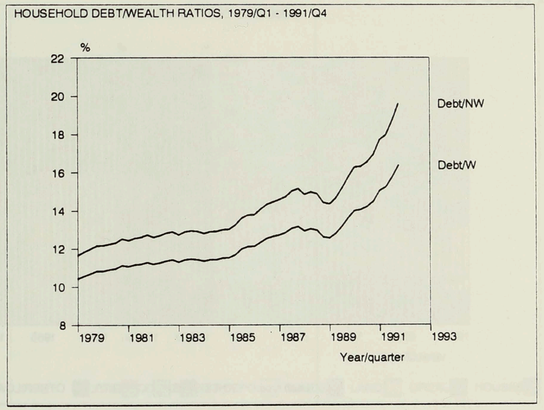

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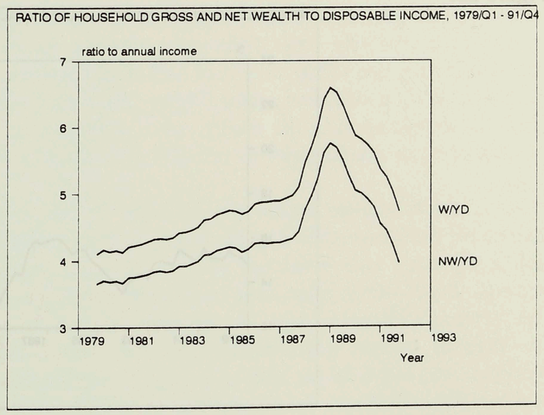

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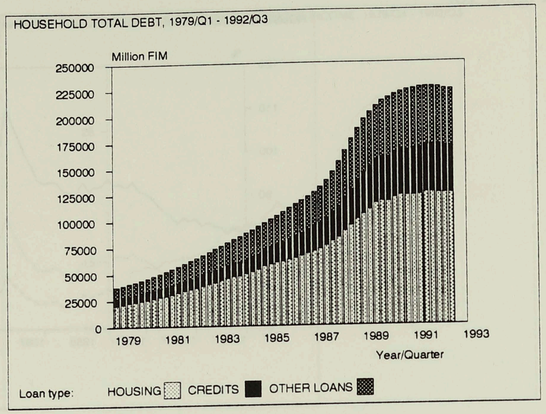

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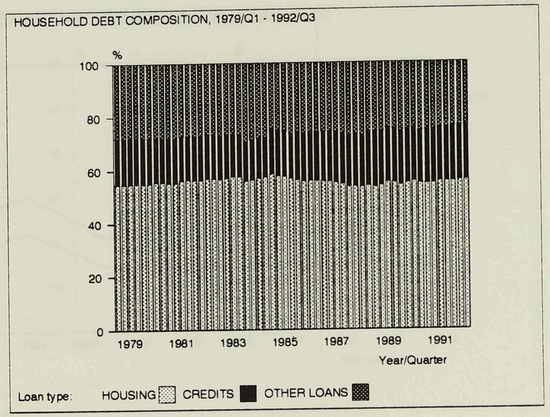

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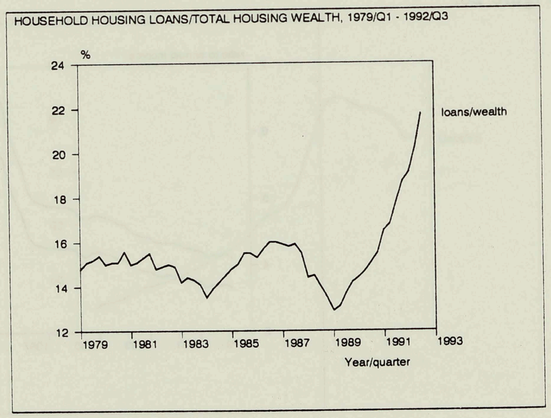


Figure 24.

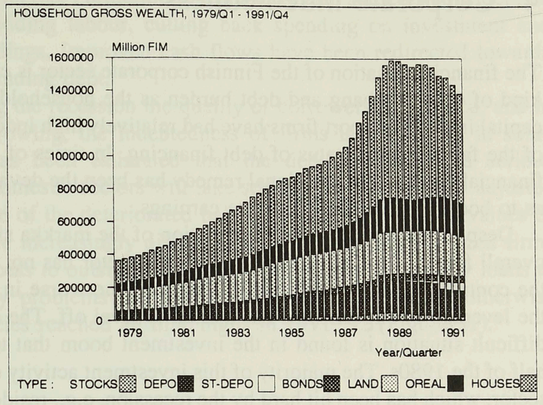
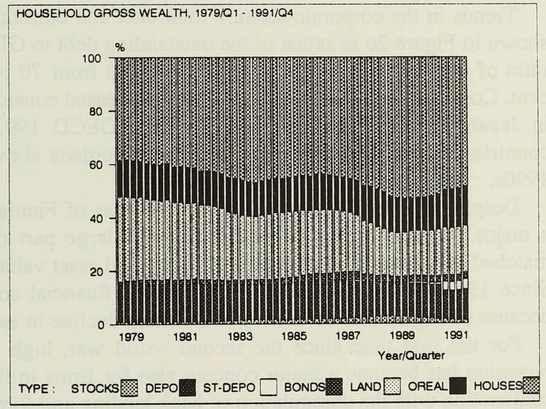


Figure 25.



4 Corporate indebtedness

The financial situation of the Finnish corporate sector is characterized by the same kind of debt overhang and debt burden as the household sector. Historically, the capital intensive export firms have had relatively high indebtedness, partly because of the favoured tax status of debt financing. In times of economic downturn and financial distress the traditional remedy has been the devaluation of the markka so as to boost exports and corporate earnings.

Despite the considerable depreciation of the markka since November 1991 the overall financial situation of the corporate sector has not improved markedly. On the contrary, financial difficulties have become worse in many respects although the leverage of export firms has started to level off. The origin for this unusually difficult situation is found in the investment boom that took place in the second half of the 1980s. The majority of this investment activity occurred in the domestic sector, which has been hit hard by the recession, e.g., residential and nonresidential construction, real estate and services. As domestic demand has fallen off since 1990, a large part of these investments turned out to be excessive and unprofitable.

Trends in the corporate sector's total debt and currency-denominated debt are shown in Figure 26 as ratios of the outstanding debt to GDP. During 1985—92 the ratio of total corporate debt to GDP increased from 70 per cent to nearly 90 per cent. Corporate debt relative to GDP also increased considerably during the 1980s in Japan, the UK, Australia and Sweden (OECD 1992). Recessions in these countries have also pushed debt repayment burdens above historic levels by the 1990s.

Despite increased leverage, the indebtedness of Finnish firms did not become a major problem until 1990—91, because a large part of the debt growth was matched by increases in corporate earnings and asset values during the late 1980s. Since 1991 the deterioration of corporations financial condition has been rapid, because of higher interest rates and the sharp decline in earnings and asset values.

For the first time since the second world war, high leverage during a deep recession has become a major concern also for firms in the domestic markets. In conjunction with the deregulation of bank lending and foreign borrowing, firms in the service and home market sectors substantially increased their debt financing, half of which was denominated in foreign currencies (Figures 27 and 28). Foreign currency loans gained popularity especially in real estate, construction and trade because of a relatively large differential between domestic and foreign interest rates. During the late 1980s more than half of all corporate sector foreign currency loans went into the domestic sector (Figure 29). As a consequence of high foreign debts, the depreciation of the markka since 1991 has considerably worsened the leverage of home market firms by increasing the markka value of foreign currency loans.

As in the household sector, the problems of debt overhang in the corporate sector have been exacerbated by the heavy burden of debt servicing resulting from high real interest rates combined with low or even negative growth in corporate earnings. Real interest rates have been historically high over the past two years. The increasing impact of high interest rates on cash flow is shown in Figure 30. The ratio of interest payments to cash flow before interest, depreciation and dividends was some 70 per cent at the end of 1991 compared to less than 45 per cent in 1981. However, the present reduction of interest rates will ease the debt

service burden to some degree. Furthermore, firms have also started a considerable cost adjustment by shedding labour, cutting back spending on investment and reducing inventory holdings. Improved cash flows have been redirected towards the repayment of outstanding debt.

It is clear that during the recession the quality of borrowers has eroded, and in spite of decreased borrowing, the indebtedness of firms is still rising in some domestic sectors. It has been estimated that the debt overhang and serious overcapacity in many domestic sectors will take several years to be fully adjusted (Brunila 1992). Because of the deteriorated balance sheets and reduced values of collateral, it has become increasingly difficult for small and medium sized firms in particular to gain access to outside financing. The inability to get new loans to ease the acute liquidity problems has triggered bankruptcy amongst otherwise viable firms. Bankruptcies reached all time highs in 1991—92 (Figure 31).

Figure 26.

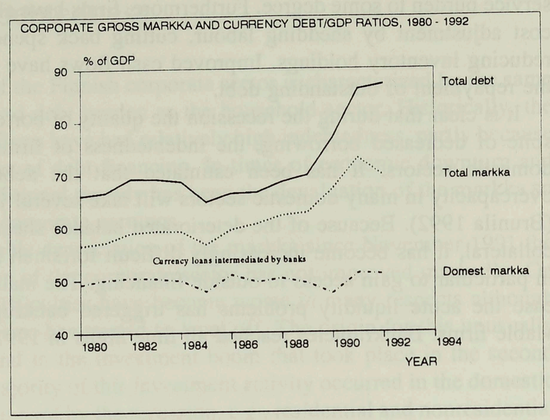


Figure 27.

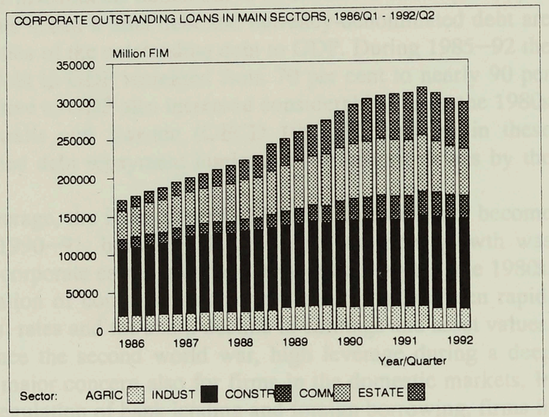


Figure 28.

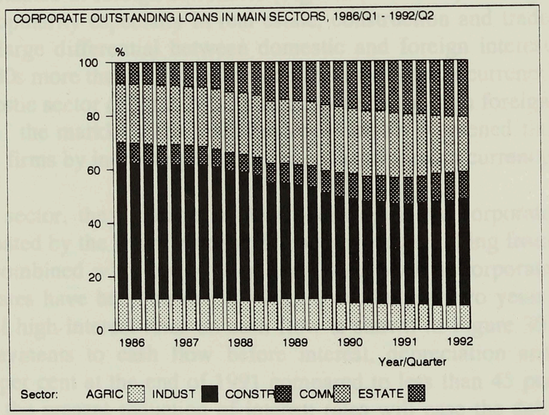


Figure 29.

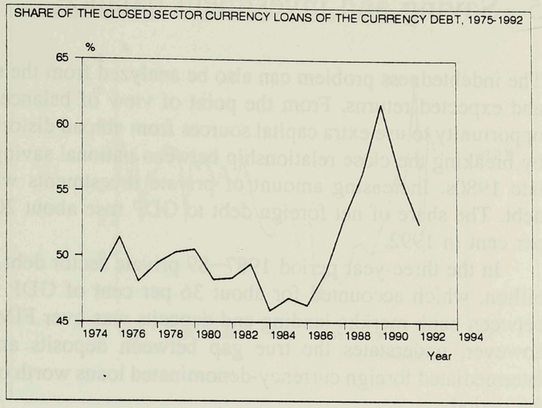


Figure 30.

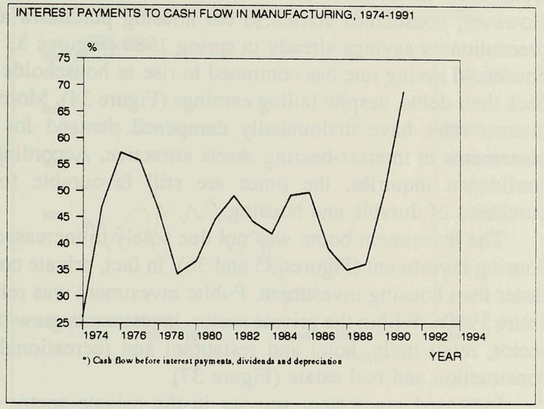
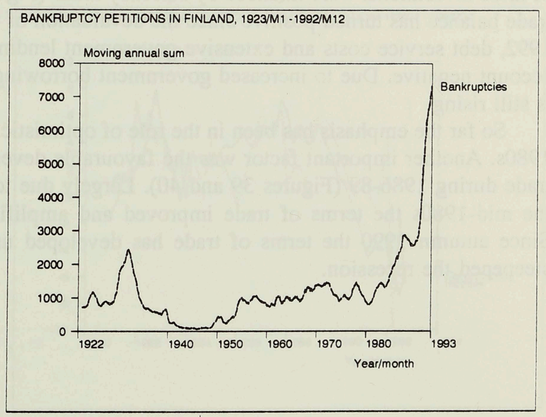


Figure 31.



5 Saving and investment balance

The indebtedness problem can also be analyzed from the standpoint of investment and expected returns. From the point of view of balanced economic growth, the opportunity to use extra capital sources from abroad distorted the Finnish economy by breaking the close relationship between national savings and investment in the late 1980s. Increasing amount of private investments were financed by foreign debt. The share of net foreign debt to GDP rose about 20 per cent in 1988 to 48 per cent in 1992.

In the three-year period 1987–89 private sector debt increased by FIM 178.7 billion, which accounted for about 36 per cent of GDP in 1989. The difference between bank markka lending and deposits was over FIM 25 billion. This figure, however, understates the true gap between deposits and loans because banks intermediated foreign currency-denominated loans worth of FIM 100 billion during the period.

In the overheated economy, income expectations were exceptionally optimistic from 1987 to mid-1989, which kept the investment boom going up to 1991. However, households started to cut housing purchases and once again build up precautionary savings already in spring 1989 (Figures 32 and 33). Since then, the household saving rate has continued to rise as households have focused on paying back their debts, despite falling earnings (Figure 34). Moreover, steadily rising real interest rates have undoubtedly dampened demand for new credits and made placements in interest-bearing assets attractive. According to the latest consumer confidence inquiries, the times are still favourable for savings, but not for purchases of durable and housing.

The investment boom was not due solely to increased housing purchases and housing investment (Figures 35 and 36). In fact, private corporate investment grew faster than housing investment. Public investment was relatively stable during the entire 1980s. Within the private sector, investments grew particularly in the service sector, retail trade, hotel and restaurant and recreational services, as well as in construction and real estate (Figure 37).

Increased investment activity in the private sector could be seen as being largely responsible for the deteriorating current account deficit, because the bulk of these investments were financed by currency loans (Figure 38). Even though the trade balance has turned positive since the devaluation of the markka in 1991 and 1992, debt service costs and extensive government lending have kept the current account negative. Due to increased government borrowing, national indebtedness is still rising.

So far the emphasis has been in the role of optimistic expectations in the mid 1980s. Another important factor was the favourable development in the terms of trade during 1986-89 (Figures 39 and 40). Largely due to declining oil prices in the mid-1980s the terms of trade improved and amplified the domestic boom. Since autumn 1990 the terms of trade has developed unfavourably, which has steepened the recession.

Figure 32.

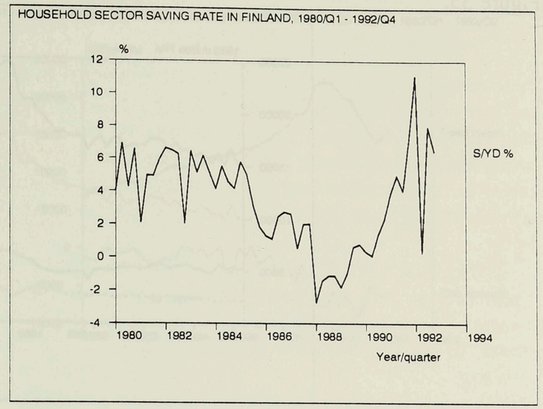


Figure 33.

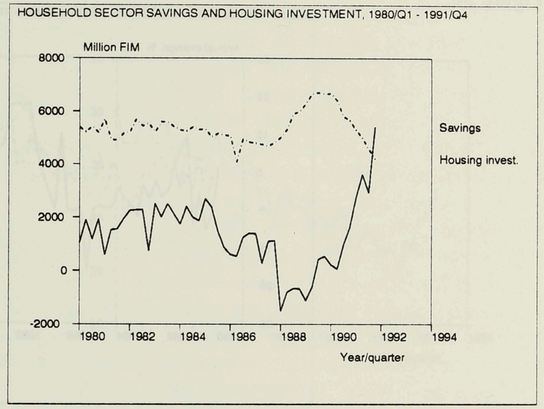


Figure 34.

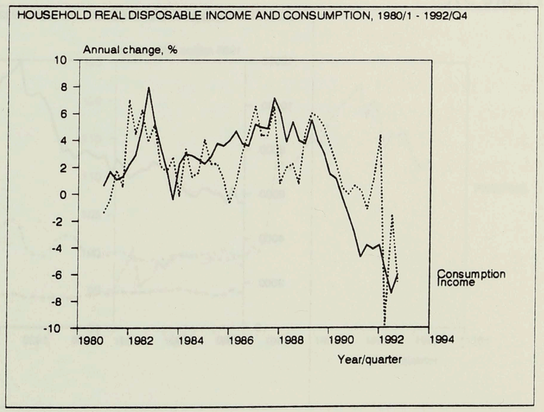


Figure 35.

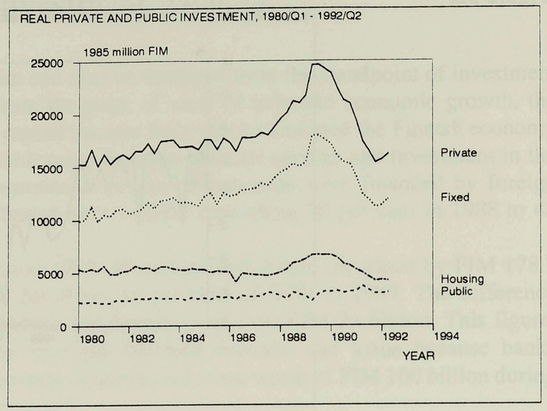


Figure 36.

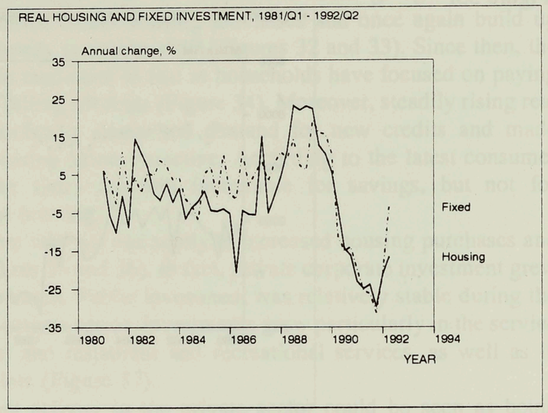


Figure 37.

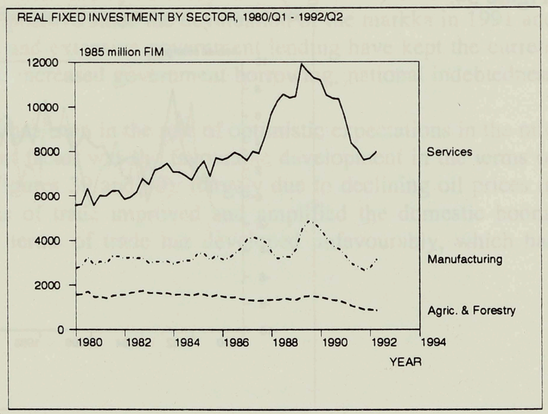


Figure 38.

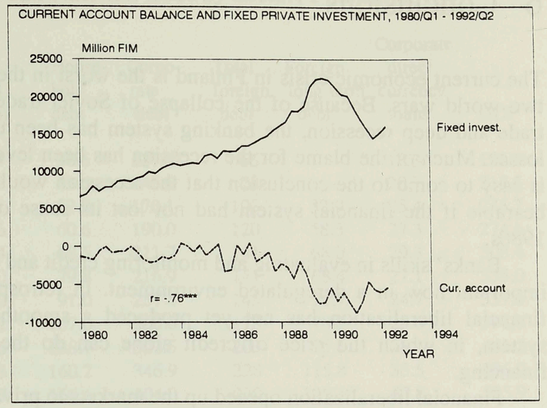


Figure 39.

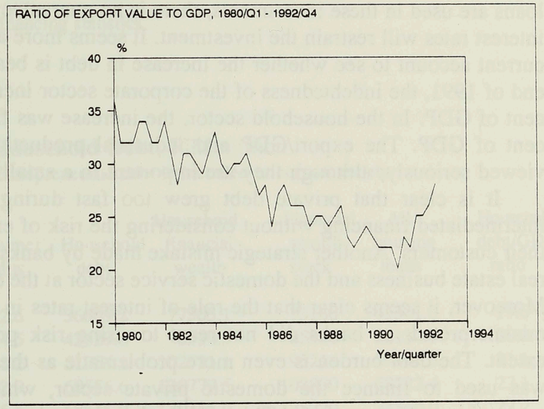
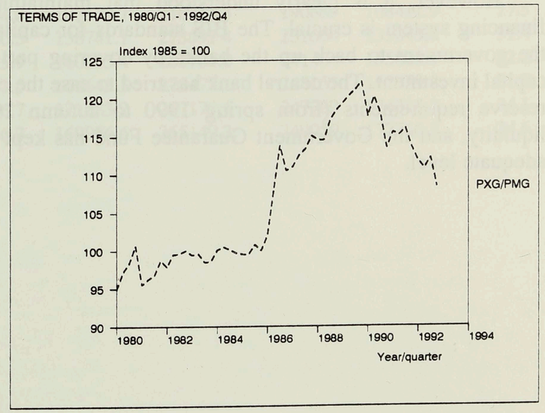


Figure 40.



6 Conclusions

The current economic crisis in Finland is the worst in the century, apart from the two world wars. Because of the collapse of Soviet trade, deteriorating terms of trade and deep recession, the banking system has been experiencing heavy debt losses. Much of the blame for the recession has been levelled at the banks, and it is easy to come to the conclusion that the recession would have been much more bearable if the financial system had not lost its sense of proportion in the late 1980s.

Banks' skills in evaluating and monitoring credit and risks have become more important now in a deregulated environment. In retrospect, it seems clear that financial liberalization has not yet produced a smoother-functioning financial system, in which the price of credit alone can do the job of allocating debt financing.

Financial liberalization opened up the markets to private borrowers, who have actively utilized their new opportunity. The most important task for banks is to intermediate financing in liquid deposits to real (illiquid) investment. If foreign loans are used in these investments, there is no guarantee that the rise in domestic interest rates will restrain the investment. It seems more appropriate to look at the current account to see whether the increase in debt is bearable. From 1985 to the end of 1991, the indebtedness of the corporate sector increased from 65 to 86 per cent of GDP. In the household sector, the increase was from 30 to almost 45 per cent of GDP. The export/GDP and industrial production/GDP ratios were not viewed seriously, although they are important in a small open economy.

It is clear that private debt grew too fast during the late 1980s. Banks intermediated financing without considering the risk of excessive indebtedness of their customers. Another strategic mistake made by banks was in concentrating on real estate business and the domestic service sector at the expence of export sector. Moreover, it seems clear that the role of interest rates in clearing the market was misinterpreted, as banks did not react to rising risk premia to any significant extent. The debt burden is even more problematic as the bulk of foreign lending was used to finance the domestic private sector, which was not capable of generating export revenue. This makes the domestic recession steeper and the recovery slower.

However, it is clearly understood that maintaining the stability of the financing system is crucial. The BIS standards for capital adequacy have forced the government to back up the banks by covering part of their losses through capital investment. The central bank has tried to ease the credit crunch by reducing reserve requirements (from spring 1990 to autumn 1992) so as to preserve liquidity, and the Government Guarantee Fund has kept the banks' capital at an adequate level.

Table 1. **Total National Debt by Sector**, FIM billion

Year	National debt	Total lending	House-hold debt	Corpo-rate debt	Total foreign debt	Foreign long-term debt	Corporate direct currency loans	GDP
1980	190.8	154.4	36.6	127.2	66	–	18.3	192.6
1981	216.7	178.2	43.6	145.6	78	–	20.7	218.5
1982	255.4	208.1	52.0	170.1	103	52.9	25.4	245.7
1983	299.2	236.6	60.6	190.0	120	58.3	27.3	274.6
1984	345.2	267.4	68.5	211.7	146	68.0	29.3	308.4
1985	386.2	311.0	79.8	216.9	141	68.4	27.1	335.0
1986	441.5	347.0	91.0	237.4	145	71.7	24.7	357.6
1987	499.3	395.2	107.6	260.8	173	78.6	23.6	391.6
1988	593.4	474.6	138.7	302.5	203	95.8	28.1	441.5
1989	685.4	542.3	160.2	346.9	228	115.8	35.5	496.9
1990	751.4	604.7	166.6	404.0	279	149.1	50.8	525.9
1991	795.9	636.0	171.4	433.7	352	217.3	66.3	503.6
1992*	–	–	170.0	427.1	–	–	85.1	490.8

Source: Statistics Finland, Financing statistics

Table 2. **Household Debt**, FIM million
Entrepreneurial debt is included in corporate debt

Year	Household housing loans	Consumer credits	Household debt	Household financial wealth	Financial wealth-stock	All housing loans	Household debt/GDP ratio
1980	28146.6	8462.6	36609.2	77305.1	73180	45301.0	19.0
1981	33795.3	9834.5	43629.8	90550.5	85596	52130.1	20.0
1982	40202.9	11751.2	51954.1	102521.1	95216	59996.6	21.1
1983	47453.7	13102.9	60556.6	120779.5	108800	68222.4	22.1
1984	54266.3	14275.6	68541.9	139365.0	125720	74360.0	22.2
1985	61406.2	18435.3	79841.5	165468.3	149603	85968.8	23.8
1986	68769.6	22211.0	90980.6	185489.1	166772	94418.0	25.4
1987	79915.7	27664.0	107579.7	216713.3	190689	108411.9	27.5
1988	100940.6	37800.5	138741.1	273692.4	231664	135043.0	31.4
1989	117617.5	42595.9	160213.4	282701.0	241484	155808.6	32.2
1990	122572.0	44071.5	166643.5	275477.1	248153	167079.8	31.7
1991	125636.5	45746.7	171383.2	267179.1	247709	174311.8	34.1
1992*	125270.3	44716.3	169986.6	265149.3	249959	177766.3	34.6

Table 3. **Corporate debt**, FIM billion

Year	Corporate debt (1) Pure markka-loans	(2) Cur. loans mediat. by banks	(3) Direct currency loans	1+2+3 = total debt	Whereof total markka debt	GDP	Corporate debt/GDP ratio
1980	94.8	14.1	18.3	127.2	108.9	192.6	66.0
1981	109.4	15.5	20.7	145.6	124.9	218.5	66.7
1982	123.9	20.8	25.4	170.1	144.8	245.7	69.2
1983	138.1	24.6	27.3	190.0	162.7	274.6	69.2
1984	153.7	28.7	29.3	211.7	182.4	308.4	68.7
1985	159.8	30.0	27.1	216.9	189.8	335.0	64.8
1986	182.0	30.7	24.7	237.4	212.7	357.6	66.4
1987	193.9	43.3	23.6	260.8	237.2	391.6	66.6
1988	221.6	52.8	28.1	302.5	274.4	441.5	68.5
1989	244.9	66.5	35.5	346.9	311.4	496.9	69.8
1990	248.5	104.7	50.8	404.0	353.2	525.9	76.8
1991	257.2	110.2	66.3	433.7	367.4	503.6	86.2
1992*	250.0	92.0	85.1	427.1	342.0	490.8	87.0

Source: Statistics Finland, Financing statistics

*) Preliminary value or value in 1992/Q3

Appendix

Timetable of financial deregulation affecting banking and the handling of Finnish banking problems

June 1982 — Authorized banks were allowed to take part in lending consortia with foreign banks. The share of the financing was limited to 50 per cent for domestic firms and 20 per cent for foreign firms.

September 1985 — The Bank of Finland issued new guidelines on the granting of personal loans. Housing loans remained unaffected: first-time buyers were required to provide 25 per cent prior savings, homeowners least one-third.

January 1986 — The Bank of Finland revised its regulations on the banks' average lending rate with effect from the beginning of 1986. The bank lending rate was permitted to exceed the Bank of Finland's base rate by maximum of 1.75 percentage points. Upper limit on banks' lending rates were abolished. However, if the average interest rate on a bank's total markka-denominated deposits exceeded the central banks base rate by more than 1.25 percentage points, the bank's average lending rate could at most equal the average deposit rate for the month in question plus 0.5 percentage point.

The dual interest rate system was introduced in the call money market. A lower rate was paid on deposits than was charged on call money credits.

May 1986 — The base rate was lowered from 8 to 7 per cent. Regulation of bank lending rates was relaxed by raising the upper limit on average interest rate by 0.25 percentage point, i.e. from 9.75 to 9 per cent.

Upper limits were placed on the amount of foreign credit intermediated by banks for financing imports.

August 1986 — The Bank of Finland totally abolished the regulation of banks' average lending rates.

November 1986 — Lending rates applied to short and medium-term loan agreements could be linked to a reference rate reflecting the cost of unregulated short-term funding. Banks were still required to link lending rates on housing loans and other long-term loans (over five years) to the base rate or to charge fixed rates of interest on such loans.

March 1987 — The Bank of Finland complemented its system of monetary control by introducing trade with banks in certificates of deposit on an experimental basis, along with term credits and term assets.

May 1987 — The Bank of Finland eased restrictions on the use of money market rates as reference rates. The Bank began to publish daily 1, 2, 3, 6, 9 and 12-month HELIBOR money market rates.

October 1987 — The savings and cooperative banks were allowed to deal in certificates of deposit with the Bank of Finland, provided the banks met the requirements for trading.

The Bank of Finland ceased issuing precise guidelines to the banks concerning prior savings required for housing loans and other personal loans.

January 1988 — The Bank of Finland commenced to calculate and publish 3- and 5-year long-term market rates on a monthly basis. Bank were allowed to use these rates as reference rates in their lending (incl. housing loans). The long-term reference rates are based on market rates for taxable, fixed-rate bonds. Banks could use these long-term market rates as reference rates for their new long-term housing loans.

June 1988 — The Bank of Finland clarified the regulations concerning the use of long-term foreign loans by prohibiting the intermediation and re-lending of these loans to economic agents who are not authorized to raise funds abroad.

January 1989 — The Bank of Finland abolished the financing arrangements for domestic suppliers' credits, new-export credits and short-term export credits.

March 1989 — An agreement supplementing the cash reserve agreement between the Bank of Finland and the banks was signed on March 13. It enabled the Bank of Finland to raise the cash reserve requirement to a maximum of 12 per cent. The application of this additional requirement was linked to developments in bank lending.

April 1989 — The Bank of Finland raised the base amount — the share of banks' till-money-credit holdings which is not financed by the Bank of Finland — by over FIM 60 billion as from beginning of April 1989. The new base amount is effective until the end of March 1990.

January 1990 — The Bank of Finland allowed banks to use their own prime interest rates in borrowing and lending. The central bank

allowed banks to emit their own certificates of deposit, which were tradeable with those emitted by the Bank of Finland.

CDs issued by banks were subjected to certain requirements before they could be used in money market dealings.

February 1990 — A credit tax of 0.5 % was placed on currency loans.

July 1990 — Foreign investments were allowed for households. Local Communities were allowed to raise long-term currency loans for the financing of expenses.

January 1991 — The Bank of Finland abolished the remaining regulation on currency loans, except for loans to households.

Repurchase agreements were taken into operation between the central bank and deposit banks. Banks could not use their own certificates of deposit or bonds in these agreements.

September 1991 — Bank of Finland decided to take control of Skopbank so as to restore confidence in the bank's activities. The central bank stated that it would assume responsibility for all Skopbank's domestic and foreign liabilities and would guarantee Skopbank's solvency and liquidity under all circumstances.

October 1991 — Private households were allowed to raise currency-denominated loans.

April 1992 — As part of the financial support package for the banking sector, the Parliamentary Supervisory Board raises the interest payable on the banks' cash reserve deposits at the Bank of Finland by one percentage point with effect from 1 April. The new rate was the 3-month Helibor less two percentage points, but not less than 8 per cent.

The law establishing the Government Guarantee Fund was approved by Parliament on 30 April. The purpose of the Fund is to help ensure the stability of deposit banking and secure depositors' claims. The fund is authorized to use up to FIM 20 billion for these purposes. Decisions on possible support measures by the fund are taken by the representatives of the Ministry of Finance, the Banking Supervision Office and the Bank of Finland on the board of the fund.

May 1992 — As part of the financial support package, the Parliamentary Supervisory Board raises the Bank of Finland's base rate by one percentage point to 9.5 per cent with effect from 1 May. As a result of this decision, the banks are allowed to raise the rate of interest on loans that are tied to the base rate by one percentage point, but the Bank of Finland recommends that

the rise should not be applied to rates that are already 12 per cent or more. Owing to an amendment to the law on the tax relief of deposits and bonds, the base-rate rise does not apply to interest rates on tax-exempt deposits.

June 1992 — Based on a decision by the Government in March to make available FIM 8 billion for investment in banks' core capital, the Government makes a formal offer of investment to the banks on 17 June. Capital will be offered to Finnish deposit banks according to their size, as measured by risk-weighted assets and off-balance-sheet commitments calculated to BIS standards. The capital was available at two dates, August and December 1992.

Government Guarantee Fund decided to grant capital support amounting to FIM 5.5 billion and guarantee of FIM 1.7 billion to the Savings Bank of Finland. The latter was established in autumn 1992 by merging 41 savings banks.

September 1992 — On 8 September, the Bank of Finland decides to temporarily float the markka because of continuing pressure against the currency in the foreign exchange rate market.

December 1992 — The Government Guarantee Fund decided to grant capital support totalling FIM 1.5 billion to Skopbank and FIM 4.7 billion to the Savings Bank of Finland.

The handling of Finnish banking problems after December 1992, see Nyberg and Vihriälä (1993).

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