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The Financing of Residential Real Estate in Finland: An Overview

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Abstract

This article provides an overview on financing residential real estate in Finland. Financial market liberalization has significantly changed Finnish housing finance since the early 1980s. The recent development and structural changes of Finnish financial markets in the context of housing finance are explored. The implications of financial market liberalization for the housing loans of Finnish households are described, and the role of public support in housing finance is discussed. The deregulation of financial markets has produced many new problems for Finnish residential real estate markets, while the long-term benefits of this development have not materialized.

Introduction

Unexpected economic shocks and planned government intervention have substantially affected Finland's economy since the early 1980s. These economic and political events have included liberalization of financial markets, attempts to broaden international trade, dramatic changes in asset prices, fluctuating interest rates, the collapse of the Soviet Union (Finland's most important trading partner at that time), rising unemployment, increasing number of bankruptcies, substantial decreases in household saving, bank crises, devaluations, and the failure of the fixed exchange rate option in September 1992.[1]

Finnish residential real estate markets also were affected by these changes. Traditionally, Finnish housing markets were orderly, with

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[1] For more detail, see Bordes (1993), Currie (1993), and Söderström (1993), who provide extensive reviews on the development of the Finnish economy. These reports were sponsored by the Bank of Finland to promote open debate on the problems of the Finnish economy. Also see Honkapohja, Koskela, and Paunio (1992) for a Finnish view on the crisis. Note that from 1970 to the present the FIM/USD exchange rate fluctuated between 3.53 and 6.06, with the high and low occurring in 1993 and 1990, respectively.

little significant price movement. For example, from the 1950s to the early 1980s, real housing prices in Finland grew at approximately 4 percent per year.[2] However, the 1980s and early 1990s were different. From 1987 to 1989, housing prices almost doubled, but by the second quarter of 1992, prices fell by 50 percent compared with the peak in 1989. Although asset price deflation was common to most Western countries in the late 1980s, two features of the downturn in Finland are worth noting. First, similar to the Japanese experience, the reversal occurred in all asset markets concurrently, which may help explain the severity of the subsequent recession. Second, this was the first major decline in house prices since the 1950s and was unexpected (Booth et al. 1993a; Bordes 1993).

The volatility in real estate prices was only one of the key events that affected real estate markets during this period. Interest rates were deregulated, and floating-rate loans became the primary loan type for residential housing. Concurrently, the Finnish government changed the tax system, government subsidy schemes for housing, and government price support techniques (e.g., most rent controls were abolished beginning in early 1992).

The purpose of this article is to provide an overview of residential real estate finance in Finland and to document the key recent changes in that market. This review complements the work of Diamond and Lea (1992a, 1992b, 1992c, 1992d, 1992e), in which they show that various countries take significantly different approaches to housing finance. This review also illustrates how dramatically financial conditions can change within a short period and how such changes affected the Finnish housing market. This work also extends Bengs and Loikkanen's (1991) work, in which they offer an analysis of housing finance before the liberalization of Finnish financial markets.

Historical Background for the Change in Residential Real Estate Finance in Finland

Regulated Financial Markets

Before the early 1980s, virtually all segments of the Finnish financial market were regulated, including lending rates, exchange rate controls, and interbank agreements on deposit rates. In the late 1970s, markets for short-term assets and liabilities were of minor importance

[2] This approximation is based on the evidence presented by Booth et al. (1993a) for the period from 1950 to 1982.

and in many cases nonexistent in the Finnish economy. Institutions specializing in housing finance were absent. Housing loans were obtained from a small number of private and cooperative banks.[3] Banks provided the main source of external funds for Finnish firms, with the stock market providing negligible financing. For instance, in 1980 the annual turnover of stocks in the Finnish markets was only FIM 308 million.[4]

Under these regulations, interest rates were administratively limited to relatively low levels (the ceilings on average lending rates offered by banks were administratively abolished in 1986), and the long-term movements were tightly controlled by monetary authorities. Interest rates were based on an administratively controlled base set by the Parliamentary Supervisory Board of the Bank of Finland in response to a proposal by the bank's Board of Management. Low interest rates encouraged households to purchase homes and finance their purchases with debt. Concurrently, inflation rates were high. Given the low nominal interest rates and the tax deductibility of interest, real interest rates on housing loans were often negative. As a result, the availability of new credit diminished, and banks required a history of substantial deposits (presaving) as a condition for obtaining housing loans. This artificially higher down payment effectively reduced housing lending to lower than market-desired levels, especially given high inflation rates and low real interest rates. At the same time, the real deposit rates offered by banks were negative, and there was no competition among the banks based on interest rates because of interbank rate agreements. During this regulatory period, deposits were the sole source of housing loans, and these loans typically had short maturities. For example, in the early 1980s the average effective maturity of private loans was between 8 and 10 years. Further, the down payment ratio tended to be 20 to 30 percent of the purchase price of the house (Koskela, Loikkanen, and Viren 1991).

[3] Five banks have been dominant in the Finnish markets. Of these, two (Kansallis Bank and Unitas) are privately owned commercial banks. Postipankki Ltd. is a state-owned commercial bank. In addition, there have been a group of savings banks and another group of cooperative banks. In practice, all banks operate in the same areas, providing loans for both households and business enterprises.

[4] Martikainen, Yli-Olli, and Gunasekaran (1991) provide an extensive analysis of Finnish stock market research during the regulated period. Although most of the empirical results on Finnish markets are similar to those reported on larger markets, some differences emerged. These include higher autocorrelation in returns, clearer inefficiency regarding the reaction to new publicly available information, and low international comovements between Finnish and overseas stocks.

Government Housing Policy

Public support programs are important in determining housing expenditures and finance in Finland. Traditionally, subsidizing housing through the tax system has been an important support program. This support generally occurred in three ways: (1) Capital gains resulting from the rise in value of an owner-occupied dwelling were normally not taxed, (2) imputed rental incomes from residential dwellings were taxed only slightly, and (3) interest payments on housing loans were largely deductible (Koskela, Loikkanen, and Viren 1991). This program of tax support encouraged Finnish households to incur debt for housing, a practice that led to increased consumption of housing and less savings. (Compare, e.g., Carroll and Summers 1987 on the tax deductibility of U.S. and Canadian interest and implications for saving behavior.) Most of these tax support systems remain today.

Until 1971, capital gains from owner-occupied dwellings were taxed according to the same rules as capital gains associated with other assets. Subsequently, these gains were tax free, provided that the dwelling had been owned and used as a permanent home for at least one year before the sale of the property. The taxes on rental income have been negligible. For instance, in 1983 only about 6 percent of owner-occupiers paid taxes on rental income.

The deductibility of interest payments has been characteristic of the Finnish system. Until 1974, tax deductions were unlimited for both housing and consumption loans, but deductions on interest payments are now limited. For instance, in 1989 households could deduct FIM 25,000 per year in housing interest payments and FIM 10,000 in interest on consumption loans. (See Gustavsson 1990 for analysis of the taxation of personal interest payments in 18 countries in the Organization for Economic Cooperation and Development.) Like Sweden, Norway, and the United States, Finland has a rather generous tax policy on interest payments. Deductibility of interest payments in Finland, as well as in some other countries, such as the United States, has decreased slightly in the 1990s (see table 1).

An important part of government support to housing markets consists of dwellings that are partly financed by the state under the National Housing Board Lending Program (ARAVA). The prices of these dwellings are controlled by the state. Loans used to purchase these dwellings are subject to the controlled base rate, which has generally been much lower than the market rates. The Finnish Housing Board sets quality standards and controls the construction costs for houses in the ARAVA. In addition, limits are set on land prices by the Housing Board.

Table 1. **Deductibility of Interest Payments, 1990**

Country	Investment or Business Purpose	Home Purchase or Improvement: Principal Residence	Home Purchase or Improvement: Secondary Residence	Consumer Purchase
Finland	TA	TA(C)	TA	TA(C)
Sweden	TA	TA	TA	TA
Norway	TA	TA	TA	TA
United Kingdom	TA(B)	TA(C)/TC(C)[a]	ND	ND
Canada	TA	TA(O)	TA(O)	ND
United States	TA(O)	TA(C)	TA(C)	ND
Japan	TA	ND[b]	ND[b]	ND

Sources: Bordes (1993) and Tanzi (1992).
Note: TA = tax allowance; (B) = deductible for interest on loans for business purposes only; (C) = subject to ceiling or maximum; (O) = fully deductible but only against associated income; TC = tax credit; ND = not deductible (or creditable).
[a] There is no relief for home improvement loans taken out after April 5, 1988.
[b] In Japan there is a provision that allows a tax credit against income tax liability corresponding to 1 percent of outstanding loans related to home acquisition at the end of each year for a certain period.

Households living in ARAVA dwellings must satisfy income and family size requirements. After the ARAVA loan is paid, the state price control ends, and the dwelling can be sold at market price. Before loan repayment, the sale price is limited to the initial controlled sale price deflated by construction costs. The initial price was determined by the Finnish Housing Board.

Municipalities have provided land for housing in Finland. In the Helsinki Land Management Policy (HITAS) system, established by the city of Helsinki in the 1970s, the city offered land for housing with subsidized rents. The prices of these dwellings (about 6,000 in 1987) were controlled in much the same way as the ARAVA dwellings.

The Finnish government also has provided interest support for both owner-occupied and rental houses. Support for owner-occupied dwellings has been offered through the Government Interest Subsidy Program (ASP) system, which was designed to help young people (ages 18 to 39) acquire their first owner-occupied dwellings. About two years' advance saving, accounting for about 15 to 20 percent of the dwelling's price, is required for participants. After these conditions are met, banks provide low-interest loans, and the state provides payments to the banks to compensate for these lower rates. Dwellings in the ASP system have price limits, which vary such that the limits are higher in more expensive areas. Moreover, the government has offered housing allowances for pensioners, students, and some households that meet family size, wealth, and income requirements.

Rent control, which existed from 1967 to 1991, has been an important part of government policy in the Finnish housing markets.[5] Under this program, the government annually set acceptable rent levels for different types of houses. These levels were based on the proposals of the rent board, which had tenant and landlord representatives. The resulting small number of rental houses—about 17 percent of Finnish households rented in 1985—created “black rental markets,” especially in the Helsinki area and in other major cities. Thus, Finnish rental markets are more limited than those in many Western countries. Two key explanations are tax support offered for owner-occupied dwellings (see Loikkanen 1991) and rent control. (See Booth et al. 1993a for a review of rents in Finland.)

Change in Housing Finance: 1980s and Beyond

Liberalization of Financial Markets

Two key trends in financial markets worldwide have been the liberalization of capital movements and the securitization of national markets. In Europe these developments have been accelerated by the increased integration of European countries. Deregulation of capital movements has led to sharper competition between financial institutions and between different national marketplaces. Along with the general deregulation of financial markets, the money and stock markets have undergone rapid changes in countries such as Finland, where these markets were once closely regulated. Developments within Finnish financial markets generally have followed the European trend but with some lag.[6] The Bank of Finland has actively taken part in this development by gradually liberalizing the financial system and allowing more room for market forces. Accordingly, current monetary policy

[5] Rent control was imposed for some parts of the country in the 1950s and early 1960s as well.

[6] Much of the Finnish experience has been shared by other countries that deregulated their markets earlier. Most notably, the United Kingdom experienced a credit cycle similar to Finland’s. According to Currie (1993), the Finnish authorities could not learn from other countries, since these countries (e.g., the United Kingdom and United States) experienced the credit boom and recession at much the same time as Finland, although they had deregulated their financial markets earlier.

is conducted with more concern for market-driven rates than was previously allowed.[7]

The Bank of Finland contributed to the evolution of the money market—for instance, by relaxing regulations on bank lending and by introducing open-market operations in central bank financing (see table 2). From the housing finance perspective the abolition of regulated interest rates in 1986 and the introduction of Helibor (Helsinki Interbank Offered Rate) rates in 1987 were important changes. The result was an increase in the number of new floating-rate loans with the base tied to market-based interest rates. The Helibor rates are calculated by the Bank of Finland as the averages of the bid rates quoted daily at 1 P.M. by the five largest banks for their certificates of deposit.

Table 2. **Financial Market Liberalization in Finland**

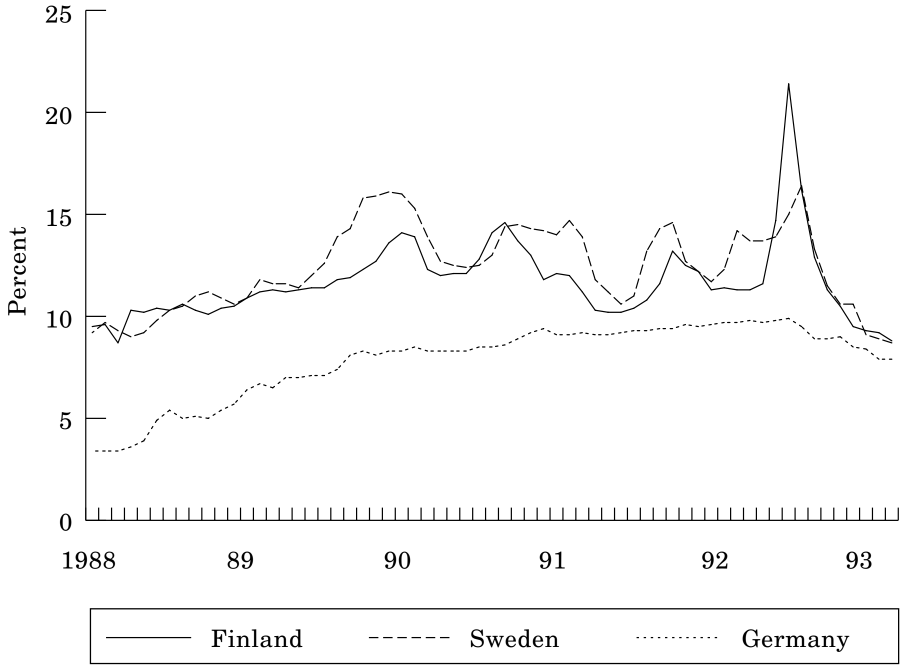
Domestic	
1983	Relaxation of lending rate regulation: pass-through formula
1984	Equal entry for foreign banks to the call money market
1986	Call money deposit rate separated from the credit rate
	Abolition of regulation of lending rates
	Floating rates allowed on some loans
1987	CDs exempt from reserve requirement
	Open-market operations introduced
	Helibor rates introduced
	Credit guidelines discontinued
1988	Floating rates allowed on all loans
1990	Prime rates allowed as reference rates
Foreign	
1980	Banks free to cover commercial forward positions
1985	Limited currency options allowed to authorized banks
1986	Free long-term foreign borrowing for manufacturing and shipping companies
1987	Free long-term borrowing for other companies
1988	Free direct investment abroad for nonfinancial companies
1989	Foreign exchange regulations relaxed except for households and short-term capital movements
1990	Free household foreign investment
1991	Free short-term capital movements
	Free foreign exchange borrowing for households

Source: Söderström (1993).

[7] Open-market interventions (i.e., the buying and selling of securities issued by the Bank of Finland as well as other companies) are currently the most important part of the Finnish monetary policy. At the end of 1992, the Bank of Finland had claims on financial institutions in the amount of about FIM 15 billion. Of these, about FIM 4.4 billion were securities with repurchase commitments, FIM 3.9 billion were certificates of deposit, and FIM 2.9 billion were till-money credits (Bank of Finland 1993).

The behavior of Helibor rates as well as the corresponding Swedish and German money market rates is shown in figure 1. Finnish interest rates have followed the behavior of German and Swedish rates, declining since the second half of 1992. As expected, Finnish and Swedish interest rates have been volatile relative to those of Germany.

Figure 1. **Finnish, Swedish, and German Money Market Rates**

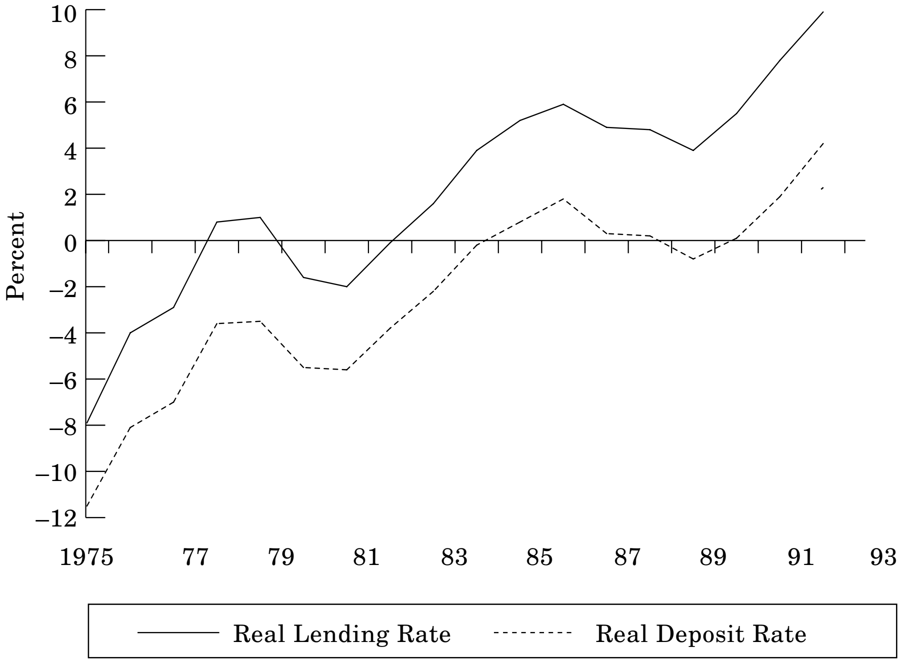


Source: Currie (1993).

New financial institutions and instruments have developed as a result of the changes in government policy and market forces. New mutual funds and finance companies emerged, but none of these focused purely on real estate finance. Regarding the new instruments, Finnish option markets currently trade with currency, interest rate, and stock index derivatives. This market was established in May 1988. (See Jokivuolle and Koskinen 1991 for more detail.)

One outcome of the liberalization of financial markets is that it is easier for borrowers to obtain bank loans. The willingness of households to incur debt was further encouraged by a tax system that subsidized debt. The favorable tax treatment of interest expenses is shown in figures 2 and 3. As reported in figure 3, the after-tax lending rates are much lower than the pre-tax lending rates displayed in figure 2. The real after-tax lending rates were negative at the height of the 1987–89

Figure 2. **Real Deposit and Lending Rates**



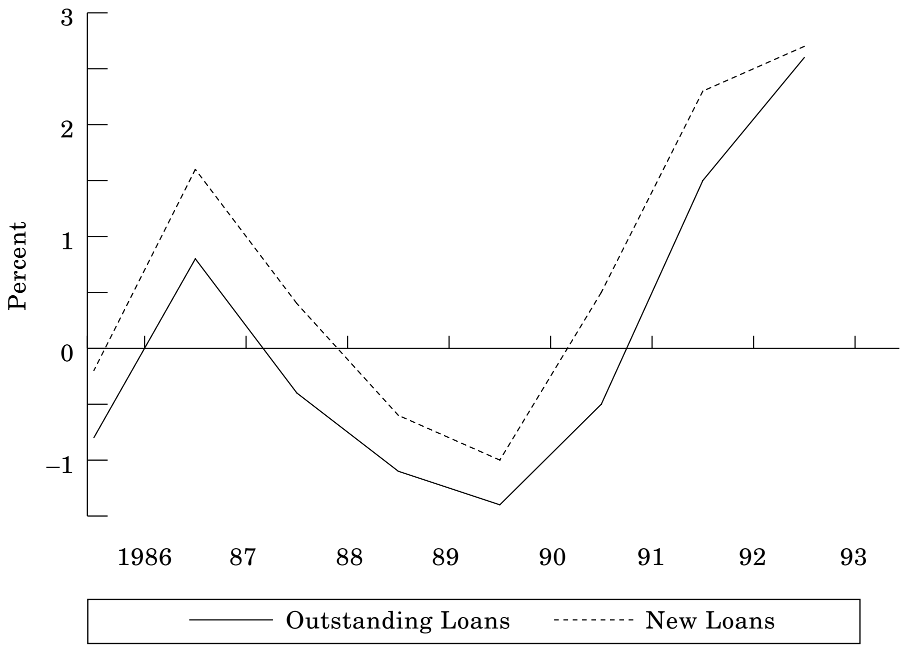
Source: Currie (1993).

boom. These negative rates obviously contributed to the decline of household saving rates during the 1980s. According to Koskela and Viren (1991), in 1983 the indicator measuring the percentage of household saving of disposable income was above 5; it became negative in 1987 and fell to –2 in the beginning of 1988. In 1991, the ratio was as high as 6.[8] Finland's inflation rates have declined significantly from their high levels in the 1970s and early 1980s (see figure 4). This pattern follows the general trends in the European Community countries.

The liberalization of money markets and the general increase in wealth connected with the rise in stock prices also paved the way for a developing stock market and an active real estate market in the 1980s. The peak in stock prices occurred in April 1989, at the same time as the peak in housing prices (see figure 5). At the same time, the volume in the Finnish stock markets increased substantially. While the annual turnover of stocks in 1980 was FIM 1.2 million, measured in constant

[8] Tanzi (1992) compares the savings rates in countries with generous and nongenerous treatment of interest deductions. For instance, in 1991 the net household saving as a percentage of disposable income in generous countries was 3.7 percent. The figure in nongenerous countries was 11.8 percent.

Figure 3. **Real After-Tax Lending Rates: Average Marginal Tax Rate of Households**



Source: Currie (1993).

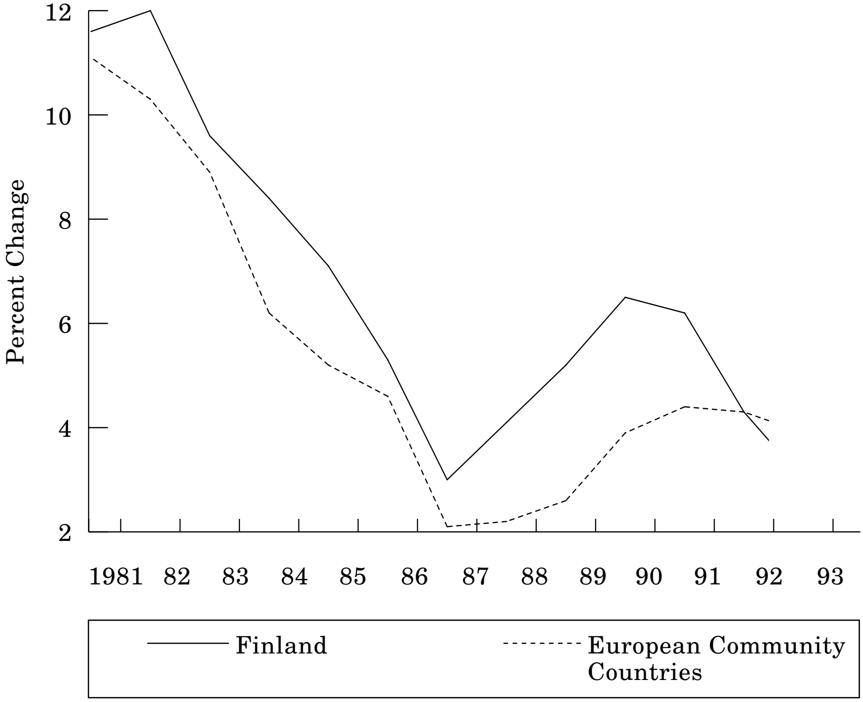
1988 FIM, it increased to FIM 37.5 million in 1988 (Berglund and Liljeblom 1990).

In 1989, the Finnish Securities Market Act made Finnish stock market regulations comparable to international standards. Despite the securitization in the Finnish financial markets, securities for real estate have not yet emerged. Recent discussion in the Finnish media, however, indicate that such instruments will be developed in Finland soon. Malkamäki and Solttila (1991) offer a description of the securitization of Finnish financial markets.[9]

The deregulation of financial markets generally has been interpreted as a major cause of Finland's bank crisis. Finnish banks' operating results started to decline in 1989. In 1988, the operating profit of commercial banks was FIM 4.8 billion. The corresponding figures for 1989 and 1990 were FIM 3.2 billion and FIM 2.4 billion, respectively. Consequently, Moody's ratings for Finnish banks were downgraded for the first time in February 1990. The situation became a crisis in 1991

[9] Kytönen, Martikainen, and Puttonen (1993) provide evidence that the development in the Finnish financial markets has improved the efficiency of Finnish stock markets.

Figure 4. **Yearly Changes in Finnish and European Consumer Prices**

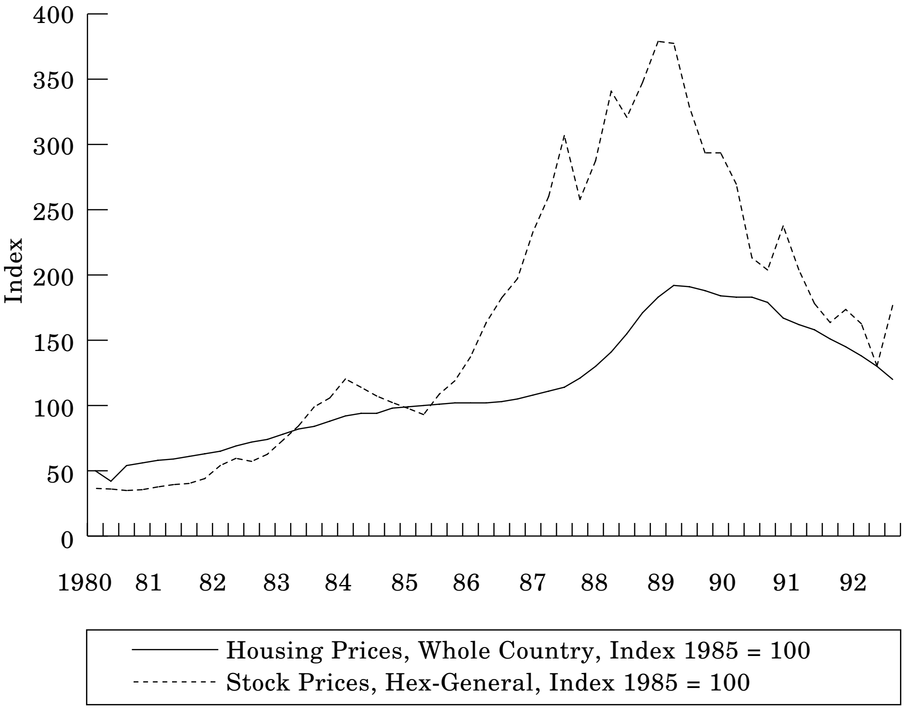


Source: Currie (1993).

when the operating loss of banks was FIM 4.8 billion, and the crisis deepened in 1992 when banks reported losses of FIM 21.7 billion.

According to Bordes (1993), three major forces drove down the profitability of banks. First, banks' profits and activities in equities and real estate markets declined considerably. Second, increasing interest rate funding brought down net interest revenues. Third, the number of nonperforming loans increased. It is expected that the government will provide Finnish banks with approximately FIM 50 billion of support in the 1992–94 period. Thus, the bank crisis will require a large part of the Finnish state budget, which is estimated at FIM 175 billion for 1994. Most of the financial support has been directed to cooperative savings banks. Nyberg and Vihriälä (1993) provide a detailed description of the Finnish banking crisis and how it was handled. In many ways (lower interest rate spreads, losses from real estate and nonperforming loans, and the large state bailout), this crisis is similar to the U.S. savings and loan crisis.

Figure 5. **Stock and Real Estate Values**



Source: Söderström (1993).

The economic crisis has been observable in other industries as well.[10] While the annual business failure rate declined between 1987 and 1989, the default rate turned upward from 1990 and was about 5 percent in 1992. In the construction industry, the price boom in the late 1980s significantly increased construction activities, while the drastic fall led to just the opposite development. This industry's economic boom peaked in 1990. Invoicing in building construction firms rose by FIM 6 billion from the previous year to a total of more than FIM 64 billion.

Employment in the construction industry was significantly affected by the downturn. In 1991, Finland had an average of 193,000 unemployed individuals, 38,000 of whom were construction workers. This industry employed 179,000 people in 1991, a fall of 26,000 from the previous year. In 1992, the number of jobless people continued to rise, and the

[10] One of the major causes of the economic recession in Finland was the collapse of the Soviet Union. In the early 1980s, as much as 25 percent of Finnish exports were sold to the Soviet Union. This figure was about 15 percent in the late 1980s. In the early 1990s, exports to the former Soviet Union were close to zero. Finnish firms were not able to export their products to other countries, so much of the Finnish industrial capacity was scrapped.

unemployment rate for construction workers was close to 50 percent by the end of the year. At the same time, the unemployment rate in Finland was 15 percent, while the corresponding figure at the end of 1990 was 5 percent (*Bank of Finland Bulletin* 1993).

The recession also affected the financial markets. Following the recession, in September 1992, the Finnish markka began to float. In November 1991, the markka had been devalued 12.3 percent. Thus, general market activity, as well as real estate market activity, declined substantially during the downturn, culminating with the currency revaluation.

Government Housing Policy

The economic recession and financial market liberalization were the major reasons for shifts in government housing policy. External forces, such as Finland's becoming a member of the European Trade Area and applying for membership in the European Community, also had an impact. Internationalization efforts encouraged the Finnish government to move toward international standards in its housing policy.

The dwelling completions in Finland for the period from 1950 to 1991 are shown in figure 6. The number of dwellings financed by the ARAVA scheme have gradually decreased since the late 1970s. In 1991, 20,804 dwellings were financed by the Government/National Housing Board. Of these, 4,576 were owner-occupied dwellings, 14,989 rental dwellings, and 1,239 student houses.[11] The economic recession forced the government to further reduce ARAVA production. The economic strain of the recession also greatly reduced the HITAS system in the Helsinki area, possibly beyond recovery. Other government-supported housing programs will probably replace these programs.

In other areas of support for housing, the government has continued to subsidize housing with interest-support loans for dwellings (see table 3). Interest-support loans for rental dwellings and for owner-occupied dwellings have increased considerably over time. The interest-support

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[11] In 1989 there were 1.1 million buildings in Finland, of which 87 percent were residential. The number of dwelling units was about 2.2 million. Owner-occupied dwellings accounted for about 67 percent of the dwelling stock, which is a high figure internationally. In 1991, building completions accounted for 46.9 million square meters (505 million square feet). Much of Finland's construction industry activity has been concentrated in the province of Uusimaa, where the capital (Helsinki) is situated. In 1991, more than half of the Finnish construction industry loans (FIM 16.4 billion) went to Uusimaa. At the same time, the northern province, Lapland, had a housing stock of only FIM 0.6 billion. Booth et al. (1993b) offer a detailed analysis on the volume of Finnish housing production over time.

Figure 6. **Dwelling Completions in Finland**

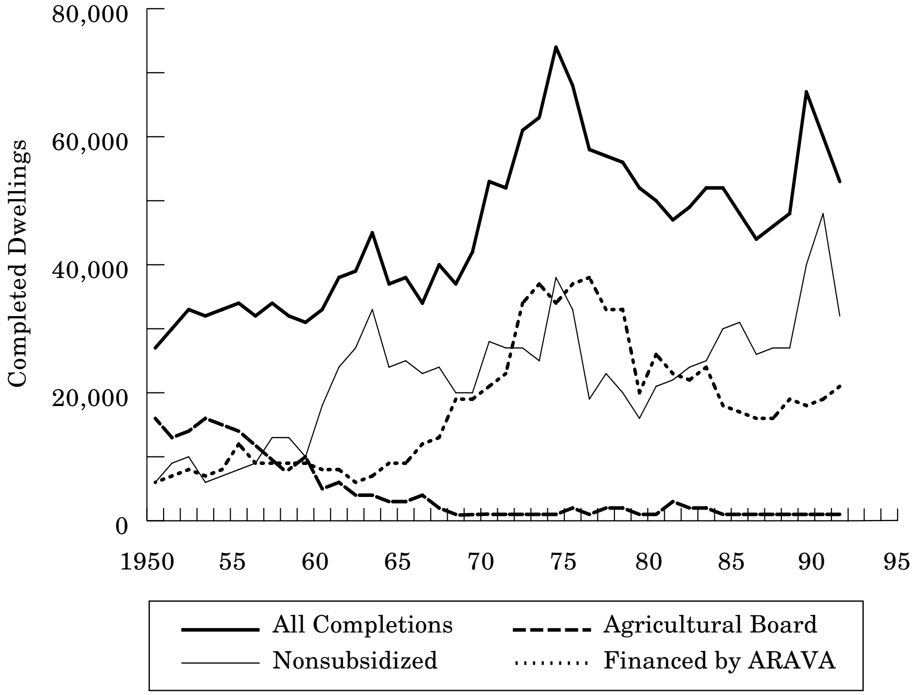


Table 3. **Interest-Support Loans for Rental and Owner-Occupied Dwellings, 1981–1991 (FIM million)**

Year	Rental Dwellings	Owner-Occupied Dwellings
1982	177	136
1983	285	23,079
1984	388	59,782
1985	830	108,202
1986	4,476	168,494
1987	10,370	228,746
1988	28,863	302,262
1989	46,467	381,845
1990	83,104	469,490
1991	111,249	533,891

Source: Tilastokeskus (1992).

loans for owner-occupied dwellings (ASP loans) are primarily for young people, as discussed earlier. The ASP loans have gradually increased in importance with respect to the interest-support loans for rental dwellings. These loans were linked to the base rate, but their interest rates are gradually being changed to market-responsive rates.

Changes also have occurred recently in the tax deductibility of interest payments. The economic recession has caused the government to reduce the deductible parts of all interest payments, including housing loan interest payments. The abolition of rent control, which began in 1992, also has affected Finnish housing markets. Rental housing is gradually becoming more popular in Finland. Loikkanen and Salo (1992) discuss the future of Finland's housing policy in more detail.

Implications of Deregulation for Housing Finance

The recession, interest rate deregulation, and other market changes dramatically affected the wealth of Finnish households in the 1980s. The real housing wealth of Finnish households declined by 27 percent from the end of 1988 to the end of 1991 (see table 4). The decline occurred for all assets, with the largest decline (almost 70 percent) occurring in stocks. During this period, the nominal net wealth of Finnish households dropped by about 10.9 percent (FIM 140 billion).

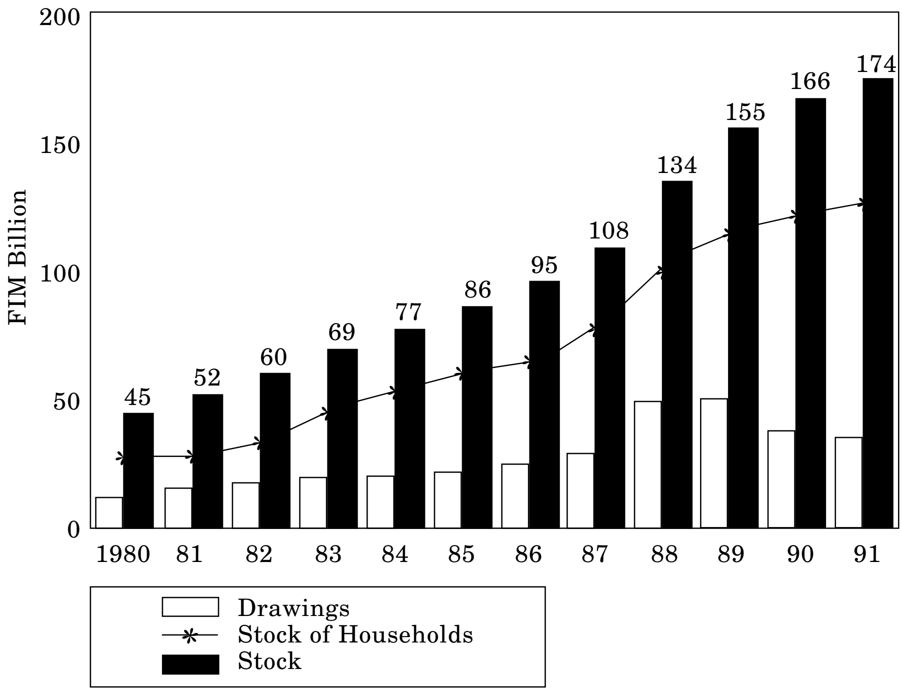
Table 4. **Evolution of Finnish Households' Wealth, 1988–1991**

	1988, 4Q (FIM million)	1991, 4Q (FIM million)	% Change Nominal	% Change Real
Assets				
Housing wealth	749,719	670,452	–10.6	–27.0
Stocks	42,028	19,470	–53.7	–70.1
Deposits	195,280	210,527	7.8	–8.6
Bonds	36,383	37,182	2.2	–14.2
Land	257,121	242,378	–5.8	–22.2
Other real assets	204,800	203,228	–0.8	–17.2
Total	1,485,332	1,383,237	–6.9	–23.3
Liabilities				
Housing loans	100,940	125,636	24.5	8.1
Consumer credits	37,800	45,746	21.0	4.6
Other loans	48,558	55,016	13.3	–3.1
Total	187,300	226,400	20.9	4.5
Net Wealth	1,298,032	1,156,837	–10.9	–27.3

Source: Bordes (1993).
Note: The real percentage change is the nominal change less the inflation rate, which is 16.4 percent for the three-year period.

At the end of 1983, the Finnish housing wealth was FIM 335 billion.[12] At the end of 1991, the total stock of housing loans in Finland was FIM 174.4 billion (see figure 7). The outstanding stock gradually increased from 1980 to 1991. However, the increase in drawings was especially high in the late 1980s, particularly 1988 and 1989, after the abolition of interest rate controls. Financial deregulation relaxed the requirement for saving in advance of housing purchases. At the same time, new housing loans were easy to obtain, and banks started to actively advertise new loans in newspapers and other media. These changes increased the demand for Finnish houses, leading to significant increases in Finnish real estate prices. The decline in drawings started in 1990, the same year housing prices started to fall. The apparent bubble in prices, the considerable increase in new drawings of housing loans, and the subsequent decline in both support the claim that the Finnish housing markets were in disequilibrium.

Figure 7. **Housing Loans in Finland**



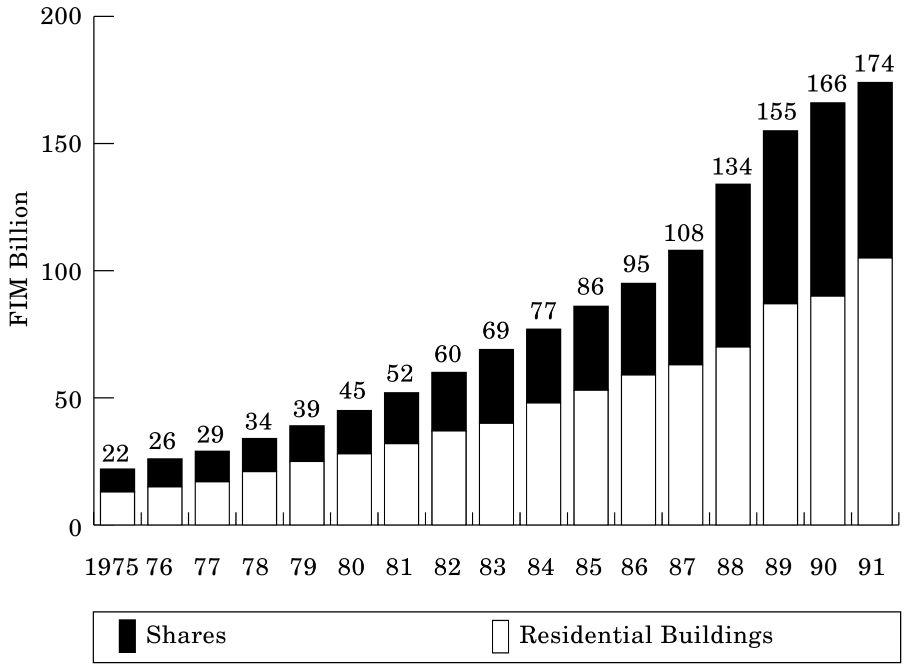
Source: Tilastokeskus (1992).

[12] During the boom (i.e., between the fourth quarters of 1983 and 1988), the real housing wealth of Finnish households increased by 97 percent. The corresponding figures in the United Kingdom and United States were 104 percent and 27 percent, respectively (Bank of Finland 1991).

There are two main types of owner-occupied dwellings in Finland. Some are held in "fee simple" (typically detached houses), while others are houses held in various forms of condominium ownership. In condominium ownership the individual owner is a shareholder in a housing company, which manages the property as a self-governing economic unit. Each shareholder may decide about matters affecting the control and use of his or her own dwelling (Bengs and Loikkanen 1991). Other decisions are made at the meetings of shareholders. In state-financed ARAVA buildings, the rights of shareholders are more restricted (Booth et al. 1993a). Most loans for owner-occupied dwellings are for residential buildings, with loans for shares playing a smaller role (see figure 8).

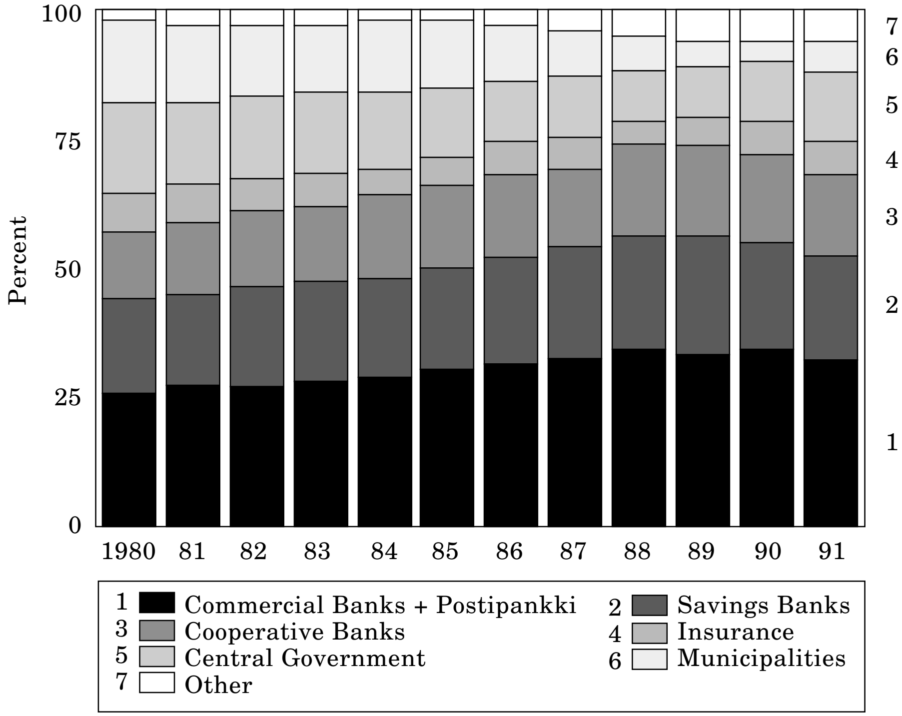
The significance of banks in the Finnish housing markets is further supported by the housing loan figures (see figure 9). The role of commercial banks, however, is not currently as dominant as in the past in terms of construction industry loans. Savings and cooperative banks are also important for private households. In addition, the central government and municipalities are important lenders, while the role of insurance establishments has not been as significant and seems to be decreasing over time.

Figure 8. **Housing Loans by the Form of Ownership**



Source: Tilastokeskus (1992).

Figure 9. **Housing Loans by Lender Sector**



Source: Tilastokeskus (1992).

The Bank of Finland's decision to abolish the ceilings on average lending rates in 1986 meant that an increasing number of new housing loans have been based on fluctuating market-based interest rates instead of the traditionally low base rate determined by the Bank of Finland. The result has been that banks are more willing to offer housing loans linked with market-based interest rates than with the government-determined base rate. Many of the new loans are based on the Helibor interest rates, which are determined by banks' certificates of deposit. Other loans are based on long-term three- and five-year interest rates, calculated by the Bank of Finland as monthly averages of the bid rates quoted daily by the five largest banks. The rates are based on market rates for taxable, fixed-rate bullet bonds issued or guaranteed by banks. Further, since the beginning of 1990, banks have been allowed to use their own prime rates as reference rates. These are set and changed at their own discretion. The behavior of major reference rates for housing loans in recent years is described in table 5. It is clear that the base rate and banks' prime rates are less volatile than the market-based interest rates. Another interesting finding is that interest rates declined noticeably in 1993, largely because of policy changes

Table 5. **Behavior of Major Reference Rates for Housing Loans, %**

Year	Helibor, 12 Months	Long-Term Reference Rates 3 Years	Long-Term Reference Rates 5 Years	Prime Postipankki	Base Rate
1988	10.50	10.7	10.8		8.00
1989	12.72	12.2	12.0		8.50
1990	14.39	13.7	13.5	13.00	8.50
1991	12.53	12.3	12.2	12.25	8.50
1992	12.96	13.1	13.0	12.50	9.50
1992 (December)	10.70	11.7	11.8	12.50	9.50
1993 (May)	7.97	9.2	9.6	9.00	7.50

Source: Bank of Finland (1993).
Note: Values are daily averages for each year, except for the Postipankki prime rate and the base rate, for which the value is the interest rate at the end of the period. Prime rates were introduced in 1990.

by the Bank of Finland, which has been increasingly active in decreasing market-based interest rates. Current interest rates, compared with the late 1980s and early 1990s, are making housing more affordable to those with housing loans.

The distribution of housing loan interest rates in 1991, 1992, and April 1993 is described in table 6. The dramatic change resulting from using base rates as the major reference to the market-based interest rates is readily observable. The stock of base-rate-determined loans is decreasing gradually, while the opposite is occurring for market-based rates,

Table 6. **Behavior of Major Reference Rates for Housing Loans (FIM million)**

Year	Base Rate	Helibor	Linked to 3-Year Market Rate	Linked to 5-Year Market Rate	Fixed Rate	Other
New loans						
1991	5,603	2,841	7,146	1,601	1,126	2,850
1992	4,100	2,556	3,628	436	796	5,493
1993 (April)	253	624	218	9	73	415
Stock						
1991	69,704	4,512	20,861	1,522	1,522	3,253
1992	60,760	5,560	21,327	1,858	1,858	8,269
1993 (April)	57,909	7,043	20,256	1,803	1,803	9,309

Source: Bank of Finland (1993).

especially for Helibor rates. In April 1993, the average rate of interest for new loans linked with the base rate was 8.98 percent. The corresponding figure for new Helibor-based loans was 11.02 percent.

Another significant change connected to market liberalization is the degree of competition among banks making housing loans. This competition can be observed, for instance, in somewhat different interest rate levels among banks. Moreover, while in the early 1980s housing loans typically had rather short maturities, maturities of 20 or even 30 years are now possible. The competition among banks has increased the average time to maturity. Provisions for current loans differ by lending bank, while provisions in the previously regulated markets were identical.

Summary and Future Outlook

This article offers a broad overview of financing residential real estate in Finland. The recent liberalization of Finnish financial markets has changed the environment for housing finance. In the late 1980s, price and construction activity increased because of the loosening of restrictions in financial markets and the presence of negative real interest rates. Saving in advance of housing purchases diminished, and the availability of housing credit increased.

The development of Finnish housing markets also was closely connected to the development of the economy as a whole. The serious recession in the late 1980s and the desire to internationalize the economy forced the government to change housing policies. Key changes were made to tax provisions regarding the deductibility of interest on housing loans, and government-supported construction diminished.

In the past, Finnish financial markets characteristically had no private institutions specializing in housing finance. Finnish financial markets have been dominated by a few large banks. Housing loans have been based mainly on deposits; securities for this purpose have not been developed. However, securitization appears to be a major future avenue for obtaining financing for residential real estate in Finland.

Although there has been considerable deregulation in the Finnish financial and housing markets in recent years, the main problems of Finnish housing have not changed. Finns still live in relatively small apartments by international standards (Booth et al. 1993b). Moreover, young families' efforts to obtain housing are seriously hampered by undeveloped rental markets, a problem that produces more pressure to provide aid to first-time buyers of owner-occupied dwellings. These problems are closely connected to the development of the Finnish economy, since the ASP system will gradually be linked to market-based interest rates in the future.

The short-term forecast for the construction industry and housing seems bleak. Continued high unemployment is expected to dampen demand in Finnish housing markets. Social construction programs also are not expected to expand soon because of the severe economic recession. Further, tax relief is not expected as long as the Finnish economy remains weak. Nevertheless, Finnish real estate markets have experienced dramatic changes that will likely continue to affect the entire Finnish economy.

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