

Asset Inflation in Selected Countries

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In the latter half of the 1980s, not only Japan but also many countries including the United States, the United Kingdom, Nordic countries, and Australia experienced big changes in asset prices. While there is no doubt that easy monetary conditions were a common background factor behind asset price inflation, there appear to be significant differences in terms of scale and timing in each country. This paper analyzes the process of, and background to, asset price inflation in the 1980s and to try to deduce implications for monetary and financial policy, especially by comparing the cases for those countries.

Key words: Asset Price Inflation; Tax Wedge.

I. Introduction

In the latter half of the 1980s, not only Japan but also many countries including the United States, the United Kingdom, Nordic countries, and Australia experienced big changes in asset prices, or so-called “asset price inflation” and “asset price deflation.” Continental countries such as Germany and France also experienced asset price fluctuation, but to a lesser extent. While there is no doubt that easy monetary conditions in those countries were a common background factor behind asset price inflation, there appear to be significant differences in terms of scale and timing in each country. In addition, there were various differences as well as common aspects with respect to economic and institutional circumstances, such as the degree of progress of financial liberalization and distortions in respective tax systems. The purpose of this paper is to analyze the process of, and background to, asset price inflation in the 1980s and to try to deduce implications for monetary and financial policy, especially by comparing the cases for selected countries which experienced large asset price volatility.

The main findings of the paper can be summarized as follows. First, comparing the background to asset price inflation in each country, such as progress of financial liberalization, monetary ease, and tax system especially vis-à-vis asset transactions, the following conclusions are obtained (Table 1):

- a) Financial liberalization itself was not always immediately followed by rapid asset price inflation. However, when financial liberalization was promoted under easy monetary conditions, asset price inflation was both rapid and substantial.
- b) This was mainly because easy monetary conditions promoted rapid credit ex-

Table 1
Comparison of Financial Liberalization, Tax Distortion,
Monetary Policy, and Asset Inflation in Selected Countries

	Timing of financial liberalization	Tax distortion favorable for real estate investment	Peak of monetary ease	Period of asset inflation	Magnitude of asset inflation
Japan	Phased liberalization since 1985	Real estate investment for business, Inheritance tax	85-early 89	Land: 85-90 Stocks: 85-89	Serious
United States	Phased liberalization since the late 1970s	Housing investment	83-88	Land: 85-89	Medium
United Kingdom	Deregulation from 1980	Housing investment	83-88	Land: 83-89	Serious
Germany	Deregulation of interest rates in 1967-69	Relatively small	85-88	Land: 90-	Small
Sweden	Deregulation in 1985	Real estate investment Especially large for housing investment	86-87	Land: 85-91 Stocks: 88-89	Serious
Norway	Deregulation in 1984-85	Housing investment	84-86	Land: 86-89	Serious
Finland	Deregulation in 1984-86	Housing investment	85-87	Land: 85-87	Serious

pansion which was more easy as a result of financial liberalization:

- (i) Financial liberalization resulted in the relaxation of liquidity constraints for borrowers.
- (ii) Financial institutions had a strong incentive to expand lending to new non-traditional customers (especially, the real estate industry) in order to maintain their asset size in a more competitive environment.

Such credit expansion resulted in the acceleration of asset inflation.

- c) Japan and Nordic countries, where monetary ease and tax distortion (which gives an advantage when investing in real estate) existed simultaneously, experi-

enced serious asset price inflation.

In Japan, both stock and land prices began to rise almost simultaneously from around 1985 and reached their peak in 1989-90 under easy monetary conditions. Indeed, from 1987 to 1989, the official discount rate had been kept then historically low at 2.5 %, and monetary aggregates had been growing significantly faster than nominal GDP growth. Similarly, asset prices surged in the United States, the United Kingdom, and Nordic countries under monetary ease. Thus, monetary ease can be regarded as a common background factor to asset price inflation. In addition, the increased availability of funds for borrowers owing to financial liberalization (such as relaxation or abolition of volume constraints on bank lending, interest rate regulation, and limitation of access to the capital market) and change on the part of financial institutions to aggressively expand credit were also commonly observed in the United States (especially the S&Ls in the early 1980s), Nordic countries, and Japan. That is, many large companies which had traditionally been the main qualified borrowers of banks switched their fund raising to the capital market. Therefore, financial institutions were obliged to find new but more risky borrowers such as small and medium-sized companies to compensate. In addition, tax incentives favoring investing in real estate by borrowing seem to have resulted in strong demand for bank loans, leading to the serious bad loan problems of financial institutions in those countries.

In general, tax distortions concerning real estate are not necessarily regarded as the main cause of asset price inflation in the 1980s because they had existed for many years. However, it should be noted that the increased availability of funds, caused by financial liberalization and more aggressive lending attitude of financial institutions associated with it, likely increased the influence of tax distortions. That is, when borrowing is strongly constrained, it is difficult to actively enjoy the benefit of tax distortions even if there exist tax advantages in buying real estate by borrowing. If the constraint is removed, the tax advantage becomes more easy to enjoy for many potential borrowers, which could result in increased demand for real estate.

Thus, neither financial liberalization nor tax distortion concerning real estate investment on their own can be considered to have led to asset price inflation in the 1980s. However, the simultaneous existence of both combined with monetary ease can be regarded as the cause for asset price inflation. If we apply this argument to the asset price inflation of the late 1980s in Japan, it can be concluded that Japan had a specific financial environment which was likely to induce asset price inflation. Namely, the virtual synchronization of monetary ease, financial liberalization, and tax distortions expanded the magnitude of asset price inflation.

From the above, the following policy implications can be derived to prevent the resurgence of asset price inflation:

- a) If financial liberalization is pursued in an environment where the risk management of financial institutions is not sufficiently established, such institutions often tend to expand lending to high returns, high risk projects, such as real estate-related lending, to compensate for the loss of margins caused by financial liberalization. This expansion of lending is likely to cause asset price inflation. Although the enhanced competition resulting from liberalization is a welcome phenomenon, the authorities should also strengthen the risk management of financial institutions by creating the proper environment.
- b) Excessive credit expansion associated with financial liberalization and continuing easy monetary policy is likely to cause a rapid rise in asset prices and, once this happens, a rapid fall is also inevitable. Such large fluctuations in asset prices in a short period imply an increase in risks borne by financial institutions. Therefore, in order to prevent an excessive rise in asset prices as well as to maintain the soundness of financial institutions, the authorities should sufficiently monitor their lending. When a significant rise in asset prices is observed, the authorities should examine whether it properly reflects a rise in profitability or interest rate developments — if it does not, the authorities should warn the market and take early policy actions.
- c) Tax advantages from real estate investment stem from the following factors:
 - (i) The deductibility of interest payments from taxable income.
 - (ii) The untaxed effective capital gain from inflation to net borrowers.

These tax advantages will be a strong incentive for effecting real estate investment through borrowing, especially under a liberalized financial environment. This argument is confirmed by the fact that even a partial weakening of the tax advantage triggered a fall in asset prices in many countries. Although these tax distortions should be removed, it is often very difficult to change them.

Since these tax distortions become larger when expected inflation is higher, it is very important for the monetary authorities to prevent formation of strong inflationary expectations, not only with respect to general prices but also asset prices. This is particularly important under a liberalized financial environment.

II. Asset Inflation and Background in Selected Countries

In this section, we make a comparative study of the background and process of asset inflation in selected countries, paying particular attention to the combination of financial liberalization, tax distortions with respect to asset investments, and monetary policy operations in each country. We will especially focus on:

- a) the timing of financial liberalization and asset inflation,

- b) the relationship between the progress of financial liberalization and the expansion of bank lending (particularly lending to the real estate industry), and
- c) tax incentives associated with real estate investments.

It should be noted, however, that the following analysis largely depends upon circumstantial evidence because the process of asset inflation is too complicated for its causality to be explicitly pinpointed.

In order to assess the importance of tax distortions quantitatively, it is necessary to estimate a 'tax wedge'¹ which is defined as the divergence between the real market interest rate and the effective after-tax real cost of funds for real estate investment.

First, let us consider the case where real estate investment is entirely financed by borrowing. In certain countries mortgage interest payments are deductible from taxable income. Under a higher inflation rate, nominal interest payments on a given loan amount become larger as the nominal interest rate increases. At the same time, since the real value of the loan decreases as inflation increases, the real debt service burden equals real interest, which is the inflation rate subtracted from the nominal interest rate. However, reduction of debt in real terms caused by inflation is not recognized as taxable income, whereas interest payments are deductible from taxable income. Therefore, when inflation and the nominal interest rate rise by the same rate, there arises an advantage for investors to invest in real estate by borrowing, because the real after-tax cost of borrowing is lower than the real interest rate. This tax wedge becomes larger as the rate of inflation increases at a given real interest rate. A similar tax advantage arises for real estate investments by corporations; corporations can enjoy a tax induced fall in the real effective cost of borrowing through inflation, because their interest payments (not necessarily confined to mortgage interest payments) can be deducted from taxable income.

Second, consider the case where investment is entirely financed by drawing down assets (i.e. the liquidation of financial assets). In this case, the opportunity cost of real estate investment is a real after-tax return on holding financial assets. When the inflation rate rises, the nominal interest rate generally rises accordingly and hence nominal interest receipts increase, which are entirely taxable. On the contrary, depreciation of the real value of financial assets caused by inflation is not deducted from taxable income. Under this tax system, an increase in inflation reduces the after-tax yield on financial assets and hence the opportunity cost of real estate investment, which stimulates such investment. As is clear from the above argument, the tax wedge becomes larger when the inflation rate is high or the income tax rate is high.

For the present, let us look at tax wedge estimates in selected countries in the case of

¹For further details of the 'tax wedge', see Fukao and Hanazaki (1986).

Table 2
 Estimated Tax Wedge on Housing Investment
 (Based upon tax systems in the mid-1980s)

(Percentage points)

Borrowing Case

		Real Interest Rates							
		3				5			
		Inflation rate				Inflation rate			
		0	5	10	15	0	5	10	15
United States	(a)	-0.79	-2.11	-3.43	-4.74	-1.32	-2.64	-3.95	-5.27
	(b)	-0.45	-1.20	-1.95	-2.70	-0.75	-1.50	-2.25	-3.00
Japan		-0.23	-0.23	-0.23	-0.23	-0.35	-0.35	-0.35	-0.35
Germany		-0.06	-0.11	-0.11	-0.11	-0.15	-0.18	-0.18	-0.18
France		-0.03	-0.09	-0.15	-0.18	-0.10	-0.19	-0.29	-0.29
United Kingdom		-0.71	-1.90	-3.10	-4.29	-1.19	-2.38	-3.57	-4.76
Canada		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Australia		-0.13	-0.33	-0.54	-0.75	-0.33	-0.66	-1.00	-1.33
Sweden		-0.53	-1.86	-3.19	-4.52	-1.06	-2.39	-3.72	-5.05

"Asset Draw Down" Case

		Real Interest Rates							
		3				5			
		Inflation rate				Inflation rate			
		0	5	10	15	0	5	10	15
United States	(a)	-0.79	-2.11	-3.43	-4.74	-1.32	-2.64	-3.95	-5.27
	(b)	-0.45	-1.20	-1.95	-2.70	-0.75	-1.50	-2.25	-3.00
Japan		-0.42	-1.12	-1.82	-2.52	-0.70	-1.40	-2.10	-2.80
Germany		-0.66	-1.76	-2.86	-3.96	-1.10	-2.20	-3.30	-4.40
France		-0.30	-0.80	-1.30	-1.80	-0.50	-1.00	-1.50	-2.00
United Kingdom		-0.90	-2.40	-3.90	-5.40	-1.50	-3.00	-4.50	-6.00
Canada		-0.88	-2.35	-3.82	-5.29	-1.47	-2.94	-4.41	-5.88
Australia		-0.90	-2.40	-3.90	-5.40	-1.50	-3.00	-4.50	-6.00
Sweden		-1.59	-4.25	-6.91	-9.57	-2.66	-5.32	-7.97	-10.63

(a) Old Tax System : Before the Tax Reform Bill of 1986.

(b) New Tax System: After the Tax Reform Bill of 1986.

Source: Fukao and Hanazaki (1986).

Table 3
 Estimated Tax Wedge for Housing Investment
 at 5% Real Interest Rate and 1985 Inflation Rate
 (Based upon tax systems in the mid-1980s)

(Percentage points)

	Tax Wedge		Inflation rate*
	Borrowing case	Asset draw down case	
United States (a)	-2.21	-2.21	3.4
(b)	-1.26	-1.26	3.4
Japan	-0.35	-0.94	1.7
Germany	-0.18	-1.56	2.1
France	-0.21	-1.09	5.9
United Kingdom	-2.64	-3.33	6.1
Canada	0.0	-2.41	3.2
Australia	-0.74	-3.33	6.1
Sweden	-2.87	-6.27	6.8

(a) Old Tax System : Before the Tax Reform Bill of 1986.

(b) New Tax System: After the Tax Reform Bill of 1986.

*Assumed GNP/GDP deflator inflation rate.

Source: Fukao and Hanazaki (1986).

borrowing around the mid-1980s (Tables 2 and 3)². First, in the United Kingdom and Sweden, there exists a tax system where interest payments on mortgages are largely deductible from taxable income. Thus, tax wedges in these countries are larger than those in others. Although the United States had as large a tax wedge as that of the United Kingdom before 1985, it narrowed considerably because tax system reform of 1986 sharply reduced the marginal tax rate on personal income. On the other hand, the tax wedge is relatively small and insensitive to the rate of inflation in Japan³, Germany, and France because of the upper limit of tax relief and its limited duration. Since there is

²In general, housing investment may be financed by borrowing or drawing down financial assets, or a combination of both. However, since the implications are basically the same in each case, we describe the cross-country comparison of tax wedge just in the case of borrowing as a typical example.

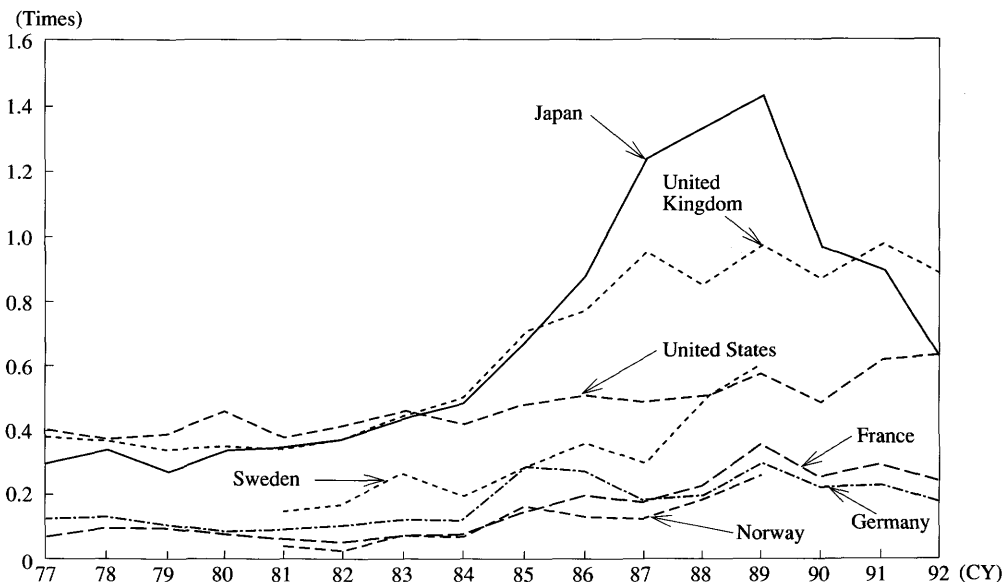
³In Japan, the size of the tax wedge in the case of purchasing owner-occupied homes is small, and (as we shall see later) it seems that such tax distortions as concerning

- a) investments in studio apartments for rent by both corporations and individuals,
 - b) inheritance of real estate, and
 - c) realized capital gains from selling land,
- are more important considerations behind asset price inflation.

no tax relief for housing investment in Canada, the tax wedge there is always zero and the real financing cost always coincides with the real market interest rate.

Before turning to specifics in each country, a few general remarks should be made concerning comparison of developments in asset prices across countries in the 1980s. First, Figure 1 indicates the ratio of total stock market value to nominal GDP. As this figure shows, total stock market value in Japan had been on an uptrend from 1985 and reached a peak in 1989, which was an outstanding surge compared with movements traced by other countries. Figure 2 shows developments in nominal residential housing prices in main OECD countries. The most conspicuous rise is seen in Finland, whose housing prices more than tripled from 1980 to 1989. Other Nordic countries, namely Norway and Sweden, also experienced a rapid rise during the same period, and housing prices in the United Kingdom and Japan also surged sharply and reached a peak in 1989-90. However, in Germany it was not until the beginning of the 1990s (when Germany was united) that such a significant rise in housing prices was observed. Finally, Figure 3 gives an international comparison of real aggregate asset price indices which are weighted averages of stocks and residential and commercial real estate price indices deflated by consumer prices. As this figure shows, the scale and pace of asset price inflation in Japan, the United Kingdom, and Nordic countries is quite similar and they seem to have

Figure 1
Total Stock Market Value / Nominal GDP

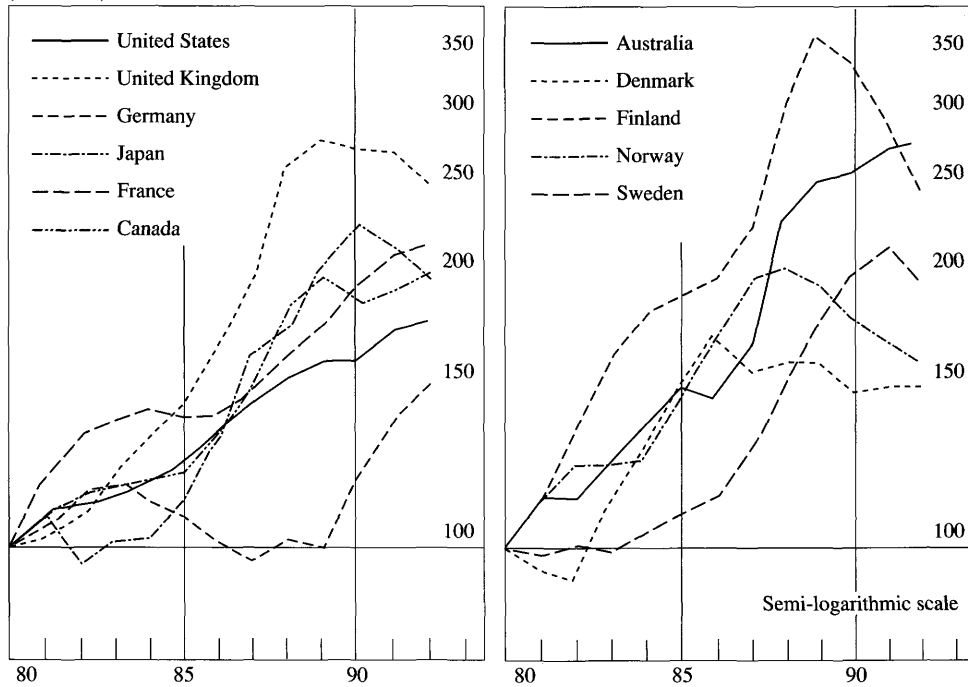


Note : For Germany, nominal GNP was used.

Sources : Nomura Research Institute, *Manual of Securities Statistics*;
Tokyo Stock Exchange, *Securities, Annual Statistics Report*.

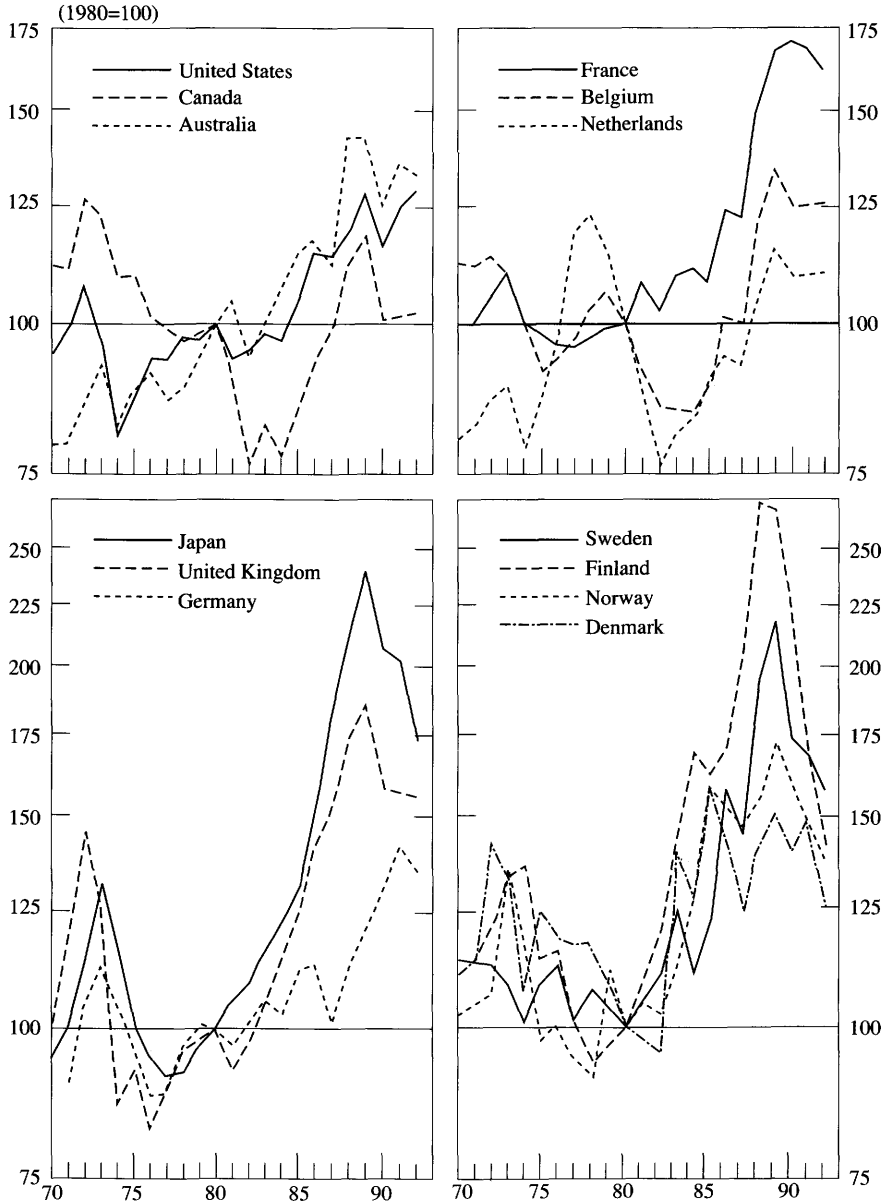
Figure 2
Nominal Residential Housing Prices

(1980=100)



Source : Bank for International Settlements, 63rd Annual Report, 1993.

Figure 3
Real Aggregate Asset Prices



Note : The real asset price index is a weighted average of equity and residential and commercial real estate price indices deflated by consumer prices. The weights are based on the composition of private sector wealth.

Source : Bank for International Settlements, 63rd Annual Report, 1993.

experienced more serious asset inflation compared to, for example, the United States, Canada, and Australia.

1. United States

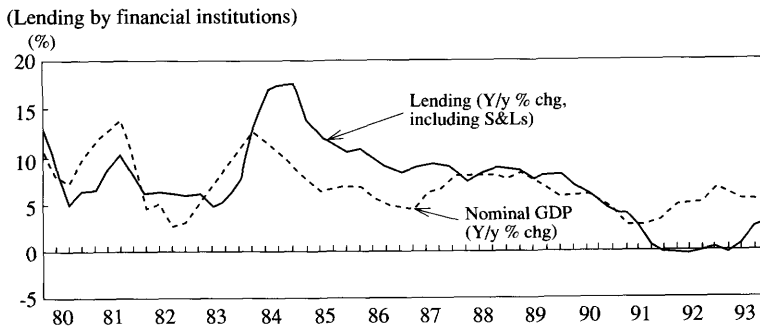
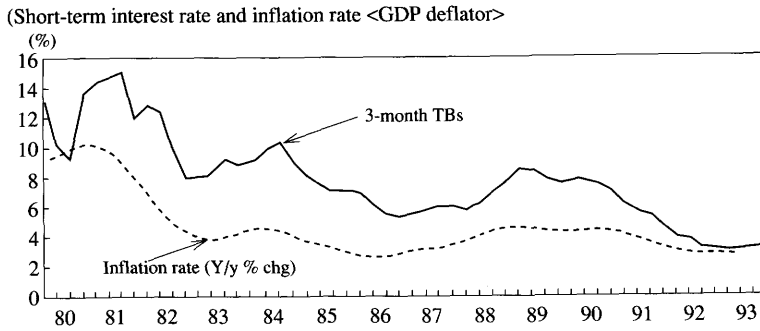
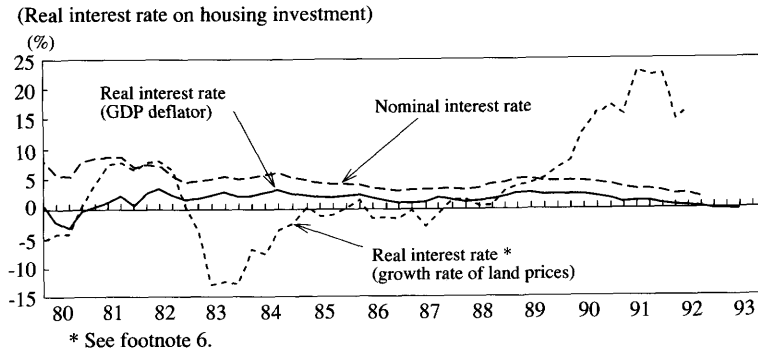
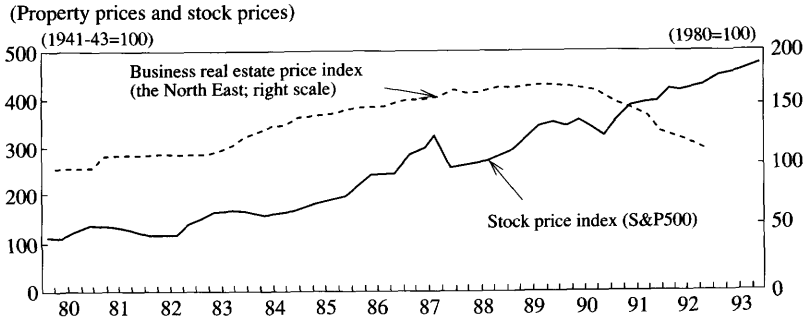
Asset prices in the United States varied widely during the 1980s. Indeed, commercial property prices (especially in the North East) began to surge during 1983-85, reached a peak in 1989-90, and fell in the early 1990s (Figure 4). Stock prices rose rapidly during 1985-87, fell around 1990-91, and then rose again. However, a series of deregulatory measures, including the phased liberalization of deposit interest rates and deregulation of the business scope of financial institutions (mainly thrift institutions⁴), were mainly taken in the late 1970s and did not immediately lead to a rapid rise in asset prices. Rather, what seems to have actually happened is that increased competition among financial institutions and shrinking revenues due to such financial deregulation encouraged their lending for real estate investments. This, combined with the tax incentives for real estate investment, which were strengthened by the tax reform of 1981, caused a sharp increase in lending for real estate investments and booming property prices. A more detailed account of these issues will be given in the following.

a. Financial liberalization and real estate-related lending

From the latter half of the 1970s, inflationary pressures in the United States gradually intensified. To tighten monetary conditions, the Federal Reserve hiked the official discount rate from 5.25% in August 1977 to 13% in February 1980. However, the regulated upper limit on thrift institutions' deposit rates was kept unchanged against the rapid rise in market interest rates and they experienced a shift of funds to more attractive, higher-yielding financial assets such as MMMFs (money market mutual funds). This phenomenon is often called 'disintermediation'. In order to put a brake on this outflow of deposits, in 1978 the monetary authorities permitted thrift institutions to introduce MMCs (money market certificates) along with the commercial banks. However, since the operating assets of thrift institutions mainly consist of home mortgage loans at fixed long-term rates, the introduction of short-term liabilities with market interest rates increased their maturity gaps and made them more vulnerable to interest rate developments. In fact, as short-term interest rates rose further, they faced narrowing interest margins, and hence declining profits. In response to this situation, the monetary authorities tried to improve the profitability of thrift institutions through further deregulation — the deregulation of their business scope with respect to consumer credit, corporate bond

⁴Thrift institutions are established primarily as a depository for consumer savings; the most common are savings and loan associations (S&Ls) and mutual savings banks. Traditionally, these thrift institutions loaned most of their deposits in the residential mortgage. However, the progress of financial liberalization has narrowed the difference between them and commercial banks as they have been allowed to expand their business areas and, in return, certain privileges previously extended to them have been terminated.

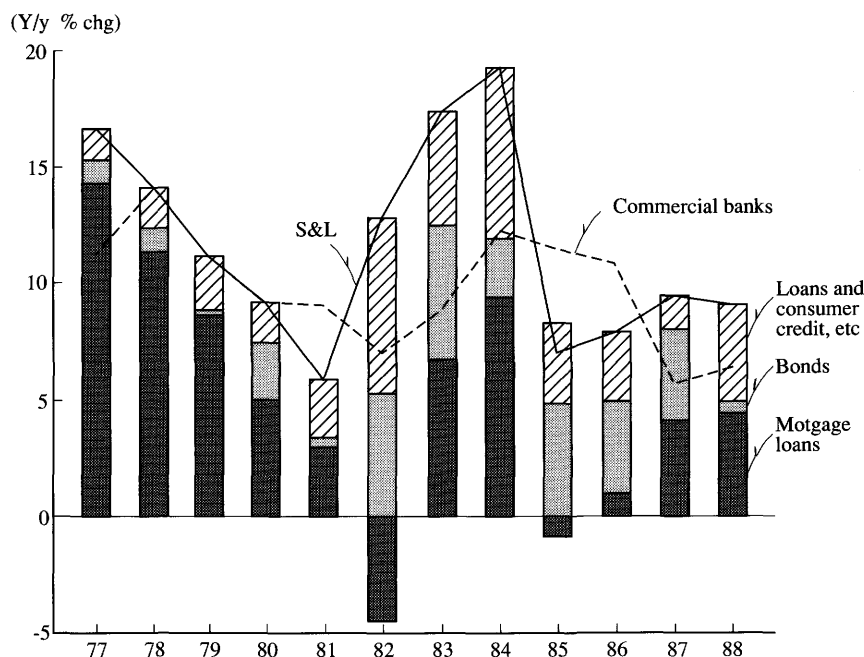
Figure 4
United States:
Development of Asset Prices and Financial Environment



investment, and investments for non-residential real estate⁵. Consequently, particularly from 1983, thrift institutions' profits once improved as institutions expanded loans for real estate investment including commercial buildings and consumer credit collateralized by real estate, in addition to their traditional home mortgage loans (Figure 5).

During this period, commercial banks also rapidly expanded loans for real estate investment. Indeed, from 1987, the share of lending for real estate investment to total bank lending exceeded that of commercial and industrial loans (Figure 6). As background to this phenomenon, the following factors can be cited:

Figure 5
United States :
Growth of Total Asset in S&L and its Breakdown

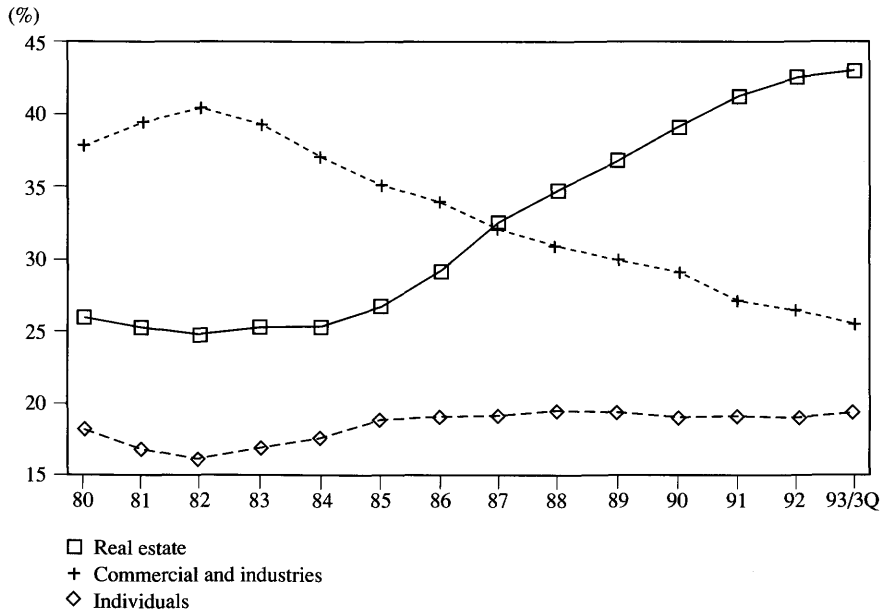


Sources : FRB, *Flow of Funds Accounts; Financial Assets and Liabilities*
Year-End 1965-88.

⁵The Depository Institutions Deregulation and Monetary Control Act (DIDMA) of 1980 permitted, for example, the following activities to thrift institutions: a) the extension of consumer loans, b) investment in corporate bonds, and c) investment in non-residential real estate (hitherto only allowed for commercial banks; within 10% of their total assets).

In addition, in the Garn-St. Germain Depository Institutions Act of 1982, further deregulation was effected: a) the limitation of consumer credit and holding of corporate bonds was increased from 20% to 30% of total assets, and b) that for non-residential real estate loans from 10% to 40%.

Figure 6
United States :
Share of Lending by Sector to Total Bank Lending
(FDIC member commercial banks)



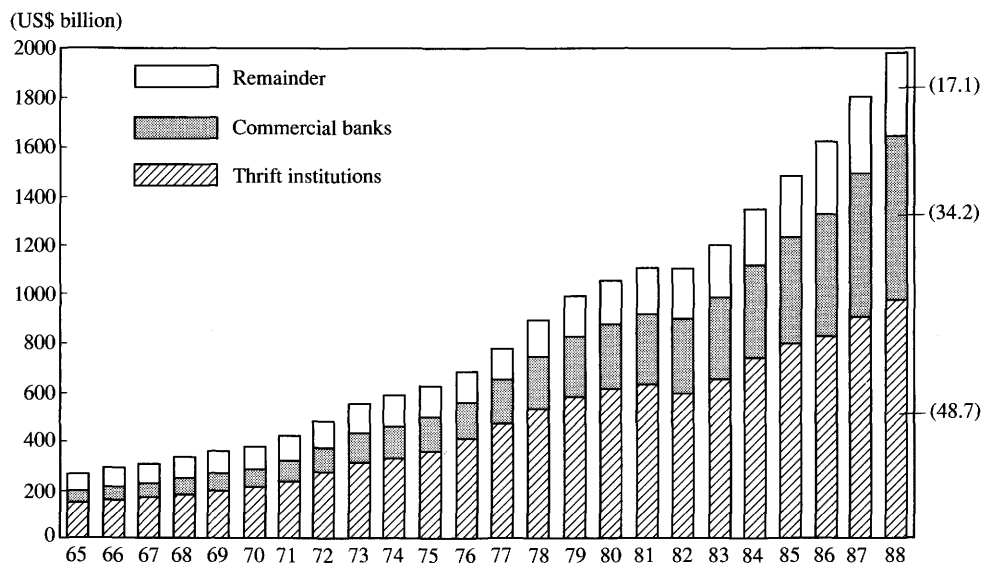
Sources : Japan Center for International Finance,
Fudosan Kanren Furyosaiken Shori eno Kakkoku Kinyukikan no Taio,
March 1994.

- a) commercial banks lost their traditional customers such as large companies that switched their fund raising to capital markets, and
- b) in order to compensate for this loss, they needed to find new customers.

As a result of this expansion of lending for real estate investment by commercial banks, the share of thrift institutions' mortgage loans to total home mortgage loans rapidly decreased in the late 1980s.

Although the mortgage loan share of thrift institutions was eroded by commercial banks, thrift institutions were able to gradually expand total assets through an increase in loans for commercial buildings and consumer credit collateralized by real estate. This meant that total real estate-related lending by financial institutions, including thrift institutions and commercial banks became huge (Figure 7), pushing up asset prices (mainly commercial real estate) with certain time lags (Figure 4).

Figure 7
United States :
Outstanding Amount of Mortgage Loans by Private Financial Institutions



Sources : FRB, *Flow of Funds Accounts; Financial Assets and Liabilities*
Year-End 1965-88.

b. Monetary policy, tax system, and real estate investment

In the early 1980s, the Federal Reserve maintained a tight monetary policy, with the official discount rate being at over 10%. However, from 1982-83, monetary ease was implemented to ensure a recovery of the stagnating economy; consequently the effective real interest rate (adjusted for taxation) for individual investors to invest in real estate became extremely low⁶ (Figure 4).

⁶In general, housing purchases by individuals are financed partly by borrowing and partly by the draw down of financial assets. However, estimation of the after-tax real interest rate here is, for simplification, based upon the assumption that the purchase of housing is entirely financed by a draw down of financial assets. In this case, the opportunity cost of housing investment depends upon the marginal tax rate on interest earnings, and the estimation formula of the after-tax real interest rate on housing investments is as follows:

$$(1 - \tau) r - \pi$$

where τ = marginal tax rate, r = short-term interest rate, π = inflation rate (the growth rate of land prices or GDP <or GNP> deflator)

The same estimations are made for the United Kingdom (Figure 9), Sweden (Figure 11), Germany (Figure 13), and Japan (Figure 16). Marginal tax rates used for the estimation are:

Moreover, there was a tax distortion that was particularly favorable for real estate investment. Table 2 indicates that the United States has a large tax wedge associated with housing investment. In particular, under the old tax system before 1985, tax distortion (for example, interest payments were fully deductible from taxable income) was a strong incentive for real estate investment⁷. In addition, various tax incentives introduced by the Reagan Administration from 1981 to 1986 increased the advantages of investing in commercial real estate. Although the tax wedge was substantially reduced by the tax reform of 1986, as a result of a large cut in the marginal income tax rate, it is still relatively high compared to other countries.

The main points made in this section can be summarized as follows. The rapid expansion of real estate investment by both the corporate and household sectors which induced serious asset price inflation in the 1980s can be regarded as the result of the synergistic effects of the following:

- a) under monetary ease in 1982-83, many investors, both corporate and individual, tried to take advantage of tax distortions by borrowing heavily and investing in real estate;
- b) on the supply side of funds, against the background of the progress of financial liberalization, small and medium-sized financial institutions, like the thrift institutions, had to improve their profits by aggressively expanding lending; and
- c) commercial banks also expanded lending in response to this situation.

2. United Kingdom

The United Kingdom experienced asset price inflation twice, once in the early 1970s and then in the latter half of the 1980s (Figure 3)⁸. Asset price inflation in the latter half

	1980	1981	1983	1984	1987 Sept	(%)
United States	24.82	29.00	→	26.35	15.00	
Japan	16.00	19.00	20.00	→		
United Kingdom	30.00	→				
Germany	22.00	→				
Sweden	58.02	55.55	53.15	→		

The marginal tax rates used here are those for the 'average production worker (APW) income level' The APW income level is the average of earnings of production workers in the manufacturing sector who have a spouse and two children.

Data source: M.J. Mckee, J.J.C. Visser and P.G. Saund, "Marginal Tax Rates on the Use of Labour and Capital in OECD Countries", 1986.

⁷The marginal tax rate on personal income was considerably reduced by tax reform in 1986 and the tax wedge (estimated under the new tax system) decreased substantially. However, the level is still higher than those of other countries (see Tables 2 and 3).

⁸Asset prices also rose notably in the late 1970s in the United Kingdom, although the rise was less dramatic than in the early 1970s and the late 1980s.

of the 1980s was rather serious among major developed countries — housing prices almost tripled from 1980 to the late 1980s (Figure 2). Asset price inflation in the 1970s was not only due to macroeconomic policy such as fiscal stimulus but also to the growth of credit through quantitative competition among banks, or banks and secondary banks, which had been intensified by the introduction of Competition and Credit Control (CCC) by the monetary authorities. Asset inflation in the 1980s, on the other hand, was largely occasioned by:

- a) economic recovery;
- b) the growth of household income through an income tax cut carried out by the Thatcher government;
- c) the introduction of certain additional tax incentives for housing investments⁹; and
- d) an increase in lending for real estate investments through financial liberalization.

a. Financial liberalization in the 1980s and asset price inflation

The introduction of the Supplementary Special Deposits scheme, the so-called 'Corset'¹⁰, in 1973 led to a deceleration in the growth of loans, which had increased due to the real estate investment boom in the early 1970s. Indeed, the Corset did once hold down asset price inflation. However, because the relaxation of foreign exchange controls in June 1979 and their abolition in October 1979 enabled U.K. residents to deposit with, and borrow from, the Euro market, the Corset had lost its effectiveness and was abolished in 1980. The abolition of the Corset essentially meant the deregulation of quantitative lending controls. Taking advantage of this situation, commercial banks began to fully enter the home mortgage market by expanding their lending at much lower interest

⁹The main tax incentives introduced over this period were:

- i) the raising of the upper limit on mortgage interest tax relief (from £25,000 to £30,000) in 1983, and
- ii) the extension of the Business Expansion Scheme to private rented housing in 1988.

Although there is an argument that the influence of these factors on housing investment itself was relatively limited, it seems certain that the combination of the four factors mentioned in the main text promoted asset price inflation. It is also said that demographic change, notably the increase in the proportion of the 25-29 year old age group, contributed to the increase in housing demand.

¹⁰The Supplementary Special Deposits (SSD) scheme, known as the 'Corset', was a system of direct control of the sterling operations of banks (and deposit-taking finance houses) in the United Kingdom. It imposed penalties on individual institutions whose interest-bearing eligible liabilities grew faster than a prescribed rate. The penalties became increasingly severe (from 5% to 50%) the greater the excess over the prescribed growth in interest-bearing eligible liabilities. The scheme was activated three times — from December 1973 to February 1975, from November 1976 to August 1977, and from June 1979 to June 1980.

rates than that of building societies¹¹. This was because the residential mortgage business was thought to be a low risk, relatively stable, business and banks had been maneuvering to enter the area for a long time. In addition, various deregulatory measures vis-à-vis building societies were effected by the Building Society Act¹², which came into force in 1987, including a higher ceiling on uncollateralized loans and permission to raise funds from the market within a given limit.

Quantitative competition among financial institutions, which resulted from financial liberalization mentioned above, led to an increase in loans for housing and real estate investments, and gave rise to asset price inflation again. This increase in loans was also influenced by:

- a) a rapid increase in demand for office space, especially from financial institutions in the City, which was triggered by the 'Big Bang' in the latter half of the 1980s; and
- b) policy to promote housing purchases, such as the introduction of tax incentives for housing investment, by the Thatcher government.

In fact, these developments are most clearly reflected in the housing loan market during that period (Figure 8). In 1980, the building societies' share of the total housing

¹¹'Building societies' are mutual cooperatives specially established for financing housing investments by individuals. They raise funds from individuals in the form of deposits and mainly make mortgage loans to individuals. Building societies have an approximate 50% share of the personal deposit market and 70% of housing mortgage loans outstanding. Building societies enjoy certain privileges not allowed for commercial banks. For example:

- a) As they are not regarded as financial institutions based on the Banking Act, they are not subject to supervision by the Bank of England (instead they are supervised by the 'Building Society Committee' established by the Building Society Act).
- b) Building societies made interest rate agreements (mortgage loan rate, interest rate on deposit and return on investment) among themselves.
- c) They received more tax advantages than banks, the principal ones being: i) Building societies pay tax on interest payments on behalf of depositors or investors at a lower rate than the basic income tax rate; building societies' customers can, therefore, receive tax saving benefits. ii) A lower minimum corporate tax rate (40%) is imposed on building societies than on banks (52%). iii) Interest payments on housing mortgage loans are partly deductible from income.

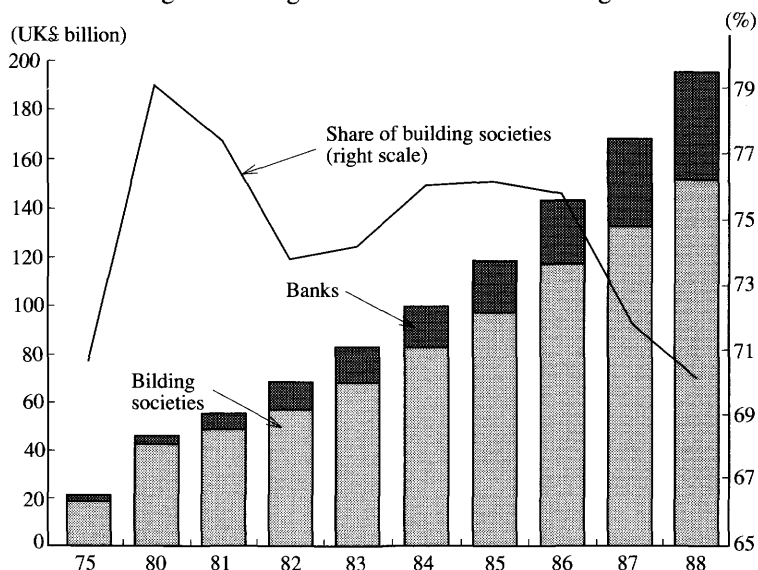
Although several tax reforms have adjusted these tax measures since 1984, their effects are said to be negligible.

¹²The Building Society Act, which came into force in January 1987, relaxed regulations on building societies' fund raising and operations:

- a) increase in the limit for uncollateralized credit, and
- b) approval of the raising of marketable funds within a given limit (the maximum ratio of marketable funds to total liabilities was initially 20%, which was further raised to 40% later).

As a result, building societies' business scope was enlarged, and competition in the mortgage market between building societies and commercial banks intensified.

Figure 8
United Kingdom :
Outstanding of Housing Loans and Share of Building Societies



Sources : Abbey National, *Proposed Conversion of Abbey National Building Society to Abbey National plc*, 1989.

loan market was 79.2% and that of commercial banks, 7.4%. After the abolition of Corset, however, the share of building societies fell to 73.9% in 1982, and that of commercial banks rose to 14.6%. Furthermore, up to the end of the 1980s, the share of building societies gradually decreased to under 70%.

Nonetheless, the size of total lending (including both building societies and commercial banks) had been growing at an average annual growth rate of around 20% during this period. It can thus be concluded that a fall in the share of building societies was a result of commercial banks' aggressive loan expansion. In the latter half of the 1980s, commercial banks actually expanded their lending at an annual rate of 20-40%. By the end of 1990, commercial banks had increased loans to the construction and real estate industry to 10% of their total lending. In addition, their lending to the real estate and affiliated industries (including housing loans, loans to housing financial unions and other non-bank financial institutions) increased rapidly to about 40% of their total lending at the end of 1992. On the side of building societies, in spite of competitive pressure to lower lending rates, they tried to expand lending volume, including uncollateralized loans, by increasing their dependence on market funds (the Building Society Act of 1987 increased the ceiling on funds raised from the market from 20% to 40%, and the actual dependence increased accordingly, from around 20% in 1985 to 30% in 1988).

From the above we can conclude that the loan market for the real estate and related

industries grew rapidly due to intense competition among financial institutions.

b. Monetary easing, tax reform, and asset price inflation

Turning to monetary policy in the 1980s, the inflation rate, which had been relatively high during the early 1980s, was gradually restrained by the mid-1980s under monetary tightening by the Thatcher government. However, from around 1987, the monetary authorities maintained an easy monetary policy in response to the appreciation of sterling that reflected an improved trade balance as well as correction of the overvalued dollar. Consequently, inflation rose again and the real interest rate dropped. Under these circumstances, financial institutions rapidly expanded lending to the private sector from 1986 to 89. The growth rate, for example, reached nearly 40%, year to year, in 1989 (Figure 9)).

As regards the tax system, although tax reform in 1984 abolished some favorable incentives for housing investment, there still remained certain tax distortions¹³. The estimated tax wedge concerning housing investment in the United Kingdom (at the GDP deflator inflation rate in 1985 (Table 3)) was higher than those in the United States, Canada, Germany and Japan, although not as high as that in Sweden. This implies that the United Kingdom had a rather large tax distortion. Evans (1994) describes a typical case in which tax incentives strongly influenced housing investment as follows:

“... the most notable feature was a boom which developed during the period gathering strength from the mid-eighties and coming to an abrupt halt in July 1988. The reason for this precise dating is that in his budget in March 1988 the then Chancellor, Nigel Lawson, announced that from the end of July 1988 the practice would cease whereby two unmarried persons could each obtain tax relief on the interest on a loan of £30,000 (and so on a loan of £60,000 in total). In future tax relief could only be obtained on one loan of £30,000 per dwelling. The housing boom was anyway nearing its end, but the effect of this announcement was to induce a large number of couples to enter the market who otherwise would not have done and, through the resulting increase in demand, to give a final upward push to the house price spiral.”

3. Australia

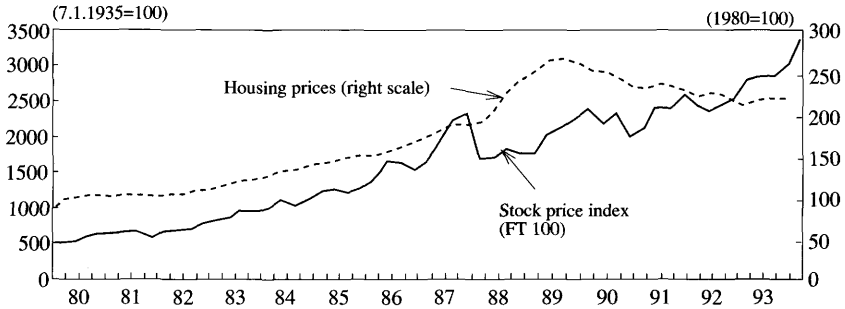
Like the United Kingdom, Australia experienced asset price inflation twice: at the beginning of the 1970s and in the mid-1980s. In the early 1970s, there was a rise in inflationary expectations associated with a boom in natural resource development. The

¹³Key provisions of 1984 tax reform were:

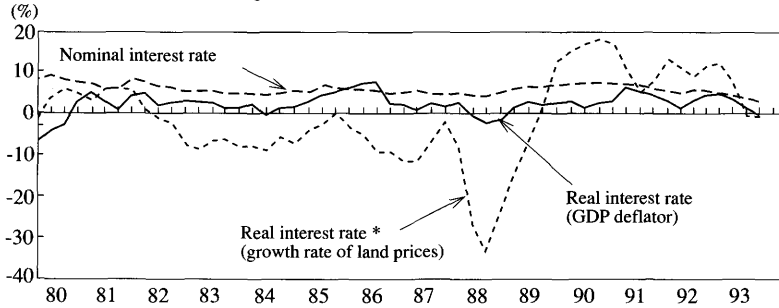
- a) simplification of the tax system, and
- b) reassessment and partial abolition of tax incentives concerning real property investments.

Figure 9
 United Kingdom:
 Development of Asset Prices and Financial Environment

(Property prices and stock prices)

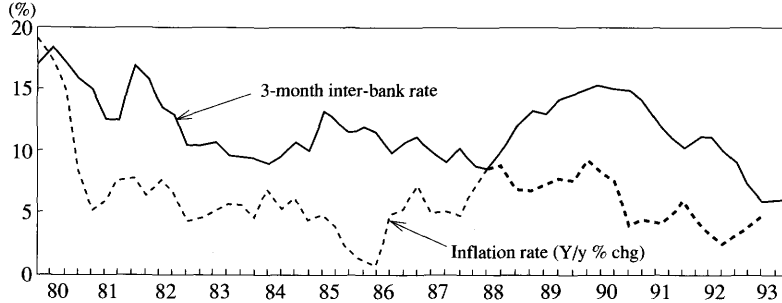


(Real interest rate on housing investment)

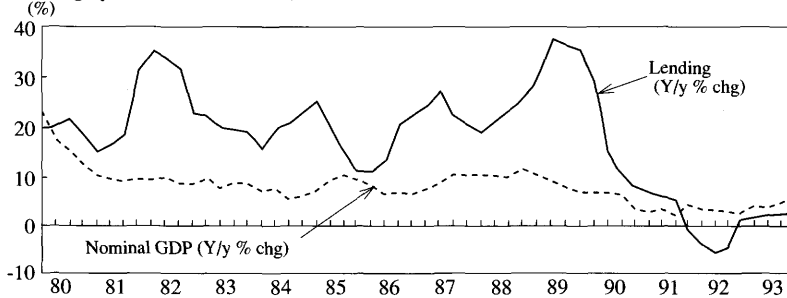


* See footnote 7.

(Short-term interest rate and inflation rate <GDP deflator>)



(Lending by financial institutions)



monetary authorities, however, maintained an easy monetary policy as they attached importance to sustaining employment conditions. As a consequence, inflation rose rapidly from 1973 to 75, and accelerating inflationary expectations also caused asset price inflation. However, an expansion of private sector credit was not observed until asset prices began to fall. This suggests that the behavior of financial institutions was not the main cause for the asset price inflation in the early 1970s. In fact, the Australian financial system in those days was very closed and regulated, and there existed direct control of deposit/lending rates and volume of the banking sector by the central bank, which prevented for a rapid expansion of lending to result in asset price inflation.

In 1979, the government commissioned a Committee of Inquiry into the Financial System (the Campbell Committee). The Campbell Report triggered a major reform of financial markets, which was followed by the Martin Report in 1983, creating an environment for a more rapid financial liberalization¹⁴. These regulatory changes gave foreign banks the opportunity to enter Australian financial markets. There was also new entry to banking from other business sectors. Commercial banks and building societies also tried to promote consumer loan operations in order to establish a solid profit base. All these developments led to an intensified competition among financial institutions, and a number of mergers, involving building societies, took place. In addition, on the monetary policy front, direct regulations such as deposit interest rate ceilings, lending rate regulation, and credit ceilings were relaxed (the control of bank lending ceilings was abolished in 1982). The monetary authorities adopted a policy more focused on interest rates.

In these circumstances, Australia experienced severe asset price inflation during 1987-89, and the boom in commercial real estate was particularly conspicuous. The following factors can be identified as having jointly caused asset price inflation: a) financial liberalization had progressed at a time when inflationary expectations had reached a peak; b) many enterprises expected that continuing inflation would underpin a further rise in asset prices; and c) firms were also able to enjoy tax advantages through debt-financed real property investment in such an inflationary environment. As a result, the rapid expansion of credit emerged, particularly to the corporate sector. Ferguson

¹⁴The reform of Australia's financial system comprised the following three key points:

- a) Deregulation in the banking sector; removal of interest rate controls (deposit interest rates and lending rates), liberalization of bank deposit maturities, relaxation of quantitative controls on the growth of bank lending, and relaxation of restrictions on entry to the banking sector (in particular, abolition of restrictions on entry into merchant banking or securities brokerage) as well as banks' entry into other business sectors.
- b) Deregulation in financial and capital markets; deregulation of interest rates on government bonds through introduction of the open tender system for the issue of most government debt, relaxation of requirements for financial institutions to hold government securities, new entry into government securities dealing, and liberalization of private sector bond transactions.
- c) Internationalization of financial and capital markets; floating of the Australian dollar, abolition of intervention in foreign exchange markets, and liberalization of cross-border capital flows.

(1990) attributes the growth of real property investment and resultant asset price inflation to this sharp growth of credit to the corporate sector (Figure 10). In fact, average CPI inflation during 1973 to 83 exceeded 11.6%, which resulted in strong inflationary expectations vis-à-vis asset prices. The continuation of easy monetary conditions during the latter half of the 1980s despite these inflationary expectations¹⁵ seems to have given rise to a strong incentive for corporations to invest in real estate. That is, in Australia, we can observe the following distinct process of asset inflation:

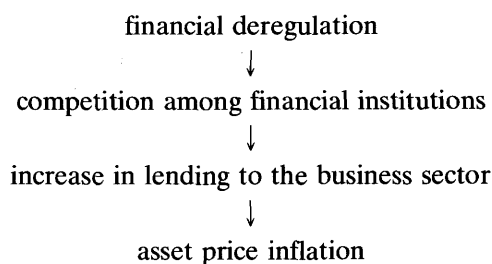


Figure 10
Australia:
Total Credit Outstanding by Sectors (% of GDP)

(comparison of Australia: US and UK) (%)

		Business	Housing	Personal	Total
Australia	1980	26	18	10	54
	1990	58	20	12	90
United States	1980	52	40	14	106
	1990	64	54	15	133
United Kingdom	1980	18	20	3	40
	1990	42	48	8	97

Source: Reserve Bank of Australia, *The Deregulation of Financial Intermediaries*.

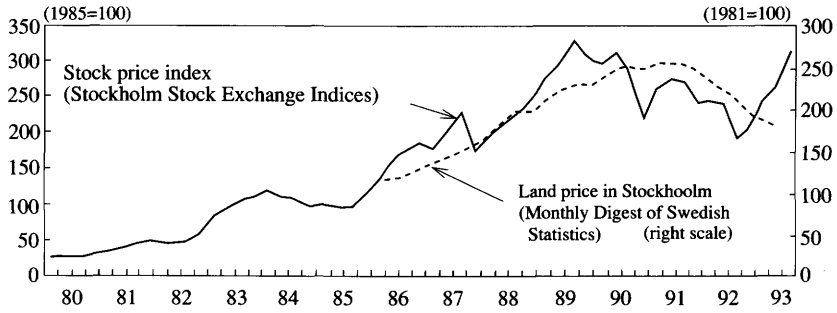
4. Nordic countries

Asset prices in the Nordic countries fluctuated widely in the 1980s. For example, in Sweden, land prices in Stockholm reached a peak in 1990-91, some 2.5-fold higher than in 1985 (Figure 11). In Norway, the nominal housing price reached a peak in 1988, double the 1980 figure, but then fell by 23% the following year. In Finland, housing prices

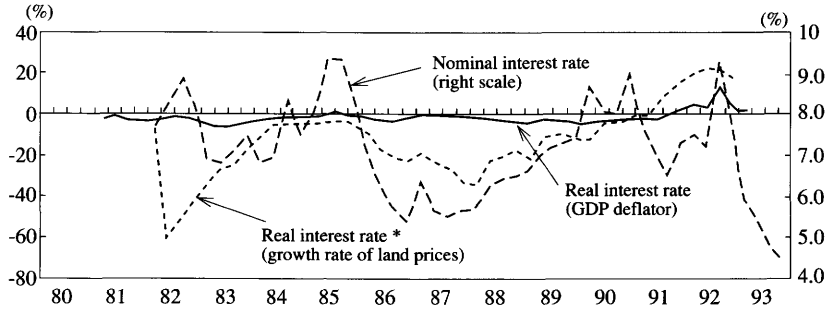
¹⁵Although interest rates were kept historically high during the mid-late 1980s, it seems that they were not sufficient to offset inflationary expectations. Monetary policy was actually tightened during 1985-86, but its main purpose was said to be to contain the excessive fall of the Australian dollar, and hence tightening was not necessarily sufficient to control asset price inflation.

Figure 11
Sweden:
Development of Asset Prices and Financial Environment

(Property prices and stock index)

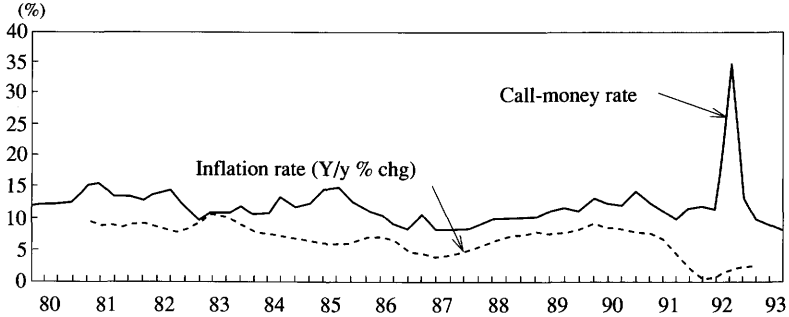


(Real interest rate on housing investment)



* See footnote 7.

(Short-term interest rate and inflation rate <GDP deflator>)



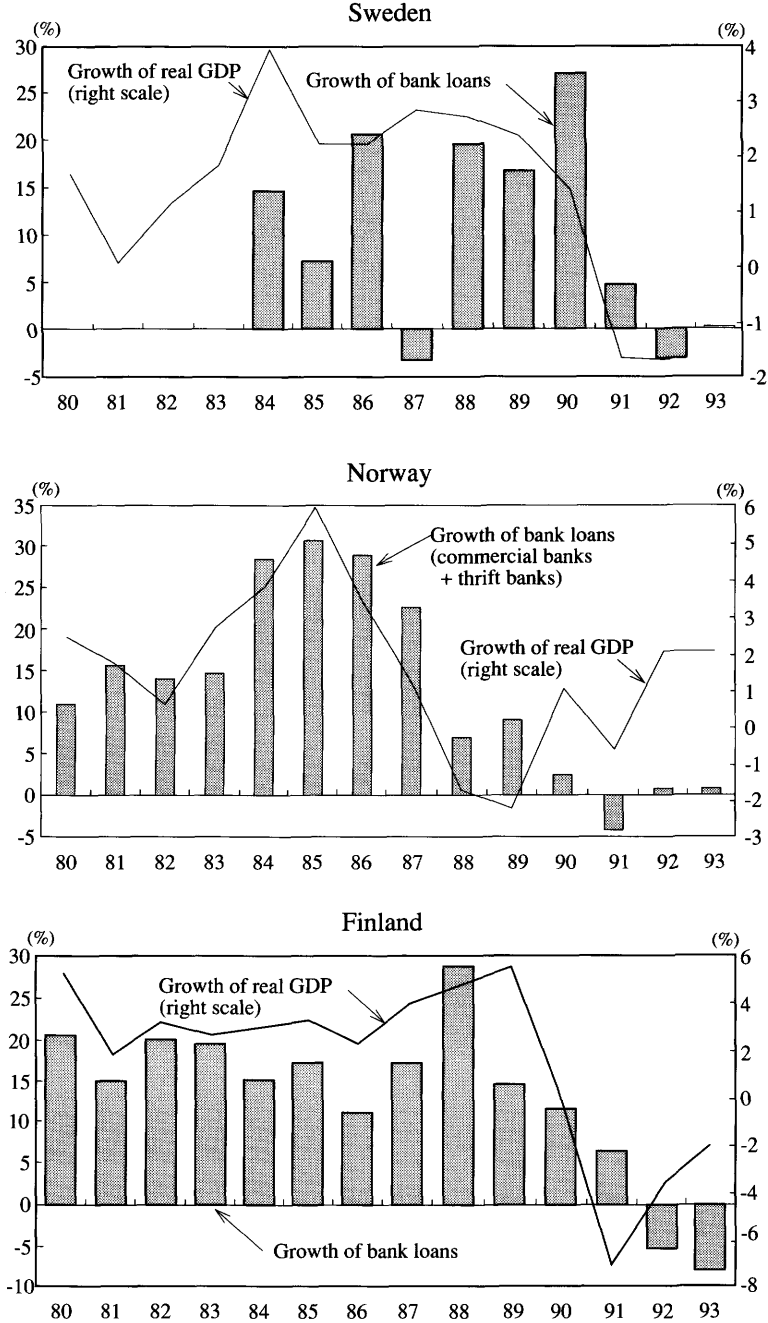
reached a peak in 1989, three times higher than in 1980, and then fell sharply towards the end of 1992. During this period, financial liberalization in Sweden, Norway, and Finland progressed rapidly. Hence, there is a strong similarity among these countries and Japan regarding the timing of financial liberalization and asset price inflation. In the following we will examine asset price fluctuation and its background in Sweden and Norway.

In Sweden, the 10% devaluation of the krona in September 1981, and further 16% devaluation in September 1982, resulted in an improvement in the current account balance in 1983-84, which created a room for easier monetary conditions to prevail under the fixed exchange rate regime. In addition, ceilings on bank lending rates and quantitative controls on bank loans were abolished in 1985. As a consequence, bank lending rapidly expanded and reached a peak in 1990, up almost 30% from the previous year (Figure 12).¹⁶ In these circumstances, a housing boom arose and housing prices rose sharply. This housing boom could be attributed to taxation which was extremely favorable to real asset investments financed through borrowing; for example interest payments on housing loans are fully deductible from taxable income. In fact, the after-tax real interest rate on real estate investments, estimated using the GDP deflator, was below zero (Figure 11). Tables 2 and 3 show that the tax wedge in Sweden is higher than in other countries which experienced asset price inflation. This high tax wedge stems from the fact that Sweden is a highly welfare-oriented state, whose public sector accounts for 60% of GDP. Thus, income tax is relatively high. At the same time, however, there are a lot of special tax reliefs; for example, interest payments on loans for housing investments are fully deductible from taxable income. These tax reliefs tend to induce incentives to convert earned income to capital gains from real estate investment. Under these distortions, if expectations arise with respect to asset price inflation due to, for example, a fall in interest rates, the increased availability of borrowing, or improvements in economic fundamentals, the demand to purchase residential and business property by borrowing could become widespread, and such movements would actually push up asset prices further. Actually, Sweden experienced a fall in asset prices after 1990. It is believed that, although the tightening of monetary policy and the resultant restraint of inflationary expectations played a certain role, the fall was mainly triggered by the surge in the after-tax real cost of borrowing which was induced by tax reform, such as the severe constraint on the deduction of the interest payments from taxable income and relaxation of the progressive income tax system.

In Norway, from the beginning of the 1980s, petroleum-related industries (principal industries in Norway) played a leading role in sustaining steady economic expansion. At

¹⁶Under a fixed exchange rate regime, the room to conduct an active monetary policy is limited. In fact, it is said that during the late 1980s the Riksbank (the Swedish central bank) hiked interest rates as much as possible without triggering massive inflow of capital. Although these interest rate hikes restrained credit expansion to a certain extent, they do not seem to have been sufficient to prevent asset price inflation.

Figure 12
Real GDP and Bank Loans in Nordic Countries



Sources : IMF, International Financial Statistics.

the same time, interest rates had been kept at a relatively low level¹⁷, and, like Sweden, the real after tax interest rate on housing investments by borrowing was actually negative, which led to a strong demand for funds. This is mainly because interest payments on loans are fully deductible from taxable income. Under these circumstances, various deregulatory measures were effected almost simultaneously; deregulation of the housing market (e.g. liberalization of pricing rules on apartments) in 1982-83, removal of volume controls on lending in 1984, and abolition of the ceiling on the bank lending rate in 1985. As a result, credit to the private sector expanded very rapidly from both the demand and supply side: year-to-year growth in bank lending reached nearly 20-30% from 1983 to 86 (Figure 12). This expansion of credit was the main factor underlying asset price inflation. However, changes in taxation of capital income in 1987 and 88 reduced the value of deduction of interest payments, especially for those with the highest marginal tax rates at the outset, which triggered asset price deflation. Thus, Norway's case is a typical example in which the influence of taxation on asset prices has been very significant.

5. Germany

In Germany, inflation has progressed gradually since German reunification in October 1990, which resulted in mild asset price inflation in the 1990s. However, during the latter half of the 1980s, asset prices in Germany had remained fairly stable despite the fact that many other countries such as Japan, the United States, the United Kingdom, and Nordic countries experienced serious asset inflation (Figure 3). In explaining this difference, one of the most outstanding characteristics related to asset price inflation in Germany is the fact that Germany had completed interest rate deregulation at a relatively early period. In this section, therefore, we will focus on the relationship between financial deregulation from the latter half of the 1960s and the development of asset prices in that period.

The deregulation of interest rates in Germany was completed relatively earlier than in other countries by the abolition of 'the regulation on interest rate adjustment (*Zinsverordnung*)' in 1967. This deregulation of interest rates substantially narrowed the business differences among credit banks and commercial banks (*Kreditbanken*), savings banks (*Sparkassen*), and credit finance associations (*Kreditgenossenschaften*) and hence intensified competition. As a consequence, a lot of mergers took place, which facilitated the spread of 'universal banking'¹⁸, considered to be one of the salient features of Germany's financial system.

¹⁷It should be noted that as in the case of Sweden, the room for actively maneuvering interest rates was limited because of the fixed exchange rate regime.

¹⁸Former West Germany had traditionally adopted the universal banking system which does not separate banking and securities activities, and banks had been engaged in securities business for a long time. Not only big banks but also small and medium-sized savings banks and credit unions can engage in securities trading through their parent institutions.

In spite of such financial deregulation and resultant increased competition among financial institutions, Germany did not experience such large-scale asset price inflation as many other countries. Several reasons can be pointed out, including both demand side and supply side factors. Demand-side factors:

- a) So as to restrain the progress of inflation, the monetary authorities had consistently pursued a tight monetary policy from the latter half of the 1960 to mid-1970, except 1967-68 when stagnation was severe.
- b) The tax wedge in Germany is relatively low compared with other countries. This means that tax distortion which gave investors extra incentives for real estate investment by borrowing was weak in Germany.
- c) Detailed and strict regulations on the use of land prevented speculative investments. On the other hand, active utilization of land in line with land development plans was promoted¹⁹.

Supply-side factors:

- a) Although financial institutions suffered from the higher cost of financing due to the deregulation of interest rates, the resultant deterioration in their profits was kept to a minimum due to strict prudential regulations such as limit to the mismatching investment of funds.
- b) Since the universal banking system was wide-spread, no significant shift of funds from the banking sector to capital markets occurred and the funds stayed within the universal bank system.
- c) In spite of financial liberalizations, banks behaved cooperatively and tended to avoid heated competition in, for example, interest rates.

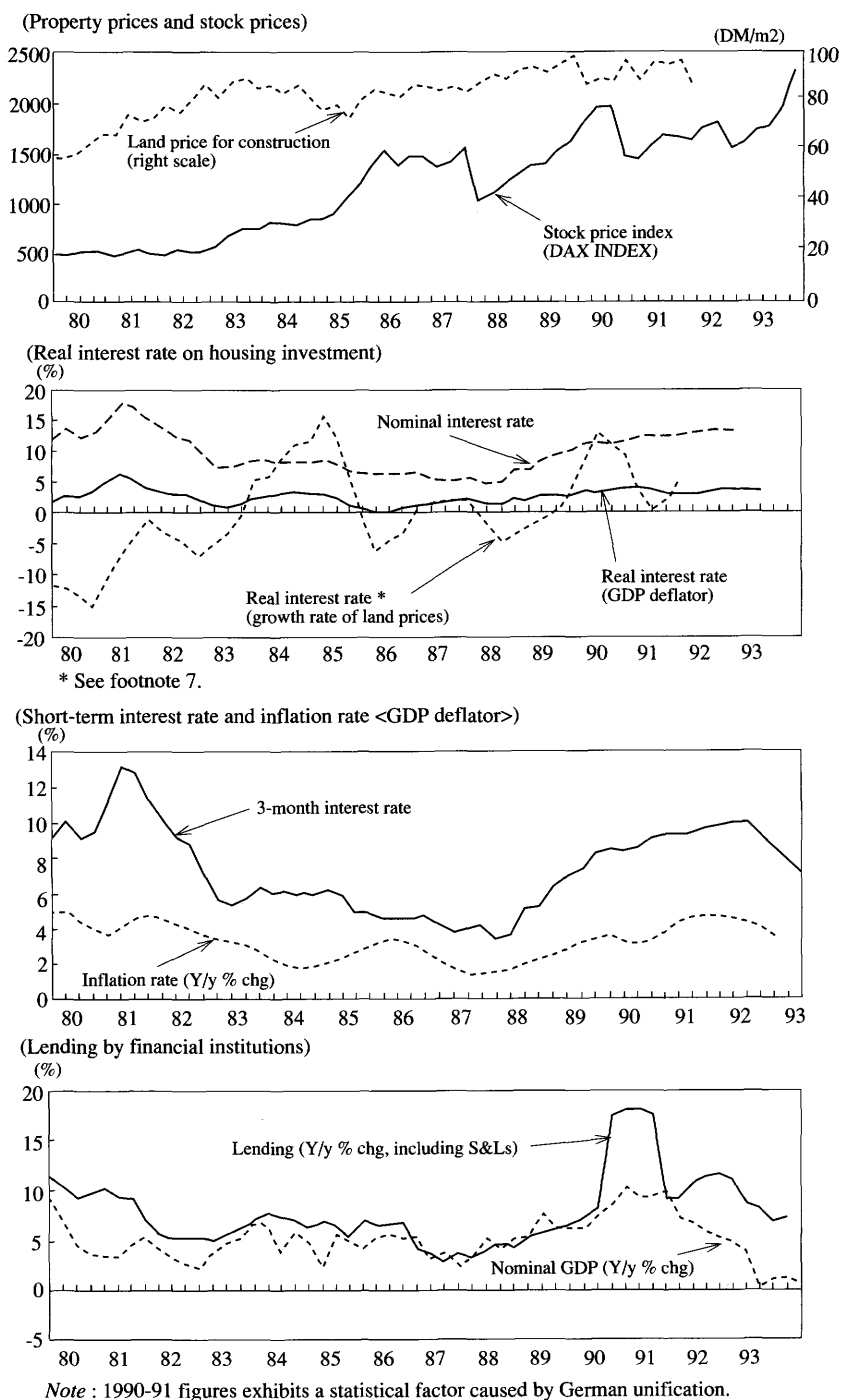
In addition to the structural factors such as taxation and universal banking system, as stated above, it is important to note that the following might have contributed to restraining asset price inflation:

- a) a continuing positive after-tax real interest rate on housing investments, and
- b) bank lending maintained relatively steady growth at least before unification (Figure 13).

¹⁹The regulations on land use in Germany can be regarded as an effective method in preventing an excessive rise in land prices. That is, on the demand side, they precluded speculative land investments and transactions and, on the supply side, promoted systematic land utilization. In many respects, Germany has more rigid and detailed land use plans than, for example, Japan has, and they are more strictly implemented, including explicit penalties for violation. Speculation in land, therefore, is more unlikely to happen in Germany.

On the other hand, the authorities positively promote land utilization in accordance with land use plans so that they do not cause supply constraints.

Figure 13
Germany:
Developments of Asset Prices and Financial Environment



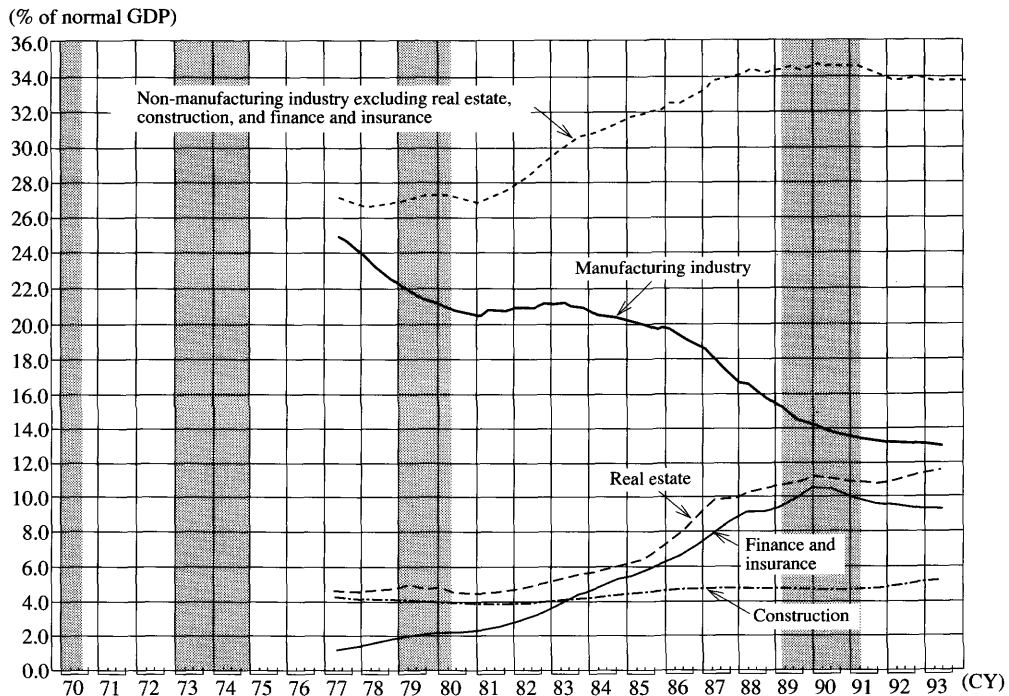
6. Japan

Examining the process and background to asset price inflation in the late 1980s in Japan and bearing in mind the above mentioned experience in certain countries, it can be concluded that asset price inflation in Japan was simultaneously affected by:

- a) various tax distortions related to investments in real estate,
- b) financial liberalization which had been progressively promoted since 1985, and
- c) an easy monetary policy.

As a result of financial liberalization, commercial banks lost their traditional borrowers quickly (Figure 14), and were also faced with narrowing lending margins. Banks responded by increasing lending volume to compensate for the fall in margins, and hence became more active in lending to medium and small-sized firms and individuals. In fact, loans outstanding to manufacturers gradually decreased (Figure 14). This strong motive for commercial banks to expand lending was helped by the continuation of an easy

Figure 14
Japan :
Loans and Discounts Outstanding to Major Industries



- Notes : 1. All figures are loans and discounts extended by All banks (Zengin). Since 2Q/92, overdrafts and cash advanced are also included; discontinuity between 1Q and 2Q/92 has been adjusted for.
2. Shaded areas show periods of increase in the official discount rate.

monetary policy which resulted in a sharp expansion in lending, especially by city banks (major money center banks); consequently, the liquidity constraint upon small and medium-sized firms and individuals was largely relaxed.

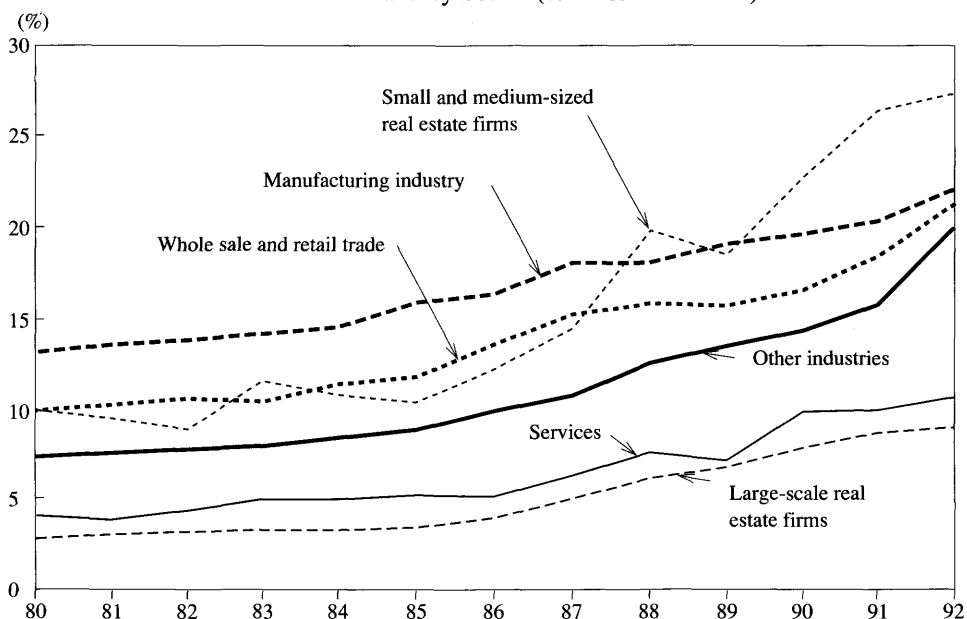
Lending to real estate-related industries expanded especially rapidly because of the following reasons:

- a) banks were willing to expand real estate-related lending because the margins were large and it was still thought to be relatively safe as it was backed by collateral;
- b) borrowers, especially corporate borrowers, were able to enjoy various tax benefits by investing in real estate with borrowed funds; and
- c) once land prices began to rise, the collateral value increased and hence loans became more easily available to borrowers.

In particular, small and medium-sized real estate companies utilized a large part of such funds to purchase land and, in fact, the total book value of land held by them expanded sharply (Figure 15).

In the latter half of the 1980s, we actually saw a number of examples of real estate

Figure 15
Japan :
Book Value of Land by Sector (% of nominal GDP)



Notes : 1. Large-scale real estate enterprises are capitalized at ¥ 1 billion and over, small and medium-sized real estate enterprises less.

2. This estimation is based on the assumption that the land inventories of real estate firms are half their working assets.

investments which took advantage of tax reliefs in corporate tax, income tax, inheritance tax, and gift tax²⁰. As already discussed, similar phenomena were seen commonly in many countries such as the United Kingdom, Nordic countries, and the United States, which had similar tax distortions. Furthermore, once real estate prices began to rise, and expectations for continuing asset price inflation emerged, many investors anticipated that they could make further profits by borrowing to invest in real estate. In fact, under such expectations, many corporate investors, as well as individuals, expanded such investments, which resulted in continuous asset price inflation (Figure 16). Hence, in the following, we will focus on the impact of the tax system, particularly vis-à-vis investments in assets, on asset price inflation.

a. Influence of taxation related to real estate

One of the most marked characteristics of Japanese taxation related to real estate is that the tax burden (mainly, municipal property tax) in holding real estate is relatively low²¹. Indeed, the appraised value of property, based on which the municipal tax is charged, is far lower than the market price, and, moreover, adjustments in appraised value and consequent tax amount have a long time lag after changes in market prices²². Thus, when land prices continue to rise, the effective tax rate of municipal property taxation (the ratio of municipal property tax to the current value of land) becomes extremely low. Therefore, the tax burden of holding land is relatively light, which tends to occasion continuous holding and restrict supply of land for utilization.

As regards taxation concerning capital gains on land, realized capital gains, that is the gain from selling a piece of land, are subject to income or corporate tax and inhabitants tax. Notable characteristics of the Japanese system are:

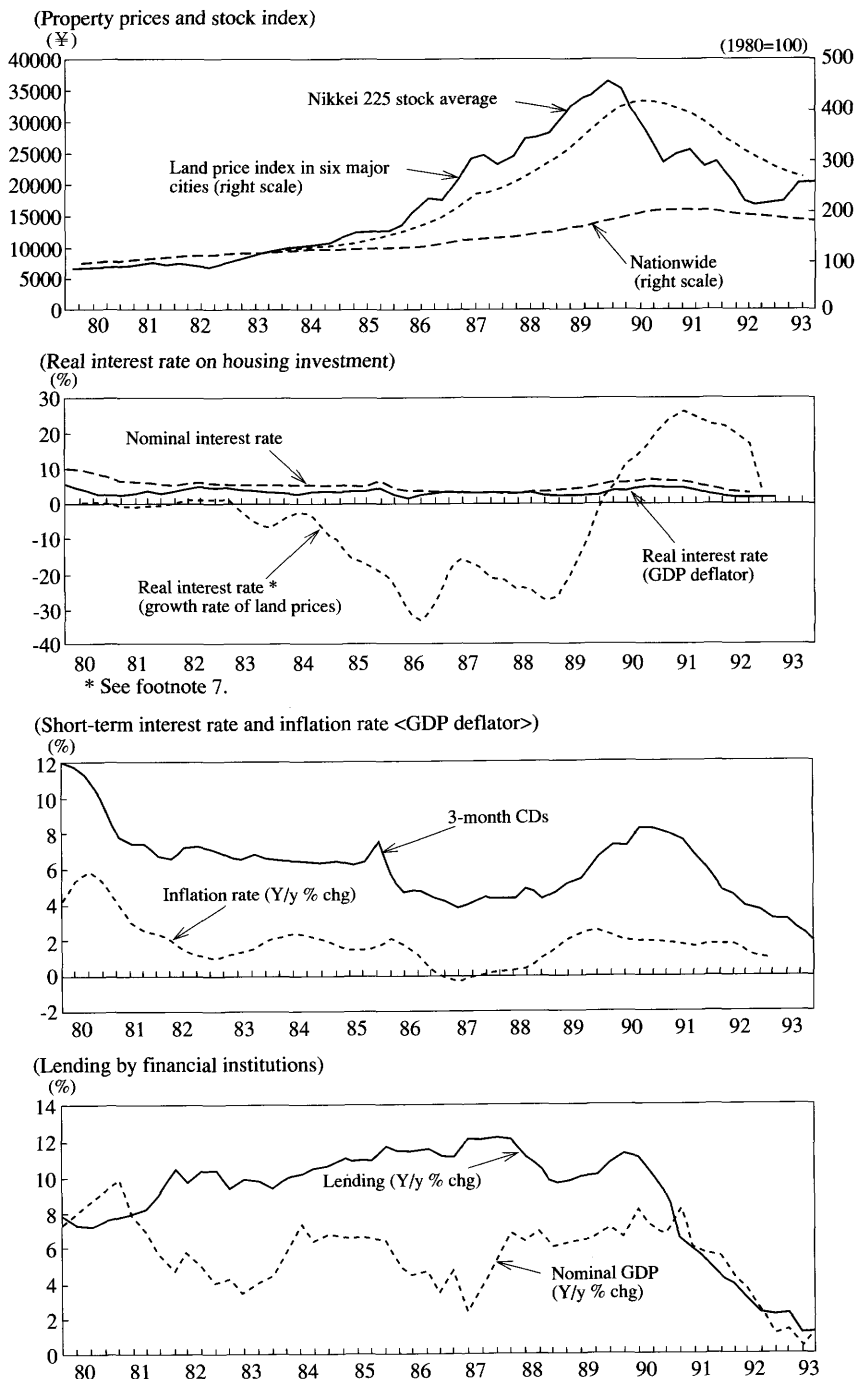
²⁰(a) The tax saving in purchasing real property is mainly related to an income tax saving, which stems from the fact that net investment cost (difference between interest on loan plus depreciation and rental income) can be deducted from taxable income from other sources.

(b) The tax saving with respect to inheritance tax is as follows: if one purchases real property by borrowing, the liability is estimated at current value (actual nominal value of borrowing), whereas the asset (real property) is underestimated for inheritance tax assessment (which is much lower than market value). Consequently, the net inheritance value is lower and inheritance tax reduced. This merit was particularly significant during a period of asset price inflation, because the increase in assessed value of land for inheritance tax did not catch up with the rapid surge in market prices, and the spread between them expanded.

²¹However, the rate of municipal property tax in Japan was raised in the 1990s. Moreover, a 'land value tax' was newly instituted in 1992.

²²In Japan, the appraised value of land which is used as a base for calculating municipal property tax is considerably undervalued. Therefore the effective tax rate of the municipal property tax is much lower by international comparison. For example, in the latter half of the 1980s during the period of asset price inflation, the nationwide average municipal property tax rate was 0.13% (FY88), and in Tokyo, where the rise in land prices was particularly rapid, 0.07% (FY88). These figures are approximately 1/10 - 1/100 of those in the United States (e.g. the effective rate in Los Angeles is 0.64% and in Detroit 4.10%; in most cities, rates are 1-2% of market prices).

Figure 16
 Japan:
 Developments of Asset Prices and Financial Environment



- a) the capital gains from selling land are taxed separately from other income in the case of individuals and
- b) the applicable capital gain tax rate depends on the period of ownership (Table 4).

Table 4
Comparison of Taxation on Capital Gains on Land
(Taxation on the transfer of land)

(1) Individuals

Japan Income tax	Separated taxation: Different tax rates applicable depending on holding periods. Border between short and long term tax rate modified as below. 1982~: less than 10 years = 40% over 10 years = 20% + 1/2 consolidated tax 1987~: less than 5 years = 40% over 5 years = 20% + 1/2 consolidated tax (for details on tax rates see Figure 17) 1991~: over 2 years but less than 5 years = 50% over 5 years = less than ¥40 million, 20% over ¥40 million, 25% 1992~: 30% uniformly
United States Income tax	Consolidated taxation (sum of other income, housing assets deductible by a certain amount): 1990 15%, 28%, 33% (long-term capital gains, maximum tax rate 28%)
State · Local tax	Consolidated taxation (other income aggregated in many states and some local governments)
United Kingdom Capital gains tax	Sum of other income, taxation at income tax rate (transfer of main residential asset <less than one acre> is tax exempt) 1989 25%, 35%, 37.5% 1990 25%, 40%
West Germany Income tax	Tax exemption (in principle) — Capital gains tax on transfer or speculative transaction (transfer of land held for less than two years or transfer of other assets held for less than six months) of assets for business is imposed summing up other income (1989, 50%).
France Income tax	Consolidated taxation: short term (holding for less than two years) — If long term (held for over two years), from the second year, taxation after subtracting 5% capital gains from capital gains. — If main residential assets (less than 2,500m ²) are transferred, tax exempt.
Sweden	Consolidated taxation: maximum tax rate (national), nearly 47% maximum tax rate (local), nearly 30% 1990~ uniformly 30% (only national tax)

(2) Corporate

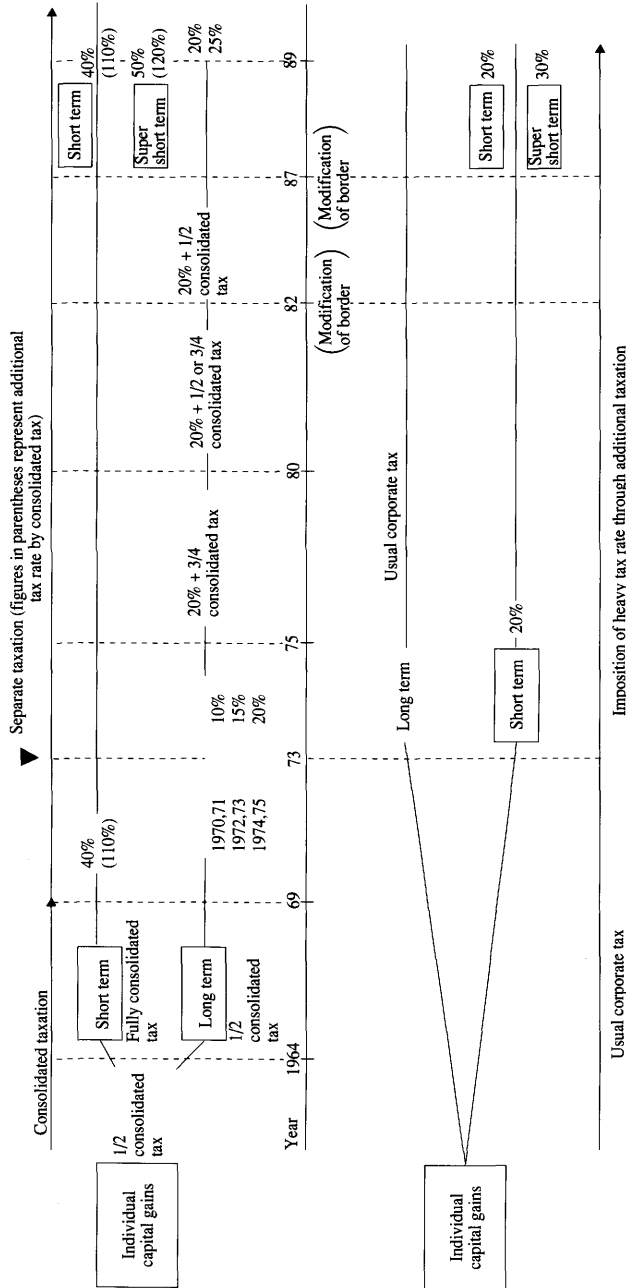
Japan Corporate tax	Consolidated taxation:	Long term = usual corporate tax rate (1988, 42%; 1989, 40%; 1990, 37.5%) Short term = additional taxation (+20%) Super short term = additional taxation (+30%) (Border between long and short term was modified in 1973, 83, 87; For details on tax rate, see Figure 17)
United States Corporate tax State · Local tax	Consolidated taxation:	Less than US\$ 50,000 15% (1990) ~ US\$ 75,000 25% (1990) Over US\$ 75,000 34% (1990)
United Kingdom Corporate tax	Consolidated taxation (sum of other income):	~3.31.87 30%, ~3.31.89 35%, ~3.31.91 34%, ~3.31.92 35%
West Germany Corporate tax Operation tax	Consolidated taxation (sum of other income):	~1990 56%, 1990~ 50%, 1990 15 - 25%
France Corporate tax	Consolidated taxation:	Short term (less than two years) 1989, 42%; 1990, 37%
	Separate taxation:	Long term (over two years) 19% (Vacant lot 25%)
Sweden Corporate tax	Consolidated taxation:	52%

Sources: Ishi, Hiromitsu, *Tochi Zeisei Kaikaku*;
Ozaki, Mamoru, *G7 no Zeisei*;
Kansa Hojin Tohmatsu EC Togo Team, *EC Kameikoku no Zeiho*; etc.

In particular, favorable treatment had been extended to the tax on gains from selling land which had been held by individuals for a long period (since 1969) — this favorable treatment was further strengthened in 1980 and 1982 (Figure 17). Consequently, the longer the land is owned, the lower the effective tax rate. This tax distortion discouraged the sales of land held for a short period. This type of tax distortion itself, of course, is not necessarily an advantage for investing in real estate with borrowed funds. However, when inflationary expectations concerning real asset prices intensified, these tax distortions contributed to restraining the new supply of land. This restraint, combined with that stemming from the regulations on land use (e.g. rigid designation of land use depending on area), created an environment in Japan in which a rapid rise in real estate prices could easily occur.

In addition, during the late 1980s when asset prices rose sharply, we frequently observe such typical phenomena (for the purpose of tax saving) as people setting off mortgage interest payments against other income. Indeed, a lot of investments in studio-type apartments were made by borrowing so as to reduce taxable income, which was reflected in the rapid increase in new housing starts (mainly houses for rent) from 1985 to

Figure 17
Japan:
Transition of Taxation on the Transfer of Land (National tax)

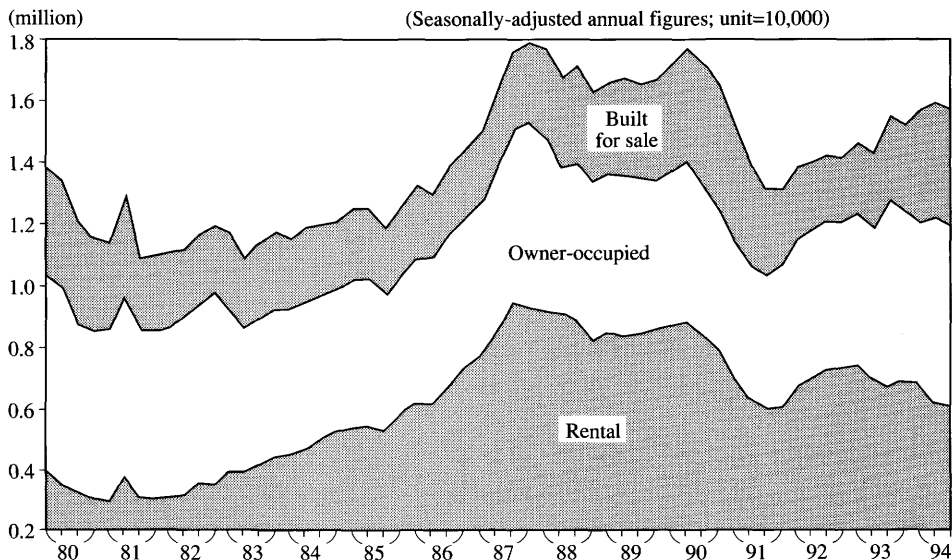


Source : Ishi, Hiromitsu, *Tochi Zeisei Kaikaku*, 1991, p145.

88 (Figure 18)²³. Finally, a special measure which gave an incentive to buy a new house by selling an old one²⁴ also contributed to asset price inflation because, if one bought a more expensive house than the existing one, tax on capital gains obtained from selling the old one would be fully deferred until the time of the sales of the new house

So far, we have mainly discussed tax distortions related to asset holding and transactions for individuals. However, when we consider the influence of tax distortions on asset price inflation in Japan, those with respect to corporations seem to have had a much greater effect²⁵. Since corporations are permitted to deduct interest payments on real estate investments as well as related municipal property tax from their taxable income, many non-financial corporations actually took advantage of this tax treatment by purchasing real estate, resulting in asset price inflation. Many real estate firms particularly enjoyed this tax advantage. They tried to reduce corporate tax by borrowing funds

Figure 18
Japan:
Number of New Housing Starts



²³In the case of individuals, the deduction of interest payments is only allowed when they invest in land with buildings, such as studio apartments. However, after tax reform in 1991, deduction is allowed only when one holds more than ten rental units and deduction of interest expense on the land portion is limited. This change in taxation is said to be partially responsible for asset price deflation.

²⁴This is a kind of deferred taxation. If one sells one's residence and purchases the same kind of house (for a residence) within a given period, the taxation imposed upon the capital gains from selling the first can be postponed until selling the new one.

²⁵So far as the tax wedge on the ownership of a house is concerned, Japan's is relatively low among other OECD countries which experienced asset inflation. This is because only limited interest payment on the mortgage of owner-occupied housing investments can be deducted from taxable income.

and buying land; thus increasing their land holdings. For firms making a profit, it is possible to reduce the tax burden by buying land with borrowed fund to reduce current profit and to accumulate unrealized capital gain to prepare for a rainy day. The low cost of holding land further promoted such business behavior.

III. Some Implications for Monetary and Financial Policy

The fact that the Nordic countries — whose progress vis-à-vis financial liberalization, implementation of monetary policy, and tax distortions were similar to Japan in many aspects — also experienced serious asset price inflation evidences the importance of the influence of these factors on asset price inflation.

The implications derived from the experiences of the countries discussed in this paper can be summarized as follows:

- a) in a liberalized financial environment, weakened liquidity constraints on economic agents tend to give rise to asset price inflation more easily, particularly during a boom, and, once it happens, asset prices are likely to overheat;
- b) overheating of asset price inflation makes the following rapid fall unavoidable, causing a serious damage to economic agents;
- c) profit margins of financial institutions tend to narrow as a result of deregulation, which makes the financial system more vulnerable to shocks, especially those caused by the bankruptcy of borrowers; and
- d) if there are tax distortions favoring real estate investment, asset price inflation is more easily triggered.


Finally, based on the discussion so far, the following suggestions can be made for monetary and financial policy to prevent resurgence of asset price inflation.


1. Financial Liberalization and Profit of Financial Institutions




































Almost all financial institutions in countries where financial liberalization was executed in a short period experienced shrinking profits (Table 5).

In the United States, Japan, Australia, and Sweden, not enough attention was paid to the concentration of credit risk to the real estate industry where financial institutions tried to compensate for squeezed profits due to progressing financial liberalization. On the other hand, Germany could avoid asset inflation when it carried out financial liberalization in the 1960s. This is probably due to the strict supervision by the monetary authorities, and the maintenance of relatively large lending margins under a rather oligopolistic financial market. Heightened competition associated with financial liberalization is welcome from the viewpoint of economic efficiency. However, at the same time, strengthening of the risk management of financial institutions with a proper support

Table 5
Developments of Interest Margins of Commercial Banks in Major Countries

 : Period of interest rate regulation through legislative control or agreements among banks.

 : Period of partial deregulation of interest rates.

	1980	1984	1987	1990	1991
Japan	 1.61	 1.36	 1.20	0.90	1.11
United Kingdom	 4.00	 3.04	3.19	2.95	2.97
France	 2.84	 2.58	 2.35	 1.90	 1.74
Finland	 2.28	 1.65	 1.57	1.60	1.25
Norway	 3.50	 3.30	 2.78	2.63	2.49
Belgium	 2.03	 1.60	 1.49	 1.35	 1.34
Spain	 4.00	 3.77	 3.91	4.02	3.96
Australia	 4.00	 3.58	 3.20	3.25	n.a.
United States	 3.08	 3.35	 3.36	 3.45	 3.57
Germany	1.89	2.54	2.30	2.04	2.16
Sweden	 2.26	 2.21	 2.49	2.08	2.09
Canada	2.24	2.56	2.79	3.00	3.15

Note : Figures are net interest income/assets.

In France, commercial banks and credit union banks only.

In Australia, the sum of the Wespac Bank, the ANZ Bank, the Commonwealth Bank of Australia, and National Commercial Bank.

Sources : OECD *Bank Profitability*, *Financial Statements of Banks*, *Competition in Banking*, *Banks Under Stress*; Reserve Bank of Australia, *The Deregulation of Financial Intermediaries*.

and encouragement from the authorities is essential.

2. *Asset Prices and Credit Expansion*

The relationship between credit growth and asset prices is obvious in many countries which experienced significant asset price inflation. Indeed, although one of the factors which prolonged the surge in asset prices in the 1980s was a fairly long period of relatively high economic growth, excessive credit expansion occasioned by financial liberalization also significantly influenced asset price inflation.

Large fluctuations in asset prices in a short period are also likely to cause an increase in credit risks taken by financial institutions. Thus, in order to maintain the soundness of financial institutions, as well as to prevent asset price inflation, proper monitoring and supervision of their assets and liabilities by the monetary authorities is very important. Furthermore, if asset prices start to increase rapidly again, the monetary authorities must examine whether or not the increase is in line with developments in returns on assets and interest rates. If they see overheating, the authorities should take preemptive actions, including warning the market.

3. *Asset Prices and Tax System*

The large influence of the tax system on asset prices is clear from the above analysis. Since tax systems in many countries allow a deduction of nominal interest payments from taxable income, the distortions are particularly serious when inflation rates and/or marginal tax rates are relatively high. Households as well as corporations can substantially reduce their opportunity cost for housing and other real estate investments by taking advantage of this tax distortion. In fact, the real cost of funds for such investments in Nordic countries was negative in the 1980s owing to a tax system which allows the full deduction of interest payments from taxable income.

Although this tax distortion should best be eliminated, it is often impossible to change them immediately, because it is at the core of each country's tax system. As expected inflation increases, this tax distortion becomes larger. It is, therefore, very important for the monetary authorities to pay sufficient attention to the price level, including asset prices, so as to prevent an emergence of inflationary expectations. This is particularly important in a liberalized financial environment.

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