
Changes in Financial Asset Selection and the Development of Financial Markets in Japan

YOSHIO SUZUKI*

I. Introduction

The purpose of this paper is to survey changes over the past decade since the end of the era of rapid growth in Japan in the build-up and composition of financial assets in the private non-financial sector, and how these changes have been linked with developments in financial markets and changes in the financial system. In Section II. we present a survey of financial assets held by the private non-financial sector as a ratio of GNP. We show how the build-up of such assets accelerated in the second half of the 1970s, and consider a few reasons underlying the acceleration. In Section III. we show that, in the midst of this speed-up in the accumulation of financial assets, holdings of currency and deposit money assets alone diminished in relative terms, and we discuss the reasons for this. In Section IV. we show that there were major changes during the second half of the 1970s in the composition of investment accounts—that is, in the composition of broader financial assets excluding cash and deposit money, and in the underlying channels of these flows of funds. In brief, direct financing increased in relative importance while indirect financing decreased in relative importance. Among financial institutions engaged in indirect financing, the market share of private deposit banks declined, while private nondeposit banks' and public sector financial intermediaries' shares increased. Finally, Section V. presents an overview of these changes in financial asset selection and in the flows of funds from the standpoint

* *Deputy Director, Institute for Monetary and Economic Studies, Bank of Japan*

of the financial system as a whole, and considers the causes of these changes. One major reason for the change is considered to be the existence of a two-tier interest rate structure with regulated rates and free market rates, and the irrational term structure of regulated rates. The conclusion attempts to outline the prospects for future developments in the financial system.

II. The Recent Acceleration in the Accumulation of Financial Assets

The pace of financial asset accumulation in the private non-financial sector can be obtained from the Bank of Japan's Flow of Funds Tables which show assets held by the personal sector and the non-financial corporate sector as well as their total (hereafter 'private non-financial sector'), year-end balances of total financial assets ('gross financial asset balances'), and total financial assets net of total liabilities ('net financial asset balances'). These are shown in Chart 1 as a ratio of nominal GNP in the same year.

One feature which is common to all six sets of time series data is the sharp upward spike in 1972. This resulted from a combination of huge current balance of payments surpluses in 1971-72, the closing years of the Bretton Woods system, and the large deficits (i.e. net investment or dissaving) of the public sector which accompanied the expansionary fiscal policies of 1972-73. Both of these influences came together in 1972 so that the private non-financial sector's surplus (net savings) increased enormously. This observation can be confirmed by reference to Chart 2 which shows the trend in sectoral surpluses and deficits in relation to GNP. The private non-financial sector's surplus (and particularly the personal sector's surplus) rose to 10-13% of GNP in 1972, and correspondingly both the deficits of the public sector and the overseas sector rose to 2-3% of GNP.

The upward spike in 1972 is especially large for the ratio of gross balances as shown in Chart 1; the relaxation of monetary policy in 1972 resulted in a huge increase in credit to the private sector from financial institutions which was reflected in a simultaneous expansion of both financial assets and liabilities. This phenomenon was called "an excess liquidity situation" at the time, and became the domestic source of the great inflation of 1972-75.¹

Leaving aside the upward spike in 1972, the gross balance ratio for the total non-financial private sector (the solid line in the upper section of Chart 1) increased steeply until the early 1960s, then flattened out until around 1970s, and has subse-

1. For a detailed analysis of the causes of the great inflation of 1972-75 in Japan, see: Komiya, R. & Suzuki, Y. "Inflation in Japan: 1960-74", in Krause, L. & Others, "Worldwide Inflation: Theory and Recent Experience," *Brookings Institution*, 1977.

Chart 1 Trends in the Accumulation of Financial Assets

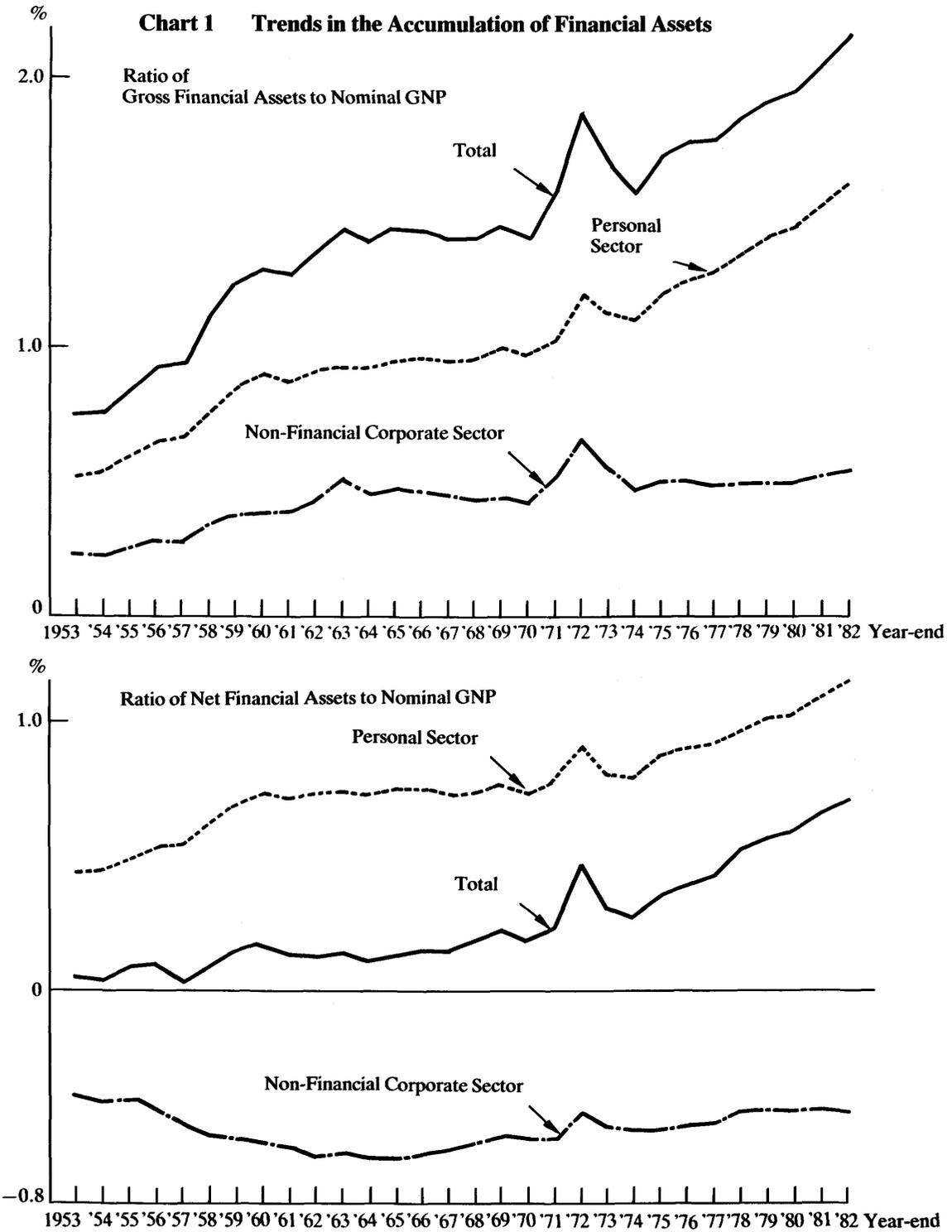
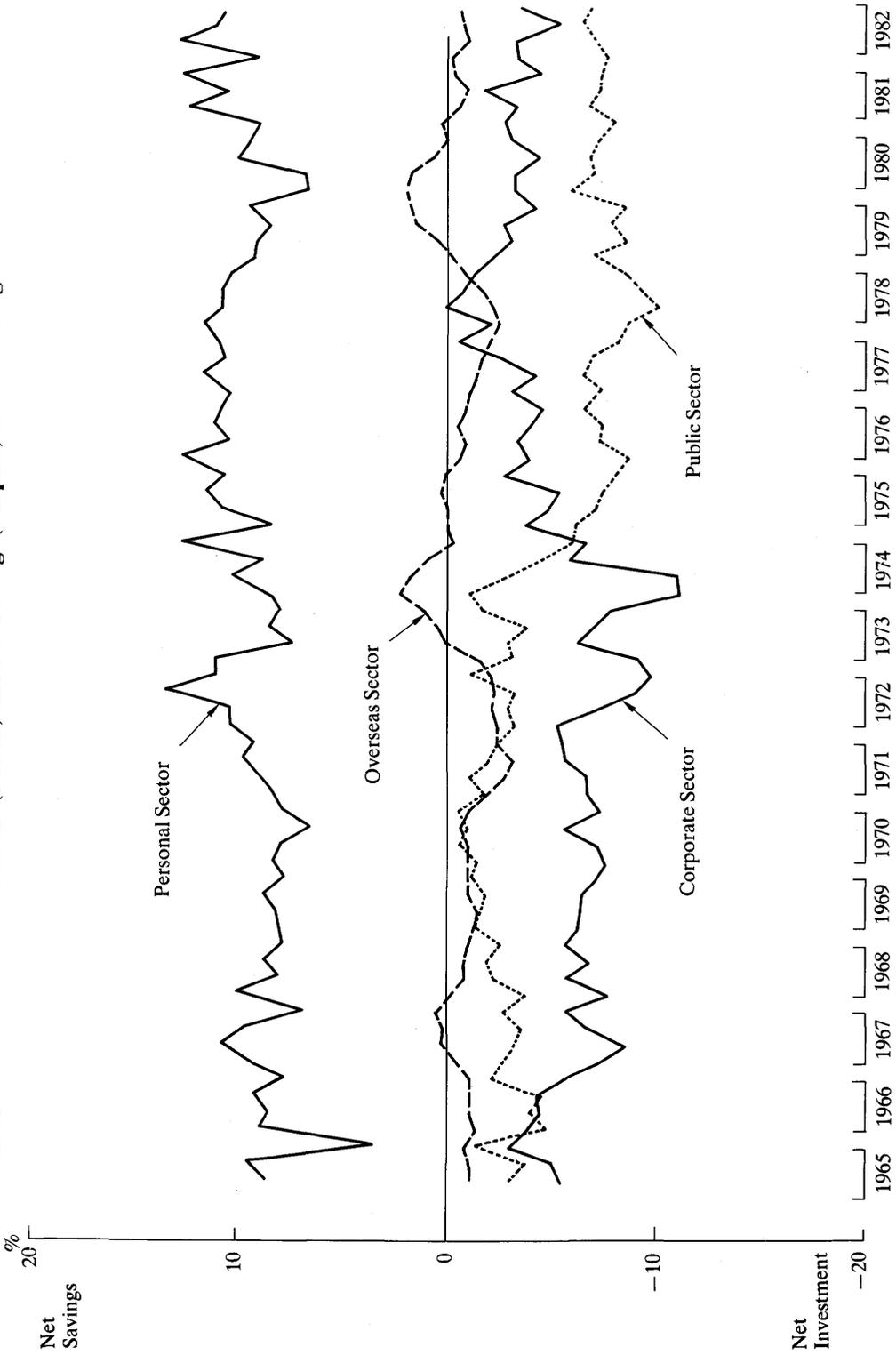


Chart 2 Sectoral Net Investment (Deficit) and Net Savings (Surplus) as a Percentage of GNP



quently risen sharply again until recently. The ratio for the same sector on a net basis (the solid line in the lower section of Chart 1) rose quite gently until around 1974, and since then has also risen steeply until recently.

Needless to say, the net financial balances of the private non-financial sector represent the summing-up of financial surpluses of that sector. Consequently the steep rise in the net ratio shown in the lower section of Chart 1 after 1975 means that the private non-financial sector's surpluses were increasing. This can be seen in Chart 2 which shows sectoral deficits and surpluses relative to GNP. After 1975, partly reflecting the increase in the public sector deficit and partly reflecting the contraction in the non-financial corporate sector's deficit, the surplus of the whole private non-financial sector (including the personal sector) increased correspondingly. This dramatic change in the structure of sectoral surpluses and deficits resulted primarily from the decline in private sector's investment as a proportion of the GNP (which in turn reflected the slowdown in Japan's real economic growth rate from an average of 10% per annum before 1973 to 3-5% per annum subsequently), and also from the increase in public sector's expenditure as a proportion of GNP.

The gross financial balances of the overall private non-financial sector reflect both the trends in its net financial assets described above and the trend in that part of its gross financial assets which increased in step with its financial liabilities to the financial sector. Although the net ratio (lower section of Chart 1) rose only at a gentle pace, the gross ratio (upper section of Chart 1) rose steeply from the early 1960s because during this period both the financial assets and liabilities of the private non-financial sector, especially the non-financial corporate sector, were increasing. In the same way, as shown in Chart 1, the non-financial corporate sector's gross ratio was rising at this time despite a decline in its net ratio, on account of a big simultaneous increase in its financial assets and liabilities. At that period which corresponds to early part of the rapid economic growth era, the ratio of corporate investment to GNP was still rising and the non-financial corporate sector's deficit was rising steeply, as firms' dependence on external funds increased. Since securities markets in Japan were under-developed at that time and indirect financing was the predominant method of raising funds, most external funds for business enterprises were in the form of bank borrowings. This high degree of dependence on bank borrowing by business enterprises (called "over-borrowing") meant that firms tended to maintain substantial amounts of bank deposits, while the banks tended to give preferential treatment to firms with large compensating balances.² This is why financial assets and liabilities in the non-financial corporate sector grew simultaneously.

2. A detailed description of the under-developed state of the securities market, the dominance of indirect financing, and overborrowing etc. and their causes is given in Suzuki, Y. "Money and Banking in Contemporary Japan," *Yale Univ. Press*, 1980 Part I. Also, according to the results

However this trend slackened off in the latter part of the rapid economic growth era, as the non-financial corporate sector's deficit grew more slowly. With the economy entering the slow growth period, this financial deficit contracted and even disappeared for a while. After 1975 overborrowing diminished, as firm's dependence on external financing declined. As open markets for financial instruments (e.g. the "gensaki" or repurchase market, the CD market, and the secondary markets for bonds) developed, the non-financial corporate sector's financial assets shifted from bank deposits to marketable assets. This phenomenon will be examined in detail in Sections IV and V. For the present, we should note from Chart 1 that since the mid-1960s the non-financial corporate sector's gross ratio has generally been fairly flat with the unwinding of the accelerated growth of financial assets and liabilities, while the net ratio has been in a firm upward trend.

Summarising, the postwar accumulation of gross financial assets by the private non-financial sector exceeded the nominal growth rate of the economy—leaving aside the exceptional 1972 episode—both in the period up to 1960s and in the period since 1975. In the first period (which was predominantly an era of indirect financing) the main reason was the simultaneous growth in assets and liabilities of the non-financial corporate sector, so that the build-up of net financial assets was not as rapid as the growth of gross financial assets. In the second period the increase in the private non-financial sector's surpluses or financial assets was rapid both on a net and on a gross basis. As will be seen below, this has had a major impact both on developments in Japan's financial markets and on changes in the financial system.

III. Progressive Economising on Monetary Assets

In contrast to the increase in private non-financial sector holdings of financial assets relative to GNP after 1975, holdings of money (cash and demand deposits i.e. M1) relative to GNP tended to decline. This is shown in Chart 3. The ratio also shows a sharp upward spike around 1972 associated with the excess liquidity at that time. Excepting this period, there was a rising trend up to the early 1970s, followed by a period of flatness, and a declining trend in the early 1980s. This pattern holds both for the personal sector and for the non-financial corporate sector, with the latter showing the more pronounced pattern.

Splitting these monetary data into cash currency and deposit money and taking the ratio of each to GNP produces the results shown in Chart 4. For the deposit

of the regression analysis on p. 50 of the same book, apart from business firms' normal motives for holding deposit money, firms tended to hold the equivalent of 25% of their borrowings in deposits.

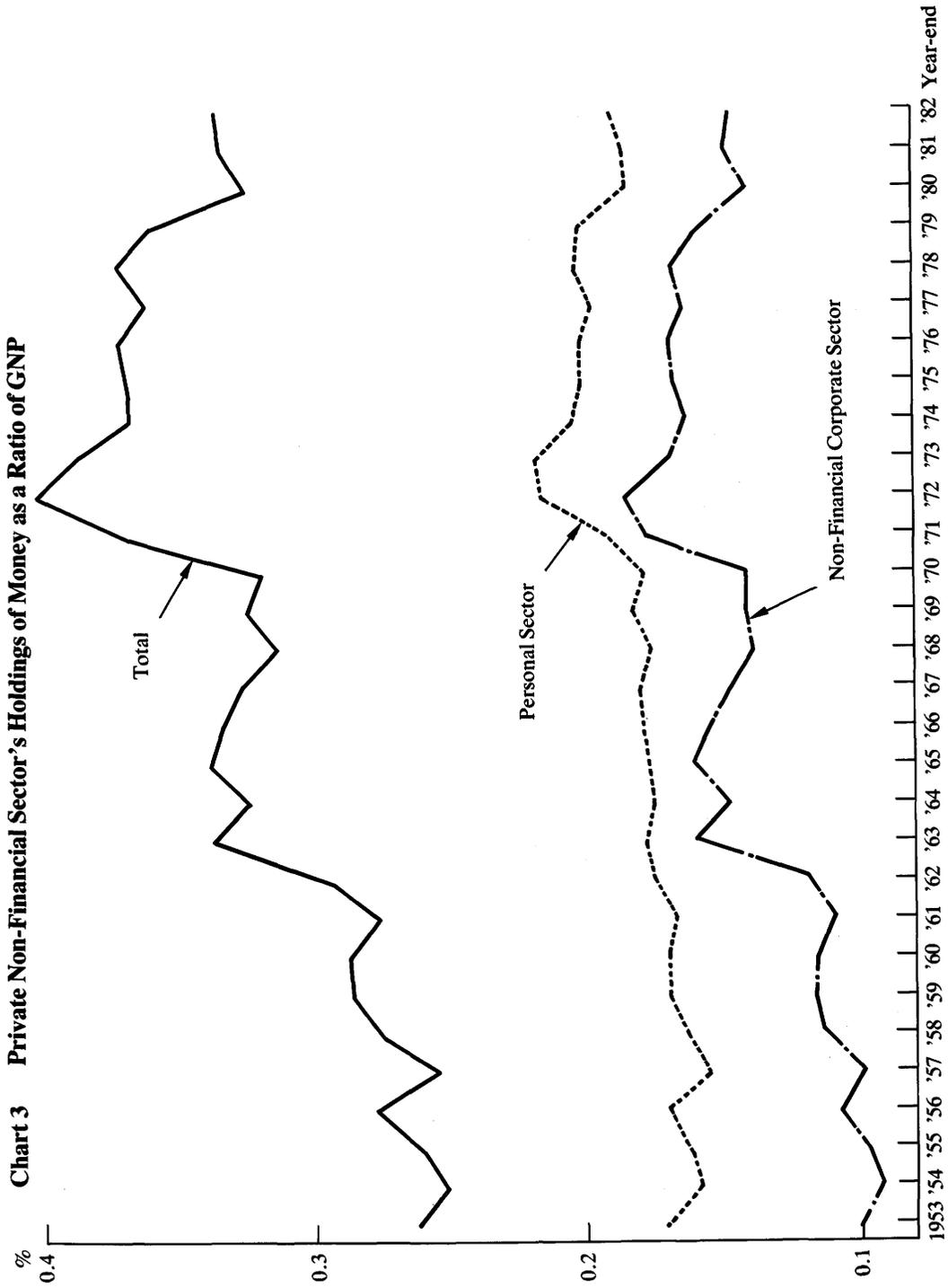
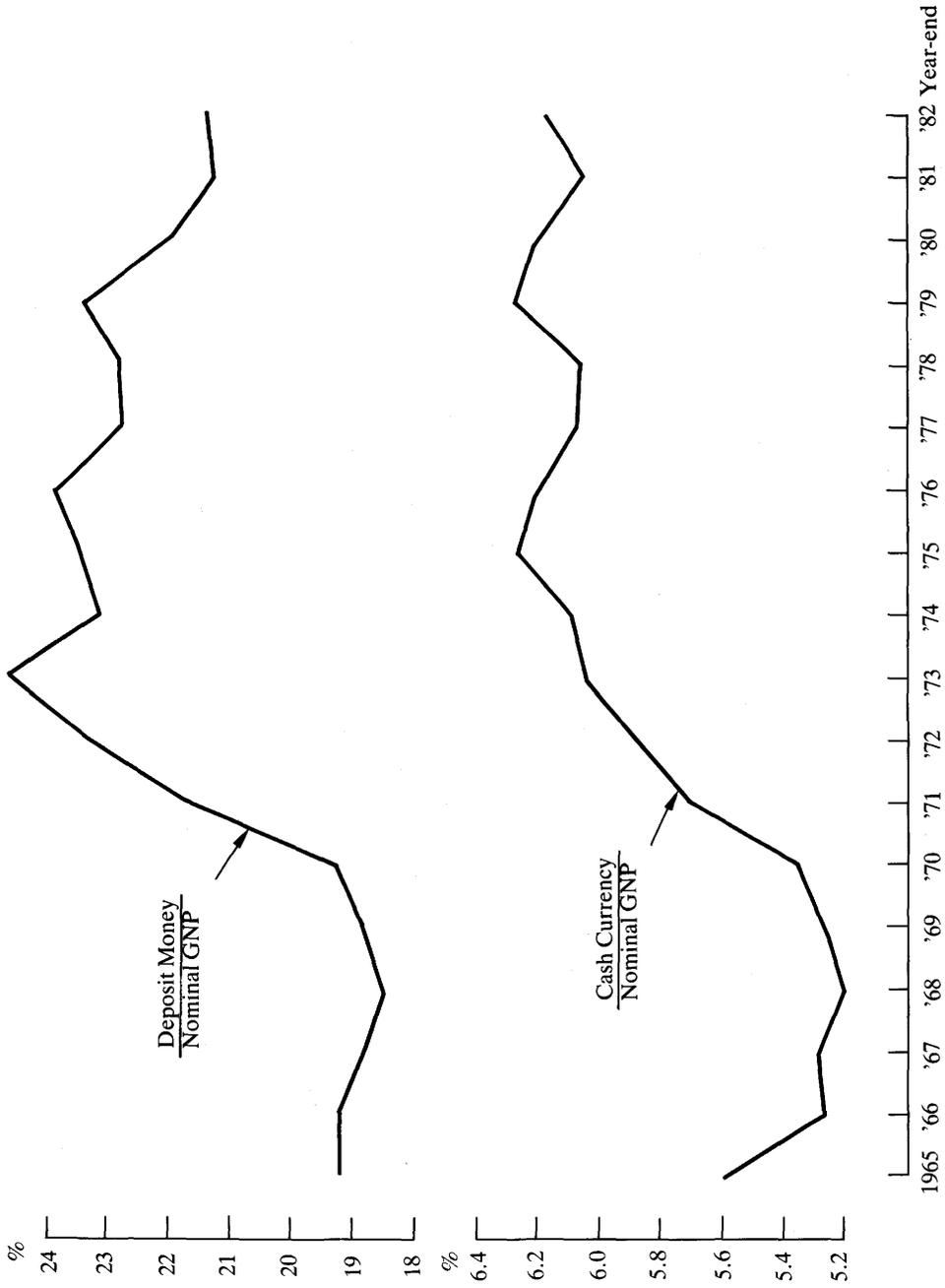


Chart 4 Ratio of Cash Currency and Deposit Money to GNP



money ratio, the downturn occurs in the 1980s, whereas for the cash currency ratio the trend since 1975 has been roughly flat. These ratios demonstrate that economising in the use of money has been most conspicuous in the non-financial corporate sector, especially in relation to deposit money.

Three factors may be considered to have caused this economising in the use of deposit money. First, with the disappearance of over-borrowing, the simultaneous acceleration of deposits and loans has been unwound. As dependence on borrowed funds has declined, the tendency for demand deposits to grow at the same rate as loans has given way to a relative decline in the former, and the actual amount of such deposits has also declined. Chart 5 confirms the fact with data from the Bank of Japan's "Analysis of Financial Statements of Principal Enterprises", which shows that since 1975 both the ratio of their demand deposits to borrowed funds and the ratio of borrowings to financial assets (an indicator of over-borrowing) have declined, with the result of decrease in the ratio of demand deposits to sales revenue. Moreover, the ratio of financial assets to sales revenue (the reciprocal of the asset turnover rate) has also declined over this period, contributing to the decrease in the ratio of demand deposits to sales. This trend reflects the efforts of Japanese corporations to raise the efficiency of capital by so-called "Genryo Keiei" (literally, management with reducing the fixed costs—perhaps best translated as Efficiency Management).

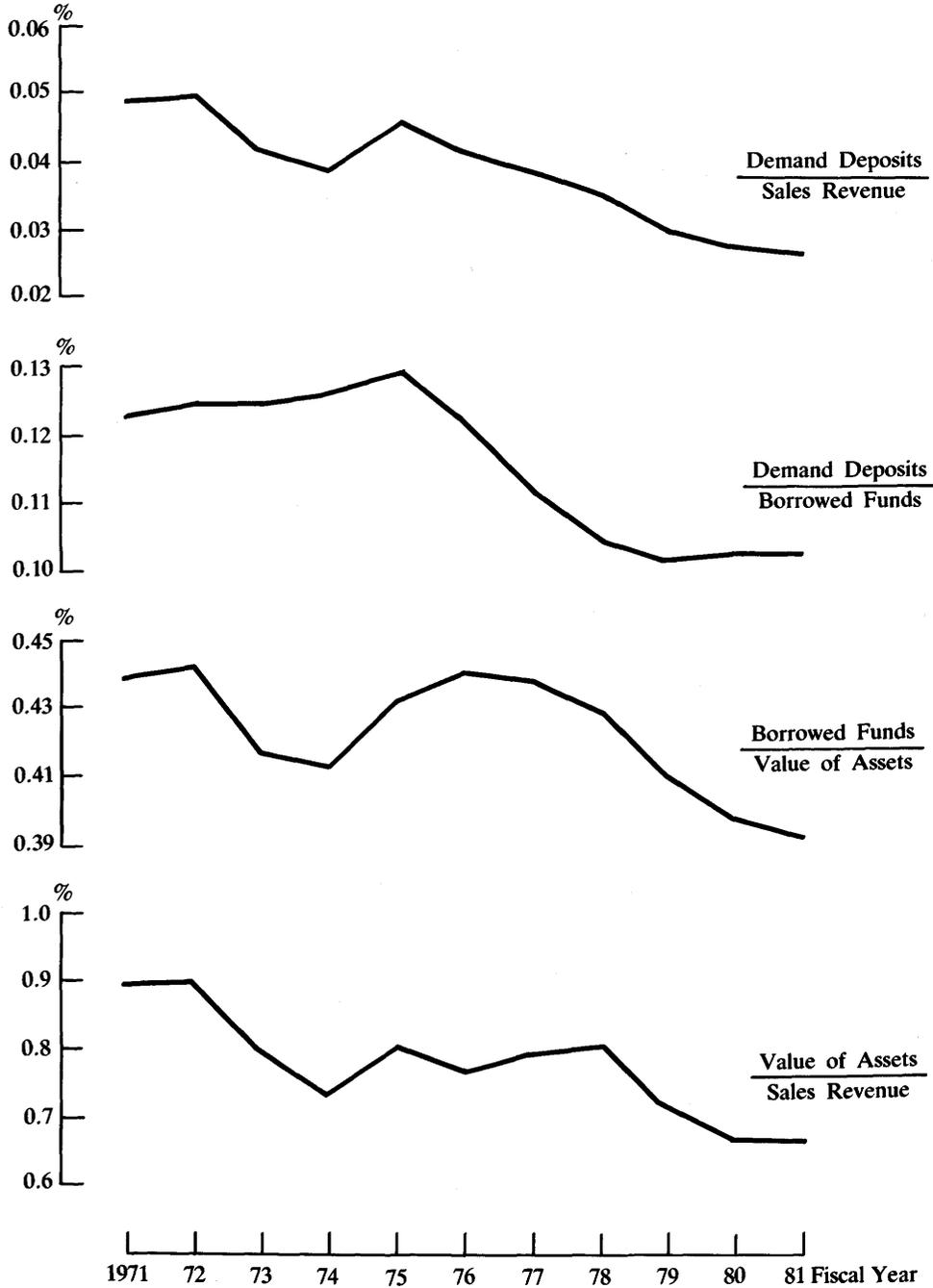
The second reason for economising on deposit money is the increased opportunity cost of holding deposit money balances at zero or controlled low interest rates. This is due to the reduced transaction costs of switching between deposit money and marketable short term financial assets as a result of the start of the open money markets (gensaki and CD markets) after 1975, and due to the maintenance of high interest rates in the open money markets relative to returns on demand deposits throughout the two periods of oil crisis and imported inflation, and through the period of global high interest rates in the early 1980s. We can confirm the latter in Chart 6.

The third factor behind economising on deposit money in the case of individuals was the development of "Deposit Combined Account" i.e. demand deposit accounts with overdraft facilities secured against fixed time deposits or loan trusts as collateral, which encouraged economising on ordinary deposit balances. As at March 1983, some 15% of banks' fixed term deposits were collateralised in this way, permitting economies on this amount of ordinary deposits. This may be regarded as a kind of financial innovation corresponding to sweep accounts in the United States.³

Turning to cash currency, there has not been so much economising as for deposit

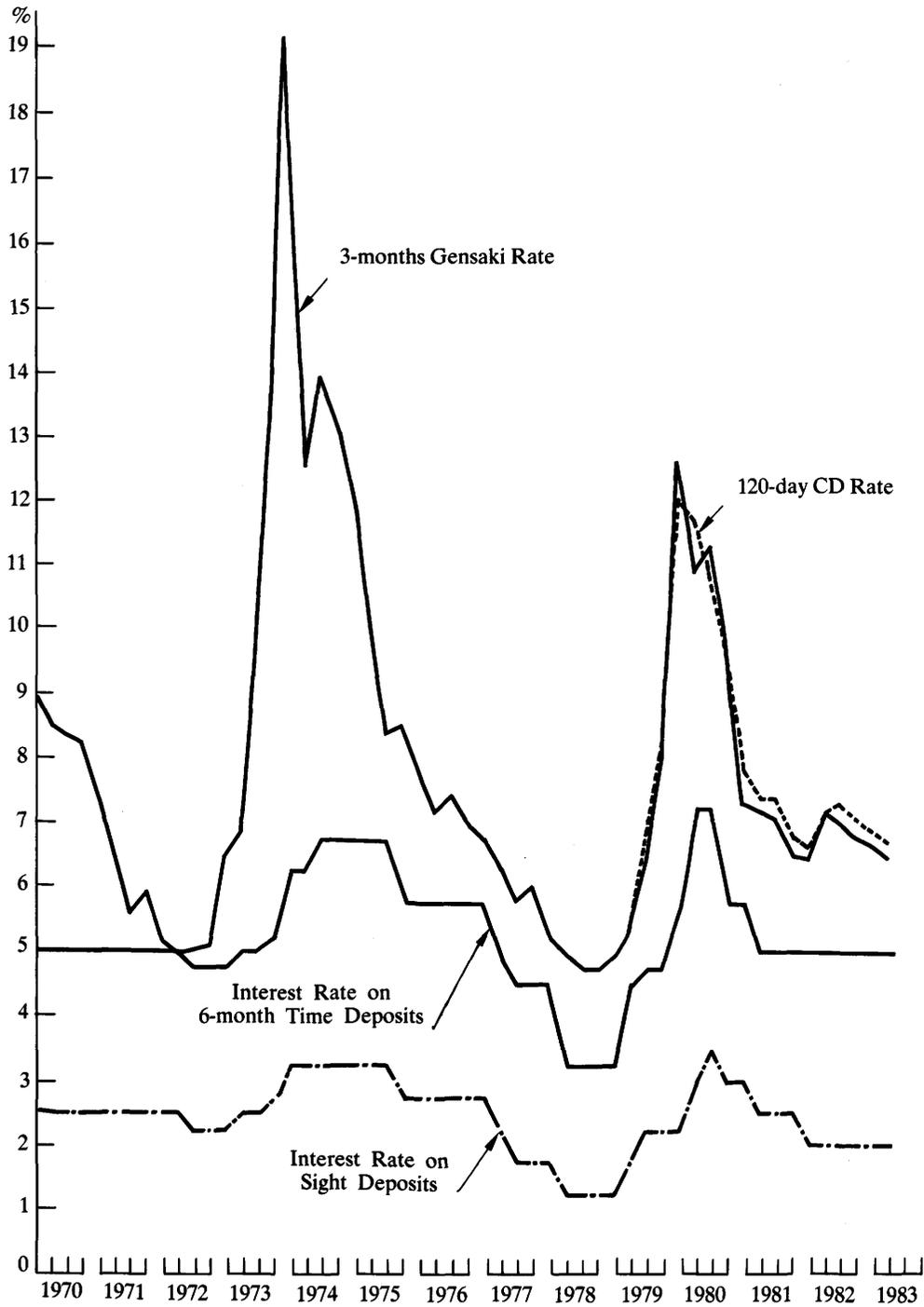
3. Since American-type MMDA or Super-NOW accounts paying money market rates of interest on transaction accounts are not permitted in Japan, financial innovation has taken the form of economising on transaction accounts along the lines of sweep accounts in the United States.

Chart 5 Economisation of Demand Deposits by the Non-Financial Corporate Sector



$$\frac{\text{Demand Deposits}}{\text{Sales Revenue}} = \frac{\text{Demand Deposits}}{\text{Borrowed Funds}} \times \frac{\text{Borrowed Funds}}{\text{Value of Assets}} \times \frac{\text{Value of Assets}}{\text{Sales Revenue}}$$

Chart 6 Indicators of Interest Rates Relating to Corporate Liquidity



money, but the fact that the upward trend of the ratio of currency to GNP has become flat since 1975 may be taken as evidence that the same kind of movement towards economising has begun. Reasons for this may be the spread of credit cards, direct debt and automatic utility billing and the wider availability of automated tellers machines. There is also the hypothesis that in several foreign countries the cash currency to GNP ratio has not declined on account of the development of the "underground economy", but there is no statistical basis for such a proposition in Japan.

IV. Financial Asset Selection and Changes in the Flow of Funds

A. Changes in the Asset Composition of Investment Accounts

Next, we examine changes in the composition of financial assets excluding money (in the sense of transactions or checkable accounts)—i.e. investment accounts. Tables 1 and 2 present data for the past 30 years for the personal sector and for the non-financial corporate sector respectively, showing shifts in the component elements of these investment accounts. From these two tables, we may observe some distinctive trends which can be summarised in the following four points:

- 1) The proportion of fixed term deposits at private financial institutions has been relatively stable over the long time, but it began to decline from 1975 in the personal sector and from 1971 in the non-financial corporate sector, and the decline intensified after 1980. As will be seen below, this phenomenon reflects the erosion of that distinctive feature of the Japanese financial system, namely the predominance of indirect financing in the private sector especially via the banks as favoured intermediaries.
- 2) As a corollary to 1) above, the proportion of personal sector deposits with the Postal Office Savings system loan trusts, and insurances has been increasing. In other words, instead of optioning for financial assets offered by the private banks, people have been shifting to financial assets offered by public sector and private sector non-bank intermediaries.
- 3) In both the personal sector and the non-financial corporate sector, holdings of securities (bonds) have increased as a counterpart of 1) above. This trend has been especially noticeable since 1975 when large quantities of government bonds started to be issued. As will be seen below, these are two aspects of the same phenomenon, namely the gradual shift in the relative importance of the flows of funds through the Japanese financial system from indirect to direct financing.
- 4) The relative importance of equities and investment trust fund-type-securities held by the personal sector peaked in the early 1960s and has been on the decline ever since. However, the relative importance of those instruments held by the non-

Table 1 Composition of Assets Held by the Personal Sector (Excluding Money)

	(per cent)													
	Fixed-Term Deposits	Private Financial Institutions	Postal Office	Loan Trusts	Insurances	Securities (Excluding Equities)	Government Bonds	Local Government Bonds	Public Financial and Non-financial Corporation Bonds	Bank Debenture	Corporate Bonds	Investment Trust Fund-type Securities	Equities	Total
end-1953	54.5	n.a.	n.a.	2.1	8.4	6.9	3.2	0.1	0.2	0.6	0.1	2.7	28.1	100.0
1954	58.5	n.a.	n.a.	2.7	9.5	6.0	2.5	0.1	0.3	0.6	0.2	2.3	23.3	100.0
1955	58.2	n.a.	n.a.	3.9	10.1	4.6	1.8	0.1	0.4	0.7	0.2	1.4	23.2	100.0
1956	56.1	n.a.	n.a.	3.4	10.5	4.0	1.2	0.1	0.1	0.9	0.5	1.2	26.0	100.0
1957	58.1	n.a.	n.a.	3.1	11.4	4.6	0.9	0.1	0.1	0.9	0.4	2.2	22.8	100.0
1958	56.1	n.a.	n.a.	3.2	11.6	5.6	1.0	0.1	0.2	1.2	0.4	2.7	23.5	100.0
1959	52.6	n.a.	n.a.	3.3	11.3	6.3	0.6	0.2	0.2	1.7	0.4	3.2	26.5	100.0
1960	49.3	n.a.	n.a.	3.4	11.0	7.9	0.4	0.1	0.3	1.8	0.5	4.8	28.4	100.0
1961	48.5	n.a.	n.a.	3.6	11.3	10.8	0.2	0.2	0.4	1.7	0.5	7.8	25.8	100.0
1962	48.0	n.a.	n.a.	4.0	11.7	10.6	0.2	0.2	0.5	1.9	0.5	7.3	25.7	100.0
1963	48.7	n.a.	n.a.	4.5	11.7	10.1	0.2	0.1	0.6	2.2	0.5	6.5	25.0	100.0
1964	49.9	40.0	9.9	5.1	14.2	9.7	0.3	0.1	0.8	2.4	0.4	5.7	21.1	100.0
1965	51.1	40.9	10.2	5.7	14.2	8.8	0.3	0.0	1.1	2.8	0.4	4.2	20.2	100.0
1966	51.9	41.4	10.5	6.2	14.5	8.9	0.7	0.0	1.3	3.4	0.4	3.1	18.5	100.0
1967	54.0	42.7	11.3	6.6	14.9	9.0	0.8	0.0	1.5	3.8	0.4	2.5	15.5	100.0
1968	53.4	41.7	11.7	6.7	14.9	8.5	0.7	0.0	1.7	3.8	0.3	2.0	16.5	100.0
1969	52.1	40.4	11.7	6.5	14.6	8.6	0.7	0.1	1.7	3.9	0.3	1.9	18.2	100.0
1970	54.3	41.7	12.6	6.8	15.4	9.1	0.6	0.1	1.9	4.0	0.4	2.1	14.4	100.0
1971	53.6	40.4	13.2	6.9	15.5	9.6	0.6	0.1	2.0	4.4	0.4	2.1	14.4	100.0
1972	51.4	38.5	12.9	6.5	14.2	9.0	0.6	0.1	1.8	4.3	0.3	1.9	18.9	100.0
1973	56.3	41.9	14.4	6.9	14.8	9.4	0.7	0.1	1.7	4.3	0.6	2.0	12.6	100.0
1974	57.7	42.4	15.3	7.1	14.9	9.4	0.7	0.1	1.6	4.1	0.8	2.1	10.9	100.0
1975	57.2	41.5	15.7	7.0	14.3	9.6	0.6	0.2	1.5	4.4	0.9	2.0	11.9	100.0
1976	57.3	40.6	16.7	7.2	14.4	10.3	0.9	0.2	1.4	4.9	0.9	2.0	10.8	100.0
1977	58.2	40.2	18.0	7.3	14.5	10.8	1.8	0.2	1.2	4.7	0.8	2.1	9.2	100.0
1978	57.7	39.1	18.6	7.1	14.4	11.1	2.5	0.2	1.1	4.6	0.6	2.1	9.7	100.0
1979	58.5	39.4	19.1	7.1	14.7	10.7	2.6	0.2	1.0	4.3	0.6	1.7	9.0	100.0
1980	59.2	39.2	20.0	6.9	15.0	10.4	2.9	0.2	0.9	4.1	0.6	1.7	8.5	100.0
1981	58.9	38.8	20.1	7.1	15.3	10.6	3.1	0.2	1.0	4.0	0.5	1.8	8.1	100.0
1982	57.9	37.7	20.2	7.5	15.8	11.1	3.4	0.1	1.0	4.0	0.5	2.1	7.7	100.0

**Table 2 Composition of Financial Assets (Excluding Money)
Held by the Non-Financial Corporate Sector**

(per cent)

	Fixed- Term Time Deposits	Nego- tiable CDs	Loan Trusts	Securities (Excluding Equities)	Investment Trust Fund-type Securities	Equities	Total
end-1953	62.6	0.0	3.8	3.7	0.7	29.9	100.0
1954	65.5	0.0	4.2	4.0	0.7	26.3	100.0
1955	62.1	0.0	4.7	3.9	0.4	29.3	100.0
1956	59.0	0.0	5.2	3.2	0.4	32.6	100.0
1957	60.2	0.0	6.2	3.1	0.6	30.5	100.0
1958	59.7	0.0	6.0	3.7	0.7	30.6	100.0
1959	55.5	0.0	5.8	4.7	0.9	34.0	100.0
1960	53.2	0.0	5.8	5.4	0.8	35.6	100.0
1961	52.8	0.0	6.1	6.4	1.5	34.7	100.0
1962	54.8	0.0	6.3	6.4	0.9	32.5	100.0
1963	57.6	0.0	6.4	6.6	0.7	29.4	100.0
1964	62.7	0.0	6.9	6.5	0.6	23.9	100.0
1965	63.2	0.0	6.0	6.1	0.4	24.7	100.0
1966	65.1	0.0	5.7	5.8	0.2	23.4	100.0
1967	66.5	0.0	5.6	6.0	0.2	21.9	100.0
1968	64.8	0.0	5.5	5.7	0.1	24.0	100.0
1969	61.8	0.0	5.4	5.4	0.0	27.4	100.0
1970	66.1	0.0	5.6	5.5	0.1	22.8	100.0
1971	65.5	0.0	5.5	5.5	0.1	23.5	100.0
1972	57.1	0.0	4.7	3.4	0.0	34.8	100.0
1973	56.8	0.0	5.6	4.0	0.0	33.6	100.0
1974	59.7	0.0	5.6	4.3	0.1	30.4	100.0
1975	55.9	0.0	5.1	4.5	0.1	34.5	100.0
1976	57.2	0.0	5.3	5.1	0.1	32.4	100.0
1977	58.7	0.0	5.8	5.3	0.1	30.2	100.0
1978	57.0	0.0	6.2	5.6	0.1	31.2	100.0
1979	55.1	1.7	6.4	6.5	0.1	30.3	100.0
1980	54.2	2.1	6.3	7.6	0.1	29.8	100.0
1981	51.5	2.7	5.8	8.9	0.1	31.1	100.0
1982	50.5	3.2	5.6	9.6	0.1	31.1	100.0

financial corporate sector, having peaked in the early 1960s, recovered again somewhat in the 1970s. This shows that individuals' preference for equities was persistently on the decline after the stock market panic which followed on from the boom of the early 1960s. It also reflects the move towards stable shareholdings by means of corporate crossholdings of shares, which meant a relative shift of shareholdings from individuals to non-financial corporations.

B. Changes in the Channels of the Flow of Funds Through the Financial System

Changes in asset preferences described in Sections III and IV of Part A above were coincident with changes in the channels of the flow of funds through the financial system. These latter changes are shown in Table 3.

1) Indirect Financing. Since the second half of the 1970s when the preference for money, especially demand deposits and fixed-term time deposits offered by private banks began to wane, the intermediary function performed by private sector banks has been on a constant downtrend, falling from nearly 70% in the past around 40% recently. In contrast, among the same private sector financial intermediaries, non-bank financial institutions such as loan trust sector of trust banks and insurance companies which had showed a mild downtrend, bottomed in 1978 and began to pick up and now hold a share of just over 10% of the total. Also the channeling of funds from the Postal System to the Government Trust Fund Bureau and into public financial intermediaries clearly increased its importance in the second half of 1970s, rising from around 15% of the total in the past to close to 30%.

2) Direct Financing. Funding through the securities market has been rising since the second half of the 1970s, increasing from just around 5% to over 10%. If investment trust funds provided by securities companies are added, it comes to 15% of the total. Over the whole period, however, the relative importance of fund flows through the equities market has tended to decline from their peaks in 1970. Thus the most significant element in the expansion of direct financing is the increased role of financial intermediation via the bond market, in particular the government securities market. The share of corporate bonds, local government bonds, public corporations bonds and public financial organizations bonds in financial intermediation has not increased over the period.

V. Causes of Changes in the Financial System

In the late 1970s the private non-financial sector's accumulation of financial assets began to accelerate. Also, because their composition began to change, the Japanese financial system entered a period of major evolution. As is already clear from the analysis above, these changes can be summarised in three points:

Table 3 Flow of Funds to Final Borrowers by Type of Lenders*

(per cent)

	Private Financial Interme- diaries	Deposit Banks	Loan Trust Sector and Insurance Companies	Public Financial Interme- diaries	Securities Markets	Equities Market	Investment Trust Funds	Total
	1965 Midyear	78.6	63.2	11.3	15.5	5.9	1.6	
1966	78.4	69.6	10.0	19.3	2.3	0.1	△ 1.7	100.0
1967	77.4	66.1	12.0	16.2	6.4	△ 0.5	△ 1.1	100.0
1968	72.5	58.3	13.0	18.4	9.1	2.5	0.2	100.0
1969	73.3	60.3	11.7	16.9	9.8	3.4	1.1	100.0
1970	71.0	60.3	12.8	16.7	12.3	4.8	0.7	100.0
1971	70.2	57.8	11.7	16.2	13.6	3.0	1.0	100.0
1972	77.5	66.2	10.5	16.1	6.4	2.6	1.5	100.0
1973	74.6	64.1	10.9	18.6	6.8	3.6	0.6	100.0
1974	69.0	58.0	10.7	21.1	9.9	2.5	0.3	100.0
1975	69.8	58.8	10.4	23.3	6.9	2.6	1.6	100.0
1976	67.4	56.0	10.2	23.7	8.9	2.5	1.0	100.0
1977	60.5	49.6	9.5	29.2	10.3	2.9	0.9	100.0
1978	62.4	54.2	6.7	25.4	12.2	2.3	0.7	100.0
1979	59.3	48.0	9.6	28.6	12.1	1.8	0.4	100.0
1980	54.9	41.9	11.6	31.2	13.9	1.0	△ 0.6	100.0
1981	61.4	49.8	9.9	25.5	13.1	2.7	1.9	100.0
1982	56.1	42.4	12.7	29.2	14.7	2.8	3.0	100.0

* This table shows the channels which funds were supplied by various types of lenders to final borrowers or users of funds inside the domestic financial system. The foreign lenders and users of funds are also included by their types.

First, there is the decline in the dominant position previously occupied by the private sector banks. Second, public sector financial intermediaries (i.e. the Postal System transferring funds to the Trust Fund Bureau which in turn transfers the funds to other government financial institutions) and non-bank private sector financial intermediaries have seen an increase of their share of the market. Looked at from the standpoint of the channels of the flow of funds, both sets of institutions now account for about 40% of total funding, which means they now rival the share of the private sector banks. Third, short, medium and long-term open markets, such as the gensaki market, the CD market, and medium and long-term bond markets have developed to the point where flows of funds raised by direct financing through these markets now account for 15% of the total flow of funds. These percentages are still low by comparison with those for the United States, but they represent a major change from those prevailing in the Japanese financial system in the earlier period when the share of direct financing remained around 5% of total fund raising. For reasons which we spell out below, the future prospects are for the upward trend in the direct financing share to continue.

Among these three changes, the first and second represent changes in the relative importance of various institutions within the indirect financing sector, while the third represents a shift from indirect financing to direct financing. We now consider the reasons for each of these two types of change in market share.

A. Variations in Market Shares within the Indirect Financing Sector

Many reasons can be given for variations in the share of indirect financing, but here we concentrate on the four most fundamental causes.

- 1) With the economising on money balances, the deposit bank which were the main suppliers of transaction accounts stood at a relative disadvantage in fund raising compared with those financial institutions whose main role was the supply of investment accounts (loan trust sector of trust banks, the long-term credit banks, life insurance companies and the Postal Office)
- 2) Also in parallel with the economising on money balances and the faster build-up of financial assets, the demand for investment accounts has been increasing rapidly over the past 10 years. Compared with financial intermediaries offering long term assets (e.g. trust banks offering 5-year loan trusts or the Postal Office offering 10-year fixed-term deposits), the deposit banks which were only able to offer fixed-term time deposits of two years and less were at a relative disadvantage in the collection of funds through investment accounts. This was (i) because interest rates on investment account assets offered by these financial intermediaries were either regulated or set by Ministry of Finance guidance so that the yield curve was always upward sloping to the right (i.e. the longer the term, the higher the rate of interest, see Chart 7) which

meant that in periods of monetary stringency long term funds were more attractive and short term funds less attractive, and (ii) because there was a strong tendency to place in long term asset accounts even those funds which might be converted to cash at short notice, as the fee charged for terminating a long term asset contract before maturity was low, and as the yields on such broken long term asset contracts were still higher than the yield on short term assets. Needless to say, as long as people arbitrage rationally between long and short term rates, the yield on a long term asset for a fixed term and the weighted average of the present yield and the future yield expected for the same term on a short term asset will be equalised. In this case, the expectation theory of the term structure teaches that, in a period of tight money, expectations that rates will fall will cause the yield curve to be downward-sloping to the right. In fact as Chart 7 shows, even in Japan this proposition holds for the yield curve for free market interest rates.⁴ However, the term structure of yields on financial assets offered by Japanese financial institutions generally slopes upward to the right so that people who arbitrage rationally between short and long rates will always tend to prefer longer term assets. Under the Japanese system of determining regulated interest rates, even in tight money periods (e.g. March 1980, see Chart 7) the yield on fixed-sum deposits at the Postal Office was the highest, and in easy money periods (March 1979, see Chart 7) the yield on bank debentures and loan trusts tends to be the highest. This is why in Table 1 and Table 3 the market share of the Postal Office rises in periods of tight money and the market share of loan trust sector of trust banks and insurance companies rises in easy money periods.

3) Because the growth of income-elastic cumulative life insurance schemes is greater as income levels rise, and because the growth of old age pension schemes will increase as the population structure becomes older, the assets of loan trust sector of trust banks, life insurance companies and the Postal Office which accept pension funds and insurance funds must increase in relative terms.

4) Postal Savings deposits have an upper limit of ¥3 million per depositor and interest received is tax-exempt, but because identification or name-registration is not perfect there is a tendency for people to hold multiple accounts so that the total of deposit holdings per person at Postal Savings Accounts exceed the legal limit ¥3 million with the advantage of interest income tax relief. Not surprisingly their growth has been relatively high.⁵

4. For a detailed analysis of the term structure in the Japanese financial markets, see: Kuroda, A. & Ōkubo, T. "An Empirical Investigation of the Term Structure of Japanese Government Bond Yields: An Analysis Using a Bivariate Time-Series Model," Bank of Japan, *Discussion Paper Series*, No. 11, January 1982, and Kuroda, A. "Expected Inflation Rates and the Term Structure of Interest Rates," in Bank of Japan, *Monetary and Economic Studies*, Vol. 1, No. 1, June 1983.
5. There are a variety of other reasons for the systematic increase in Postal Savings Accounts. For

B. Variations in the Shares of Direct Financing and Indirect Financing

Next, we consider the reasons why the share of direct financing has grown relative to the share of indirect financing. As was explained earlier, the growth of direct financing has not been due to widespread fund-raising on the equity market, but rather to the large issues of government securities on the bond market. However, the government bond issues themselves are not a sufficient condition for increased direct financing. This is because if it is financial intermediaries that purchase a large amount of government bond issues, the direct/ indirect financing ratio does not change. Hence the fundamental causes of increased direct financing must be the reasons for which the final lenders of funds prefer holding government bonds directly rather than acquiring assets offered by financial intermediary institutions.

One type of bonds issued by the government of Japan—10-year long-term bonds and 5-year discount bonds—are underwritten by a syndicate of financial institutions. In addition, 2-4 year medium-term bonds are issued by tender or at a fixed rate at a public offering. Four possible reasons can be put forward as to why people prefer these two types of government bonds as compared with assets offered by financial intermediaries.

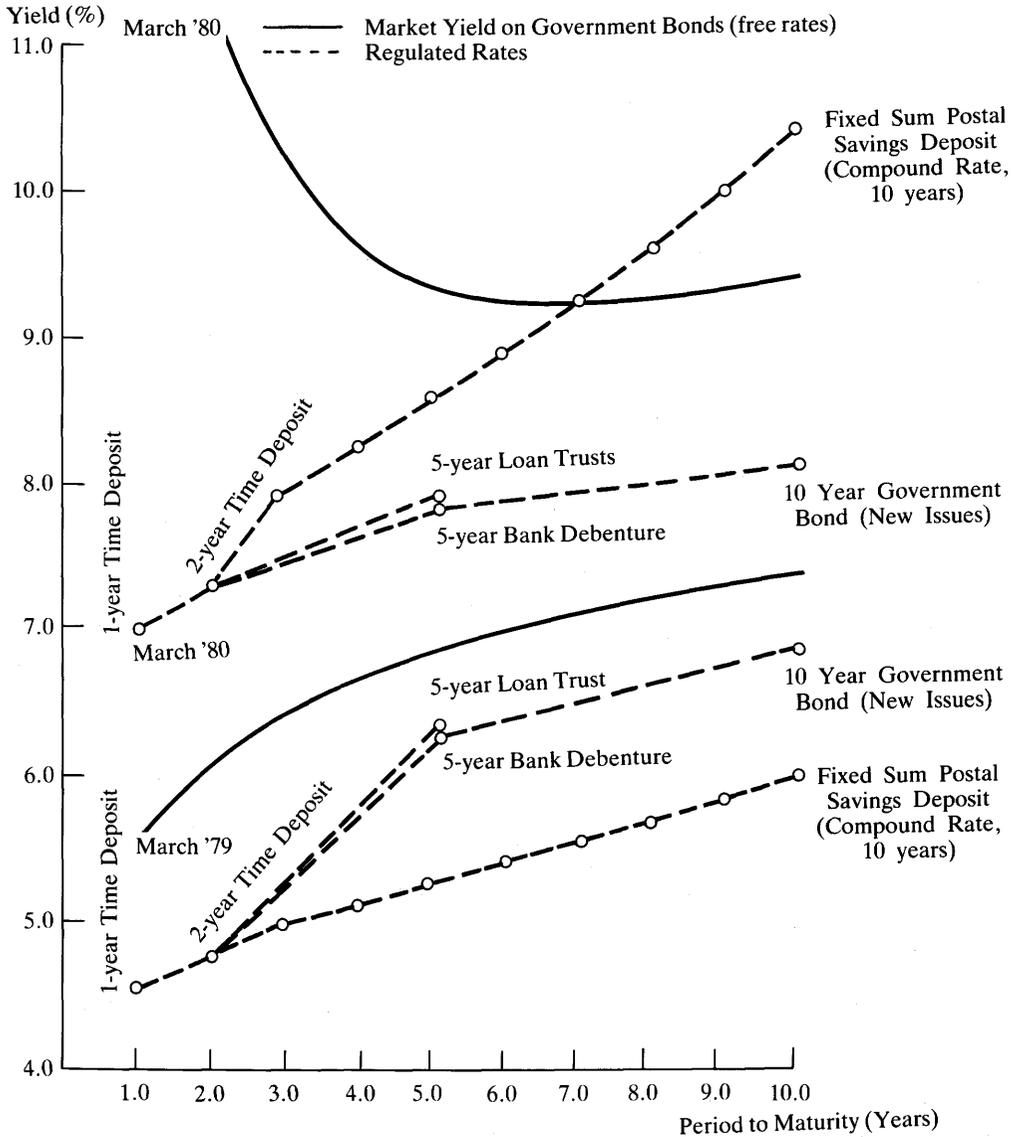
1) As set out in Section V.A.2) and in Chart 7, the yield curve of assets offered by financial intermediaries is upward sloping to the right, but the yield to new subscribers on 10-year government bonds is furthest to the right and always higher. Thus for the same reason as 5-year loan trusts and 5-year bank debentures are preferred to fixed-term time deposits (2 years and under), long-term government bonds (10 years) are preferred to fixed-term time deposits, loan trusts and bank debentures. Reflecting this, Table 4 shows that the share of securities brokers with the private non-financial sector as their customer in the underwriting syndicate is quite high.

However, as Chart 7 shows, only in times of monetary squeeze does the yield on fixed-sum postal savings deposits (which are in the same class of long-term assets) exceed the yield on long-term government bonds. Also, since the principal on government bonds may be at risk when sold before maturity, unless the original yield on government bonds exceeds by a certain margin the yields on fixed-term deposits and loan trusts (where the capital value on sales before maturity is not at risk), ordinary risk-averse investors will not prefer government bonds. In this sense, 2), 3) and 4) below give more important reasons for preferring government bonds for interest rate differential considerations.

details, see Rōyama, S. "Nihon no Kinyū Shisutemu", *Tokyo Keizai Shimposha*, 1982, Chapter 12 "Report on Discussions about Postal Savings" (Report, 1981: Discussions concerning the Appropriate Position of Public Sector Activity in the Financial Sphere.)

Chart 7 Yield Curves for Market Yields on Government Bonds and Regulated Interest Rates

March 1979 (easy money period)
and March 1980 (tight money period)



2) After large-scale issues of government bonds began in the late 1970s, the secondary market in government bonds developed rapidly, but as shown in Chart 7 the yields in that market frequently far exceeded the yields on assets offered by financial intermediaries. Especially in tight money periods, the term structure of market interest rates conformed to the theory by being downwards sloping to the right (inverted), which magnified the discrepancy between yields in the short and medium maturities. Further, in such tight money periods, the predominant expectation that yields would fall later enhanced the probability of capital gains in the future. For these two reasons, the ultimate lenders in such periods were strongly tempted to shift their funds from assets offered by financial intermediaries to long-term government bonds in the secondary market. The main sellers of long-term government bonds in the secondary market were city banks and local banks which together have a large share in the syndicate.

3) The tender-issue system for 2-4 year medium-term government bonds began in 1978. The yield in this market, as shown in Chart 8, was typically higher than the yields on comparable assets offered by financial intermediaries such as 2-year fixed-term time deposits, 5-year loan trusts and bank debentures. As a result the distribution of medium-term government bonds via the securities companies to the non-financial private sector was highly successful as shown in Table 4, and to that extent the preference for fixed-term time deposits, loan trusts and bank debentures was undermined.

4) Because the yield on Japanese government Treasury Bills is controlled at a low rate, the TB market has not developed, and the open money market did not exist in the early era of rapid economic growth. However, there was one financial innovation in the 1960s, the "gensaki" market equivalent to the US market in RPs, which got under way thanks to the inventiveness of the private sector. Particularly in the late 1970s (as discussed in Section II), with the faster accumulation of financial assets by the non-financial corporate sector and with the corresponding expansion in the secondary market for government bonds, the gensaki market developed very rapidly. Also, after 1979 the issue of negotiable CDs with freely-determined interest rates but subject to quantitative restrictions on the size of issue etc. was permitted. As a result of the development of the gensaki and CD markets, free open markets for short term funds played a significant role for the first time in Japan's financial system. The interest rates in these markets are, as shown in Chart 8, substantially higher than the rates on corresponding fixed-term deposits. Thus non-financial corporations reduced their holdings of fixed-term deposits (Table 2), replacing them with negotiable CDs and gensaki-type securities (negotiable securities, excluding equities), holdings of which rose proportionately. The shift to negotiable CDs does not affect the proportion of direct financing, but the shift to the gensaki market raises the share of direct financing and reduces the share of indirect financing.

Chart 8 Japan's Two-Tier Interest Rate Structure (June 1983)

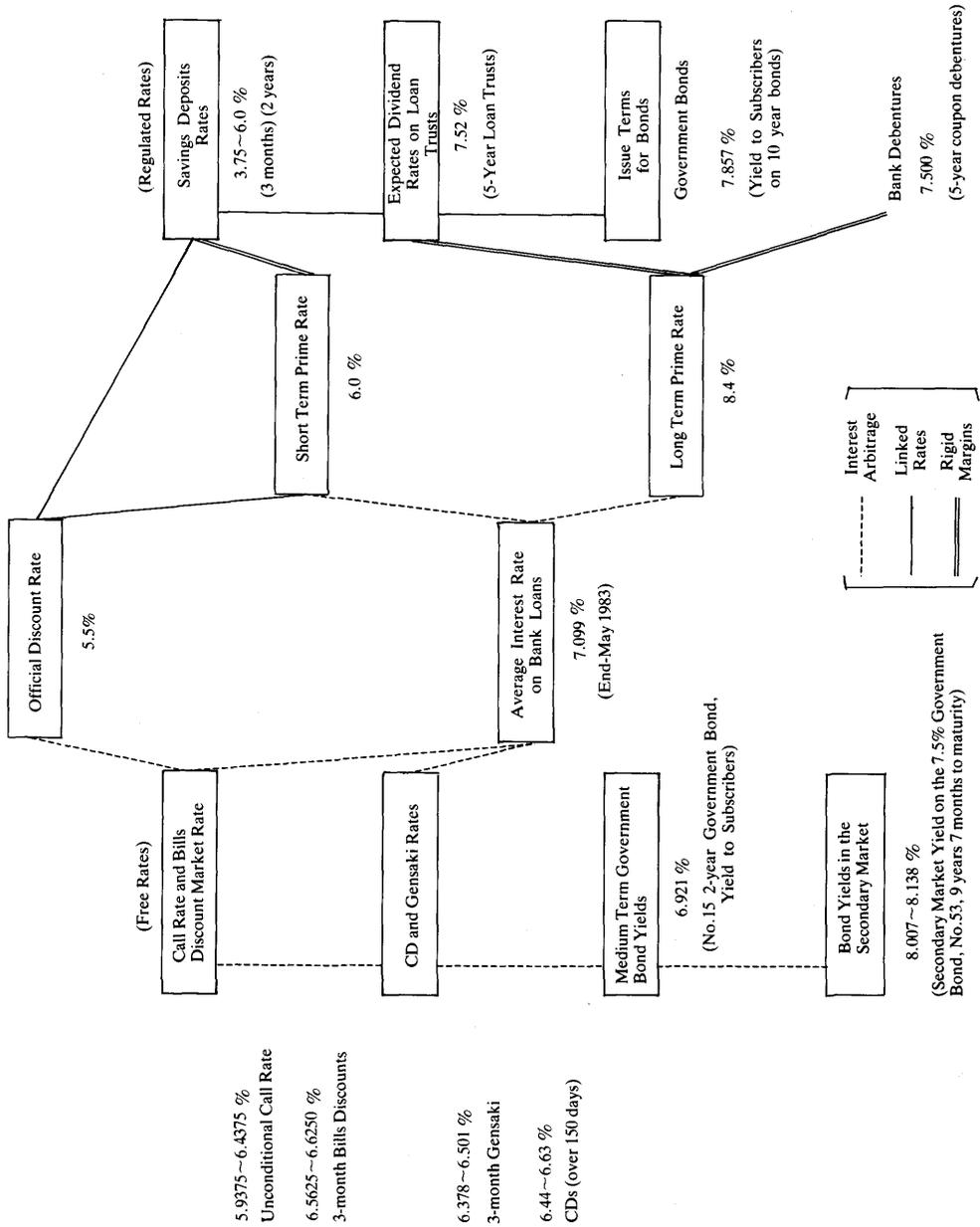


Table 4 Composition of Government Bond Issues

	(per cent)					
	Long term Government Bonds with Coupons (10 Years) and Government Discount Bonds (5 Years) issued via the Underwriting Syndicate		Medium Term Government Bonds with Coupons (2-4 years) issued by tender or at fixed rates to the public		* Others	Total
	Underwritten by Financial Intermediaries	Underwritten by Securities Brokers	Subscribed by Financial Intermediaries	Subscribed by Securities Brokers		
1975 Fiscal Year	93.2	6.8	0.0	0.0	0.0	100.0
1976	83.6	16.4	0.0	0.0	0.0	100.0
1977	73.6	26.4	0.0	0.0	0.0	100.0
1978	71.1	19.3	3.9	5.7	0.0	100.0
1979	78.3	12.1	5.9	3.7	0.0	100.0
1980	60.6	22.4	2.1	14.9	0.0	100.0
1981	47.6	14.4	3.3	24.6	10.1	100.0
1982	51.0	14.0	3.1	23.1	8.8	100.0

(Note) * : Direct Placements at Fixed Rates to Financial Intermediaries of Non-Marketable Long Term Government Bonds and Medium Term Government Financial Debentures.

VI. CONCLUSION

The year 1985 will mark an epoch in the Japanese financial system. In that year the first renewal of government borrowing in the form of 10-year long-term government bonds, the large-scale issues of which started in 1975 and have been continuing since, will commence, marking a dramatic increase in gross issue volume. Also, from around 1985 Nippon Telegraph and Telephone Public Corporation (NTT) will begin its INS (Information Network System) project, which is planned to spread out gradually across the country, bringing in the era of electronic banking.

In preparation for the major increase in the gross amount of government bond issues, the Ministry of Finance has permitted from April 1983 the retail selling at private financial institutions of new issues of 10-year government bonds, and it is reported to intend adopting the same policy for 2-4 year medium-term government bonds as from this autumn, and from next spring for the secondary market government bonds. If this occurs, the persistent trend towards less financial intermediation (from indirect to direct financing) mentioned in Section V, B, 1) 2) and 3) above will be speeded up even more by the participation of financial institutions themselves. Also, as the maturity dates for large volumes of government bonds approach an open money market approximating to a TB market will take shape, so that even without further expansion of the gensaki and CD markets, the increase in direct financing mentioned in Section V, B, 4) above will accelerate.

If under these circumstances controls and official guidance on interest rates on assets offered by financial intermediaries are continued along the lines of the current tendency of keeping rates artificially low, the decline in the share of indirect financing will probably continue further. On the other hand, if these controls and government guidance are abolished, or if they are changed to become flexible enough to match equilibrium rates in the free market, there may be some brake applied to the downward trend in the share of indirect financing. If the irrational term structure of interest rates is also reformed, the reasons for the changes within the indirect financing sector given in Section V, A, 2) and B, 1) may also cease to exist.

However, if the development by financial intermediaries of new instruments based on market interest rate criteria is permitted, it is not immediately clear how the shares of the direct financing and indirect financing sectors will move. Among financial innovations in the investment accounts, the securities firms can already offer gensaki instruments which are equivalent to RPs and medium-term government bond funds which are equivalent to MMMFs. On the other hand financial intermediaries can only offer large CDs. One key to how the market shares will move will be whether financial intermediaries will be able to offer a new kind of 'market-interest-related investment accounts'.

For the deposit banks, another factor is the arrival of electronic banking. Their main financial innovations for the transaction accounts have been the so-called Sōgō Kōza (“Deposit Combined Account”) and automatic cash dispensing/depositing machines. But, in future, with transaction instructions from terminals linked to INS, home banking or firm banking will become realistically feasible. Another important point will be whether automatic transfers between transaction accounts and investment accounts with market interest rates (like sweep accounts) or transaction accounts bearing market interest rates (like MMDAs or Super-NOW accounts) are permitted in Japan.

If the present controls on interest rates and official guidance are maintained, the change of financial system in the direction as analysed in Section V. (increased share of direct financing, decline of the banks’ share within the indirect financing sector) will continue further; if these controls are abolished and financial innovations are permitted, the financial system will again shift in a new direction. If there are to be changes whatever happens, it is desirable that those changes are in the direction of efficiency and fairness. Such a course would be gradually to reduce government controls and guidance and to permit financial innovations to go ahead while ensuring no extreme bias either between financial intermediaries and securities companies or between different types of financial intermediaries, and no serious instability in the financial system as a whole.⁶

6. Implications for monetary policy of these changes in the financial system is beyond the purpose of this paper. However, the author already discussed the subject in Suzuki, Y. “Interest Rate Decontrol, Financial Innovation, and the Effectiveness of Monetary Policy”, in Bank of Japan, *Monetary and Economic Studies*, Vol. 1, No. 1, June 1983.