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Japan's Financial Structure since the 1980s – in View of the Flow of Funds Accounts

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Abstract

The Bank of Japan, which has been releasing Flow of Funds Accounts fiscal year data on a 1993 SNA basis since 1990, has now retroactively converted earlier data running back to 1980 so that 1993 SNA basis time-series data are now available from 1980 to the present day. These revised long-term time-series data clearly show the dramatic changes in Japan's financial structure, in particular, the expansion of financial flows and growth of financial assets/liabilities during the late 1980s, and their contraction and deceleration in the 1990s. These changes and features since the 1980s, as seen from the Flow of Funds Accounts, are discussed below from two main aspects: the domestic nonfinancial sector and financial intermediaries.

(Changes and features of the domestic nonfinancial sector since 1980)

The financial investments and fundraising (financial flows) of Japan's nonfinancial sector show significant changes when comparing the 1980s with the 1990s and onwards. In the 1980s, the households sector was the largest fund providing entity. The private nonfinancial corporations sector ranked as the largest borrowing entity, but also invested large amounts of funds in the late 1980s. From the 1990s onwards, funds provision by the households sector gradually declined. The private nonfinancial corporations sector reduced its assets and liabilities, which had expanded in the 1980s, and the general government sector became the largest fund borrowing entity.

In terms of financial surpluses and deficits, during the 1980s the households sector maintained a large financial surplus and acted as the main fund providing entity while the private nonfinancial corporations sector expanded its financial deficit amid active business fixed investment.

Furthermore, in the late 1980s the private nonfinancial corporations sector, which was the largest fundraising entity, increased both fundraising and financial investment transactions to lift financial gains, and became one of the largest financial investment entities as well.

These changes in the 1980s expanded the total financial flows of the domestic nonfinancial sector on a large scale. The financial assets and liabilities of the domestic nonfinancial sector also increased substantially due to the expansion of financial flows

and the rise in stock and other financial asset prices. In the general government sector, the financial deficit turned to a financial surplus with the rise in tax revenues in the late 1980s.

In the early 1990s, while the households sector maintained its high financial surplus, the private nonfinancial corporations sector greatly reduced its financial deficit, mostly from a major contraction in business fixed investment. Meanwhile, the general government sector fell into a financial deficit because of declining tax revenues and increasing public investment. Amid these developments, the overall financial flows of the domestic nonfinancial sector declined sharply as private nonfinancial corporations reduced both fundraising and financial investment transactions.

From the mid 1990s, the households sector reduced its financial surplus due to a decline in savings rates, and the general government sector expanded its financial deficit as tax revenues diminished and social security related expenditures increased. On the other hand, the private nonfinancial corporations sector replaced the households sector as the leading financial surplus entity. The financial flows of the domestic nonfinancial sector decreased further as the nonfinancial corporations sector reduced its debt (borrowings) and kept financial investments at a low level.

Since the 1990s, the growth rate of the financial assets and liabilities of the domestic nonfinancial sector has slowed down due to this decrease in financial flows and a decline in financial asset prices.

In the private nonfinancial corporations sector, however, a large financial surplus pushed the difference between the financial assets and financial liabilities (excluding shares and other equities) above zero in FY 2003 for the first time since FY 1989. This demonstrates that financial balance sheet restructuring has been advancing.

(Structural change in Japanese financial intermediaries since 1980)

Since the 1980s, fundraising and investment by the domestic nonfinancial sector have mainly been handled by financial intermediaries. The proportion of funds directly invested and raised by the domestic nonfinancial sector has remained small.

Nevertheless, the structure of Japan's financial intermediaries has changed over the years. In the 1980s, private financial intermediaries were the main fund handlers, but in the 1990s this role shifted to public financial intermediaries. In the 1980s private financial intermediaries such as private depository corporations, which had the largest share of financial assets outstanding, were actively involved in financial intermediary activities, including the provision of loans via nonbanks (finance companies).

In the 1990s the weight of financial intermediary activities shifted from private financial intermediaries to public financial intermediaries. Among depository corporations, funds flowing into postal savings expanded while financial investment (flow) by private depository corporations diminished, mainly in the area of providing loans. Public financial institutions expanded their share of financial assets outstanding, with growth in areas such as insurance and pension funds (postal life insurance) and other financial intermediaries (public financial institutions). In other words, there was a shift in the flow of funds via financial intermediaries from the private sector in the 1980s to the public sector in the 1990s.

From FY 2000 to FY 2003, however, the weight of public financial intermediaries has slightly decreased, with a decline in the amount of funds flowing into postal savings and a contraction of the Fiscal Loan Fund.

Today, the fundraising of the domestic nonfinancial sector still centers round the public sector, but the amount of funds handled by public financial intermediaries has decreased. At private financial intermediaries, investments have shifted from providing loans to private nonfinancial corporations to providing credit to the government sector by purchasing securities.

I. Introduction

The Research and Statistics Department of the Bank of Japan compiles and releases the Flow of Funds Accounts (FFA) as comprehensive national financial statistics showing the movement of funds among economic entities such as households, corporations and the government, and the claim/debt relations among them. The FFA time-series data run back to 1954 on a flow basis in the financial transactions table and back to the end of 1953 on a stock basis in the financial assets and liabilities table.[1] However, because these statistics were initially compiled under the prior System of National Accounts 1968 SNA basis, the more recent statistics compiled under the new 1993 SNA basis were only released in the financial transactions table from FY 1990 and in the financial assets and liabilities table from FY 1989.[2,3] The Research and Statistics Department has now has now retroactively converted and released earlier data running back to 1980, albeit limited to the annual figures, so that continuous 1993 SNA basis time-series data are now available showing financial activities from 1980 to the present day.

Compared with the 1968 SNA basis data, because the 1993 SNA basis data expands the range of market valuation, the revised long-term time-series clearly show the dramatic changes in Japan's financial structure, in particular, the expansion of financial assets and liabilities in certain sectors during the late 1980s, and their subsequent leveling off and decline since the 1990s. This paper examines the changes in Japan's financial structure since the 1980s in view of the flow of funds accounts, broadly dividing the discussion into three periods: the 1980s, the 1990s, and the period since about FY 2000.[4]

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[1] The "financial transactions table" (flow table) records the increases and decreases in assets and liabilities that result from financial transactions among economic entities in the flow of funds during a given period of time. The flow table reveals fundraising and financial investment by economic entities over a given period of time. In contrast the "financial assets and liabilities table" (stock table) shows the financial assets and liabilities outstanding held by economic entities at the end of a given period, which result from financial trading activities. The stock table is the cumulative result of the flow trading, but in the actual statistics the amount outstanding at the end of the term is recorded, in principle, as the market value.

[2] The quarterly 1993 SNA basis statistics were released from the 1st quarter of 1998 in the financial transactions table and from the end of 1997 in the financial assets and liabilities table. Prior to that time, the statistics were only released on an fiscal-yearly or fiscal-year-end basis.

[3] See Box 1 regarding the differences between the 1968 SNA basis and the 1993 SNA basis flow of funds accounts.

[4] In certain sections, however, a somewhat more detailed examination is presented dividing the 1980s into the early and late 1980s in cases where, like the developments

II. Structural Changes and Features of the Domestic Nonfinancial Sector

In this chapter, the first section examines the changes in the financial surplus or deficit in the domestic nonfinancial sector and then, as background to that, considers the developments in the savings-investment gap, which is conceptually consistent with the financial surplus or deficit.

In addition to this real savings and investment behavior, the financial activities of the domestic nonfinancial sector are also influenced by such factors as financial market trends, systems changes, and the financial conditions and outlooks of the economic entities. Accordingly, the second section of this chapter then reviews the features of the financial investments and fundraising transactions (flow) and their outstanding amounts (stock) by sector under the financial surplus or deficit presented in Section 1.

1. Structural Changes in Financial Surplus or Deficit by Sector

(Financial Surplus or Deficit Developments by Economic Entity)

Reviewing the financial surplus or deficit by economic entity (Chart 1), the households sector maintained a financial surplus on the order of about 10% of nominal GDP from the 1980s through the beginning of the 1990s (peaking above 11% in FY 1986), but this surplus turned to a declining trend from around the middle of the 1990s and fell still further from FY 2000. As a result, since FY 1999 (with the sole exception of FY 2001), the households sector is no longer Japan's largest financial surplus entity.

Private nonfinancial corporations (with the exception of several periods) had been Japan's largest financial deficit entity from the 1980s through the early 1990s and posted a financial deficit approaching 9% of nominal GDP from around FY 1990 and became. From FY 1992, however, private nonfinancial corporations greatly reduced their financial deficit, which was essentially eliminated around the middle of the 1990s. They have subsequently shown a growing financial surplus since FY 1998.

The general government sector posted a financial deficit of about 4% of nominal GDP in the early 1980s, which subsequently contracted and turned to a financial surplus from

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in the real economy, the financial developments in the early and late 1980s show different characteristics, such as greater movements in the latter half of the decade.

FY 1987 through FY 1991 (and peaked at above 3% of nominal GDP in FY 1991). That trend then reversed to a deficit, which rapidly expanded so that the general government sector became Japan's largest financial deficit entity from around the middle 1990s (the recent level has been on the order of 7% of nominal GDP).[5,6]

(Background to the Changes in Financial Surplus or Financial Deficit)

In this way, the financial surplus or deficit trends by sector have greatly changed over the more than two decades which have passed since the start of the 1980s. We now consider the savings and investment developments (expressed as ratios to nominal GDP) of each economic entity under the System of National Accounts savings-investment gap (financial surplus = net savings; financial deficit = excessive investment), which is conceptually consistent with financial surpluses or deficits.[7]

In the households sector (Chart 2-1(1)),[8] savings has been on a declining trend ever since the 1980s, while investment decreased in the late 1980s, rose in the early 1990s, and has been gradually declining thereafter. The background as to why households sector investment declined in the late 1980s and rose in the early 1990s was largely because the sector's net land sales grew in the late 1980s and then eased off in the early 1990s (Chart 2-1 (2)). In other words, amid the decline in households sector savings, investment from land sales contracted from the late 1980s through around FY 1990 resulting in a high savings-investment gap, but with the subsequent decline in net land sales the savings decline was reflected in the reduced savings-investment gap.

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5 Because this paper focuses on the developments in the domestic sector, discussions of the features of the overseas sector are limited to comments in the footnotes.

6 The overseas sector was a financial surplus entity in FY 1980, but has been a financial deficit entity ever since FY 1981 (posting the largest deficit, which exceeded 4% of nominal GDP, in FY 1986). In the Flow of Funds Accounts, the overseas sector financial deficit corresponds to the overall financial surplus of the domestic sector, including financial institutions. The overseas sector financial surplus or deficit of the Flow of Funds Accounts should equal the total of financial account and changes in reserve assets of the Balance of Payments. However, considering that errors and omissions arise mainly from the financial account, the figures are made to equal the sum of current account and capital account in the actual statistics.

7 Regardless, there is a divergence between the actual savings-investment gap and the financial surplus or deficit figures. See Box 2 for the background to this differential.

8 In Chart 2, "gross savings, etc." = savings (current income < compensation of employees, etc.> - current expenses <consumption expenditure> before deducting consumption of fixed capital) + net receipt of capital transfers, and "gross investments" = gross fixed capital formation + changes in inventories + purchases of land (net) .

Next, in the private nonfinancial corporations sector (Chart 2-2(1)), the large increase in investment from the late 1980s through around FY 1990 expanded the negative savings-investment gap (whereby investment exceeds savings). Over that period, in addition to an increase in gross fixed capital formation, the purchases of land (net) by the private nonfinancial corporations sector (opposite to the sales of land (net) by the households sector) was a large positive factor. The reversal whereby investment by the private nonfinancial corporations sector was then sharply reduced in the early 1990s led to a great reduction in this negative savings-investment gap. The sector's savings-investment gap remained near zero from the late 1990s, and has now turned positive with the recent trend toward increased savings.

In the general government sector (Chart 2-2 (2)), investment was generally restrained throughout the 1980s while savings greatly increased from higher tax revenues (especially during the late 1980s), causing a big rise in the savings-investment gap. This trend, however, reversed in the early 1990s as the gap turned negative with a large decline in savings and an increase in investment substantially. In the late 1990s, while general government sector investment decreased, savings declined markedly, further increasing the negative savings-investment gap. Since the end of the 1990s, while investments have also been further restrained, the general government sector has posted a large negative savings-investment gap. Apparently the background to this includes a declining savings trend since the 1990s, with stagnant tax revenues and increased social security expenditures, while investments, which were at a high level in the early 1990s reflecting large-scale economic stimulus measures, became restrained overall, including investments by local governments.[9]

2. Domestic Nonfinancial Sector Financial Investments and Fundraising

(1) Households sector Developments

(Households sector Financial Investments)

Looking at the overall developments (Chart 3-1), after increasing throughout the late 1980s, households sector financial investments (flow) have been declining since the

[9] The overseas sector has posted a negative savings-investment gap (net worth from savings and capital transfers), reflecting current account trends, ever since FY 1981.

1990s, with the financial surplus contracting from around the middle of the 1990s as explained in Chapter II.1 above[10], and have declined even further since FY 2000.

Next looking at the breakdown of financial investments (flow), as shown above in Chart 3 (1), during the 1980s the greatest contribution came from currency and deposits. Insurance and pension reserves also made a large contribution, and securities other than shares show some contribution as well. The breakdown of securities other than shares (Chart 3(2)) shows that trust beneficiary rights, investment trusts, and bank debentures contributed to the increase.[11] Share prices were firm over the 1980s (especially during the latter 1980s), but the financial investments (flow) of the households sector were relatively small and the sector did not purchase that many shares on a net basis. Since the 1990s, currency and deposits combined with insurance and pension reserves have accounted for the majority of households sector investments, indicating a reduced appetite for risk assets.[12] Investments in insurance and pension reserves have increased more or less consistently, but the rate of increase has slowed from the latter 1990s with the decline in assumed interest rates and the maturity of single premium endowment insurance, which greatly increased during the latter 1980s.

Meanwhile, financial investments (flow) in securities other than shares suddenly contracted and has generally been negative since the middle 1990s. Among such

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[10] The households sector had a high level of financial surplus at the beginning of the 1990s, but financial investments (flow) subsequently declined together with a decline in fundraising (flow). Over this period, as explained below, the trend toward spread transactions (fundraising combined with financial investment) was particularly pronounced among private nonfinancial corporations, but was also apparently evident in the households sector (including proprietorships).

[11] A series of new financial products were placed on sale during the 1980s including the Medium-term Government Securities Fund (1980), the "Big" (loan trusts which pays compound interest at maturity: 1981), the "Wide" (bank debenture with lump-sum interest payment at maturity: 1981), and the "Hit" (jointly operated designed money trusts <one month grace period> : 1985).

[12] Thus, currency and deposits has been the largest financial investments item during most periods since the 1980s, but the breakdown of currency and deposits (Chart 3(3)) differs between the period up through the early 1990s and the period thereafter. Specifically, time deposits were the main item up through the early 1990s, but since the middle 1990s the contribution of liquid deposits has been rising with the continuous decline in interest rates and the partial removal of the blanket guarantee of deposits insurance. Especially since FY 2000 time deposits have continued to decrease and the shift toward liquid deposits has grown even stronger. Foreign currency deposits have shown a relatively high growth rate since the end of the 1990s, but still make only a limited contribution to overall households sector investments.

investments, the decline in trust beneficiary rights and bank debentures has been specially prominent.[13] The financial investments (flow) in shares and other equities has become relatively small overall since the 1990s amid the stagnation in stock prices.

Next, we review the (monetary basis) levels of financial assets outstanding held by the households sector, which have accumulated as a consequence of these households sector financial investments (flow) (Chart 4(1)).[14] Households sector financial assets totaled ¥328 trillion in FY 1979, and generally grew at a high annual rate of more than 10% throughout the 1980s to surpass ¥1,000 trillion in FY 1990. This increase resulted from the high level of financial investments (flow) combined with the valuation gains from the increase in the prices of shares and other equities. Households sector financial assets outstanding continued to rise during the 1990s, and peaked at ¥1,420 trillion in FY 1999.[15] The average annual rate of increase during the 1990s was about 4%, which is a much slower pace compared with that of the 1980s. The rate of increase slowed because the amount of the financial surplus contracted compared with the 1980s, and because appraised values declined under stagnant share prices. Since FY 1999, households sector financial assets have generally remained flat amid a further decline in the financial surplus, although there has been some fluctuation caused by changing share prices.[16]

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13 In contrast, while financial investments in investment trusts declined conspicuously during the early 1990s, they still have had a positive contribution since FY 1998 except for FY 2001. Government bonds have had a positive contribution since FY 2000. There have also been important developments for financial investments in investment trusts and government bonds since FY 1998. The prohibition on bank window sales of investment trusts was removed (in 1998), stock-index linked listed investment trusts (ETFs) were listed (in 2001), real estate investment trusts (REITs) were listed (also in 2001), and government bonds for individuals were issued (in 2003).

14 Because financial assets and liabilities outstanding are, in principle, valued at the end of each period, the differential between the figures at the end of a given period and at the end of the prior period does not necessary match the flow transaction amounts during that period. Accordingly, the Flow of Funds Accounts prepares "Reconciliation Table" which records this differential between the flow and stock figures. While this differential may be viewed as an adjustment amount to reconcile the flow and stock figures, it may also be viewed as the profit or loss on financial asset holdings due to price changes during the period.

15 On a quarterly basis, the historical peak was ¥1,432 trillion at the end of June 2001.

16 The households sector net financial position (differential between financial assets and liabilities outstanding) has mostly reflected these developments in financial assets outstanding. Under its long-term financial surplus, the households sector is the greatest net asset entity. During the 1980s, the households sector's net financial position rose (from about 1 times nominal GDP in FY 1980 to about 1.7 times GDP in FY 1988) as a result of the financial surplus combined with the rise in market prices. From the end of

Looking at this in terms of the composition of household financial assets (Chart 4(2)), during the 1980s the component ratio of currency and deposits declined while the component ratios of investment trusts, shares and other equities, and insurance and pension reserves rose. Since the 1990s, the component ratios of currency and deposits and of insurance and pension reserves have been on a rising trend, while the component ratios of trust beneficiary rights, bank debentures and other bonds, and shares and other equities have declined. Through FY 2003, the increase in currency and deposits has been particularly outstanding. These developments are the result of the households sector financial investments (flow) and of fluctuations in stock prices.

(Households sector Fundraising)

Next, reviewing the developments in households sector fundraising (flow) (Chart 5), fundraising by households was around 4-5% of nominal GDP in the early and middle 1980s, but greatly increased in the late 1980s and peaked at over 9% in FY 1989. The breakdown shows that housing loans and consumer loans increased in the late 1980s amid firm housing investment and consumption, and that other business-like borrowings[17] also contributed to the increase. This fundraising was apparently used, in part, for increased financial investments and the purchase of golf course memberships. As for land investments, as explained above, the households sector was a net seller of land over this period (while corporations were net purchasers).

Households sector fundraising (flow) sharply contracted in the early 1990s, expanded slightly in some phases around the middle 1990s, but then resumed its decline and has remained negative since FY 2000. Looking at the breakdown, housing loans made a growing contribution during the 1990s, but have remained flat since FY 2001. Business-like borrowings fell sharply in the early 1990s, and recovered somewhat in the middle 1990s. Since FY 2000, however, there has been a marked trend toward the

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the 1980s through the early 1990s, the financial surplus was a positive factor, but reconciliation factors had a large negative influence. Since then, the net financial position gradually was increased by the financial surplus as the main factor and rose to about 2 times nominal GDP (¥1,002 trillion) in FY 1999. Since FY 2000, on average households sector financial position have remained more or less flat as the financial surplus level has declined and the contribution of reconciliation factors via share price fluctuations has become more substantial.

[17] The Flow of Funds Accounts includes the business-like borrowings of proprietors in households sector borrowings.

repayment of these loans, and thus they have come to account for a large proportion of the overall negative households sector fundraising (flow) in recent years.

(2) Private Nonfinancial Corporations Sector Developments

(Private Nonfinancial Corporations Sector Financial Investments)

Financial investments (flow) by private nonfinancial corporations (Chart 6(1)) ranged from 4-10% of nominal GDP through the middle 1980s, rose sharply in the late 1980s, and peaked at about 19% in FY 1989. In FY 1988 and FY 1989, the financial investments of private nonfinancial corporations even surpassed those of the households sector. Reviewing the breakdown, amid the vibrant real economic activities during the bubble economy, trade credits and foreign trade credits[18] expanded greatly, and the growth in currency and deposits also contributed. While the increase in currency and deposits may be partially attributed to the need to secure sufficient liquidity for trading settlements, active spread transactions (such as taking margins by combining low interest rate fundraising with high interest rate investments)[19] also apparently contributed. During this period, investments in shares and other equities and in securities other than shares also rose. With a bullish outlook on the future financial environment, the private nonfinancial corporations actively invested in securities with an aim toward securing capital gains.

Since the 1990s, financial investments (flow) by private nonfinancial corporations have greatly declined as trade credits and foreign trade credits have been on a downward trend with the stagnation of real economic activities following the collapse of the bubble economy, and because of the sharp contraction in the kind of spread transactions described above. The fluctuations in these financial investments have generally been in accordance with the business cycle, as trade credits and foreign trade credits, and

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[18] Trade credits and foreign trade credits are claims and liabilities which emerge among nonfinancial entities along with the regular trade in goods and services. Specifically, these include accounts receivable, accounts payable, notes receivable and notes payable.

[19] The spread transactions included, for example, fundraising by issuing CP coupled with investments in large-lot time deposits (incidentally, the liberalization of interest rates on large-lot time deposits began in 1985, and the prohibition on the issuance of CP was lifted in 1987). During this transition period to liberalized interest rates, interest rates rose through the end of the 1980s, so corporations could utilize relatively inexpensive fundraising methods and invest the funds obtained in profitable financial assets, and the use of this so-called “financial engineering” became very active.

currency and deposits have risen during business recovery phases (FY 1994-1996, FY 1999-2000, and FY 2002-2003).

(Private Nonfinancial Corporations Sector Fundraising)

Fundraising by the private nonfinancial corporations sector (flow) (Chart 6 (2)) was on the order of 10% of nominal GDP through the middle 1980s, greatly increased in the late 1980s and peaked at around 25% in FY 1989. During the latter 1980s, while their financial deficit expanded, private nonfinancial corporations had a robust funds demand for investment in facilities and land, and also conducted a large volume of spread transactions. Looking at the breakdown, in the late 1980s loans, trade credits and foreign trade credits, shares and other securities (equity finance), and securities other than shares (industrial securities, external securities issued by residents, CP, etc.) all increased.[20]

From the 1990s, however, private nonfinancial corporations sector fundraising (flow) sharply decreased with the stagnant funds demand and the termination of spread transactions at the start of the 1990s. The net fundraising has remained negative (loan repayment) since FY 1996.

Looking at the breakdown, all of the fundraising items show a declining trend. Since FY 1999, there has been a marked repayment of loans by private nonfinancial corporations in accordance with their financial restructuring policies (reduction of liabilities via balance sheet adjustments).

Next, reviewing the financial liabilities outstanding (stock) held by the private nonfinancial corporations sector, which have accumulated as a consequence of transactions (flow) described above[21] (Chart 7(1)), these liabilities increased during the

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[20] The background to these developments included financial liberalization (such as the interest rate liberalization mentioned in Footnote 19) and the influence of internationalization. Specific government policies included the liberalization of Euroyen loans to Japanese residents (short-term loans were liberalized in 1984), the easing of the issuance guideline standards for uncollateralized convertible corporate bonds (from the middle 1980s), and the removal of the prohibition on introducing warrant bonds and warrants issued overseas into Japan (1986).

[21] Here, to exclude the influence from market price fluctuations, book value and face value figures are used for borrowings, securities other than shares, and shares and other equities.

1980s (especially during the late 1980s), held more or less steady during the early 1990s, and have been declining since the late 1990s.

Reviewing the composition of these financial liabilities outstanding (Chart 7(2)), trade credits and foreign trade credits greatly declined during the 1980s, and have retained a component ratio of about 20% since the 1990s, while the component ratio of shares and other equities has been on a rising trend. In contrast, borrowings had a component ratio of more than 50% from FY 1980 through FY 1999, but have since declined reflecting management efforts to reduce debt, and fell to the lowest level of 44% in FY 2003.[22]

(Net Financial Position of Private Nonfinancial Corporations)

Next we review the developments in the net financial position (the differential between financial assets and financial liabilities outstanding) of private nonfinancial corporations (Chart 9(1)). The net financial position of private nonfinancial corporations[23] rose through the late 1980s to become positive, but then declined sharply from the end of the 1980s through the early 1990s. The net financial position of private nonfinancial corporations has basically remained level thereafter, but it did rise in FY 1997 - FY 1999 and again in FY 2003, when it turned positive for the first time since FY 1989.

Dividing these developments into financial transaction (financial surplus or deficit) factors and reconciliation factors (Chart 9(2)), while financial transaction factors had a negative influence from the 1980s through the early 1990s, reconciliation factors (the contribution of share price rises, etc.) had a positive effect from FY 1983 through FY 1988. From the end of the 1980s through the early 1990s, the net financial position declined because of a combination of financial transaction factors and the financial asset valuation loss from stock price declines. Thereafter, as the financial surplus or deficit generally held around zero in the middle 1990s, the fluctuations in the net financial position mostly reflected reconciliation factors (changes in the valuation of shares, etc.). Private nonfinancial corporations have generally recorded a rising net financial position

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22 Comparing these developments with those at public nonfinancial corporations (Chart 8), while private nonfinancial corporations posted high growth in fundraising (flow) and fundraising outstanding during the late 1980s, public nonfinancial corporations posted high growth in fundraising (flow) and fundraising outstanding since the early 1990s. In this manner, a distinct shift took place in corporate fundraising from the private to the public sector.

23 Here financial liabilities outstanding do not include shares and other equities.

since FY 1998 under a rising financial surplus.[24] As noted above, the net financial position turned positive in FY 2003, indicating progress in the financial balance sheet adjustment efforts of private nonfinancial corporations.

(3) General Government Sector Developments

(Financial Surplus or Deficit of Each General Government Entity)

The general government sector comprises the three entities: central government, local governments, and the social security fund. Before reviewing the general government sector financial investments and fundraising developments, we first confirm the financial surplus or deficit of these entities (Chart 10). As noted in Chapter II.1 above, overall the general government sector posted an improving financial position (expressed as a ratio to nominal GDP) from the middle 1980s through the early 1990s, but this trend then reversed. Looking at the individual entities, the financial developments at local governments and the central government were basically the same as those of the entire general government sector, with the central government making a great contribution. Meanwhile, the social security fund posted a financial surplus throughout the 1980s and 1990s, but turned toward a decline from the late 1990s with the advance of the aging of society, and has remained nearly even (showing neither surplus nor deficit) since FY 2000. Next, we consider the characteristics of the financial investments and fundraising (flow) and of the financial assets and liabilities outstanding of the three general government sector entities under these financial surplus or deficit conditions.[25]

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[24] However, this was cancelled by the reconciliation factors from stock price declines in FY 2000 – FY 2002, which left the net financial position figures basically flat over those years.

[25] Confirming the changes in the net financial position of the general government sector, in connection with these financial surplus or deficit trends, shows that because general government sector holdings of shares and other equities are small compared with those of the household and private nonfinancial corporations sectors, the changes in the financial position of the general government sector are better explained by changes in transaction factors (financial surplus or deficit), primarily of the central government, than by reconciliation for changes in assessed values. The net financial position of the general government showed a reduction in net liabilities from the late 1980s through the early 1990s, but general government sector net liabilities have increased ever since reflecting large government budget deficits.

(Central Government Sector Fundraising)

The liabilities outstanding of the central government (Chart 11) increased through the middle 1980s, temporarily leveled off from the middle 1980s through the early 1990s, and continued to increase further thereafter. These developments correspond to the above-mentioned reduction of the financial deficit and switch to a financial surplus from the middle 1980s through the early 1990s (the positive turn in government financial conditions) and the subsequent increase in the financial deficit (the expansion of the government budget deficit). Looking at the breakdown of the liabilities outstanding, the overall developments can almost all be explained by the developments in government bonds and FBs (financing bills).

(Local Government Financial Investments and Fundraising)

Local government financial investments (flow) as a ratio to nominal GDP (Chart 12(1)) rose during the late 1980s, declined in the early 1990s, and have since remained at a low level. The breakdown shows an increase in currency and deposits from firm tax revenues in the late 1980s, reversing to a decline in currency and deposits in the 1990s. In contrast, local government investments in shares and other equities remained positive throughout the 1990s.

On the other hand, a review of the fundraising developments in terms of changes in liabilities outstanding (Chart 12(2)) shows that the rate of increase in liabilities outstanding eased during the late 1980s but has greatly accelerated since the 1990s. The breakdown shows that loans by public financial institutions and bonds (local government bonds) account for the majority of this increase.

(Social Security Fund Financial Investments)

Social security fund financial investments (flow) remained around 2-3% as a ratio to nominal GDP from the 1980s (Chart 13), reflecting an ongoing financial surplus, but started declining in the late 1990s and have been negative since FY 2002.[26] The

[26] The financial investments (flow) have been decreasing since FY 2002, despite a continued financial surplus (see Chart 10, above). While a financial surplus or deficit is the differential between financial investments (flow) and fundraising (flow), over this period fundraising (flow), mostly borrowings, declined more than financial investments.

breakdown shows that through the 1990s the investments were mostly deposits with the former Trust Fund Bureau (deposits with the present Fiscal Loan Fund), but with the increase in self management under the reform of the Fiscal Investment and Loan Program,[27] deposits with Fiscal Loan Fund have been declining since FY 2001 and those monies are being shifted into securities.

Summarizing the above developments in overall domestic nonfinancial sector financial investments and fundraising (flow), during the 1980s the households sector was the main fund providing entity, and the private nonfinancial corporations sector, which had been the largest fundraising entity, also became a fund providing entity, especially during the latter 1980s with its expansion of spread transactions. This increased the level of financial investments and fundraising overall. From the 1990s, however, the overall level of financial investments and fundraising declined sharply as private nonfinancial corporations ceased their spread transactions. Additionally, since the general government sector became the largest fundraising entity in the middle 1990s, overall financial investments and fundraising (flow) have been falling further as the level of households sector financial investments has declined and financial investments by private nonfinancial corporations have been restrained under corporate debt reduction (repayment) policies. In this way, there have been great fluctuations in the financial investments and fundraising of the domestic nonfinancial sector.[28]

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27 See Box 3 for information regarding the reform of the Fiscal Investment and Loan Program.

28 Looking at the developments in the overseas sector, it has been posting financial deficit since Japan's current account balance turned to surplus in FY 1981, and the fluctuations in this overseas sector surplus or deficit have been small compared with those of the domestic sectors. Major changes do appear, however, when we examine the transactions (flow) of overseas funds investment (the capital influx from Japanese fundraising overseas) and overseas fundraising (the capital outflow from investing Japanese funds abroad), Specifically, financial trading with the overseas sector grew active during the late 1980s. Especially, financial investments and fundraising (flow) both expanded from FY 1986 (when the offshore market was established) through FY 1989, centered around borrowings (such as the increase in Euroyen impact loans <borrowings from overseas branches of Japanese banks > reflecting the strong funds demand of Japanese private nonfinancial corporations during the late 1980s). From the 1990s, however, the levels of both financial investments and fundraising declined, in part reflecting the reduction of spread transactions by the banking sector. Since the 1990s, in terms of funds investment the overseas sector has been a Japanese stocks purchasing entity, and in terms of fundraising the overseas sector has shown a rising fundraising in securities (Japanese overseas portfolio investment).

III. Structural Changes and Features of Financial Intermediaries

In the previous chapter we primarily reviewed the financial investments and fundraising developments in the domestic nonfinancial sector. In this chapter, we examine the flow of funds via financial intermediaries and summarize the structural changes and features on Japan's financial intermediaries.

1. Structural Changes of Financial Intermediaries

(Overall Image of Japan's Flow of Funds)

Charts 14-1 and 14-2 combine the financial assets and liabilities outstanding of each entity to present a bird's-eye view of Japan's flow of funds, centered around financial intermediaries.[29] These charts present the figures for FY 1979, FY 1989, FY 1999 and FY 2003. The arrows on the right-hand side of the charts indicate the flow of the financial investments of the domestic nonfinancial sector, and show that funds management via deposits with financial intermediaries has a large weight. The arrows on the left-hand side of the charts show that financial intermediaries use the deposits and other funds that they receive for investments such as loans and securities in the domestic nonfinancial sector and other areas. There is also a fundraising route directly from the domestic nonfinancial sector without passing through the financial intermediaries, which are in the middle of the figures. We now use other charts to consider these points in a bit more detail.

Chart 15(1) presents the composition of the total financial assets outstanding of the domestic nonfinancial sector to consider the details of these financial investments, which appear on the right-hand side of Charts 14-1 and 14-2. The weight of deposits, which has been the highest component ratio, declined slightly through the late 1980s, but has recovered since the 1990s. The figures show that while the weight of insurance

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29 Financial intermediaries are institutions that by incurring liabilities on their own account, it 1) accepts risk on their own account and 2) transforms the nature of funds in terms of factors such as liquidity and market risk. Under the Flow of Funds Accounts, financial intermediaries include "Depository corporations" (banks and other institutions that accept deposits and provide loans), "Insurance and pension funds" (which invest in insurance and pension related funds), "Other financial institutions" (which include securities companies, non-banks, governmental financial institutions, etc.), and "Central bank". But this paper examines financial intermediaries excluding the central bank.

and pension reserves is rising, the weight of credits and trade credits is on a declining trend. As seen in the previous chapter, the weight of shares and other equities is greatly affected by fluctuations in share price valuations. Also, the combined component shares of all the financial assets outstanding of the domestic nonfinancial sector which correspond to the liabilities of financial intermediaries (that is the combined shares of deposits, insurance and pension reserves, and deposits with Fiscal Loan Fund) rose from 45-50% around FY 1980 to 55-60% around FY 2000. Considering that some of the investments in securities are also via financial intermediaries, it is clear that financial intermediaries have a very large presence in Japans flow of funds.

Chart 15(2), which corresponds to the left half of Charts 14-1 and 14-2 (domestic nonfinancial sector fundraising) further shows that the center of Japan’s flow of funds is via financial intermediaries, and not directly from the domestic nonfinancial sector.[30] In other words, looking at the component ratios of the domestic nonfinancial sector’s fundraising routes (outstanding basis), the share of fundraising via financial institutions is overwhelmingly large and growing, while the weight of direct fundraising from the domestic nonfinancial sector is quite small.[31]

To summarize, direct investments and fundraising by the domestic nonfinancial sector account for only a small percentage of Japan’s flow of funds, while funding via financial intermediaries constitutes the core. Accordingly, we next examine the changes in the composition of intermediation via these financial intermediaries.

(Changes in the Component Ratios of Financial Intermediaries)

Charts 16(1) and 16(2) present the component ratios of financial assets and financial liabilities outstanding held by different kinds of financial intermediaries. While

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30 Chart 15(2) is based on the reference table “Channels of Fundraising by the Nonfinancial Sector” , prepared by reorganizing the Flow of Funds Accounts. The financial assets and liabilities table of the Flow of Funds Accounts is on a market value basis, but in this reference table, the loans, securities other than shares, and shares and other equities figures are on a book value or face value basis.

31 Here, fundraising via financial intermediaries is defined as the amount of fundraising by the domestic nonfinancial sector through the intermediation activities of financial institutions (this includes securities holdings in addition to loans), and direct fundraising from the domestic nonfinancial sector is defined as the amount of fundraising by the domestic nonfinancial sector in the form of securities other than shares, and shares and other equities from the domestic nonfinancial sector.

depository corporations have maintained the highest shares of both assets and liabilities throughout, those shares declined during the 1980s and 1990s amid a rise in the component ratios of insurance and pension funds and of other financial intermediaries.

This increase in the component ratio of insurance and pension funds reflects the rising share of insurance and pension funds in the financial investments of the domestic nonfinancial sector (households) (see Charts 15(1) and 4(2), above).

The increase in the share of other financial intermediaries mostly originated from the growing weight of nonbanks etc. in the 1980s and of public financial institutions in the 1990s.

While the detailed developments by type of financial instituitions are considered in the next section, the key features are as follows. During the 1980s, nonbanks (finance companies)[32] raised funds mostly through borrowings from depository corporations and other private financial instituitions, and engaged in active lending. During the 1990s, funds from the domestic nonfinancial sector collected in postal savings, more than in private financial institutions, and were entrusted to the former Trust Fund Bureau. This had a great influence on the increase in loans using these funds by public financial institutions.

Dividing the component ratios of the financial assets and liabilities outstanding of financial intermediaries into those held by private and public institutions (Chart 16(1) and 16(2), above), we find that while the share of private financial institutions rose during the 1980s, it was the share of public financial institutions that rose during the 1990s. So like the changes in the composition of fundraising entities seen in the previous section, the flow of funds through Japan's financial intermediaries shifted from moving through private financial intermediaries in the 1980s to moving through public financial intermediaries in the 1990s. However, compared with FY 1999 the FY 2003 financial assets and liabilities outstanding figures show declines in the weights of both postal savings and public financial institutions. This is because the flow of funds into

[32] In the Flow of Funds Accounts, nonbanks are defined as private financial institutions that raise funds using means other than deposits and deposit-like products, and implement financial investments through loans, etc. (including holding underlying loan rights and purchasing liquidated claims) These include financing companies that are engaged in the loan business as well as structured-financing companies and trusts engaged in the securitization of claims.

the postal savings is slowing, and because the weight of fiscal investment and loan funds has been declining since the reform of the Fiscal Investment and Loan Program.[33]

We now proceed to examine the detailed features of the financial investments by different types of financial institutions in the next section.

2. Financial Investments by Financial Institutions Sector

(1) Depository corporations Developments

As noted above, while depository corporations still have the largest share among financial intermediaries, their share has declined throughout the 1980s and 1990s. Considering that the provision of funds through lending to non-banks (finance companies) was very active during the 1980s, especially the later 1980s, the actual decline in the presence of depository corporations was probably not as great as the decline in share suggests. During the 1990s, the relative position of private financial institutions declined. The decline in the share of private depository corporations and the rise in the share of the postal savings were particularly conspicuous.

Looking at the actual developments in the financial investments (flow) of depository corporations (Chart 17(1)), when postal savings are excluded, the investments, centered around loans, remained at a high level during the 1980s but have sharply decreased since the 1990s. The breakdown of the financial investments (flow) indicates a great influence from the increase in loans during the 1980s and the subsequent decrease during the 1990s. Since FY 1999, there has been a distinct shift from loans to government bonds and financing bills.[34] While this decrease in financial investments (flow) during the 1990s can largely be attributed to the sluggishness in the overall flow of funds, it does stand out in comparison with the steady level maintained by the postal savings over the same period. However, the acceptance of deposits (liabilities) by the postal savings has been negative since FY 2000, while the financial investments (flow) have also remained negative.

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33 See Box 3 for information regarding the reform of the Fiscal Investment and Loan Program.

34 See Box 4 for the developments in the composition of government bond and local government bond holders.

Looking at the year-to-year changes in loans by depository corporations (excluding postal savings) (Chart 17(2)), which have played a central role in their provision of funds, the high rate of increase through the latter 1980s was followed by a sudden decline from the 1990s, and the flow has been negative since FY 1998. The developments by borrower, excluding loans to the general government and to public nonfinancial corporations, all show basically the same trends. Two particularly outstanding developments are that loans to financial institutions (mostly nonbanks) were negative almost all through the 1990s, and loans to private nonfinancial corporations have been negative during most terms since the middle 1990s (and declining even more conspicuously since FY 2000). Loans to the overseas sector sharply expanded after the offshore market was established in FY 1986, but have been negative during most terms since the 1990s.[35]

(2) Insurance and Pension Fund Developments

Insurance and pension funds have increased their share among financial intermediaries over the past 20 some years (Charts 16(1) and 16(2), above). Here, we examine the features of insurance and pension fund investments.

First, reviewing the developments in financial investments (flow) separating insurance into private insurance (private life and non-life insurance and mutual aid insurance) and postal life insurance, etc. (Chart 18(1)), both private insurance and postal life insurance, etc. maintained high levels during the 1980s, but from the 1990s the level of private insurance declined while postal life insurance held firm. Thus in the insurance field the share of the public sector rose during the 1990s.

Next, looking at the breakdown of financial investments (flow) by private insurance (Chart 18(1), above), investments in loans and in shares and other equities remained firm during the 1980s, but have declined since the 1990s with the investments shifting into government bonds and financing bills, and into securities other than shares.

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[35] Using the financial transactions table (flow) and the reconciliation table to separate lending flow factors and other reconciliation factors from write-offs in the year-to-year changes in the loans outstanding of depository corporations, we find that while the loan flow generally remained positive year-on-year through FY 1997, the decline in the real prices of loan assets since the 1990s (which equal the reconciliation amount <direct write-offs, excluding transfers from indirect write-offs> plus net allowances for individual uncollectibles) restricted the growth in the loans outstanding. More recently, the loan flow has been greatly diminishing since FY 1998.

On the other hand, the figures for the financial investments (flow) of corporate pensions and other pensions (Chart 18(2)) generally show a high level of investment in government bonds and in securities other than shares from the 1980s through the middle 1990s. Thereafter, there has generally been a high level of pension fund investment in shares and other equities and in outward investment in securities.[36]

(3) Other Financial Intermediaries Developments

Overall, the financial investments (flow) of other financial intermediaries (Chart 19(1)) were at a high level during the 1980s and then declined from the 1990s. This can mostly be explained by the developments in lending.

Looking first at the financial investments (flow) of public financial institutions (Chart 19(2)), loans are the main item. These loans declined during the 1990s compared with the 1980s, yet remained relatively firm compared with those at private depository corporations (Chart 17(1), above). In this manner, the public sector took over the role of funds provider from the private sector. Since FY 2001, however, loans by public financial institutions have had a negative contribution, reflecting the reduction in the scale of fiscal investment and loans, which were very active through the 1990s.[37]

On the other hand, the financial investments (flow) by finance companies (Chart 19(3)), which show large fluctuations within the non-bank category, also have loans as the main item. Finance company loans were at a considerably high level during the 1980s, but

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[36] Deregulation of the financial investments of pension funds has advanced since the middle 1990s. Specifically, the asset allocation regulations covering the employees' pension funds (the so-called 5-3-3-2 regulations) for each investing entity were abolished in 1995 (for additional managed funds) and in 1996 (for funds already under management). Thereafter, in 1997, the asset allocation regulations were completely abolished.

[37] Looking at the loans outstanding of public financial sectors, including postal life insurance etc. by borrower (Chart 20, on a net basis excluding intra-sectoral transactions such as those from the fiscal loan fund to government financial institutions and postal savings), lending generally maintained high growth throughout the 1980s and 1990s. In particular, loans to the general government and public nonfinancial corporations sectors supported that growth almost throughout the period under study, and especially during the 1990s. Loans to the households sector were also relatively firm through the middle 1990s, but then dropped off and have fallen sharply since FY 2001, especially housing loans. This decrease in loans to the households sector has contributed to the minus contribution from lending overall since FY 2002.

then turned down and have generally maintained a negative contribution since the 1990s.

The overall features of the developments in domestic nonfinancial sector fundraising and at financial intermediaries may be summarized as follows. During the 1980s fundraising was centered around the private sector, and private financial institutions served as the main intermediaries. From the 1990s, however, as the center of fundraising changed from the private to the public sector, the main intermediary role shifted from private financial institutions to public financial institutions. Since FY 2000, the public sector remains the center of fundraising activities, but changes are taking place in the intermediary routes. The flow of funds via public financial institutions is declining along with the reduced influx of funds into postal savings and the contraction of the fiscal loan fund. Meanwhile, there is a growing shift in the investments of private financial institutions from funding private nonfinancial corporations to providing credit to the government sector through the purchase of government bonds, etc.[38]

IV. Conclusion

This paper has examined the changes in Japan's financial structure since the 1980s, including the changes in the structure of the financial surplus or deficit of domestic nonfinancial sector entities, and in the structure of financial investments and fundraising, and has summarized the features of the structural changes in financial intermediaries, which play the central role in this flow of funds. The analyses have shown that this flow of funds through fundraising entities and financial intermediaries shifted from the private sector in the 1980s to the public sector in the 1990s, among other changes.

The Flow of Funds Accounts is a financial statistics with a wide range of applications, as they grasp Japan's financial structure from a comprehensive and diverse perspective. Amid the further reform of Japan's financial systems and the advancement of corporate balance sheet adjustments and other structural reforms, the Bank of Japan will continue

[38] As shown above, the overall role of financial intermediaries can be explained by the developments at traditional financial institutions such as depository corporations, insurance and pension funds, finance companies, and public financial institutions. See Box 5 for information regarding the developments at new financial intermediaries such as investment trusts and the structured-financing special purpose companies and trusts, which have been advanced by legal reforms and administrative deregulation.

striving to enhance the accuracy of the Flow of Funds Accounts, incorporating the opinions of users, to more accurately and precisely grasp the financial behavior of each economic entity and the ongoing changes in Japan's financial structure.

BOX 1: Comparison of the 1968 SNA Basis and the 1993 SNA Basis Flow of Funds Accounts

The three main changes between the 1968 SNA basis (former statistics) and the 1993 SNA basis (present statistics) Flow of Funds Accounts (FFA) are (1) reclassification of sectors, (2) establishment of new transaction items, and (3) changes in accounting methods, such as expansion in the range of applying market prices (see Chart to Box 1, below).

The 1993 SNA has no sharp changes in the means used to value financial assets and liabilities over time,* so basically it facilitates continuous time-series evaluations. Moreover, the 1993 SNA is released giving reference not only to market prices, but also to book value or face value, so it can be used in diverse ways in accordance with the analytical objectives.

Since the FFA data running back to 1980 have now been retroactively converted to the 1993 SNA basis, and because compared with the earlier statistics the 1993 SNA establishes new transaction items, expands the range of market valuation, and records both assets and liabilities (without netting out), the revised data more clearly show the expansion of the financial assets of the households sector and of the financial liabilities of the private nonfinancial corporations sector in the late 1980s, as well as their subsequent leveling off and decline since the 1990s.

* Under the 1968 SNA, there were some items that had large time-series discontinuity because of changes in the valuation methods, etc. For example, the valuation methods used for shares of corporate liabilities changed around the 1st quarter of 1995, resulting in sharp differences (and different valuation methods were sometimes used for liabilities and assets).

1.Reclassification of Sectors	(1)Changes in sector classification in line with the SNA The 1993 SNA basis FFA reorganizes the sectors as "financial institutions", "nonfinancia corporations*[1]", "general government*[2]", "households*[3]", "private nonprofit institutions serving households (NPISH) *[3]," and "overseas" in accordance with the System of National Accounts.

	*1. The 1993 SNA basis FFA establishes the “private nonfinancial corporations” sector and the “public nonfinancial corporations” sector as sub-sectors of “nonfinancial corporations”. Of these, the “public nonfinancial corporations sector” figures include both public corporations and agencies that are not otherwise classified as central government or public financial institutions. In contrast, the 1968 SNA made no distinction between public and private nonfinancial corporations, and included all agencies aside from public agencies in the “corporate business” sector. *2. The 1968 SNA only broke down the general government sector into the two sub-sectors “public corporations & local government” and “central government,” and included just a portion of “social security funds” (which fall under “general government” in the 1993 SNA basis statistics) in “central government”. *3. The 1968 SNA combined “households” and ”NPISH” in the “personal” sector. (2) Changes in the sub-sectors of financial institutions to focus on the financial intermediaries function To focus on the financial intermediaries function, the 1993 SNA reorganizes the sub-sectors of the financial institutions sector into “central bank”, “depository corporations*[4]”, “insurance and pension funds*[4]”, “other financial intermediaries*[5]”, and “financial auxiliaries”. *4. Postal savings and postal life insurance, which were categorized under “public financial institutions” in the 1968 SNA basis FFA, are categorized, respectively, under “depository corporations” and “insurance and pension funds” in the 1993SNA basis FFA. *5. Including the non-bank sector (which was categorized under “corporate business” in the 1968 SNA).
2. Establishment of new transaction items	In the 1993 SNA, transaction items such as “financial derivatives”, “structured financing instruments”, “repurchase agreements and securities lending transactions,” and “equities” are newly established.
3. Changes in accounting methods	(1) Expansion in the range of applying market prices The 1993 SNA basis FFA expands the application of market prices[*6] to include transaction items, such as “loans by private financial institutions [7]”, “securities other than shares” and “shares and other equities”.

*6. The 1968 SNA only valued shares at market value.

*7. For loans, the 1968 SNA records changes in book value outstanding accompanying the off balance sheet processing of loan securities such as direct write-offs in the flow figures.

(2) Posting intra-sectoral transactions on a gross basis

The 1993 SNA records all assets and liabilities within sectors and sub-sectors on a gross basis, without netting out.

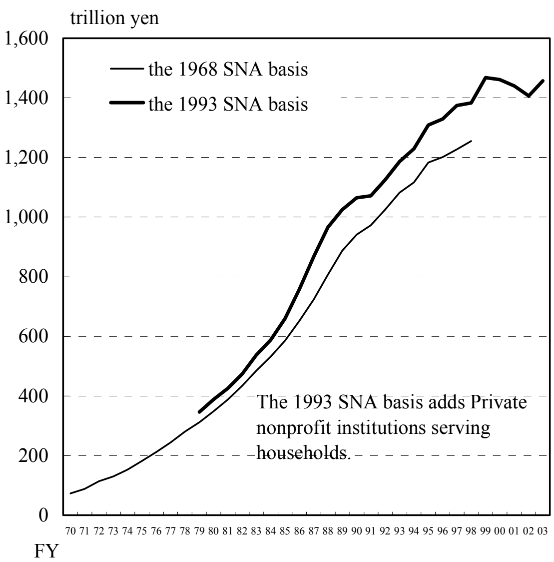
(3) Recording transactions on an accrual basis

The 1993 SNA records transactions at the time when they are executed (i.e., on an accrual basis)[*8].

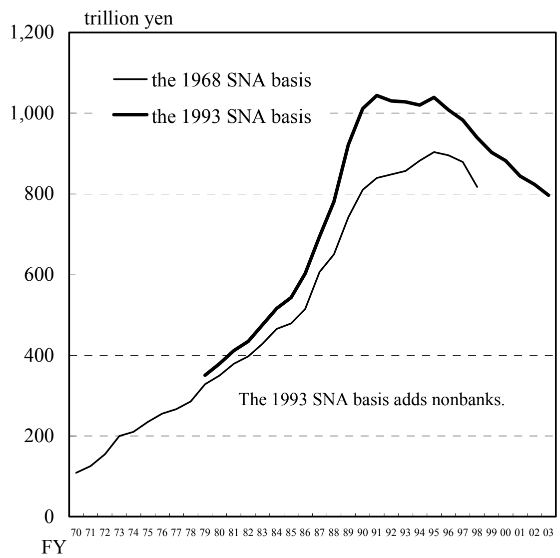
*8. The 1968 SNA recorded transactions at the time of cash transfer (i.e., on a cash basis), with the exception of trade credits.

(Reference) Comparison of the 1993 SNA Basis and the 1968 SNA Basis
(Comparison of Assets and Liabilities by Sector)

Financial Assets Outstanding of Households (Personal) Sector



Financial Liabilities Outstanding of Private Nonfinancial Corporations (Corporate Business) sector (excluding shares and other equities,etc.)



Box 2: Regarding Financial Surplus or Deficit and the Savings-Investment Gap

As noted in the main body of this paper, the Flow of Funds Accounts (FFA) financial surplus or deficit are conceptually consistent with the System of National Accounts (SNA) savings-investment gap (regarding the sectors, the 1993 SNA basis Flow of Funds Accounts follow the System of National Accounts classification). Nevertheless, there are differences between the savings-investment gap and financial surplus or deficit figures. These apparently appear because (1) there are statistical discrepancies in the estimation of the savings-investment gap, and (2) there are differences in the underlying data and estimation methods used respectively by the FFA and the SNA.

As for (1), under the FFA the total financial surplus or deficit of the domestic sector must equal the opposite of the total financial surplus or deficit of the overseas sector. In contrast, under the SNA the changing in claims overseas (which correspond to the total financial surplus or deficit of the domestic sector under the FFA) does not equal the sum of the savings-investment gaps of each domestic sector, and that differential is posted as a statistical discrepancy.

As for (2), reviewing the features of each estimation method, the SNA utilizes synthetic estimates for many items and stages in estimating the goods and services flow, the income flow, and the capital finance flow, and uses those results to derive the savings-investment gap. In contrast, the FFA has some extremely precise areas as it stipulates data directly aggregated from primary materials in estimating the financial investments and fundraising (flow) as well as the financial assets and liabilities outstanding of each sector and item. Yet the FFA also incorporates less precise estimation procedures, as it uses fixed ratios for allocations to each sector and item when they cannot be stipulated from the primary materials.

Specifically, reviewing the estimation method of each of the households sector financial assets and liabilities items, on the asset side the deposits, shares, and insurance and pension reserves items are mostly directly aggregated from the primary data. These items which are estimated with a high level of precision account for over 80% of households sector financial assets outstanding, so these financial assets can be grasped with a very high level of accuracy. However, there are no primary data for deposits money, accounts payable and receivable, and for some of the liability side items (business-like borrowings, etc.), and so they are indirectly estimated using fixed ratios and residuals, etc.[39] For the items which use these kinds of estimation methods, for example when there are great inter-sectoral movements, the estimates may greatly diverge from the actual conditions. In this manner, the SNA and the FFA both inevitably incorporate some statistical error, and thus the financial surplus or deficit and the savings-investment gap figures are not identical.

[39] Reviewing the estimation accuracy of each of the households sector financial assets and liabilities outstanding items, the highly accurate financial assets items (which are mostly directly aggregated from the primary data) deposits, shares, and insurance and pension reserves account for 85% of total financial assets, and the highly accurate financial liabilities items housing loans and consumer loans account for 57% of total financial liabilities (both as of FY 2003).

Box 3: Regarding the Reform of the Fiscal Investment and Loan Program

Fundamental reforms were instituted to Japan's Fiscal Investment and Loan Program (FILP) system from FY 2001 which eliminated the compulsory deposits of postal savings and pension reserves. Since then, Fiscal Loan Fund fundraising is shifting to government bonds (FILP bonds) and to bonds issued by government financial institutions etc.

Under the Flow of Funds Accounts (FFA), prior to the reform the main FILP entrance, that is to say the source of the majority of the funds, was the deposit of postal savings and social security funds to the former Trust Fund Bureau, and as an exit the collected funds would pass through government financial institutions or be loaned directly from the former Trust Fund Bureau, and these were posted in the FFA as loans by public financial institutions.

Since the reform, directly (1) the Fiscal Loan Fund (the former Trust Fund Bureau) repays deposits with the Fiscal Loan Fund to the postal savings and social security funds, and the postal savings and social security funds have shifted their investments from deposits with the Fiscal Loan Fund to government bonds (and are using some of the funds to underwrite FILP bonds, which are a type of government bond), and (2) Fiscal Loan Fund loans to government financial institutions etc. have decreased, and that has been accompanied by a shift in the fundraising of government financial institutions etc. to the issuance of bonds. Additionally, as noted in the main body of this paper, the influx of funds into the postal savings turned negative right around the time that the FILP reforms were instituted, and the lending of public financial institutions, which was the exit, has declined, centered around reduced housing loans to the households sector. Thus, since the FILP reforms, the flow of funds has changed not only within public financial institutions but among economic entities, including the non-financial sector.[40]

[40] Because the social security fund is in the domestic nonfinancial sector, the changes noted in (1) constitute a shift from what was a flow of funds via public financial institutions (fiscal loan fund) to a flow of funds directly from the domestic nonfinancial sector.

• Effects of the FILP Reform (Main Numerical Changes)

Upper rows show FY 2003; lower rows (in parentheses) show FY 2000

Social Security Funds (Assets)	Deposits with FLF ¥105 trillion (¥158 trillion)	Government bonds ¥43 trillion (¥11 trillion)
Postal Savings (Assets)	Deposits with FLF ¥156 trillion (¥248 trillion)	Government bonds ¥84 trillion (¥26 trillion)

↓ ↓

Fiscal Loan Fund (Liabilities)	Deposits with FLF ¥276 trillion (¥428 trillion)	Government bonds ¥95 trillion (¥0 trillion)
Fiscal Loan Fund (Assets)	Loans by public financial institutions ¥303 trillion (¥346 trillion)	Government bonds ¥54 trillion (¥77 trillion)

↓

Government financial institutions (Liabilities)	Borrowings from public financial institutions ¥108 trillion (¥143 trillion)	Bonds ¥31 trillion (¥30 trillion)

Box 4: Government Bond and Local Government Bond Holder Trends

Amid the shift in fundraising entities from the private to the public sector from the 1990s, financial intermediaries remained at the center of fundraising activities. This can also be confirmed by reviewing the trends in the holders of government bonds and local government bonds, which are the main public sector fundraising items.

Looking at these developments in government bond and financing bill (FB) holders (Chart to Box 4(1)), financial institutions have consistently held at least 80% since the 1980s. Among financial institutions, during the early 1980s the holdings of private depository corporations and other private sector entities surpassed those of the Trust Fund Bureau (the present Fiscal Loan Fund), the Central Bank and other public sector entities. From the late 1980s until recently, however, with the exception of a few periods the share of the public sector has been greater than that of the private sector. Among public financial institutions, the share of the Fiscal Loan Fund has greatly declined since FY 2001 while the shares of the postal savings and postal life insurance have expanded (influenced by FILP reform), with the underwriting of government bonds issued by the Fiscal Loan Fund (FILP bonds) etc..[41]

Reviewing the breakdown of local government bond holders (Chart to Box 4(2)), the share of financial institutions remains over 80%, just as for central government bonds. Among financial institutions, private sector entities account for over 50%, but their component share has been on a long-term declining trend since the 1980s while the share of public sector entities, especially the postal savings, has been expanding. Within the private sector the share of private depository corporations has been declining while the share of insurance and pension funds has been rising.

[41] Through FY 2001 the general government was the only government bond and FB fundraising entity, but the Fiscal Loan Fund has also raised funds by issuing government bonds (FILP bonds) since FY 2001. FILP bonds accounted for over 14% of all government bonds outstanding as of FY 2003.

Box 5: New Financial Intermediaries Developments

As presented in the main body of this paper, the component share of other financial intermediaries in the financial assets and liabilities outstanding of financial institutions rose from the 1980s through the 1990s. While finance companies and public financial institutions, which are traditional financial intermediaries, are addressed in the main body, here we consider investment trusts and structured-financing special purpose companies and trusts [42], whose developments are attracting a great deal of attention as new financial intermediaries.

First investment trusts rose during the late 1980s, but the overall fluctuations have become small from the 1990s (see Chart to Box 5(1)). Reviewing the developments in investment trusts outstanding by type[43], stock investment trusts played the central role during the 1980s as stock prices rose, especially during the late 1980s, but the weight of bond investment trusts rose during the 1990s with the decline in stock prices and the beginning of MMF sales. From FY 2000 bond investment trusts declined as MMF investors lost principal, and the weight of stock investment trusts rose once again through FY 2003 as stock prices rose and private placement investment trusts increased while bond investment trusts receded. Also, looking at the breakdown of investments made, investments in domestic securities accounted for the majority during the 1980s, but outward investment in securities has been rising since the middle 1990s. While administrative deregulation has advanced in Japan from the late 1990s, including the launch of bank window sales of investment trusts, there have been no major changes in investment trusts overall. In contrast, investment trusts outstanding, centered around mutual funds, rapidly expanded in the US from the late 1990s amid rising stock prices.

Next, the share of financial intermediation via structured-financing special purpose

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42 Structured-financing special purpose companies (SPCs) and trusts which are engaged in the liquidation of debt acquire monetary claims and raise funds by using these claims as collateral for the issuance of securities. This sector includes special purpose companies engaged in the liquidation of monetary claims (loans receivable, lease and credit assets, accounts receivable, etc.). Special purpose companies that are established overseas (overseas SPCs) that issue domestic bonds and samurai bonds as asset-backed securities are treated as domestic residents and included in the sector, while SPCs that issue Eurobonds are treated as non-residents and not included in the sector.

43 Because investment trusts outstanding are recorded on a market price basis, their fluctuations reflect price fluctuations in addition to increases and decreases in transaction.

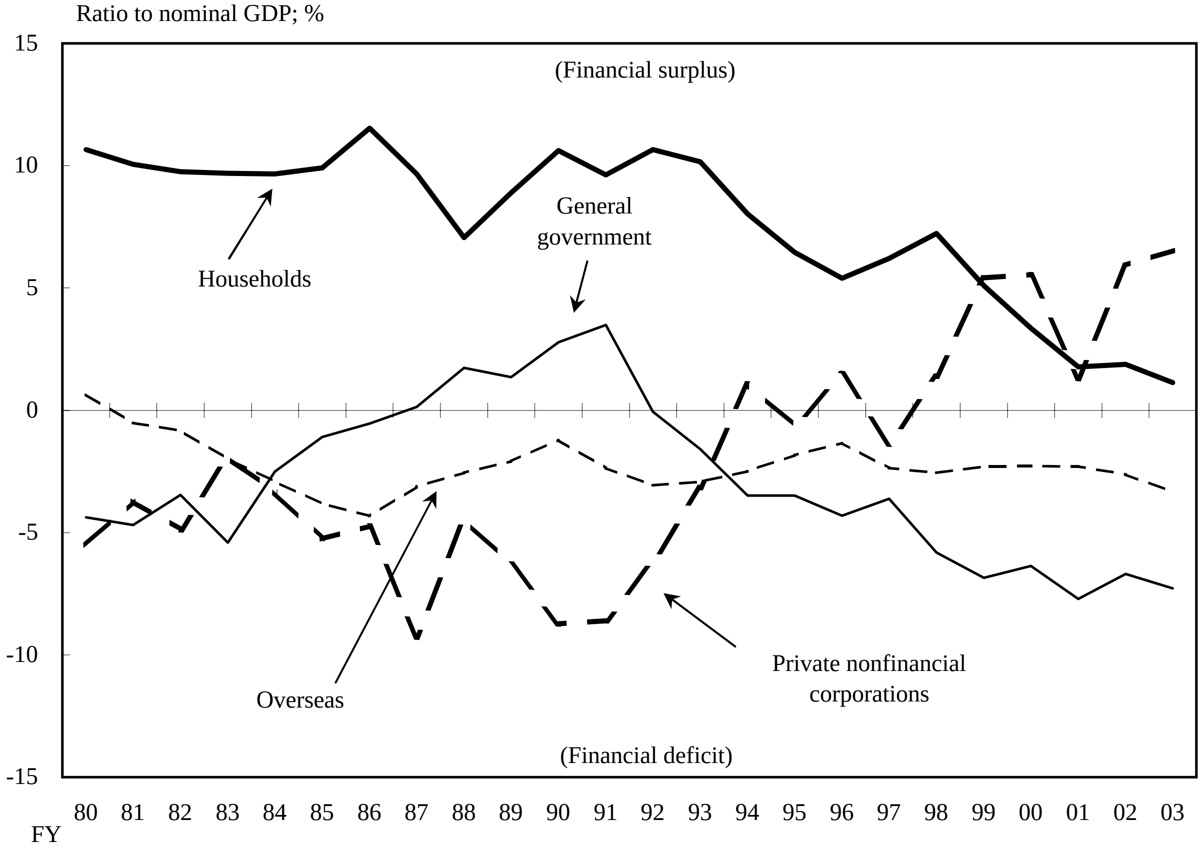
companies and trusts has increased since FY 1997, along with system improvements[44] (see Chart to Box 5(2)). Nevertheless, in FY 2003 the share of securitized products at private Japanese financial institutions was still under 4%, which is a low level compared with nearly 30% in the US.

To summarize, while new financial intermediaries are spreading in Japan in certain fields, their share remains not all that high compared with their US counterparts.

[44] The legal framework for the securitization of leasing and credit claims was established In line with the implementation of the law regarding regulation of business concerning specified claims in 1993. Additionally, the issuance of asset-backed securities started as a back-up to leasing and credit claims in 1996.Furthermore, the regulations for the establishment of SPCs was eased with the revision of the SPC Law in 2000.

Chart 1

Financial Surplus or Deficit by Sector

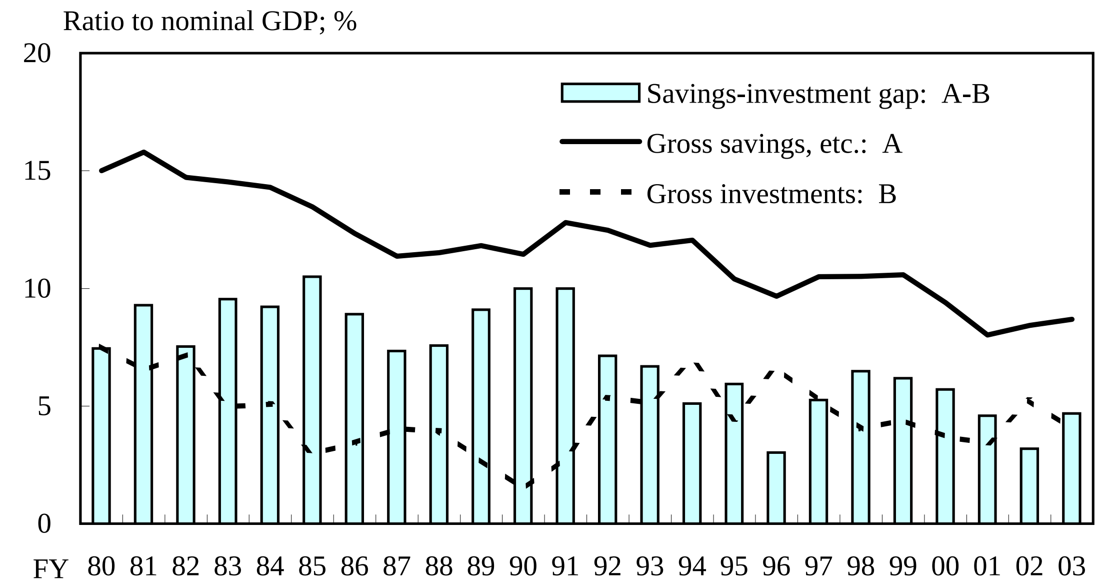


Notes: 1. Households include proprietorships (here and in subsequent charts).

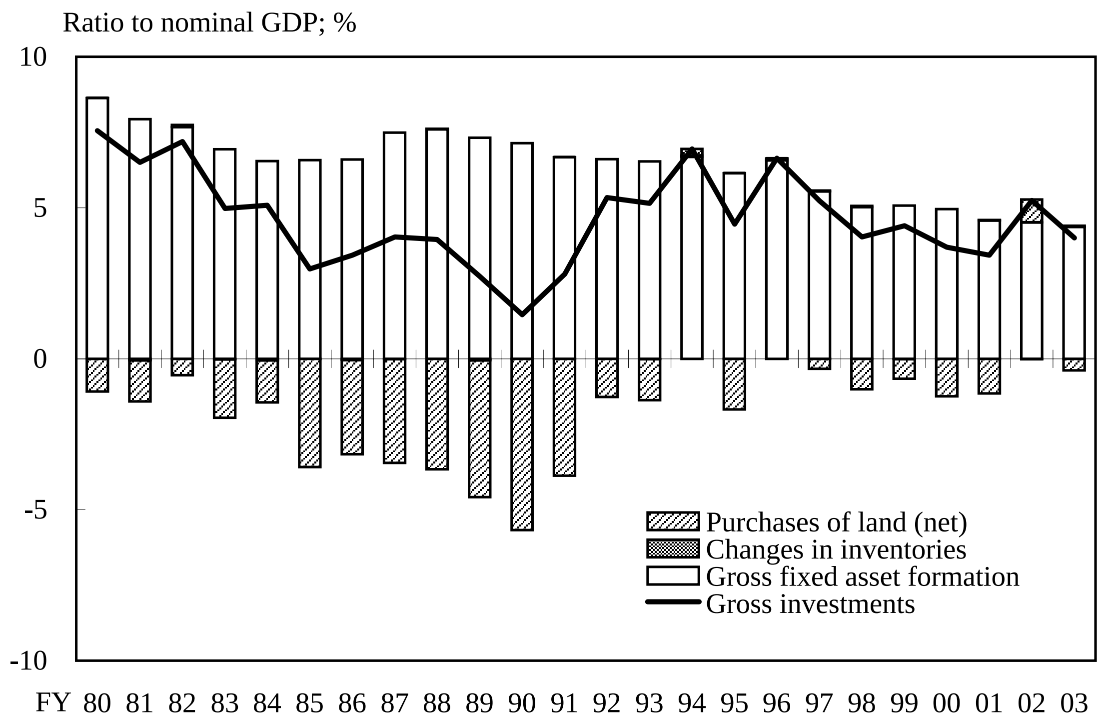
2. The inherited claims of JNR Settlements Corporation and the special accounts for National Forest Service are adjusted (FY 1998).

Savings-Investment Gap (National Accounts) (1)

(1) Households Savings and Investment



(2) Breakdown of Households Investments

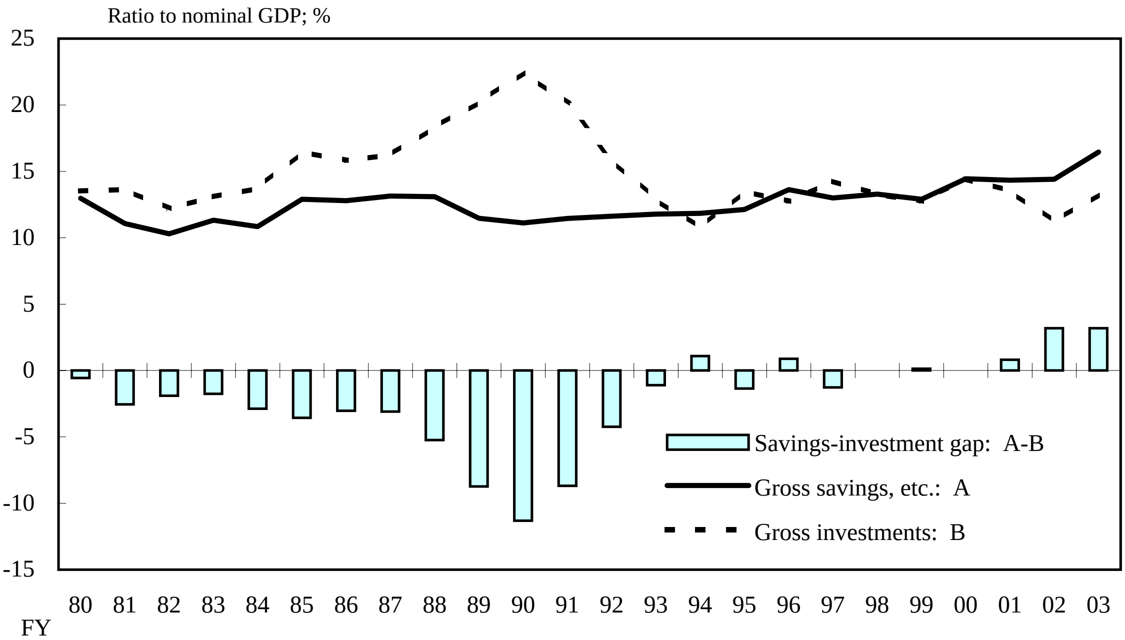


Note: Gross savings, etc. = savings (current income – current expenses; before deducting for consumption of fixed capital) + net receipt of capital transfers, and Gross investments = gross fixed capital formation + changes in inventories + purchases of land (net).

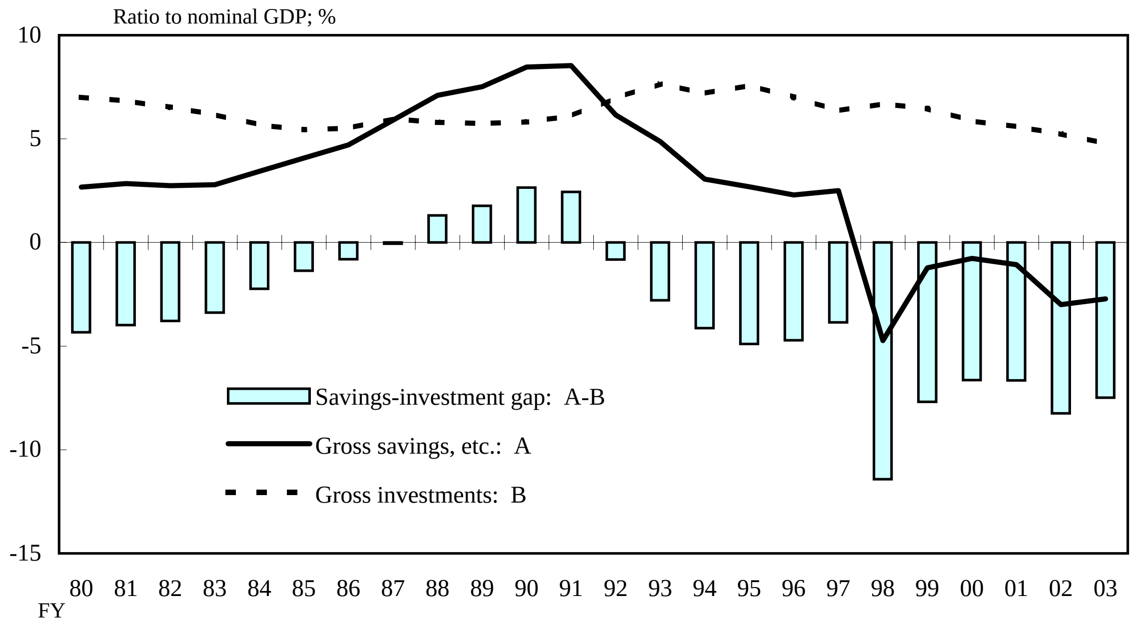
Chart 2-2

Savings-Investment Gap (National Accounts) (2)

(1) Private Nonfinancial Corporation Savings and Investment



(2) General Government Savings and Investment

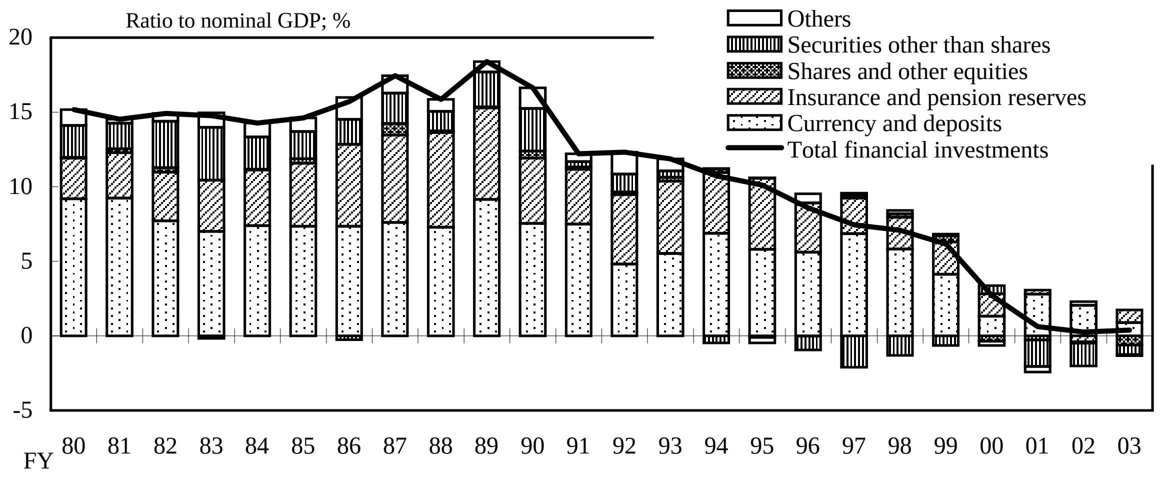


Note: Gross savings, etc. = savings (current income – current expenses; before deducting for consumption of fixed capital) + net receipt of capital transfers, and Gross investments = gross fixed capital formation + changes in inventories + purchases of land (net).

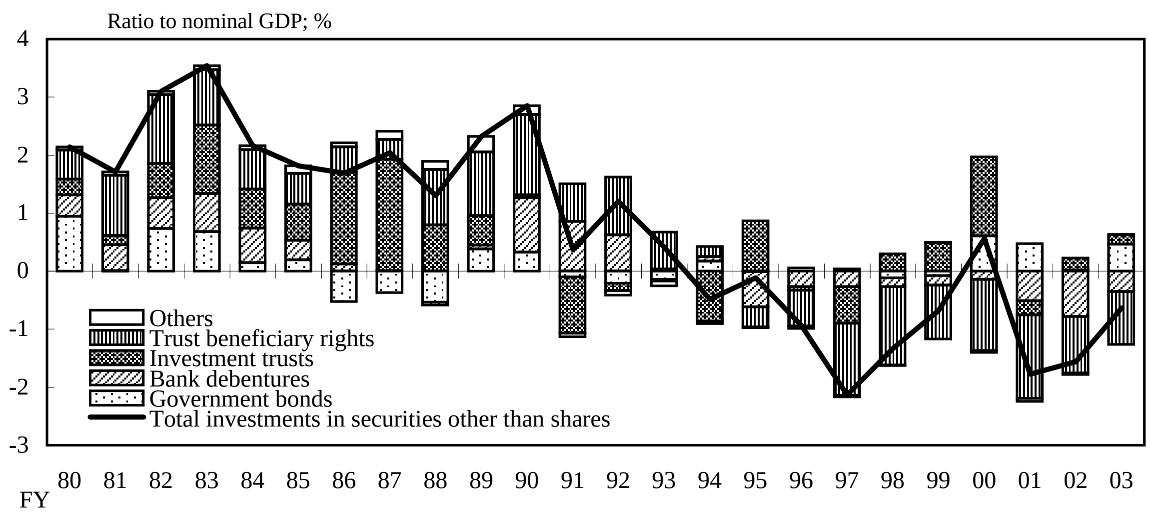
Chart 3

Financial Investments by Households (Flow)

(1) Financial Investments (Flow)



(2) Breakdown of Financial Investments in Securities other than Shares (Flow)



(3) Breakdown of Financial Investments in Currency and Deposits (Flow)

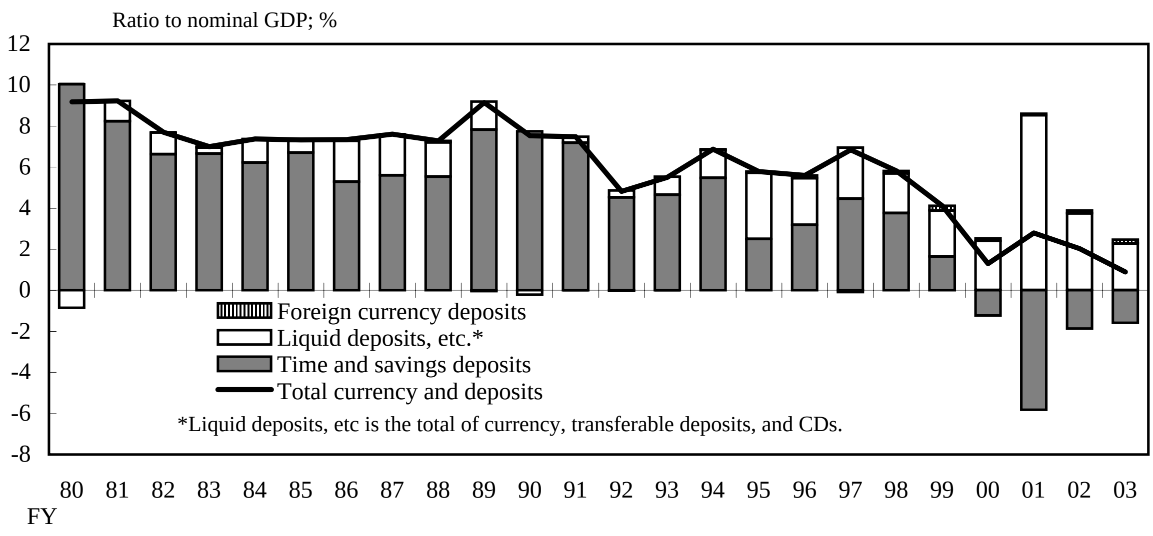
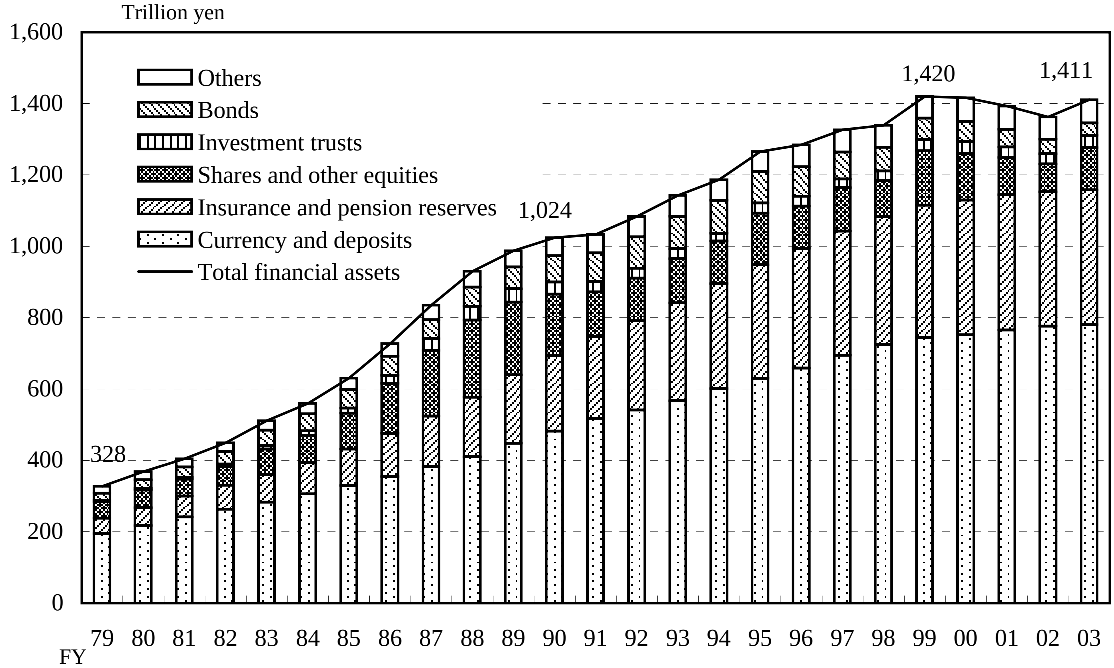


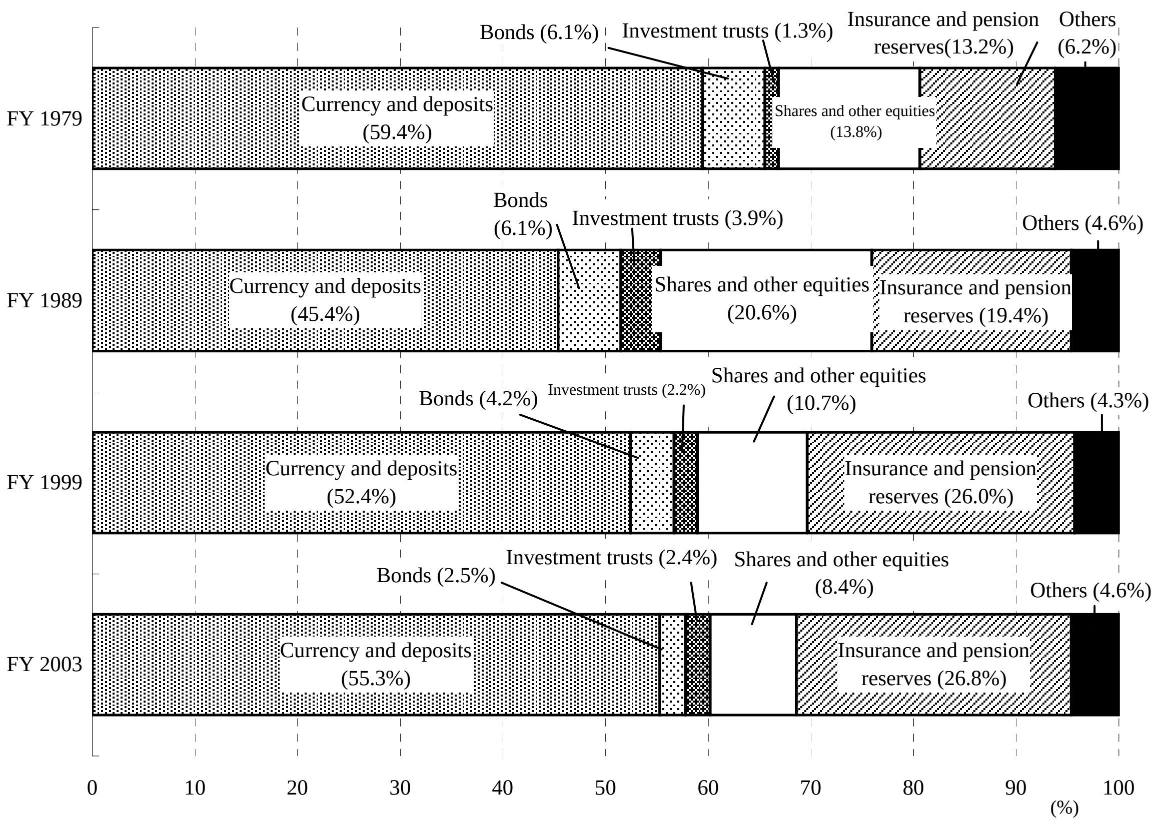
Chart 4

Households Financial Assets

(1) Households Financial Assets Outstanding



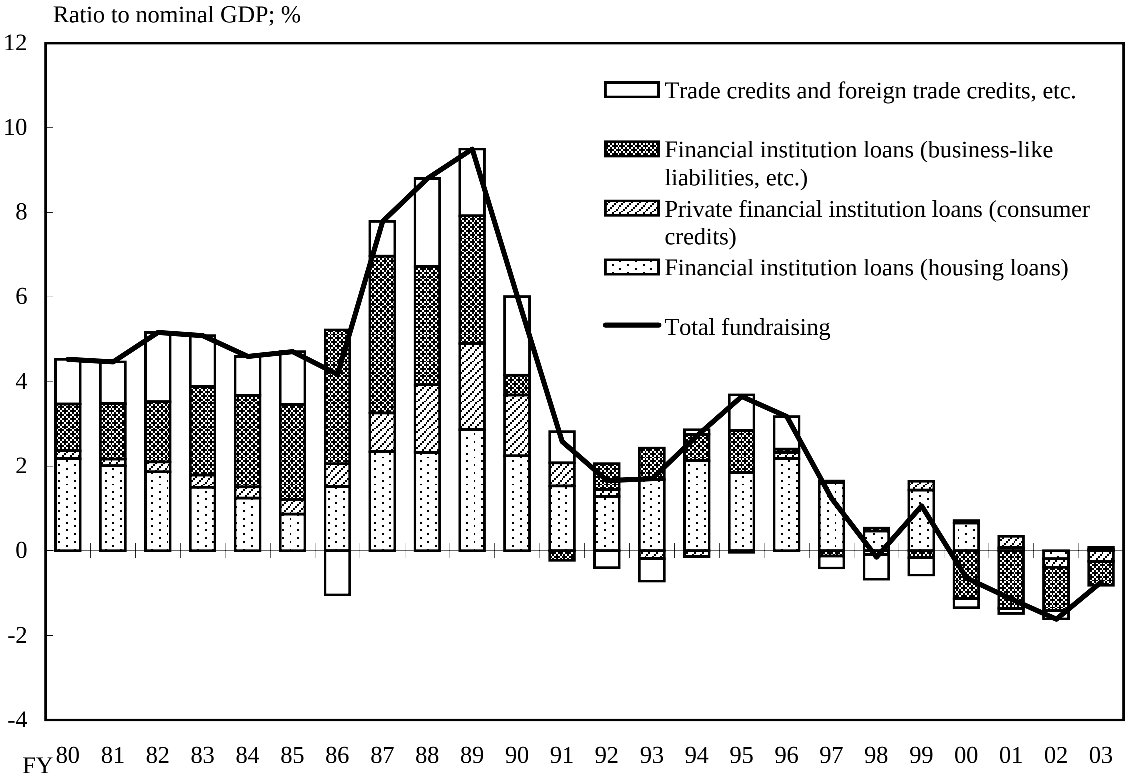
(2) Composition of Households Financial Assets



Note: Bonds are calculated by subtracting investment trusts from securities other than shares (government bonds, bank debentures, industrial bonds and trust beneficiary rights, etc.).

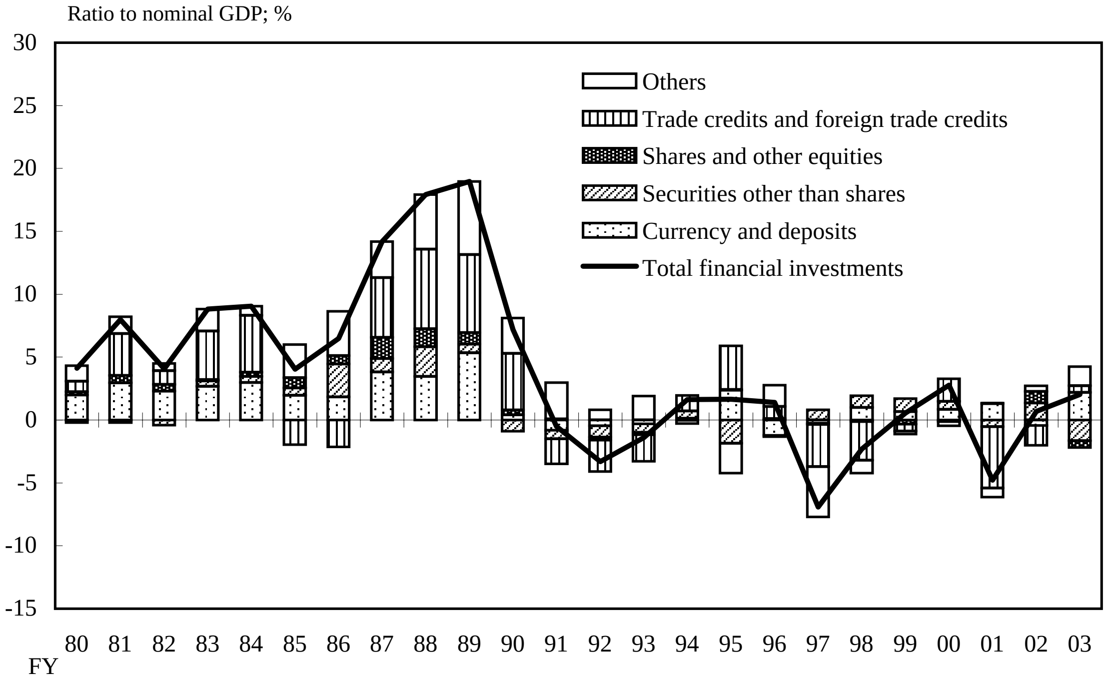
Chart 5

Fundraising by Households (Flow)



Financial Investments and Fundraising by Private Nonfinancial Corporations (Flow)

(1) Financial Investments (Flow)



(2) Fundraising (Flow)

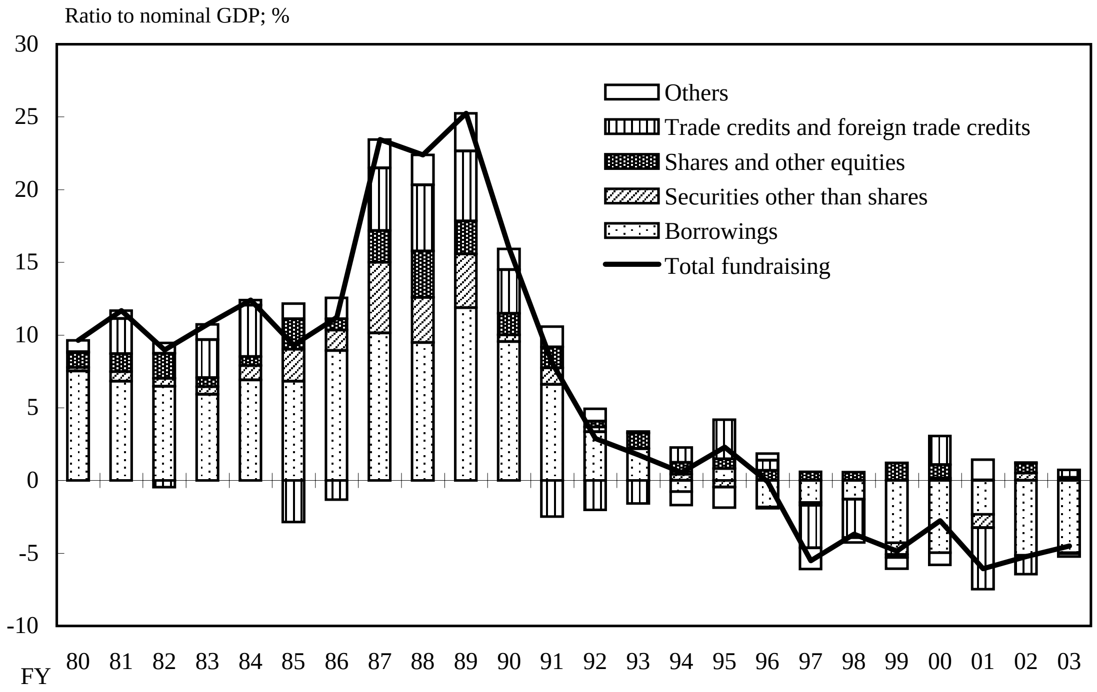
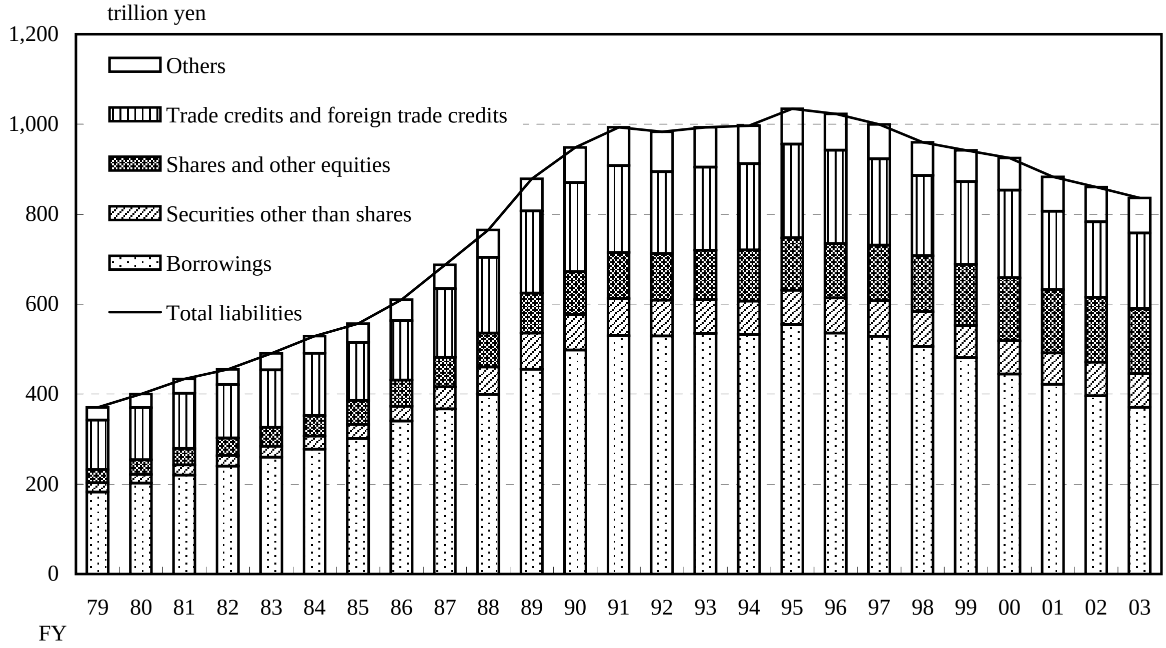


Chart 7

Private Nonfinancial Corporation Financial Liabilities

(1) Financial Liabilities Outstanding (book value and face value basis)



(2) Composition of Financial Liabilities (book value and face value basis)

Component ratio excluding total outstanding; %

	FY 1979	FY 1989	FY 1999	FY 2003
Total outstanding (trillion yen)	370	879	942	836
Borrowings	49.2	51.8	51.0	44.3
Securities other than shares	5.5	9.2	7.6	8.9
Shares and other equities	7.9	10.1	14.4	17.3
Trade credits and foreign trade credits	29.7	20.8	19.5	20.1
Others	7.7	8.2	7.4	9.4

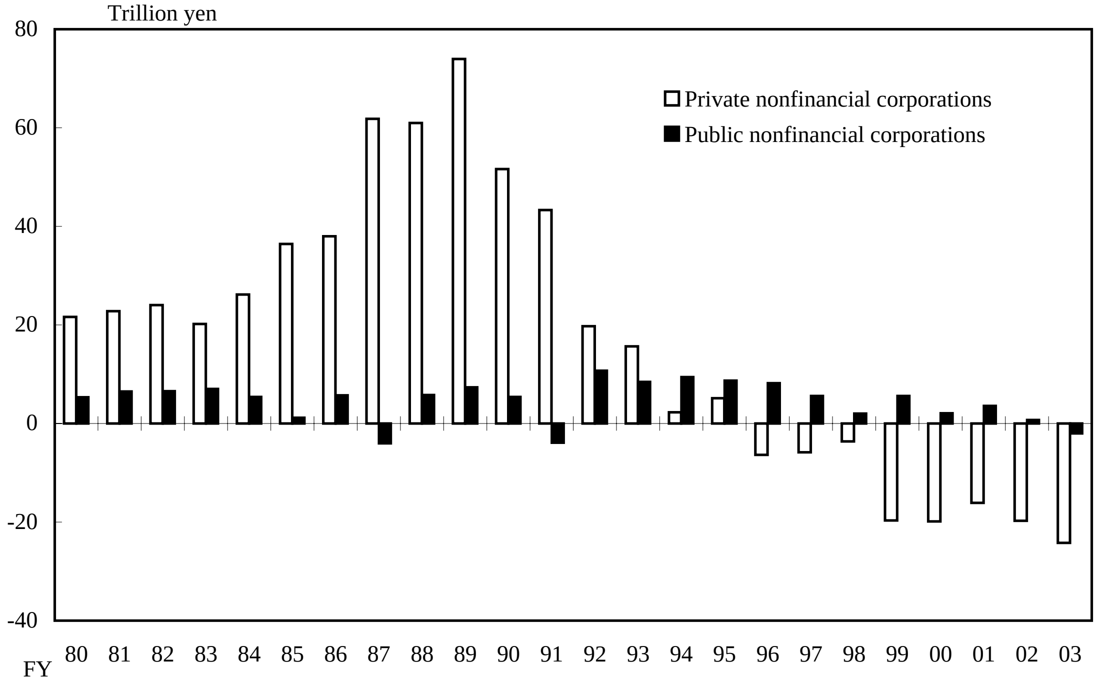
Notes: 1. Book value and face value figures are used for items with market value (borrowings, securities other than shares, shares and other equities).

2. Others comprises deposits money, financial derivatives, accounts receivable / payable, other external claims and debts, and others .

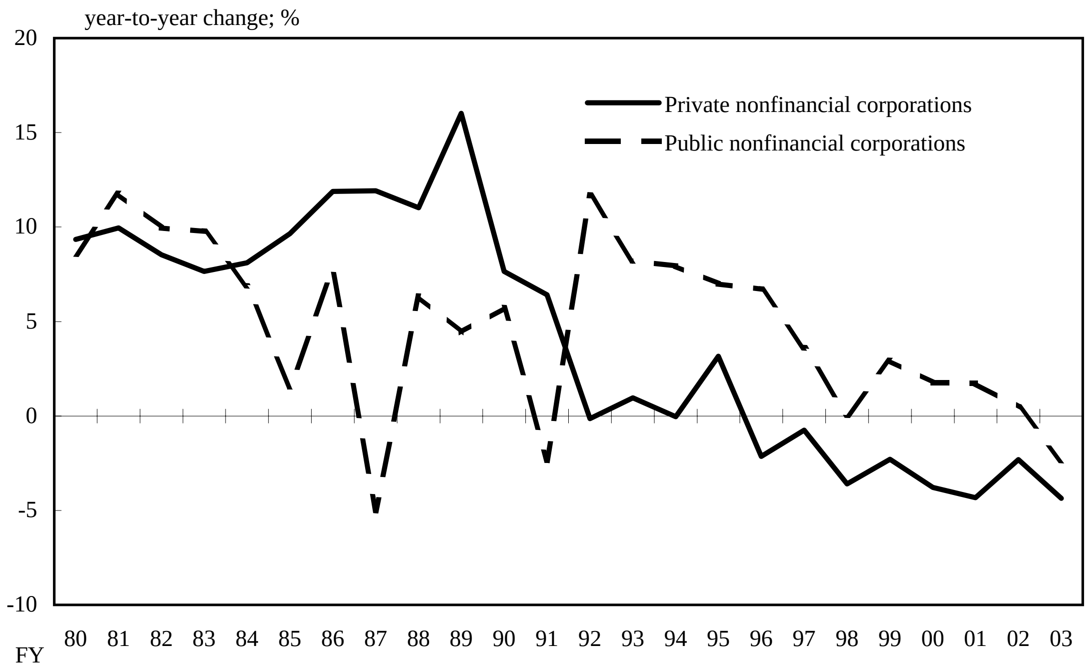
Chart 8

Fundraising by Nonfinancial Corporations

(1) Fundraising (Flow)



(2) Fundraising Outstanding



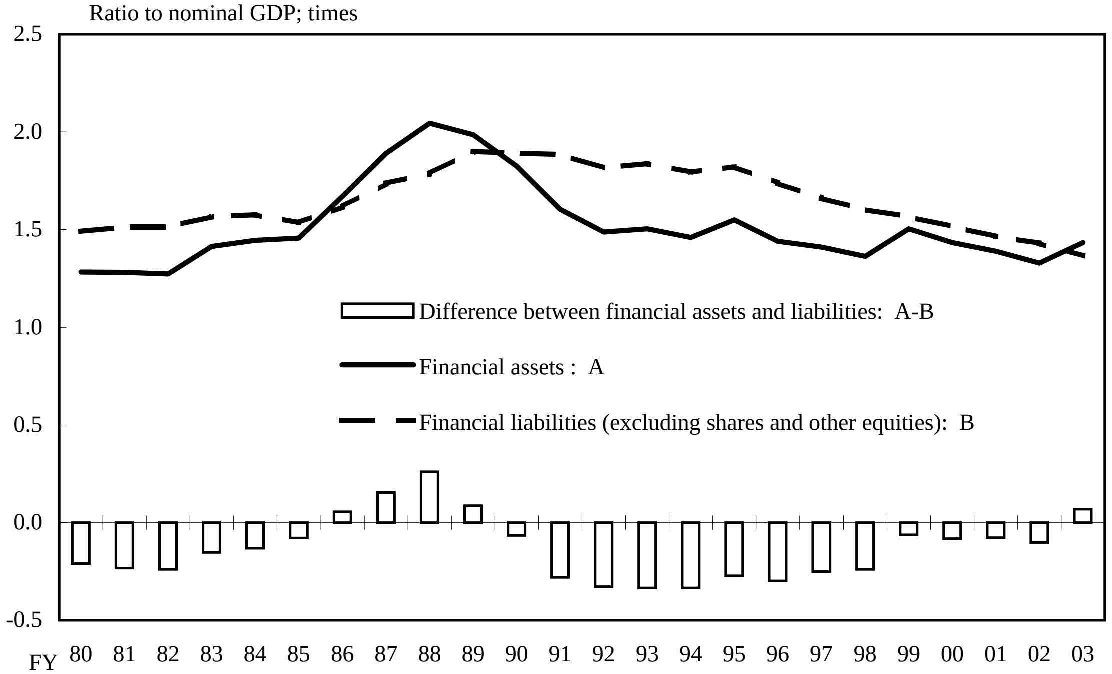
Notes: 1. Fundraising = borrowings + securities other than shares + shares and other equities.

2. The inherited claims of JNR Settlements Corporation and the special accounts for National Forest Service are adjusted (FY 1998).

3. Private nonfinancial corporation shares and other equities outstanding are on a book value basis.

Net Financial Position of Private Nonfinancial Corporations

(1) Difference between Financial Assets and Liabilities (Liabilities exclude shares and other equities)



(2) Analysis of Year-to-Year Changes in the Difference between Financial Assets and Liabilities (Liabilities exclude shares and other equities)

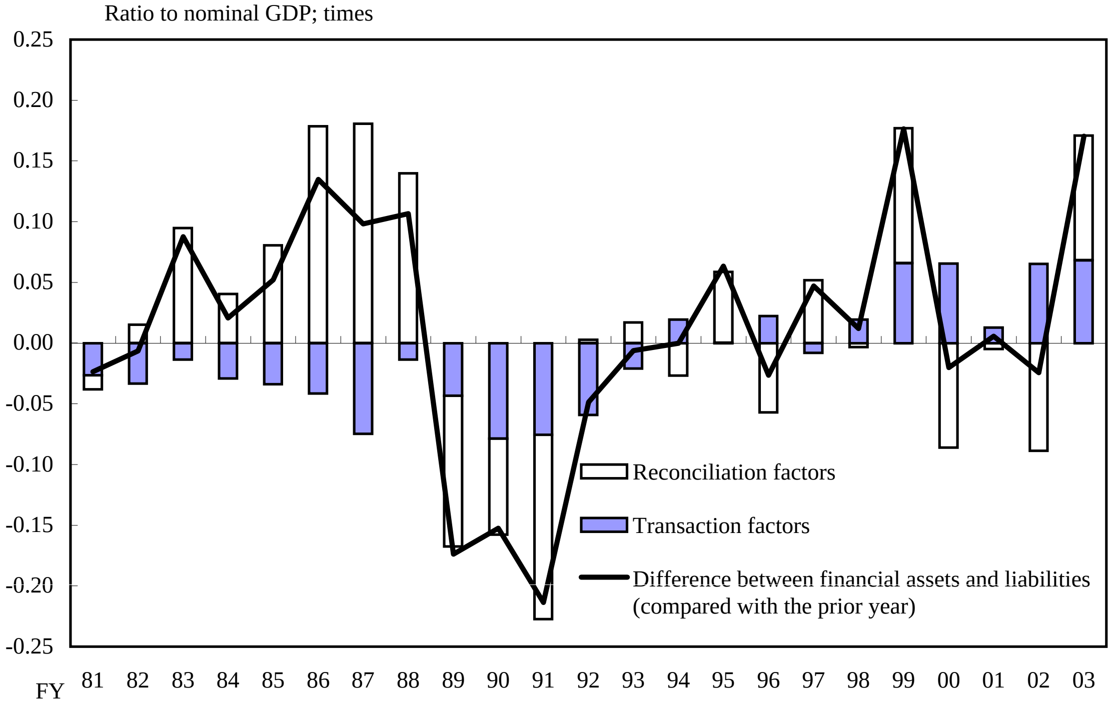
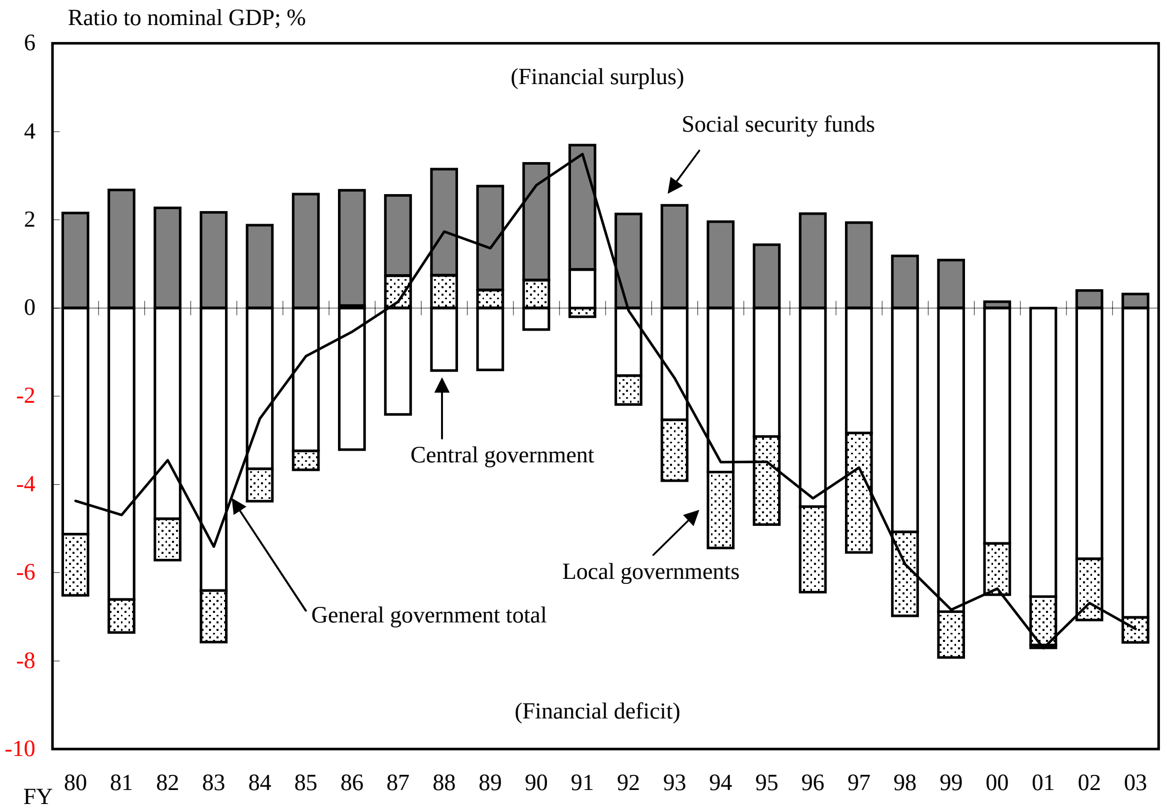


Chart 10

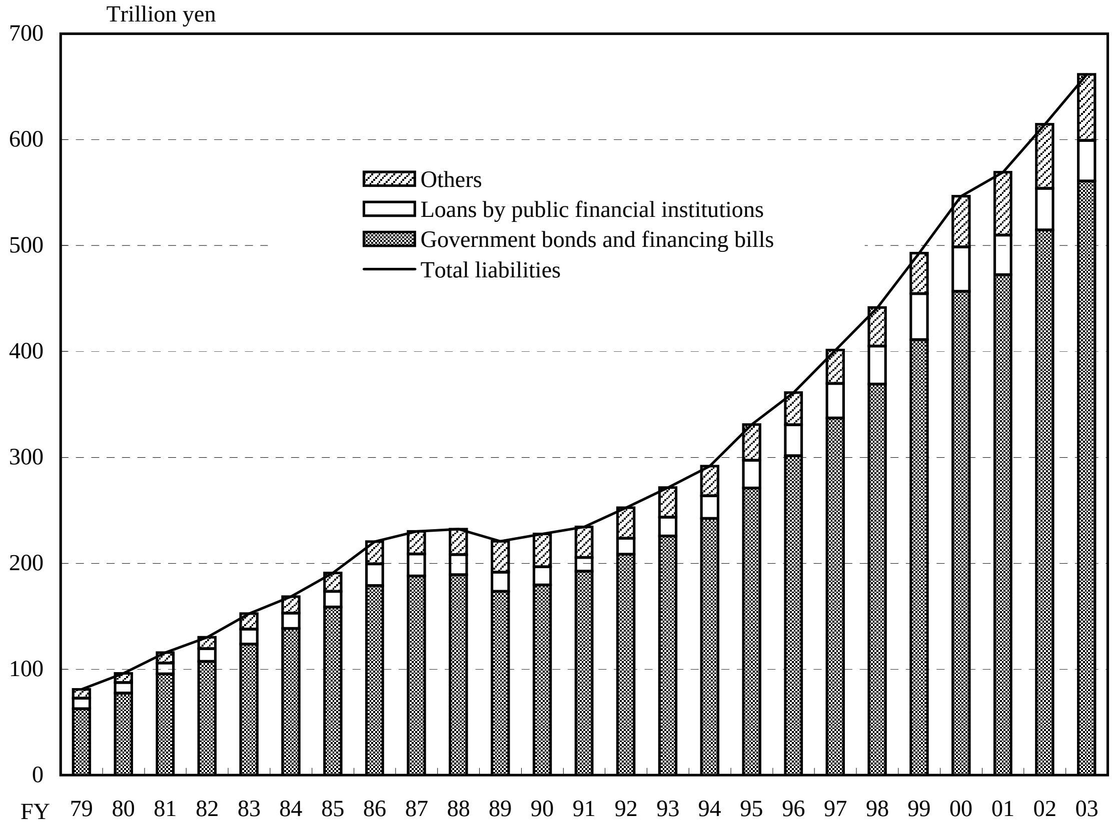
Financial Surplus or Deficit by General Government Sector



Note: The inherited claims of JNR Settlements Corporation and the special accounts for National Forest Service are adjusted (FY 1998).

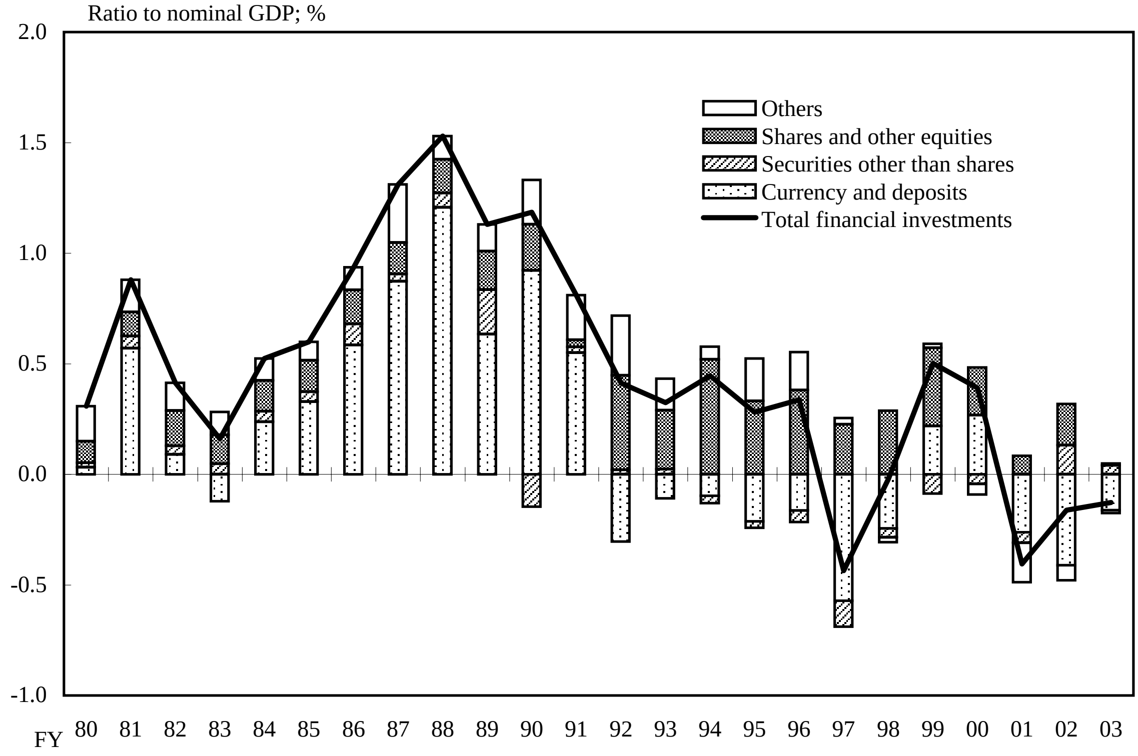
Chart 11

Central Government Liabilities Outstanding

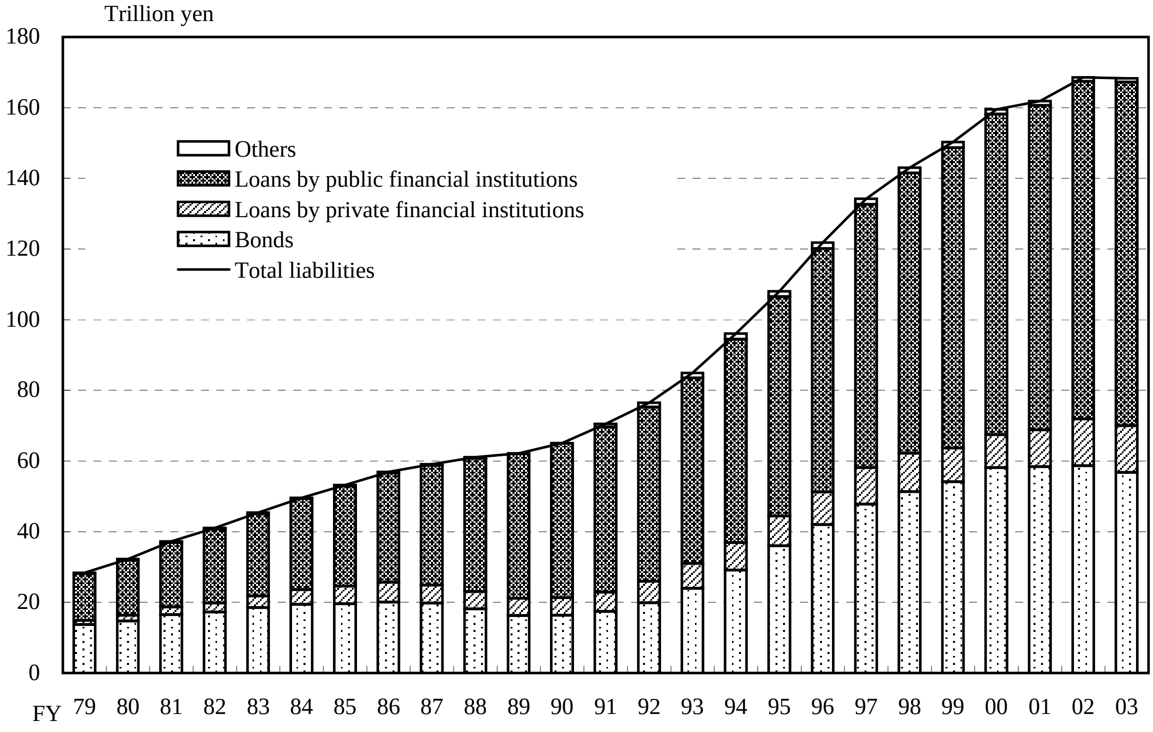


Financial Investments and Fundraising by Local Governments

(1) Financial Investments (Flow)



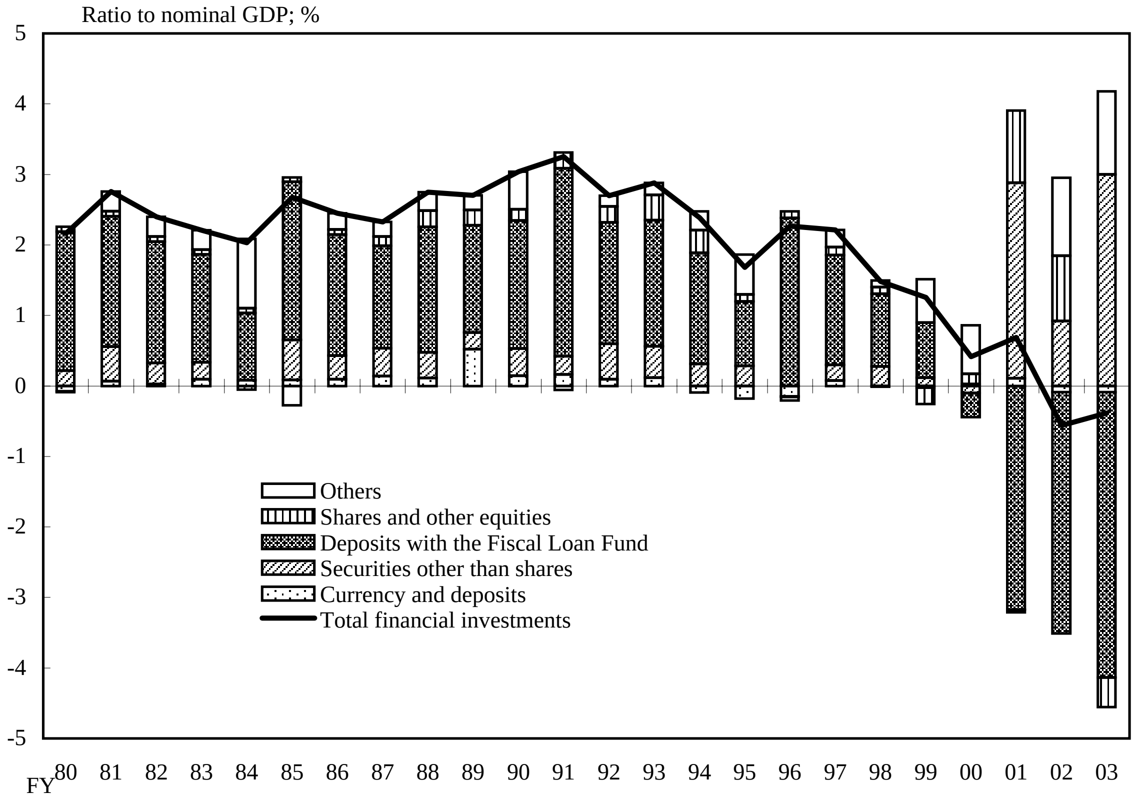
(2) Liabilities Outstanding



Note: Bonds are the total of local government bonds and external bonds issued by residents.

chart 13

Social Security Funds Financial Investments (Flow)



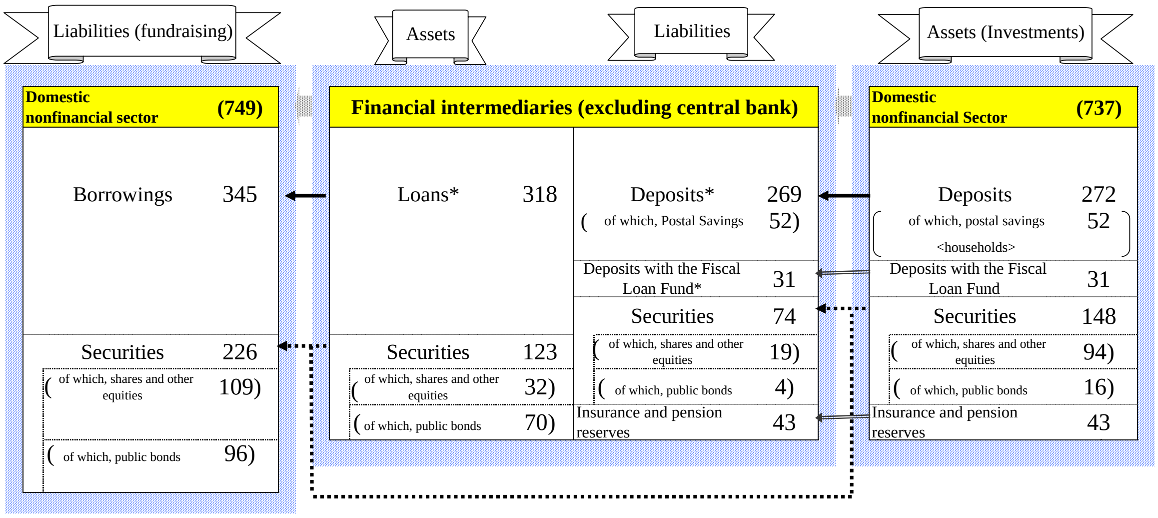
Note: Deposits with the Fiscal Loan Fund were Deposits with the Trust Fund Bureau through FY 2000 (here and in subsequent charts).

Chart 14-1

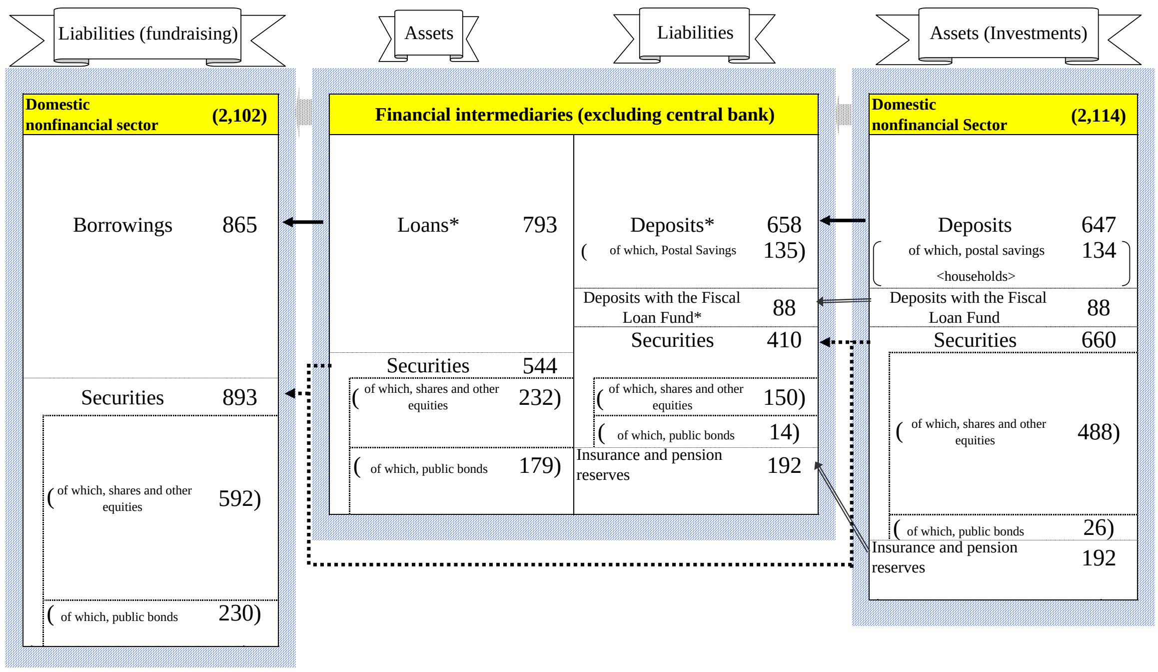
Flow of Funds in Japan (Outstanding Basis) (1)

Unit: trillion yen

<FY 1979>



<FY 1989>



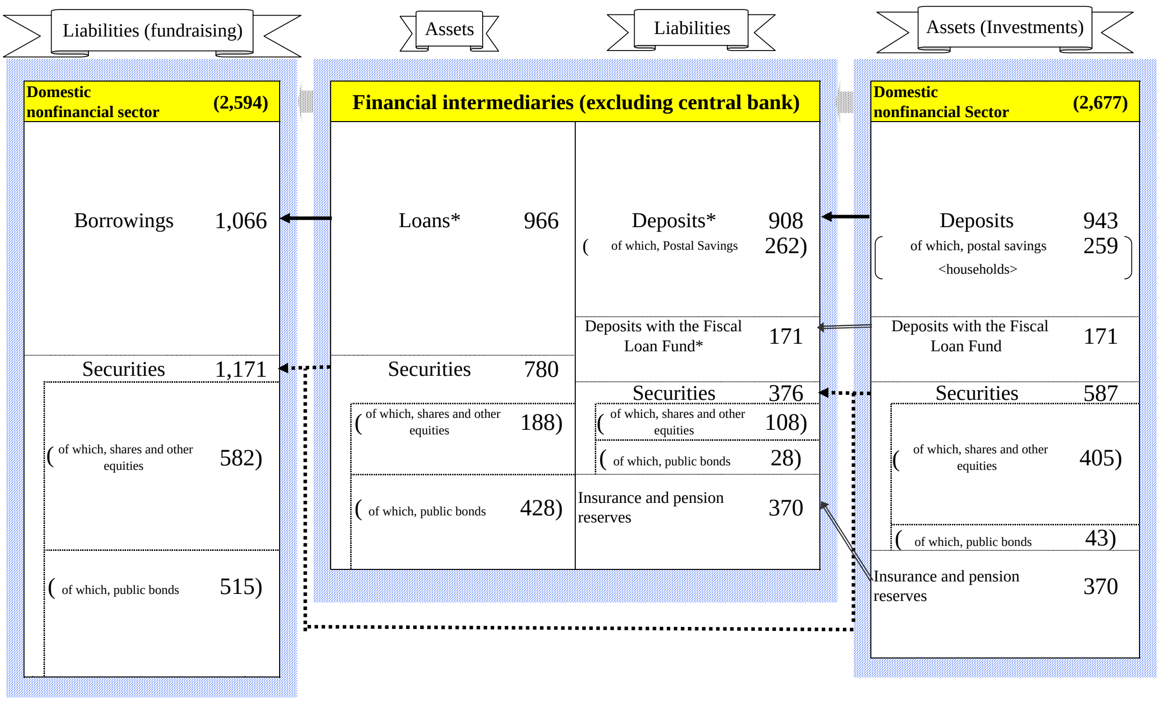
Notes: 1.Excludes overseas sector.
2.The data of each sector refer only to main transaction items.
3.Transaction items marked with "*" are net (assets – liabilities) figures within the sector.
4.Loans (borrowings) include Bank of Japan loans, call loans and money, bills purchased and sold, loans by private financial institutions, loans by public financial institutions, loans by the nonfinancial sector, installment credit, and repurchase agreements and securities lending transactions.
5.Securities include shares and other equities, and securities other than shares (government bonds, bank debentures, industrial bonds, investment trust beneficiary certificates, and trust beneficiary rights, etc).
6.Public bonds include government bonds, financing bills, local government bonds, and public corporation bonds.

Chart 14-2

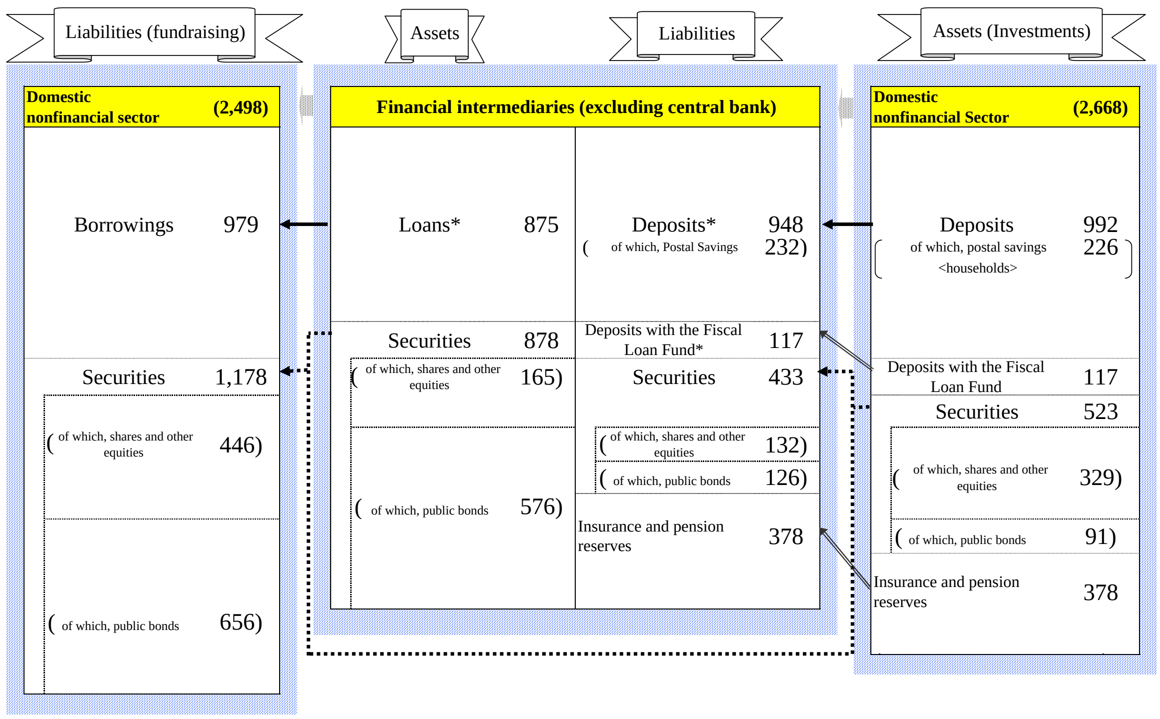
Flow of Funds in Japan (Outstanding Basis) (2)

Unit: trillion yen

<FY 1999>



<FY 2003>



Notes : See notes for Chart 14-1.

Chart 15

Domestic Nonfinancial Sector Outstanding Financial Assets Composition and Fundraising Routes

(1) Composition of Financial Assets

Component ratio excluding total assets; %

	FY 1979	FY 1989	FY 1999	FY 2003
Total assets (trillion yen)	737	2,114	2,677	2,668
Currency	2.0	1.5	2.1	2.5
Deposits	36.9	30.6	35.2	37.2
Deposits with Fiscal Loan Fund	4.2	4.1	6.4	4.4
Securities other than shares	7.3	8.1	6.8	7.3
Shares and other equities	12.8	23.1	15.1	12.3
Insurance and pension reserves	5.9	9.1	13.8	14.2
Trade credits and foreign trade credits	18.2	11.1	9.0	8.1
Others	12.6	12.3	11.6	14.1

(2) Fundraising Routes (outstanding basis)[1,2]

Component ratio excluding total fundraising outstanding; %

	FY 1979	FY 1989	FY 1999	FY 2003
Total fundraising outstanding (trillion yen)	677	1,622	2,137	2,198
Via domestic markets	98.4	96.5	96.6	96.9
Via financial institutions (excluding the central bank)	60.3	64.4	68.6	66.4
Central bank	2.2	2.3	2.2	4.4
Fundraising from domestic nonfinancial sector	6.4	6.6	7.3	8.7
Credits, etc.	29.4	23.2	18.5	17.4
Via overseas markets	1.6	3.5	3.4	3.1

Notes:1. Prepared from “Channels of Fundraising Nonfinancial Sector”.
2. Loans, securities other than shares, and shares and other equities figures are on book value and face value basis.

Chart 16

Composition of Financial Intermediaries Financial Assets and Liabilities Outstanding by Type of Institution

(1) Financial Assets

Component ratio excluding total financial assets; %

		FY 1979	FY 1989	FY 1999	FY 2003
Total financial assets outstanding (trillion yen)		646	2,263	2,925	2,805
Depository corporations		65.5	58.7	52.5	53.7
	Banks	54.0	48.9	39.3	42.9
	Postal savings	7.9	6.4	11.1	9.9
	Collectively managed trusts	3.5	3.4	2.1	0.9
Insurance and pension funds		9.3	12.0	15.1	16.0
	Private life and nonlife insurance, mutual aid insurance	5.6	7.6	7.6	8.1
	Postal life insurance, etc.	2.2	2.2	4.3	4.4
	Pension Funds	1.4	2.3	3.2	3.5
Other financial intermediaries		25.3	29.3	32.3	30.3
	Investment trusts	0.9	2.3	2.0	1.8
	Nonbanks	1.7	5.7	3.4	3.7
	Public financial institutions	19.8	15.1	22.3	20.2
	Financial dealers and brokers	2.8	3.2	3.2	3.6
	Noncollectively managed trusts	0.1	3.1	1.4	0.9
Reclassification					
Private financial institutions		70.1	76.4	62.3	65.5
Public financial institutions, etc.		29.9	23.6	37.7	34.5

(2) Financial Liabilities

Component ratio excluding total financial liabilities; %

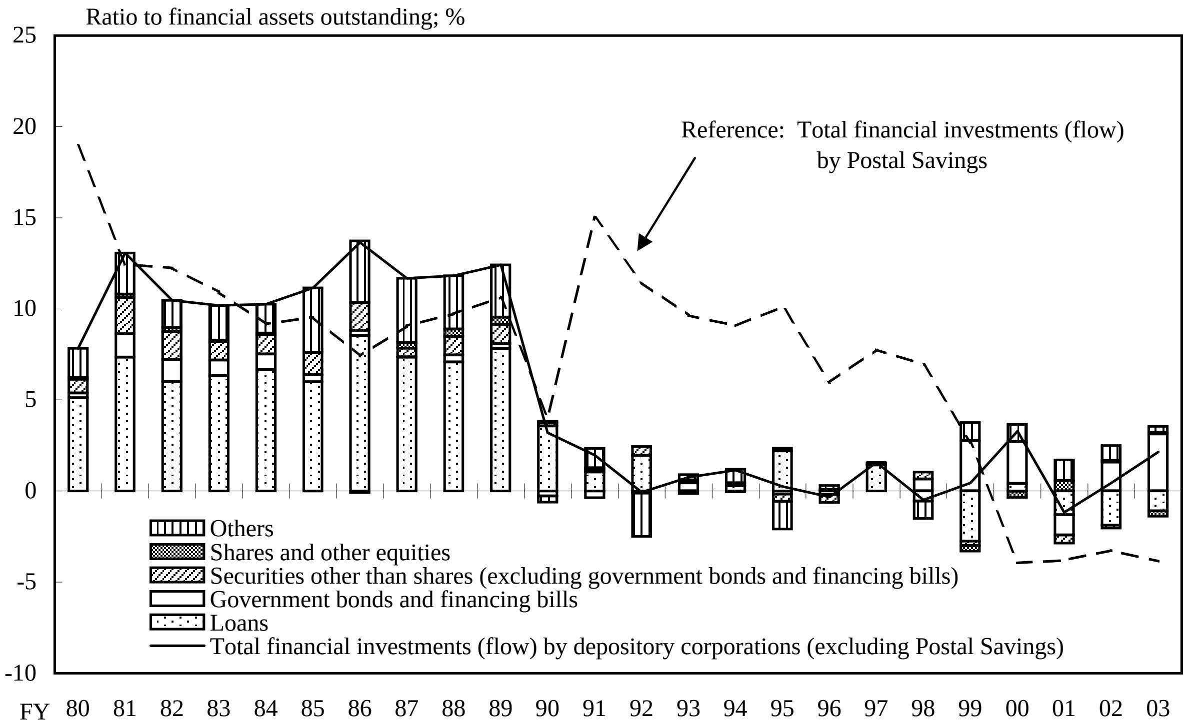
		FY 1979	FY 1989	FY 1999	FY 2003
Total financial liabilities outstanding (trillion yen)		629	2,227	2,924	2,808
Depository corporations		66.4	60.3	52.8	54.3
	Banks	54.6	50.6	39.7	43.6
	Postal savings	8.3	6.5	11.0	9.8
	Collectively managed trusts	3.5	3.2	2.1	0.9
Insurance and pension funds		8.2	10.2	14.5	15.5
	Private life and nonlife insurance, mutual aid insurance	4.6	6.1	7.3	7.9
	Postal life insurance, etc.	2.2	2.2	4.1	4.3
	Pension Funds	1.3	1.9	3.1	3.3
Other financial intermediaries		25.4	29.5	32.7	30.1
	Investment trusts	0.9	2.4	2.0	1.8
	Nonbanks	1.6	6.3	4.2	4.5
	Public financial institutions	20.0	15.2	21.7	19.2
	Financial dealers and brokers	2.8	3.2	3.5	3.9
	Noncollectively managed trusts	0.1	2.3	1.3	0.7
Reclassification					
Private financial institutions		69.4	76.1	63.2	66.7
Public financial institutions, etc.		30.6	23.9	36.8	33.3

Note: Public financial institutions, etc. includes postal savings, postal life insurance, etc. (insurance other than private life and nonlife insurance and mutual assistance insurance), and public financial institutions (Fiscal Loan Fund and government financial institutions).

Chart 17

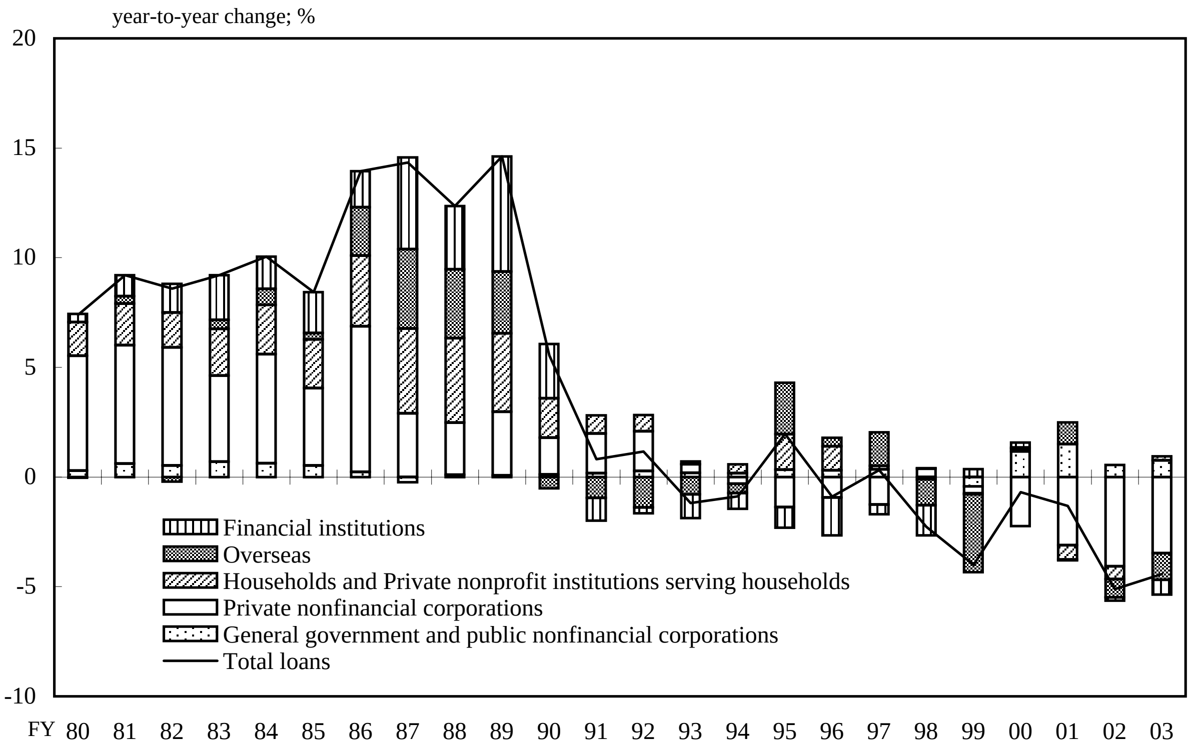
Financial Investments by Depository Corporations (Flow)

(1) Breakdown of Financial Investments (Flow) by Depository Corporations (excluding Postal Savings) and Total Financial Investments (Flow) by Postal Savings



Note: Financial assets outstanding figures are from the prior fiscal year.

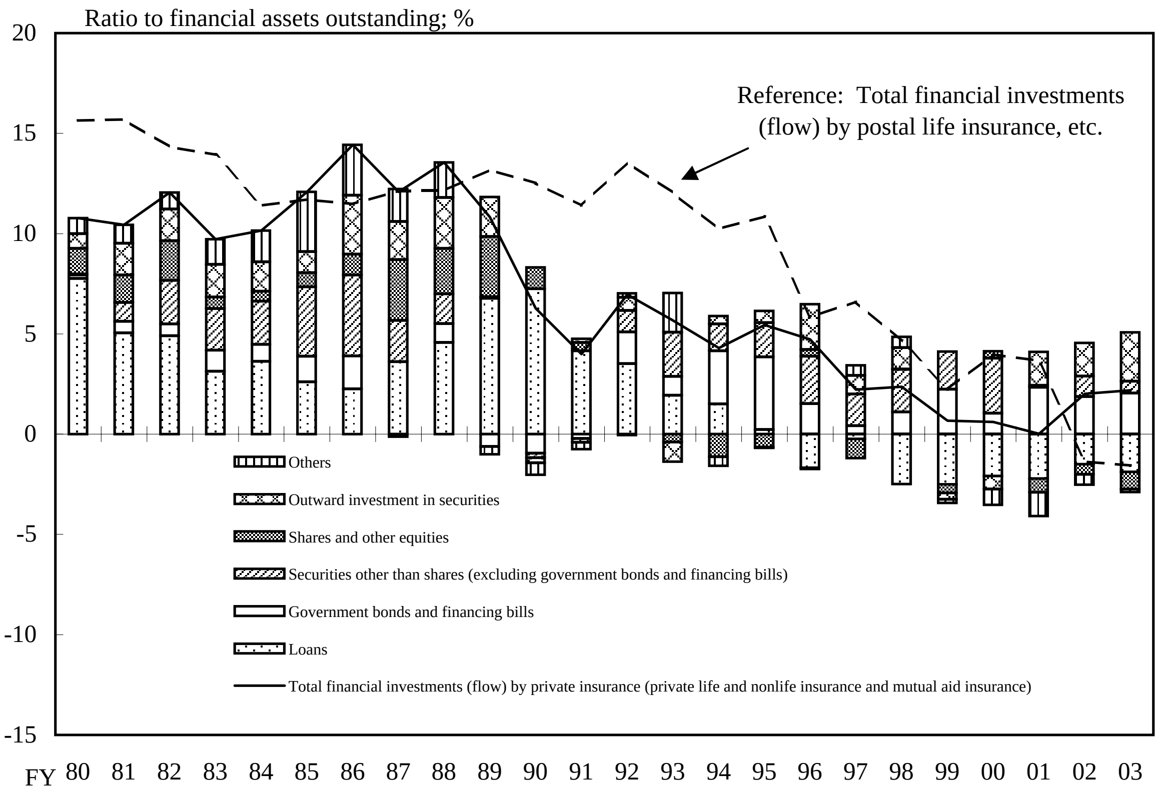
(2) Loans by Depository Corporations (excluding Postal Savings)



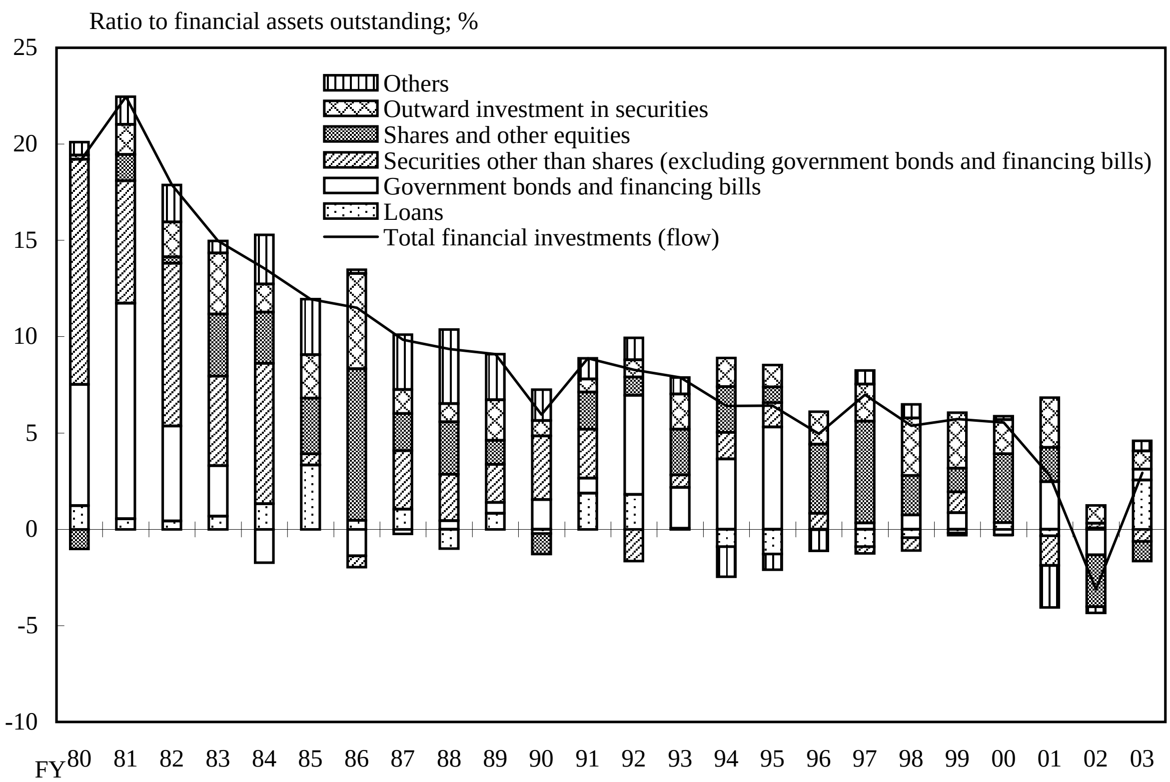
Note: Figures are on a net basis after deducting for intra-sectoral transactions.
Loans to financial institutions indicate loans to insurance and pension funds, other financial intermediaries, and financial auxiliaries.

Financial Investments by Insurance and Pension Funds (Flow)

(1) Breakdown of Financial Investments (Flow) by Private Insurance (private life and nonlife insurance and mutual aid insurance) and Total Financial Investments (flow) by Postal Life Insurance, etc.



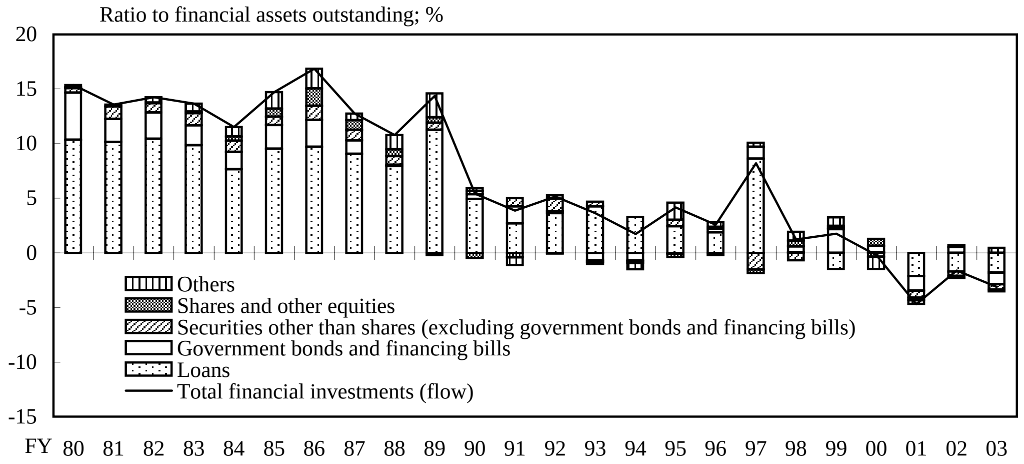
(2) Breakdown of Financial Investments (Flow) by Pension Funds



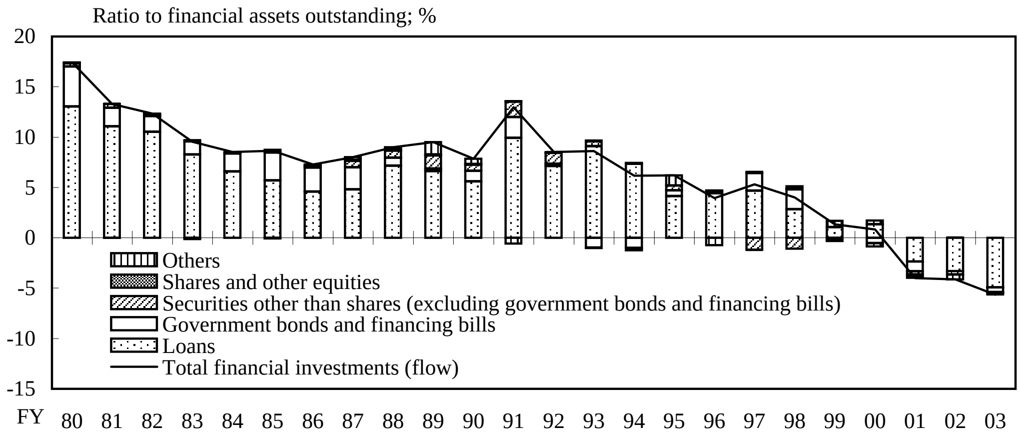
Note: Financial assets outstanding figures are from the prior fiscal year.

Financial Investments by Other Financial Intermediaries (Flow)

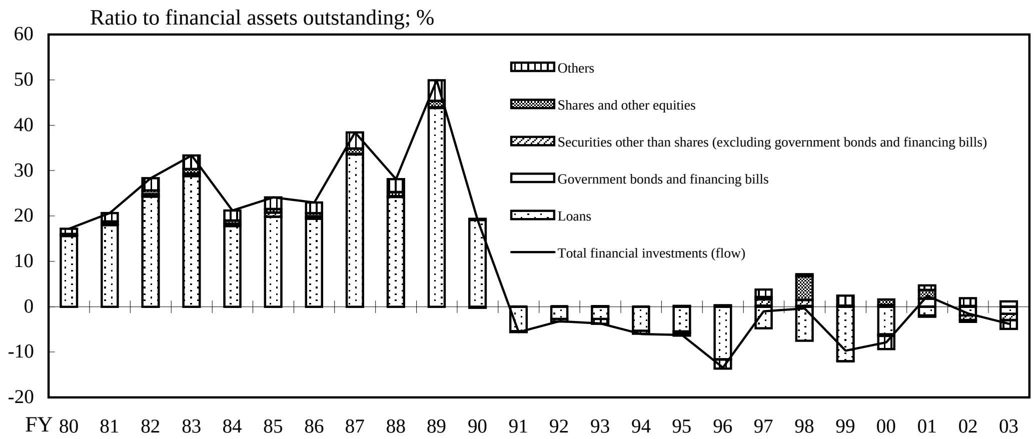
(1) Breakdown of Financial Investments (Flow) by All Other Financial Intermediaries



(2) Breakdown of Financial Investments (Flow) by Public Financial Institutions



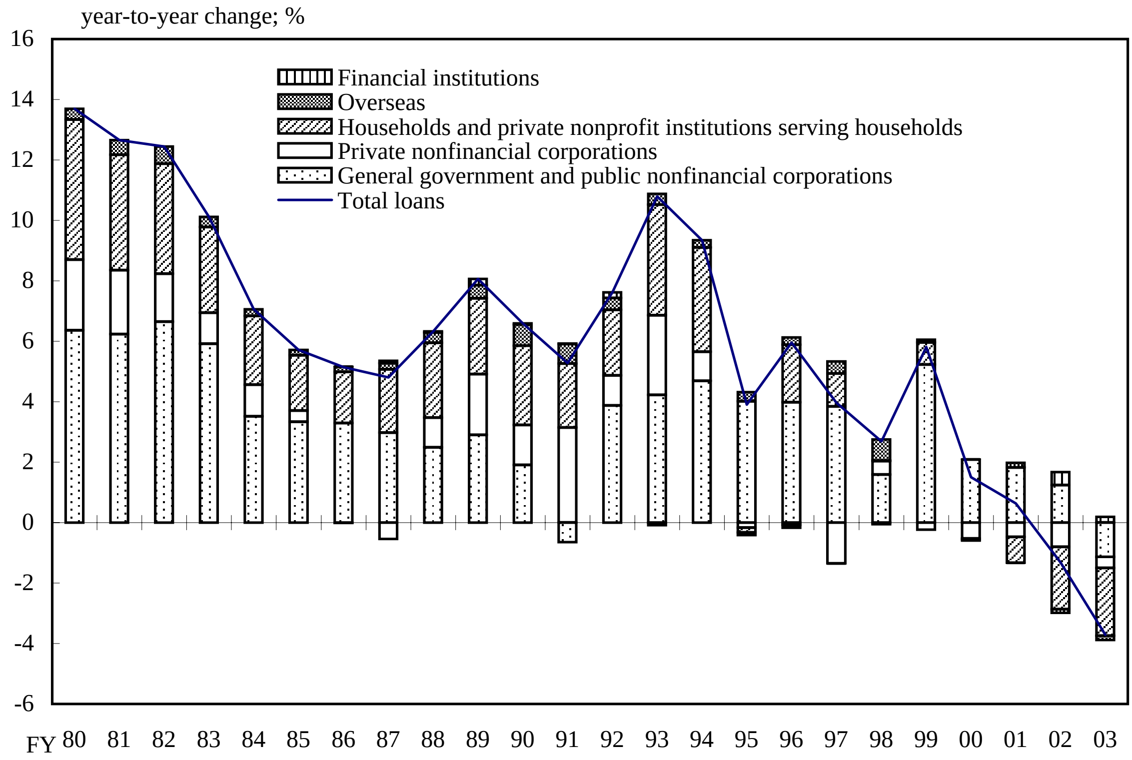
(3) Breakdown of Financial Investments (Flow) by Finance Companies



Note: Financial assets outstanding figures are from the prior fiscal year .

Chart 20

Loans Outstanding by Public Financial Institutions



Note: Figures are on a net basis after deducting for intra-sectoral transactions. “Loans by public financial institutions” indicate loans by postal savings and postal insurance, etc.(insurance other than private life and nonlife insurance and mutual aid insurance), and public financial institutions (Fiscal Loan Fund and government financial institutions).

Chart to Box 4

Government Bonds and Local Government Bonds by Holder

(1) Breakdown of Government Bonds and FBs by Holder

Component ratio excluding total outstanding; %

	FY 1979	FY 1989	FY 1999	FY 2003
Total outstanding (trillion yen)	62	173	411	656
Financial institutions	84.7	90.8	88.3	85.5
Public Sector	39.0	49.5	46.1	46.5
(of which)Central bank	22.4	20.6	12.5	15.1
Postal savings	0.0	2.3	6.9	13.2
Postal life insurance, etc.	0.2	0.3	6.4	8.2
Fiscal Loan Fund	15.7	25.8	19.4	9.8
Government financial institutions	0.7	0.6	0.8	0.3
Private Sector	45.7	41.3	42.2	39.0
(of which)Private depository corporations	38.3	30.7	24.1	25.1
Private life and nonlife insurance, mutual aid insurance, and pension funds	3.4	4.8	12.3	10.3
Other private financial intermediaries	3.9	5.6	5.7	3.6
General government	7.1	3.4	3.2	7.6
Others	8.1	5.8	8.5	6.9

(2) Breakdown of Local Government Bonds by Holder

Component ratio excluding total outstanding; %

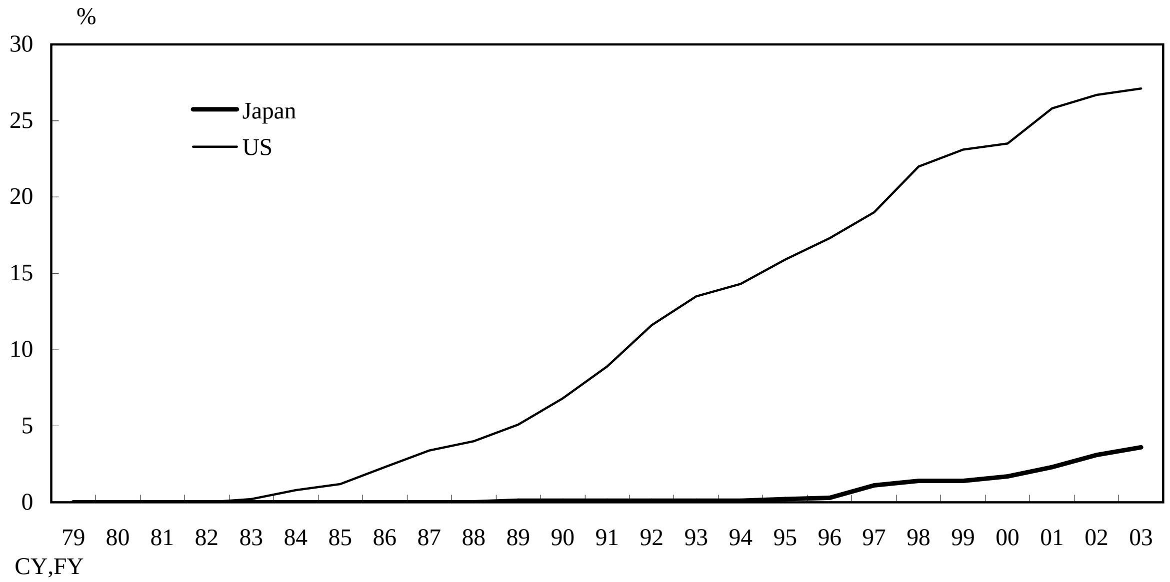
	FY 1979	FY 1989	FY 1999	FY 2003
Total outstanding (trillion yen)	16	19	57	59
Financial institutions	85.9	86.4	88.5	84.7
Public Sector	4.4	19.6	31.3	29.0
(of which)Postal savings	0.0	1.6	17.3	16.4
Postal life insurance, etc.	4.4	18.0	13.9	12.4
Private Sector	81.4	66.8	57.2	55.7
(of which)Private depository corporations	69.9	52.5	29.0	26.3
Private life and nonlife insurance, mutual aid insurance, and pension funds	8.4	12.0	25.3	27.9
Other private financial intermediaries	3.0	2.3	2.8	1.0
General government	5.3	7.9	5.3	4.2
Others	8.8	5.7	6.2	11.1

Chart to Box 5

Investment Trusts and Structured-financing Instruments Trends

(1) Investment Trusts Outstanding

(2) Ratio of Structured-financing Instruments to Total Loans by Private Financial Institutions
(Comparison between Japan and the US)



Notes: 1. The ratio of structured-financing instruments to loans is calculated as follows:

Japan (fiscal year) : Structured-financing instruments / (loans by private financial institutions + installment credit)

US (calendar year) : Asset-backed securities / loans by private financial institutions

2. Loans by private financial institutions in the US are defined as follows:

Loans : Bank Loans Not Elsewhere Classified, Other Loans and Advances , Total Mortgages, Consumer Credit

Private financial institutions : Financial institutions excluding Government-Sponsored Enterprises and Federally Related Mortgage Pools