

## **Japan's Financial Structure—in View of the Flow of Funds Accounts**

### **1. Introduction**

The Flow of Funds Accounts (hereafter FFA) are comprehensive financial statistics that show the movements of funds among economic entities such as enterprises, households, and the government, and the claim/debt relationships between them. In July 1999, the Research and Statistics Department of the Bank of Japan conducted a fundamental revision on the FFA for the first time in nearly 40 years and started releasing the new data.<sup>1</sup> The revised FFA reflects changes in financial and economic structure more precisely, provides statistics that are more convenient to use, offers greater consistency with national accounts, and makes international comparisons easier. Retroactively revised data for the past 10 fiscal years were also released in March 2000.

This paper will review the flow of funds in the Japanese economy in fiscal 1999 and will discuss the features of Japan's financial structure using the new FFA (data released in September 2000).

### **2. Flow of funds in fiscal 1999**

#### **(1) Financial flows**

The transaction table (flow table) for fiscal 1999 (Chart 1) shows financial surpluses<sup>2</sup> in

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<sup>1</sup> See *Guide to Japan's Flow of Funds Accounts* (Research and Statistics Department, Bank of Japan, November 1999) and *Compilation Method of the Flow of Funds Accounts* (Research and Statistics Department, Bank of Japan, October 2000) for the new FFA.

<sup>2</sup> Conceptually, financial surplus or deficit in the FFA is the same as the investment-savings gap in the national accounts (financial surplus = excess net savings, financial deficit = excess investment). They are not exactly the same because of differences in primary sources, estimation methods and the statistical discrepancies.

the households (37.8 trillion yen) and nonfinancial corporations (21.7 trillion yen) sectors and financial deficits in sectors such as general government (-39.5 trillion yen) and overseas (-11.7 trillion yen). This indicates that in fiscal 1999, the financial deficits in general government and overseas were financed by households and nonfinancial corporations through financial intermediaries.

Close examination of the flow of funds for each sector during fiscal 1999 shows that the financial surplus in the nonfinancial corporations sector soared and marked the largest in the past 10 years (FY 1998: 7.5 trillion yen; FY 1999: 21.7 trillion yen).<sup>3</sup> The financial investment of private nonfinancial corporations, which comprises a large share of the nonfinancial corporations sector (Chart 2), showed a substantial increase from the negative figures of the previous fiscal year (FY 1998: -12.0 trillion yen; FY 1999: +17.0 trillion yen) and the decrease in borrowings from financial institutions became large (FY 1998: -3.4 trillion yen; FY 1999: -10.0 trillion yen). This indicates that real investment such as in plant and equipment was restrained despite the recovery in corporate profits and the surpluses were used for debt payments and financial investment. From the breakdown of financial investment, we see that time and saving deposits decreased (FY 1998: -0.1 trillion yen; FY 1999: -4.4 trillion yen) and transferable deposits (FY 1998: +5.5 trillion yen; FY 1999: +5.9 trillion yen) and investment trust beneficiary rights (FY 1998: +1.7 trillion yen; FY 1999: +4.0 trillion yen) increased. Therefore, there seemed to be a shift in financial investment reflecting the low-interest rate under the zero interest rate policy.

In the households sector, the financial surplus expanded compared to the previous fiscal year (FY 1998: +31.3 trillion yen; FY 1999: +37.8 trillion yen). Looking at financial investment, the increase in time and savings deposits diminished (FY 1998: +19.2 trillion yen; FY 1999: +8.3 trillion yen), but transferable deposits (FY 1998: +6.1 trillion yen; FY 1999: +9.6 trillion yen), and investment trust beneficiary rights (FY

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<sup>3</sup> Released materials indicate that the surplus in the nonfinancial corporations sector and the deficit in the general government sector were both largest in fiscal 1998. This is, however, due to the transfers of debts from the former Japan National Railways Settlements Corporation and the Special Account for the National Forest Service to the General Account (approximately 27 trillion yen). In

1998: +1.5 trillion yen; FY 1999: +2.5 trillion yen) increased. As in the private nonfinancial corporations sector, funds shifted reflecting low interest rates. Fund raising decreased still more in loans to companies and governments (borrowings for business-like elements in the households sector; (FY 1998: -0.1 trillion yen; FY 1999: -5.4 trillion yen)). This suggests that sole proprietorships were reducing their debt.

In the general government sector, financial deficit increased and marked the largest deficit in the 1990s due mainly to a decline in tax revenue<sup>4</sup> and high levels of public investment (FY 1998: -26.7 trillion yen; FY 1999: -39.5 trillion yen). To finance this financial deficit, fund raising by central government securities and financing bills increased significantly (total of central government securities and financing bills, FY 1998: +19.7 trillion yen; FY 1999: +46.8 trillion yen).

The financial deficit of the overseas sector remains reflecting the nominal current account surplus, although the financial deficit declined somewhat compared to the previous fiscal year (FY 1998: -13.1 trillion yen; FY 1999: -11.7 trillion yen).<sup>5</sup> Financial investment from the overseas sector in shares and other equities increased, reflecting the rise in stock prices from the spring of 1999 (FY 1998: +2.4 trillion yen; FY 1999: +9.5 trillion yen). On the other hand, financial investment in central government securities turned to decline (FY 1998: +5.5 trillion yen; FY 1999: -1.2 trillion yen).

## **(2) Outstanding of financial assets and liabilities**

With respect to the assets and liabilities table (stock table; Chart 3) at the end of fiscal 1999 (end of March 2000), outstanding assets in the nonfinancial corporations sector

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this paper, these factors are adjusted (for details see the note on chart 7).

<sup>4</sup> In fiscal 1999, tax revenue (general account basis) decreased by over 2 trillion yen from the previous fiscal year as a result of depressed income and corporate taxes.

<sup>5</sup> The financial surplus or deficit of the overseas sector matches the amount left after deducting settlement received amounts of interest rate swaps (that are included in the current accounts (posted as interest) in the balance of payments statistics, but are not regarded as interest in FFA and SNA) from total current accounts and capital accounts.

were 739 trillion yen and outstanding liabilities were 1,469 trillion yen. So, the nonfinancial corporations sector still remains the largest net debtor on a stock base. The breakdown of liabilities shows that borrowing (indicated as “loans” on the table) was 566 trillion yen, and shares and other equities was 500 trillion yen, but fund raising by securities such as industrial securities was a rather small figure of 78 trillion yen (total of industrial securities, CPs, and external securities issued by residents). The year-to-year outstanding of assets and liabilities (Chart 4) both showed high growth in fiscal 1999 (assets: 8.1 percent; liabilities: 10.2 percent). This is because the outstanding of shares and other equities reflects the rise in stock prices.<sup>6</sup>

In the households sector, the outstanding of financial assets at the end of fiscal 1999 was 1,390 trillion yen and that of liabilities was 393 trillion yen. Thus, the households sector was a net creditor with the outstanding of net assets of 997 trillion yen (see BOX 1 for discussions on financial assets in the households sector). If we breakdown financial assets in the households sector, safety assets such as currency and deposits comprise over half the assets (748 trillion yen) and the weights of shares and other equities (117 trillion yen) and securities other than shares (92 trillion yen) were small. Moreover, in the FFA, insurance and pensions are regarded as financial assets of the households (posted as insurance and pension reserves<sup>7</sup>) and the outstanding was 384 trillion yen, making up nearly 30 percent of total financial assets. While the outstanding of financial liabilities decreased (-0.8 percent at the end of fiscal 1999 on a year-to-year basis), the outstanding of financial assets increased on a year-to-year basis as the market value of shares and other equities increased due to the rise in stock prices (+4.9 percent at the end of fiscal 1999; Chart 4).

In the general government sector, the outstanding of assets was 428 trillion yen and that

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<sup>6</sup> In the assets and liabilities table, outstanding is basically posted on a market value basis. This means that the outstanding of shares and other equities on the liability side is not the cumulative amount of fund raising over the past years. In fiscal 1999, although shares and other equities hardly changed on a flow basis, the growth rate of the outstanding of shares and other equities was high (year-to-year increase of 41.6 percent), due to the increase in stock prices.

<sup>7</sup> Savings of savings-type insurance by households are posted as insurance reserves, while savings of personal pension instruments and corporate pensions are posted as pension reserves.

of liabilities was 639 trillion yen. This sector is a net debtor and liabilities increased even further over the previous year (end of FY 1998: +8.6 percent; end of FY 1999: +9.5 percent). In more detail, social security funds was a net creditor while the central government sector and local governments sector were net debtors. In particular, the outstanding of net liabilities of the central government sector was large of 369 trillion yen.

As for the overseas sector, the outstanding of assets was 237 trillion yen (external liabilities for Japan) and that of liabilities was 325 trillion yen (external assets for Japan). Thus, Japan is a net creditor. Financial assets of the overseas sector turned to an increase year-on-year due to the rise in investment in shares in addition to the valuation profit<sup>8</sup> caused by the rise in Japanese stock prices (end of FY 1998: -6.7 percent; end of FY 1999: +1.5 percent). Meanwhile, financial liabilities decreased further compared to the previous year due to the valuation loss of outward investment in securities from Japan caused by the appreciation of the yen (end of FY 1998: -2.3 percent; end of FY 1999: -12.0 percent).

### **(3) Overview of Financial intermediaries**

By rearranging the financial assets and liabilities table (stock table; Chart 3) as in Chart 5, we can observe how funds flow through financial intermediaries. Depository corporations (banks, postal savings, and collectively managed trusts) use deposits such as those of the households sector as fund resources and lend them to fund-raising entities such as the nonfinancial corporations sector (postal savings are transferred to the Trust Fund Bureau as deposits with the Trust Fund Bureau). Meanwhile, insurance and pension funds function as financial intermediaries by investing the savings reserves of the households sector in securities such as central government securities. Other financial intermediaries include securities investment trusts, nonbanks, and the Trust Fund Bureau and government financial institutions. Postal savings and savings of public pensions comprise 60 to 70 percent of the total liabilities of other financial

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<sup>8</sup> Changes in the outstanding in line with price fluctuations, such as those in shares, are mentioned in the reconciliation table. The overseas sector posted a large reconciliation amount for shares in fiscal 1999 (as a ratio to assets held: 87.3 percent).

intermediaries. Public financial institutions<sup>9</sup>, in particular, lend these funds to the nonfinancial corporations and the households.

Next, we compare the composition of the outstanding of financial assets and liabilities by financial intermediaries at the end of fiscal 1999 to that of the U.S. (Chart 6). In Japan, the outstanding of assets and liabilities of depository corporations comprise approximately 50 percent of those of total financial intermediaries, reflecting that financial investment by the households sector is conducted mainly in deposits. On the other hand, the U.S. depository corporations only comprise about 20 percent of the total. This indicates that traditional indirect financing, particularly by depository corporations, is the mainstream in Japan.<sup>10</sup> For other financial intermediaries, the public sector such as the Trust Fund Bureau plays an important role as financial intermediaries, which is a sharp contrast with the U.S. In the U.S., securities investment trusts (mutual funds) and nonbanks, which raise funds mainly through bonds and investment trusts and invest them mainly in bonds and shares, play an important role.

### **3. Changes and Features of the Financial Structure during the 1990s**

The previous chapter focused on the flow of funds in fiscal 1999. Here, we examine changes and features of the financial structure in Japan through the flow of funds in the

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<sup>9</sup> Public financial institutions in the FFA consist of the Trust Fund Bureau and government financial institutions. In addition to the so-called government financial institutions, government financial institutions in the FFA include special accounts for public investment and loans other than the Trust Fund Bureau and special status corporations that act as financial intermediaries as their primary business.

Nevertheless, since postal savings are classified as depository corporations, deposits with the Trust Fund Bureau of postal savings are posted as assets of depository corporations. Public pensions are classified as general government (social security funds) and so the deposits with the Trust Fund Bureau of public pensions are recorded as assets of general government (social security funds).

<sup>10</sup> In the European countries, the weight of depository corporations is high as observed in Japan. In Germany, where the universal banking system is accepted, the outstanding of assets and liabilities of depository corporations comprise 70 percent of all financial intermediaries. However, since affiliates of securities companies are included in depository corporations in Germany, the ratio of loans to total financial intermediaries is low compared to Japan. For details, see *Points on International Comparison of the Flow of Funds Accounts* (Research and Statistics Department, Bank of Japan, December 2000).

1990s.

### **(1) Structural changes and features of the domestic nonfinancial sector**

#### **(Structural changes in the financial surplus or deficit by sector)**

With regard to developments from fiscal 1990 (Chart 7), the households sector was in financial surplus of about 6 to 8 percent as a ratio to nominal GDP while the overseas sector was in financial deficit of around 2 to 3 percent due to the continuing current account surplus. Hence, significant changes were not observed in either sector throughout the 1990s.

In the nonfinancial corporations sector, a substantial financial deficit occurred in the first half of the 1990s reflecting the intentions of firms to stimulate business fixed investment, but as investment in real assets such as fixed investment was restricted from the mid-1990s, the financial deficit diminished. As a result, the nonfinancial corporations sector started to become a financial surplus from fiscal 1998. In contrast, the general government sector was in financial surplus in the early 1990s due to favorable tax revenues in line with the economic expansion and the increase in savings in social security funds. From fiscal 1993, however, it started into a financial deficit entity against the background of a rise in public investment and the financial deficit was becoming larger in these years.

During the 1990s, there was a contrast between changes in the nonfinancial corporations sector and the general government sector. These changes indicate that investment has shifted from the private sector to the public sector amid economic stagnation after the burst of the bubble economy.

Now, we will explore the changes and features of financial investment and fund raising during the 1990s of the households, nonfinancial corporations, and general government sectors.

#### **(Financial investment of the households sector)**

The households sector was the largest fund providing entity throughout the 1990s.

Outstanding of financial assets increased from 926 trillion yen at the end of fiscal 1989 to 1,390 trillion yen at the end of fiscal 1999 (as a ratio to nominal GDP, the figure rose from 2.3 times to 2.8 times; Chart 8).

Looking more closely at the composition ratio to financial assets in the households sector, we see the weight of currency and deposits, insurance and pension reserves increased by more than 5 percentage points in the past decade. The weight of risk assets such as shares and other equities, and investment trusts declined. These changes are influenced by the decline in the market value of shares that followed the decrease in stock prices. However, when looking at financial investment in each fiscal year (flow; Chart 9), a majority of the amount was invested as currency and deposits (including postal savings), and insurance and pension reserves. This means that investment in risk assets such as shares was barely increasing<sup>11</sup> and it seemed that the portfolio selection of the households sector in Japan tended to become risk-averse amid the economic stagnation that followed the bursting of the bubble economy. In U.S. households during the 1990s, the weight of currency and deposits were declining and the weight of shares and other equities, and investment trusts were increasing. That is a sharp contrast from what was observed in Japan (Chart 8).

#### **(Fund raising in the nonfinancial corporations sector)**

Fund raising<sup>12</sup> in the private nonfinancial corporations sector during the 1990s rapidly reduced from the mid-1990s and started to decline from fiscal 1997 (Chart 10). On the other hand, the rate of increase for public nonfinancial corporations became somewhat small from fiscal 1998 to 1999 but it remained on a rising trend throughout the 1990s. The year-to-year changes show that fund raising by public nonfinancial corporations surpassed that of private nonfinancial corporations from the end of fiscal 1992. Even in the nonfinancial corporations sector, the fund raising entity shifted from private nonfinancial corporations to public nonfinancial corporations.

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<sup>11</sup> Financial investments in investment trusts declined from the second half of the 1990s due to financial anxieties about failures of securities companies (Chart 9).

<sup>12</sup> Fund raising <flow> = Borrowing + Securities other than shares + Shares and other equities.

In the private nonfinancial corporations sector, which comprises most of the nonfinancial corporations sector (Chart 11), in the first half of the 1990s, the amount of borrowings decreased sharply because demand for funds declined in line with the deceleration of business fixed investment. As a result, the fund raising amount decreased. From the mid-1990s, the fund raising amount increased slightly with the gradual economic recovery, but the amount turned to decline from the second half of fiscal 1997 to the first half of fiscal 1998 due to the cautious lending attitude of financial institutions reflecting raising financial anxieties and the depressed demand for equipment funds.<sup>13</sup> In fiscal 1999, financial anxieties eased and business fixed investment bottomed out. Corporate profits improved. However, fund raising remained negative as balance sheet restructuring continued. Reflecting these developments, the net financial positions of the nonfinancial corporations sector as a ratio to nominal GDP, which remained at a high level since the first half of the 1990s, declined substantially through fiscal 1998 to fiscal 1999 (Chart 12).

#### **(Fund raising by the general government sector)**

In the general government sector, the financial deficit expanded from fiscal 1993 due mainly to the central government sector (Chart 13). As for the debt outstanding of the central government (Chart 14), the issued outstanding of central government securities and financing bills increased throughout the 1990s and the pace of increase was particularly noticeable in the second half of the 1990s.<sup>14</sup> Breakdown central government securities and financing bills by holder (Chart 15), and we see that nearly 90 percent are held by financial institutions and the ratio of those held by the households and nonfinancial corporations sectors remained at a low level. This trend remained unchanged for the past ten years. Among financial institutions, over half the

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<sup>13</sup> As for the breakdown of fund raising, borrowings from the nonfinancial sector increased in FY1995 and FY 1996, and decreased in FY1997 and FY1998. This is mainly because borrowings from the overseas sector fluctuated (in the FFA, all loans from the overseas sector are posted as “loans by the nonfinancial sector) reflecting the shift between Euro-yen impact loan and loans of domestic branches.

<sup>14</sup> In the FFA, the outstanding of bonds is evaluated on a market value basis, and so it does not match with that measured on a face value basis.

securities and bills were held by the public sector such as the Trust Fund Bureau and the central bank.

The local governments sector turned to a financial deficit from fiscal 1992 (Chart 13),<sup>15</sup> and the outstanding of debt increased cumulatively through the second half of the 1990s as happened in the central government sector.<sup>16</sup> These fund raising activities depend mainly on borrowing from public financial institutions (composition ratio to fund raising <fiscal 1999>: 46.7 percent) and local government securities<sup>17</sup> (composition ratio to fund raising <fiscal 1999>: 40.6 percent), but there was also borrowing from private financial institutions (composition ratio to fund raising <fiscal 1999>: 10.8 percent). With regard to the breakdown of local government securities by holder (Chart 17), like that of central government securities, nearly 90 percent of local government securities are held by financial institutions and this trend remains unchanged throughout the 1990s. Looking close at financial institutions, the weight of private depository corporations declined, but the weight of private insurance and pension funds, and postal savings increased.

Social security funds were in financial surplus mainly due to savings of public pensions but the surplus diminished in fiscal 1998 and 1999 compared to the first half of the 1990s (Chart 13). This is because pension benefits and payments of health insurance were increasing compared to the savings of public pensions. Thus, in line with the aging population, this indicates that there are changes in the financial flow of social security funds.

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<sup>15</sup> The local governments sector was in financial surplus in 1990 and 1991 but this is due to the abundant tax revenue available during bubble economy. Prior to this period, it is thought to have been in financial deficit. (Before the statistics were revised, “public corporations and local governments” were in financial deficit prior to fiscal 1987.)

<sup>16</sup> The outstanding of debt of the local governments sector does not include “among the outstanding of borrowings of Special Accounts for Allotment of Local Allocation Tax and Local Transfer Tax, the local government burden (projection for fiscal 1999:22 trillion yen).” The outstanding of borrowings of the Special Accounts for Allotment of Local Allocation Tax and Local Transfer Tax are all posted as the debt of the central government sector.

<sup>17</sup> Local government securities in the FFA are the total of publicly issued municipal bonds and privately-placed municipal bonds issued domestically by local governments.

## **(2) Changes and Features of Financial Intermediation Structure**

### **(Overview of financial intermediaries)**

As discussed, depository corporations continue to make a large share of the financial intermediaries in Japan. Here, we examine how the financial intermediation structure changed during the 1990s by comparing the outstanding of assets and liabilities at the end of fiscal 1999 (end of March 2000) to that of 10 years before.<sup>18</sup>

In the liabilities side (Chart 18), the weight of depository corporations within financial intermediaries declined over 10 years due to decreases in collectively invested trust beneficiary rights (classified as bonds), and shares and other equities in line with the drop in stock prices (end of FY 1989: 60.1 percent; end of FY 1999: 51.7 percent). Thus, the weights of insurance and pension funds (end of FY 1989: 9.7 percent; end of FY 1999: 14.3 percent) and other financial intermediaries (end of FY 1989: 30.2 percent; end of FY 1999: 34.0 percent) rose. However, the weight of deposits with depository corporations to total liabilities was almost unchanged over the past ten years (end of FY 1989: 37.1 percent; end of FY 1999: 36.9 percent). This shows a distinct difference between the U.S., where the weight of depository corporations, the largest financial intermediary 10 years ago decreased as a result of a substantial decline in deposits. The weight of other financial intermediaries is rising in both Japan and the U.S., but this is mostly due to the increase in deposits with the Trust Fund Bureau in Japan, while it is because of a noticeable increase in securities investment trusts in the U.S.

On the assets side (Chart 19), the weight of depository corporations within financial intermediaries declined from ten years before (end of FY 1989: 58.1 percent; end of FY 1999: 51.3 percent). On the other hand, both the weights of insurance and pension funds (end of FY 1989: 12.0 percent; end of FY 1999: 15.2 percent) and other financial intermediaries (end of FY 1989: 29.9 percent; end of FY 1999: 33.5 percent) increased.

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<sup>18</sup> Because of data limitations, the outstanding at the end of fiscal 1989 (end of March 1990) for Japan and that at the end of 1990 (end of December 1990) for the U.S. are used for comparison.

Under this condition, the weight of loans to assets of financial intermediaries declined slightly from ten years before (end of FY 1989: 54.4 percent; end of FY 1999: 51.2 percent). Looking at specific sectors, the weight of loans to depository corporations decreased (end of FY 1989: 31.1 percent; end of FY 1999: 24.5 percent), while the weight of loans to other financial intermediaries, particularly in public financial institutions, increased (end of FY 1989: 20.1 percent; end of FY 1999: 23.4 percent). As a result, the weights of loans of both sectors are about the same.<sup>19</sup> Meanwhile in the U.S., the weight of loans to depository corporations declined in line with the decrease in deposits (end of 1990: 22.7 percent; end of FY 1999: 12.8 percent) but the weight of shares and other equities of other financial intermediaries and insurance and pension funds expanded (end of 1990: 10.6 percent; end of FY 1999: 27.0 percent). This may be because stock prices increased and because the expansion in stock investment was positively influenced by stock prices. These developments contrast with those in Japan where the weight of shares and other equities declined along with the decrease in stock prices.

#### **(Loans of depository corporations)**

There seems to be no major changes in the role of depository corporations as financial intermediaries. However, the weight of loans, which has played a major role in terms of fund supply, has been declining.

As for loans by depository corporations<sup>20</sup> for the past 10 years (Chart 21), high growth was observed in the beginning of the 1990s but decelerated rapidly thereafter, although

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<sup>19</sup> The weight of public financial institutions among financial intermediaries in terms of the amount outstanding of assets increased from 15.4 percent at the end of fiscal 1989 to 22.0 percent at the end of fiscal 1999 (Chart 20).

<sup>20</sup> To analyze loans of depository corporations (excluding postal savings) to other sectors, loans of depository corporations are defined as loans of private financial institutions on a consolidated basis by deducting loans and borrowings among depository corporations (excluding postal savings). The breakdown of loans of depository corporations (excluding postal savings) by borrower show figures outstanding of loans by sector of financial intermediaries (see the “reference” in the released material of the FFA).

it recovered temporarily in fiscal 1995, and started to decline from fiscal 1998.<sup>21</sup> This basically reflects the decrease in the demand for funds in the private nonfinancial corporations sector as well as the cautious lending attitude of depository corporations from the second half of fiscal 1997 to the first half of fiscal 1998, as mentioned above. Loans to financial institutions (after deducting inter-sector transactions) are mostly to nonbanks and after marking high growth in fiscal 1990, they have exerted downward pressure on loans as a result of the burst of the bubble economy.

The year-to-year change in outstanding of loans of depository corporations will be examined, using the transaction table (flow) and reconciliation table. Looking at both the loan flow factor and reconciliation factor such as write-offs (Chart 22), loans on a flow basis continued to increase year-to-year until fiscal 1998, although they decreased significantly in fiscal 1999. This means that the depreciation of the real value of loan assets (=reconciliation amount <same as the amount of direct write-offs of loans and addition to allowances for individual uncollectibles>) constrained the growth of the outstanding. In March 1999, vast amounts of public funds were injected into private financial institutions. Since the public funds were mainly loans from depository corporations (private financial institutions) to the Deposit Insurance Corporation of Japan, it should be taken into consideration that this is added to the loans amount of depository corporations in fiscal 1998 (see BOX 2 for details on the flow of funds for public fund injections).

#### **(Financial investment and fund raising of insurance and pension funds)**

The weight of insurance and pension funds as a financial intermediation has increased in the past 10 years (Charts 18 and 19), although it is still small compared to that of the U.S. Here, we discuss the features of insurance and pension funds from the fund raising and investment aspects.

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<sup>21</sup> The positive growth in fiscal 1995 and the negative growth during fiscal years 1998 to 1999 are largely due to the developments of loans to the overseas sector. These developments are affected by fluctuations in lending to overseas branches through banking accounts of inter-offices in conjunction with borrowing and payment of Euro-yen impact loans of Japanese enterprises (transfer

First, with regard to the developments of insurance and pension reserves of the past 10 years (Chart 23), the growth rate was around 10 percent in the first half of the 1990s but it slowed from the second half of the 1990s particularly among insurance reserves, of which the outstanding is twice as large as that of pension reserves. This is because the growth of insurance contracts decreased as a result of the decline of the crediting rate due to the drop in interest rates and the maturity of single premium endowment insurance during the second half of the 1980s. While the growth of insurance reserves for private life insurance were stagnant, that of postal life insurance continued to show a firm increase and thus the weight of public insurance was rising (Chart 24).

As for asset investment (Chart 25), the weights of shares and other equities, and loans within insurance were becoming small but the weight of securities other than shares was rising. This basically reflects the decline in stock prices after the burst of the bubble economy and the sluggish demand for funds in the private nonfinancial corporations sector. It also reflects the increase in the weight of postal life insurance, mainly in the investment of securities other than shares such as central government securities. For pension funds, the weight of risk assets such as shares and other equities and outward investment in securities has increased reflecting deregulation in investment<sup>22</sup> from the second half of the 1990s.

In the U.S. (Chart 26), pension funds invested aggressively in risk assets, such as shares and other equities, and investment trusts. The outstanding of investment assets were twice as large as insurance (opposite to the situation in Japan). These factors have caused the difference between Japan and the U.S. in terms of the supply of risk funds through financial intermediation.

### **(Developments of loans by public financial institutions)**

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to loans of domestic branches).

<sup>22</sup> As for the asset allocation regulation of employees' pension funds (the so-called "5-3-3-2" regulation), the regulation for each investing corporation was in abolished in 1995 (in the investment expansion sector) and 1996 (in the traditional investment sector). Thereafter, in 1997, the asset allocation regulation was abolished completely.

Loans by public financial institutions,<sup>23</sup> adding postal life insurance to public financial institutions (Charts 27 and 28), showed high growth throughout the 1990s. Hence, the weight of loans by public financial institutions as a result of the outstanding of financial assets was increasing in financial intermediaries at a rapid pace.

Loans to the general government sector and public nonfinancial corporations sector exerted upward pressure on the growth rate throughout the 1990s. However, the high contribution of loans to the households sector during the first half of the 1990s started to decline from the second half as interest rates of housing loans in the private financial institutions decreased. During the 1990s, fiscal investment and loan activities were stimulated using funds such as postal savings and public pensions. During this period, the relative weight of public financial intermediaries increased (see BOX 3 for details on fiscal investment and loans).

In the U.S., the weight of loans by public financial institutions to the outstanding of financial assets of financial intermediaries was low compared to Japan and continued to decline throughout the 1990s (Chart 28). Most of the loans were liquidated and the weight of loan assets, which were considered to be financial intermediation risks by public financial institutions, was even lower.

#### **(New movements in financial intermediation)**

For the past decade in the U.S., the weight of other financial intermediaries such as nonbanks and securities investment trusts has been increasing rapidly on behalf of traditional depository corporations. In Japan, the construction of the legal infrastructure and deregulation of nonbanks and securities investment trusts progressed, but the new intermediary route by financial intermediaries has not expanded yet (Charts 18 and 19). Details on nonbanks and securities investment trusts regarding this point are as follows.<sup>24</sup>

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<sup>23</sup> Loans by public financial institutions include loans of postal savings and postal life insurance in addition to loans by government financial institutions and the Trust Fund Bureau. Here, the analyses are conducted on a consolidated basis that deducts inter-sector transactions such as those from the Trust Fund Bureau to government financial institutions.

<sup>24</sup> Nonbanks in the FFA are defined as private financial institutions that raise funds through methods other than deposits and deposit-like instruments and invest such funds by loans (includes purchase of structured-financing instruments). Nonbanks consist of finance companies engaged in money

In Japan, over 90 percent of financial assets and liabilities posted as nonbanks are those of finance companies. Loans by finance companies (Chart 29) grew substantially in fiscal 1990 but have declined since fiscal 1991. The breakdown of these developments shows that the decline is due to the decrease in loans to companies and governments, and that the burst of the bubble economy, as observed through write-off and collections of loan claims secured by real estate throughout the 1990s, has caused the reduction in loans of financing companies. Many finance companies are not raising resource funds through securities other than shares as in the U.S., instead nearly 80 percent of fund raising relies on borrowing from banks (Chart 30). This means that a majority of the financial flow through nonbanks in Japan basically does not differ from traditional financial intermediation particularly by depository corporations.

Financial intermediation through structured-financing institutions grew, reflecting the deregulation<sup>25</sup> that began in fiscal 1997. However, the weight of securitized instruments to loans at the end of fiscal 1999 remained very small at just below 2 percent. In contrast, in the U.S., nearly 20 percent of loans of private financial institutions are liquidated<sup>26</sup> (Chart 31).

There were no major developments in securities investment trusts, amid sluggish stock market conditions throughout the 1990s. This is a sharp contrast to the U.S. where investment trusts expanded rapidly particularly among mutual funds as stock prices increased (Chart 32). In Japan, securities investment trusts started to increase from fiscal 1998 due to various deregulation measures such as the commencement of investment trusts sales at banks. Whether these movements will continue depends on the extent of funds which providers such as the households sector will select risk assets from financial institutions.

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lending business and structured-financing special purpose companies and trusts.

<sup>25</sup> In line with the implementation of the law regarding regulation of business concerning specified claims in 1993, the legal framework for securitizing leasing and credit claims was established. In addition, the issuance of asset-backed securities started as a back-up to leasing and credit claims in 1996.

#### 4. Conclusion

This paper has discussed the following four points regarding the changes and features of the financial structure in Japan during the 1990s and the flow of funds for fiscal 1999.

(1) During the 1990s, the nonfinancial corporations sector changed from a financial deficit entity to a financial surplus entity. It was the other way round for the general government sector. As the economy remains weak after the burst of the bubble economy, the investment entity has shifted from the private corporations sector to the public sector.

(2) Throughout the 1990s, the households sector was a financial surplus entity, but in terms of investment, the weight of currency and deposits, and insurance and pension reserves increased. This shows that since the burst of the bubble economy and the lingering economic stagnation, the portfolio selection of the households sector has been risk-averse.

(3) The financial structure continues to rely on indirect financing. When looking at the flow of funds from deposits to loans, however, the weight of banks has declined, but the weight of the public sector such as postal savings and public financial institutions have risen.

(4) Although the construction of the legal framework and deregulation for new financial intermediaries such as securities investment trusts and liquidating claims are in progress, they have not grown large enough to be a new financial intermediation route.

Since the FFA are secondary statistics compiled from various primary statistics, estimation discrepancies occur. However, the FFA covers a wide range and points a comprehensive picture of the financial structure in Japan. The Research and Statistics

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<sup>26</sup> Over 70 percent of loans of public financial institutions are liquidated.

Department of the Bank of Japan will continue to enhance the accuracy of the FFA by incorporating the opinions of users in order to capture changes of the financial structure in Japan more accurately as financial system reforms are taking place as part of the Financial Big Bang.

## **BOX 1 Financial Assets of the Households Sector**

The outstanding of financial assets in the household sector is 1,390 trillion yen. This means that financial assets of 11 million yen are held per capita. It is sometimes pointed out that this 11 million yen per capita does not reflect reality or that the figure is large compared to other surveys.<sup>1</sup> Here, we examine whether the 1,390 trillion yen figure in the FFA is accurate.

First, when estimating financial assets in the households sector, many figures - such as those of deposits, and insurance and pension reserves - are based on the balance sheets of financial institutions and thus discrepancies are a few trillion yen at the most.<sup>2</sup> Moreover, there are no statistical problems such as sample bias and low responses that may occur in surveys (sample surveys). In this sense, we believe the 1,390 trillion yen estimate in the households sector to be accurate.

However, some financial assets may be deducted when we consider “financial assets of the households sector” because of the following reasons:

(1) Some financial assets in the FFA are hard to identify as financial assets of households (such as pension reserves (personal pension products of life insurance companies, and corporate pensions and national pension funds), deposits money (golf club membership<deposits>), and accounts receivable/payable (deferred and accrued interests of deposits)). (2) The households sector includes not only individuals but own-account workers as well.

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<sup>1</sup> According to the *Family Savings Survey* (Management and Coordination Agency, December 1999) financial assets held by households per capita was 5 million yen (including business-like element funds) while it was 4 million yen per capita in the *Public Opinion Survey on Household Savings and Consumption* (Central Council for Savings Information, June 2000; excluding business-like element funds).

<sup>2</sup> From source data limitations, slight discrepancies are projected for financial derivatives, accounts receivable/payable, and outward investment in securities. In addition, securities other than shares also may include slight discrepancies. These transaction items combined, only equal about 10 percent of total financial assets in the households sector. Thus, even though discrepancies may occur, the amount is expected to be very small.

When deducting all instruments listed in (1), financial assets held by the households sector decreased to 1,216 trillion yen. As for business-like element funds in (2), 10 percent of the 1,216 trillion yen is assumed to be business-like element funds,<sup>3</sup> so the financial assets held by individuals would be about 1,100 trillion yen. Converting this into per capita shows that over 8 million yen are held as financial assets per capita.

In this way, outstanding of financial assets in the households sector, which is 1,390 trillion yen, should be used on the understanding of the definition. If the estimation of 8 million yen of financial assets per capita still seems to be overestimated, this should be examined as a problem deriving from the gap in assets held.

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<sup>3</sup> Among financial liabilities of households, those other than housing loans and consumer credits are assumed to be business-like element liabilities. Furthermore, by assuming that the ratio of business-like element financial assets to liabilities is the same as sole proprietorships and private nonfinancial corporations, the estimation of business-like element financial assets of sole proprietorships is 97 trillion yen.

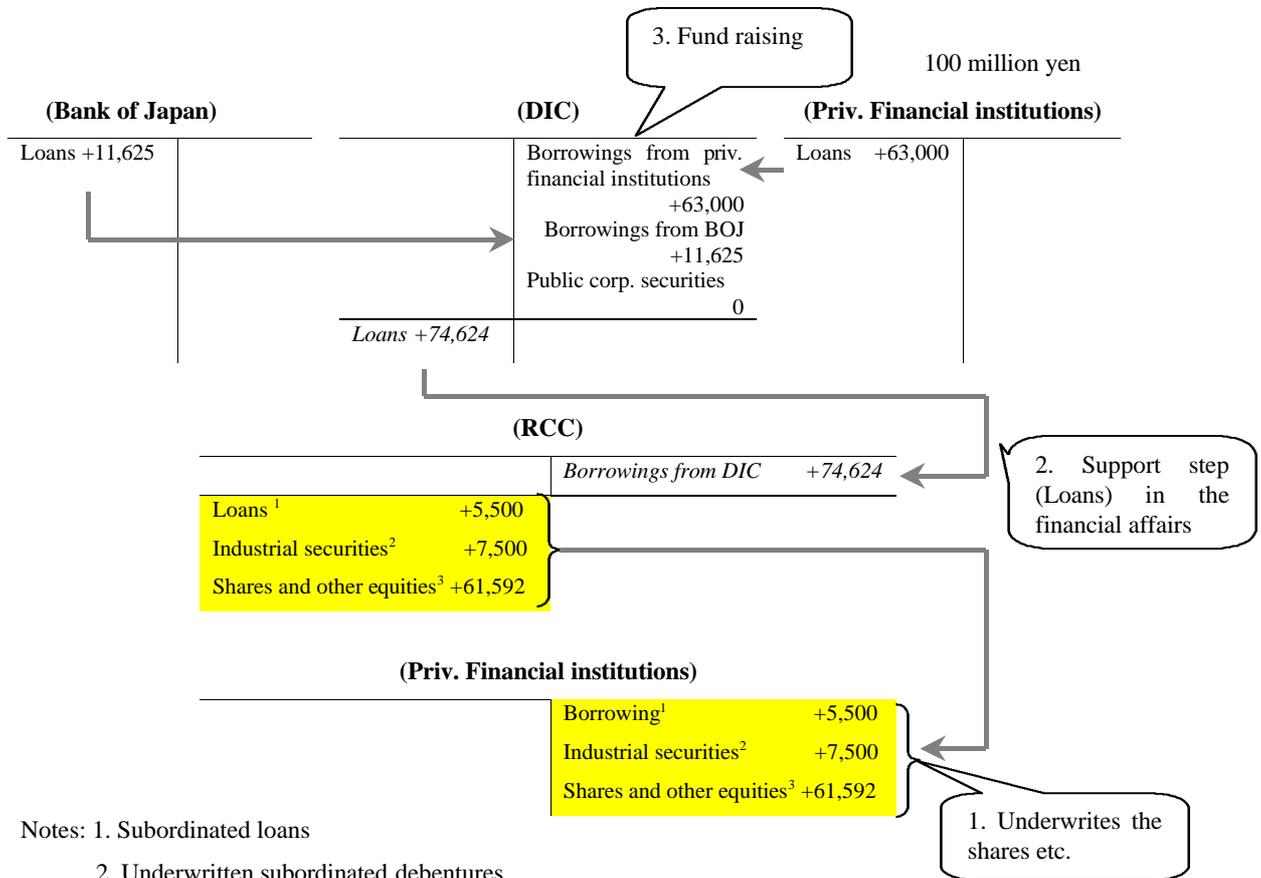
## **BOX 2 Financial Flow of Public Fund Injections**

The Law Concerning Emergency Measures for the Reconstruction of the Financial System (the Financial Function Reconstruction Law) implemented in February 1998 and the Law Concerning Emergency Measures for the Early Strengthening of the Financial Function (the Early Strengthening Law) implemented in October 1998 injected public funds into financial institutions. Particularly in March 1999, a total of 7.5 trillion yen were injected as public funds and this had a large impact on the flow of funds in Japan.

Public funds were injected through the following schemes:

- (1) The Deposit Insurance Corporation of Japan (DIC) assigns the Resolution and Collection Corporation (RCC) to underwrite shares and the RCC underwrites the preferred shares issued by financial institutions.
- (2) The DIC lends funds needed to underwrite shares to the RCC. In addition, it compensates losses occurred from debt guarantees.
- (3) The DIC raises funds from the borrowings from the Bank of Japan and private financial institutions and issued DIC bonds. (The amount of funds that can be raised is regulated by government ordinance <25 trillion yen>. The government can also guarantee an amount within a range decided upon by the Diet).

The influence resulting from the injection of funds at the end of March 1999 is as follows:



In the FFA, the DIC is posted among financial institutions as “financial auxiliaries,” while the RCC is put with “other financial intermediaries (of which “nonbanks).” This should be noted when analyzing “depository corporations (such as banks),” “other financial intermediaries (nonbanks),” and “financial auxiliaries.”

**Reference: Actual result of injection of public funds**

**Injection based on the Financial Function Reconstruction Law (March 1998)**

100 million yen

Financial Revitalization Account (Financial Crisis Management Account until November 1998)		
Preferred shares	3,210	Among preferred shares, the amount of those of the Long-term Credit Bank and the Nippon Credit Bank was 1,900 million yen. As these banks were put under special public management, preferred shares of these banks were obtained by the DIC in October and December 1998 respectively.
Subordinated debts	10,800	The Bank of Tokyo-Mitsubishi repaid perpetual subordinated bonds (repayment by purchase)
Subordinated loan	4,146	

**Injection based on the Early Strengthening Law (from March 1999)**

100 million yen

Financial Function Early Strengthening Account		
Preferred shares	61,592	March 1999 (injected in 15 banks)
Subordinated debts	7,500	
Subordinated loan	5,500	
Preferred shares	1,700	September 1999 (injected in 4 banks)
Subordinated debts	400	
Subordinated loan	200	
Preferred shares	300	November 1999 (injected in 1 bank)
Preferred shares	300	February 2000 (injected in 1 bank)
Preferred shares	2,400	March 2000 (injected in 2 banks)
Subordinated debts	450	

### **BOX 3 Financial Flow of Fiscal Investment and Loans**

Fiscal investment and loans are implemented by the government based on a particular program (Fiscal Investment and Loan Program) using funds collected through national systems such as postal savings and insurance premiums of public pensions. The FFA provides an overview of the financial flow of fiscal investment and loans.

Resource funds of fiscal investment and loans are classified into the following three funds: (1) deposits with the Trust Fund Bureau such as those from postal savings, postal life insurance (in FFA, “life insurance” sector minus “of which private life insurance companies” sector), and social security funds. (2) the remaining surpluses of insurance reserves in postal life insurance. (3) Government guaranteed bonds and borrowings. In practice, deposits with the Trust Fund Bureau make up a majority of the amount and the level has doubled in the past decade. In addition, among resource funds of deposits with the Trust Fund Bureau, nearly 60 percent are postal savings followed by social security funds. Funds raised from postal life insurance is small because most of the funds are invested on their own.

Funds for fiscal investment and loans are lent via government financial institutions or directly from the Trust Fund Bureau and postal life insurance. These are shown as “loans by public financial institutions” within FFA.<sup>4</sup> In detail, borrowers are the households, public nonfinancial corporations, local governments, private nonfinancial corporations, and central government sectors. Although there is not a conspicuous sector, loans to the households sector comprises one-fourth of those to the domestic nonfinancial sector, and among this 80 percent are housing loans. Compared to 10 years before, however, the increase in loans to local and central governments is becoming distinct and when these two sectors are combined, public loans to the domestic nonfinancial sector adds up to 30 percent. It is not clear in the chart but for local governments, direct borrowing from postal life insurance is relatively large

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<sup>4</sup> More precisely, funds of fiscal investments and loans include “other equities” from government financial institutions (industrial investment special account etc.) other than “loans by public financial institutions.”

compared to other sectors.<sup>5</sup>

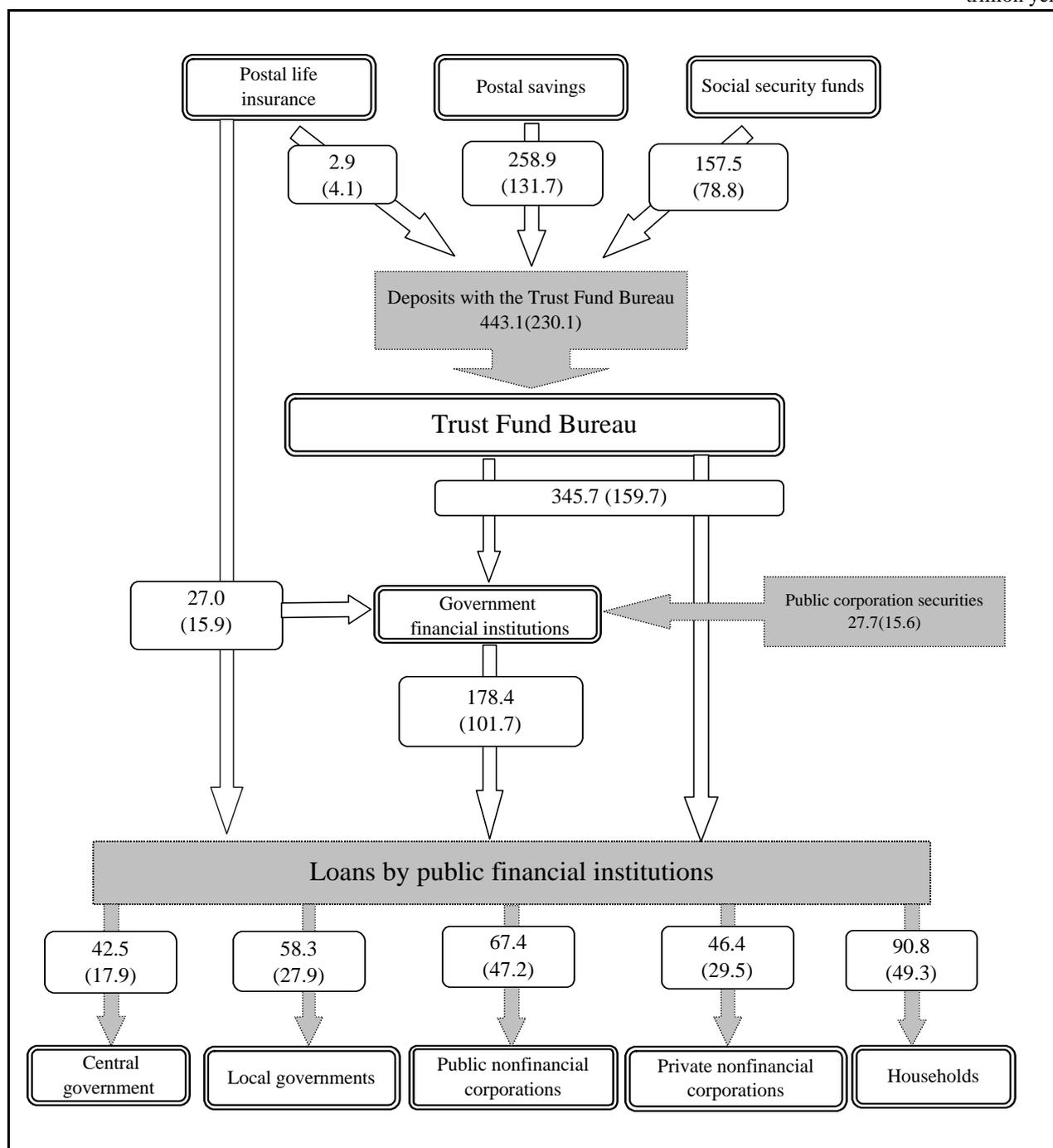
The fiscal investment and loan system will be changed fundamentally from fiscal 2001 and depository obligations of postal savings and social security funds with the Trust Fund Bureau will be abolished. Meanwhile, fund raising of central government securities (FILP <Fiscal Investment and Loan Program> bonds) by the Trust Fund Bureau and of public corporation securities (FILP agency bonds) by public financial corporations are projected to increase. The FFA will provide useful data by capturing changes in the flow of funds in line with the changes in these systems.

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<sup>5</sup> For local governments, about 30 percent of borrowing from public sector is from the insurance sector (of which 98 percent is from postal life insurance). Yet, looking at borrowers of public loans from the insurance sector, 80 percent are to local governments.

## Fiscal Investment and Loans (End of March 2000)

trillion yen



- Notes: 1. This chart refers to financial assets and liabilities of the main sectors. As for items in brackets, the date is end of March 1990.  
 2. Postal life insurance = Life insurance - Private life insurance companies  
 3. Social security funds = "National Pension Special Accounts" + "Welfare Insurance Special Accounts" + "Seaman's Insurance Special Account" + "Labor Insurance Special Account" + "The Federation of Government Official's Mutual Aid" + "The Pension Fund Association for Local Government Officials" + "The Mutual Aid Association of Agricultural, Forestry and Fishery Corporation Personnel" + "Private school Mutual Aid Association"

(Chart 1)

**Financial Transactions (Main sectors and Transaction Items, during FY 1999 )**

trillion yen

		Financial institutions		Nonfinancial corporations		General government		Households		Private nonprofit institutions serving households		Overseas		
		1		2		3		4		5		6		
		Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
A	Currency and deposits	19.4	49.8	1.5		12.1		24.9		0.5		-5.2	3.4	A
B	Deposits with the Trust Fund Bureau	0.3	7.0	-0.2		6.9								B
C	Loans	-11.3	-1.8	2.2	-6.1	4.4	9.8		1.9	0.8	0.9	-9.5	-18.2	C
Cd	of which Loans by private financial institutions	-26.2	6.1		-10.3		-3.8		0.2		-0.7		-17.7	Cd
Ce	Loans by public financial institutions	24.6	5.7		2.8		13.6		2.2		0.0		0.3	Ce
D	Securities other than shares	52.4	5.3	7.4	-0.6	-2.2	49.6	-3.8		3.1		-2.7		D
Da	of which Financing bills	16.0		0.0		-2.9	14.4			0.0		1.3		Da
Db	Central government securities	30.8		0.1		0.6	32.4	-0.5		2.6		-1.2		Db
De	Bank debentures	-0.9	-2.0	-0.7		0.6		-0.8		-0.3		0.1		De
Df	Industrial securities	1.7	2.1	0.7	1.2	-0.2		0.1		0.9		0.2		Df
Dh	Commercial paper	-0.3	-0.2	0.6	0.4	0.0								Dh
Di	Investment trust beneficiary certificates	1.4	8.3	4.0		-0.1		2.5		0.6				Di
Dj	Trust beneficiary rights	-1.5	-3.6	2.9		-0.3		-4.7						Dj
Dk	Structured-financing instruments	-0.2	0.0	0.2		0.0						0.0		Dk
E	Shares and other equities	-0.7	2.2	-1.7	4.9	1.7	0.5	-1.3		-0.0		9.5		E
F	Financial derivatives	-0.1	-0.3	0.0	0.0			0.0	0.0			-0.1	0.1	F
G	Insurance and pension reserves		13.6					13.6						G
Ga	of which Insurance reserves		4.1					4.1						Ga
Gb	Pension reserves		9.4					9.4						Gb
H'	Deposits money etc.	10.0	0.8	2.6	1.7	-0.8	3.1	1.1	-0.0	0.3	0.2	-10.3	-2.9	H'
I	Trade credits and foreign trade credits	0.3		-2.9	-1.1	-0.0	0.0		-1.2			0.1	-0.1	I
K'	External claims etc.	-6.3	-0.5	11.7	0.3	1.4	0.0	4.1				-0.2	10.9	K'
Y	Financial surplus or deficit		-11.9		*1 21.7		*2 -39.5		37.8		3.6		-11.7	Y
Z	Total	64.2	64.2	20.7	20.7	23.6	23.6	38.4	38.4	4.7	4.7	-18.4	-18.4	Z

Notes: 1. "Deposits money etc. (H)" = "Deposits money (H)" + "Accounts receivable/payable (J)" + "Others (N)"

2. "External claims etc. (K)" = "Outward direct investment (K)" + "Outward investment in securities (L)" + "Other external claims and debts (M)"

3. Breakdown of \*1 is "Private nonfinancial corporations +21.8 trillion yen" and "Public nonfinancial corporations -0.1 trillion yen."

4. Breakdown of \*2 is "Central government -37.1 trillion yen," "Local governments -6.2 trillion yen," and "Social security funds +3.8 trillion yen."

(Chart 2)

## Financial Investment and Fund Raising by Sector (Main transaction items)

### (1) Private nonfinancial corporations

trillion yen

	FY98	FY99		FY98	FY99
Currency and deposits	+ 5.5	- 1.1	Loans	- 3.4	-10.0
of which Transferable deposits	+ 5.5	+ 5.9	of which Loans by private financial institutions	+ 0.9	-10.3
of which Time and savings deposits	- 0.1	- 4.4	Securities other than shares	+ 0.6	+ 0.2
Securities other than shares	+ 7.5	+ 7.4	of which Industrial securities	+ 2.8	+ 1.2
of which Investment trusts	+ 1.7	+ 4.0	of which Commercial paper	+ 0.1	+ 0.4
Shares and other equities	- 1.6	- 1.8	Shares and other equities	- 1.7	+ 4.3
Trade credits and foreign trade credits	-15.7	- 2.9	Trade credits and foreign trade credits	-13.6	- 1.1
			Financial surplus or deficit	+11.2	+21.8
Total financial investment	-12.0	+17.0	Total fund raising	-23.2	- 4.8

### (2) Households

trillion yen

	FY98	FY99		FY98	FY99
Currency and deposits	+29.0	+24.9	Loans	+ 3.5	+ 1.9
of which Currency	+ 3.1	+ 5.6	of which Loans by private financial institutions	+ 3.5	+ 0.2
of which Transferable deposits	+ 6.1	+ 9.6	Housing loans	+ 4.3	+ 5.2
of which Time and savings deposits	+19.2	+ 8.3	Consumer credit	- 0.7	+ 0.4
Securities other than shares	- 6.9	- 3.8	Loans to companies and governments	- 0.1	- 5.4
of which Investment trusts	+ 1.5	+ 2.5	Trade credits and foreign trade credits	- 2.3	- 1.2
Shares and other equities	- 2.9	- 1.3			
Insurance and pension reserves	+12.6	+13.6			
			Financial surplus or deficit	+31.3	+37.8
Total financial investment	+31.0	+38.4	Total fund raising	- 0.4	+ 0.6

### (3) Central government

trillion yen

	FY98	FY99		FY98	FY99
Currency and deposits	- 2.9	+11.4	Loans	- 2.4	+ 4.8
Loans	- 0.2	+ 4.8	Securities other than shares	+19.7	+46.8
Securities other than shares	- 2.0	- 3.0	of which Financing bills	- 7.5	+14.4
Shares and other equities	+ 2.2	+ 2.2	of which Central government securities	+27.2	+32.4
			Financial surplus or deficit	-20.5	-37.1
Total financial investment	-2.1	+18.1	Total fund raising	+18.4	+55.2

### (4) Overseas

trillion yen

	FY98	FY99		FY98	FY99
Deposits	- 8.1	- 5.2	Deposits	- 5.3	+ 3.4
Loans	-12.7	- 9.5	Loans	- 3.0	-18.2
Securities other than shares	+ 1.4	- 2.7	Outward direct investment	+ 1.8	+ 2.5
of which Central government securities	+ 5.5	- 1.2	Outward investment in securities	+15.6	+15.2
of which External securities issued by residents	- 3.7	- 3.2			
Shares and other equities	+ 2.4	+ 9.5			
			Financial surplus or deficit	-13.1	-11.7
Total financial investment	-16.3	-18.4	Total fund raising	- 3.2	-6.7

**Financial Assets and Liabilities (Main sectors and Transaction Items, end of March 2000)**

trillion yen

		Financial institutions		Nonfinancial corporations		General government		Households		Private nonprofit institutions serving households		Overseas		
		1		2		3		4		5		6		
		Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
A	Currency and deposits	195.8	1,182.5	177.6		44.8		747.9		22.5		5.8	11.9	A
B	Deposits with the Trust Fund Bureau	267.1	443.1	0.1		175.9								B
C	Loans	1,576.1	579.9	36.6	565.9	33.2	138.2		328.7	7.8	29.8	75.6	86.9	C
Cd	of which Loans by private financial institutions	855.9	163.2		390.9		16.1		227.8		10.5		47.3	Cd
Ce	Loans by public financial institutions	552.7	205.5		113.8		120.1		90.8		4.3		18.1	Ce
D	Securities other than shares	641.8	267.5	38.4	130.8	34.7	468.2	92.4		23.6		35.6		D
Da	of which Financing bills	40.9		0.0		1.2	44.2			0.0		2.1		Da
Db	Central government securities	319.7		0.4		10.9	371.5	7.2		11.7		21.7		Db
De	Bank debentures	32.1	56.0	5.2		2.6		14.5		1.3		0.3		De
Df	Industrial securities	52.0	6.6	2.7	58.8	4.3		0.7		4.0		1.8		Df
Dh	Commercial paper	11.3	5.0	5.1	11.4	0.0								Dh
Di	Investment trust beneficiary certificates	10.0	54.9	5.9		3.0		31.9		4.0				Di
Dj	Trust beneficiary rights	50.8	99.6	10.8		2.6		35.4						Dj
Dk	Structured-financing instruments	4.8	12.1	6.9		0.0						0.3		Dk
E	Shares and other equities	186.8	98.4	135.0	500.5	70.8	11.2	116.8		0.1		100.6		E
F	Financial derivatives	14.0	11.9	0.9	2.2			0.0	0.0			5.2	6.2	F
G	Insurance and pension reserves		383.6					383.6						G
Ga	of which Insurance reserves		252.4					252.4						Ga
Gb	Pension reserves		131.1					131.1						Gb
H'	Deposits money etc.	110.1	113.5	48.1	82.0	30.5	20.9	45.2	10.9	1.5	2.6	5.1	10.8	H'
I	Trade credits and foreign trade credits	2.6		238.6	184.2	1.1	0.0		53.4			1.0	5.7	I
K'	External claims etc.	99.0	4.6	63.9	3.7	36.9	0.1	3.9				8.4	203.7	K'
Y	Financial surplus or deficit		8.5		*1 -730.0		*2 -210.6		996.8		23.1		-87.8	Y
Z	Total	3,093.4	3,093.4 (3,084.9)	739.1	739.1 (1,469.2)	427.9	427.9 (638.5)	1,389.8	1,389.8 (393.0)	55.5	55.5 (32.4)	237.4	237.4 (325.2)	Z

Notes: 1. Items in brackets are total of financial liabilities.

2. "Deposits money etc.(H)" = "Deposits money (H)" + "Accounts receivable/payable (J)" + "Others (N)"

3. "External claims etc. (K)" = "Outward direct investment (K)" + "Outward investment in securities (L)" + "Other external claims and debts (M)"

4. Breakdown of \*1 is "Private nonfinancial corporations -574.3 trillion yen" and "Public nonfinancial corporations -155.7 trillion yen."

5. Breakdown of \*2 is "Central government -368.5 trillion yen," "Local governments -60.7 trillion yen," and "Social security funds +218.6 trillion yen."

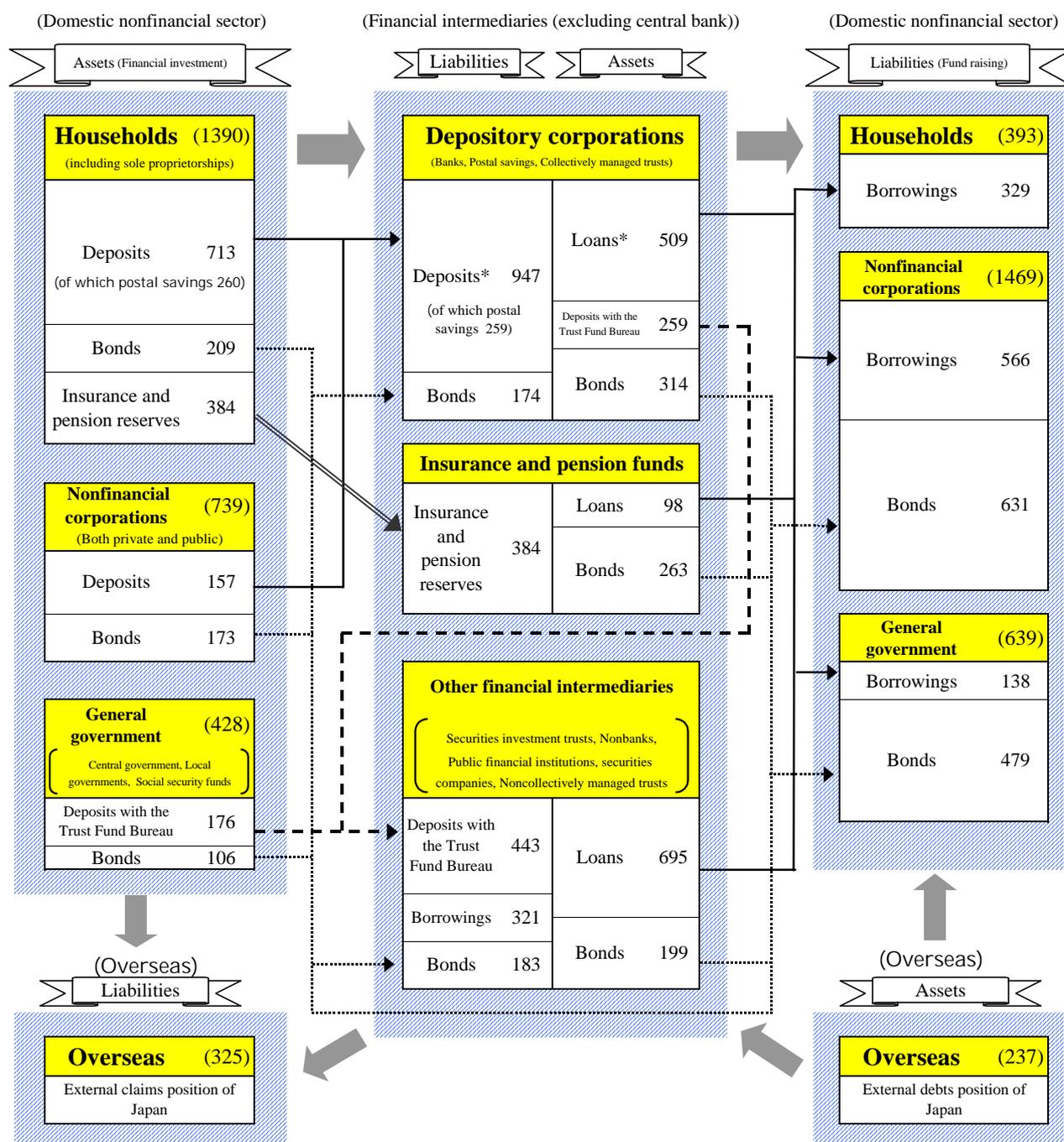
(Chart 4)

**Financial Assets and Liabilities of the Main Sectors**  
(year-to-year percent change)

%

	Assets		Liabilities	
	FY98	FY99	FY98	FY99
Nonfinancial corporations	- 1.9	8.1	- 3.5	10.2
General government	- 2.9	6.8	8.6	9.5
Households	2.9	4.9	0.9	- 0.8
Private nonprofit institutions serving households	- 1.7	9.1	7.1	3.2
Overseas	- 6.7	1.5	- 2.3	-12.0

### Financial Assets and Liabilities by Sector (End of March 2000, trillion yen)



Notes: 1. The data of each sector refers only to main transaction items.

2. Transaction items with an asterisk are shown as consolidated assets and liabilities within the sector.

3. "Loans (Borrowings)" includes "Bank of Japan loans," "Call loans and money," "Bills purchased and sold,"

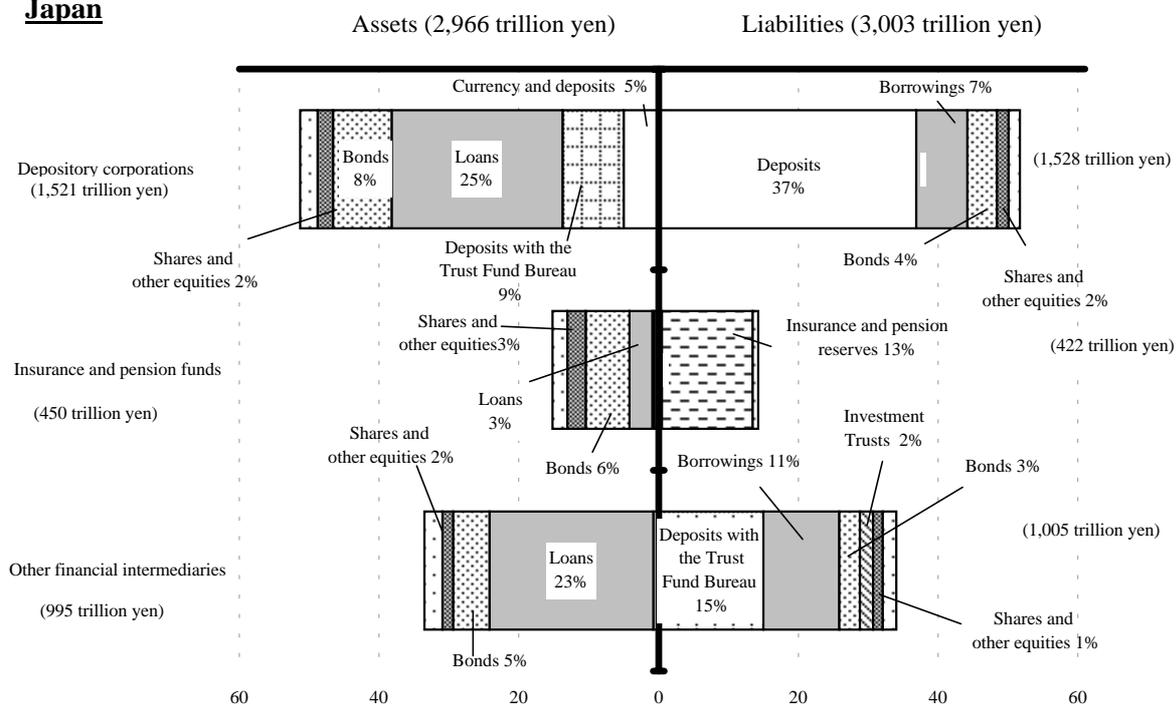
"Loans by private financial institutions," "Loans by public financial institutions," "Loans by the nonfinancial sector,"

"Installment credit," and "Repurchase agreements and securities lending transactions."

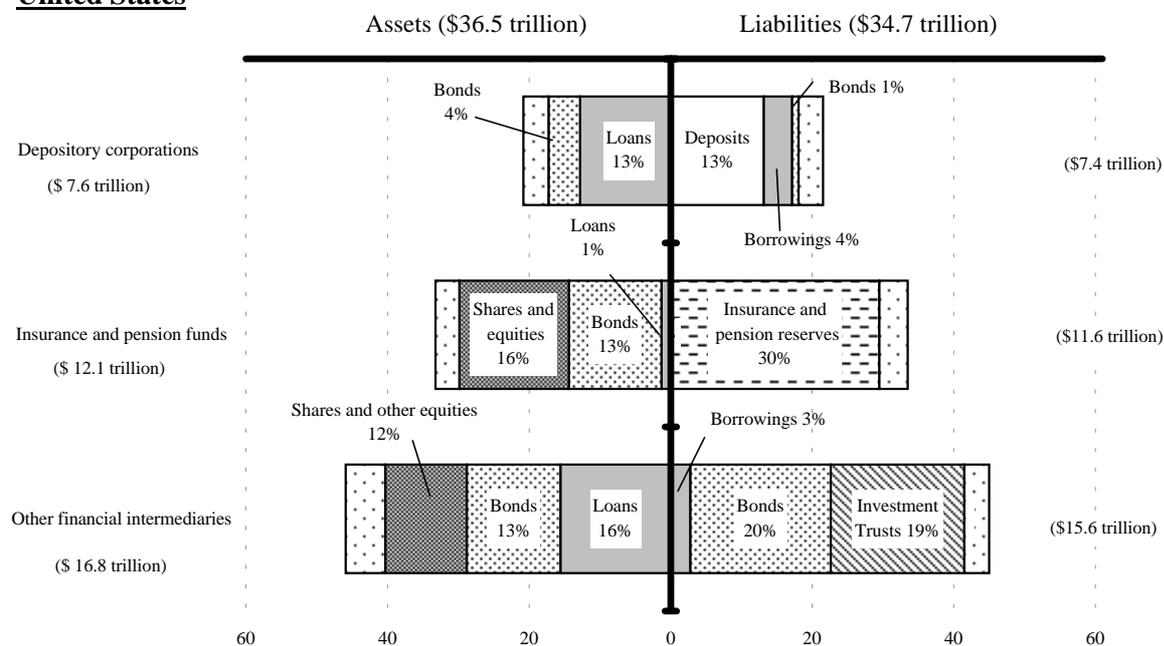
4. "Bonds" includes "Securities other than shares" and "Shares and other equities."

### Assets and Liabilities Composition of Financial Intermediaries (End of March 2000, comparison between Japan and US)

#### Japan



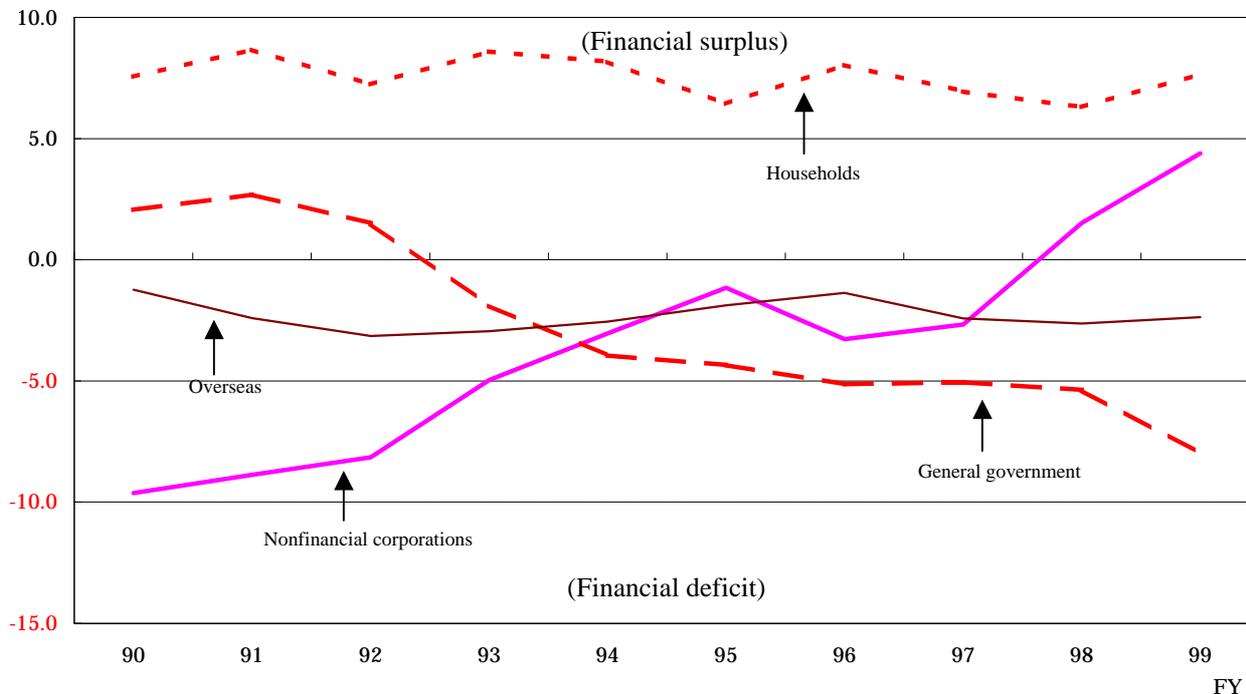
#### United States



Notes: 1. Percentage of total financial assets or liabilities of the financial intermediaries (excluding central bank).  
2. For details on the U.S. FFA, see appendix.

## Financial Surplus or Deficit by Sector (Adjusted for Special factors)

as a ratio to nominal GDP ; %



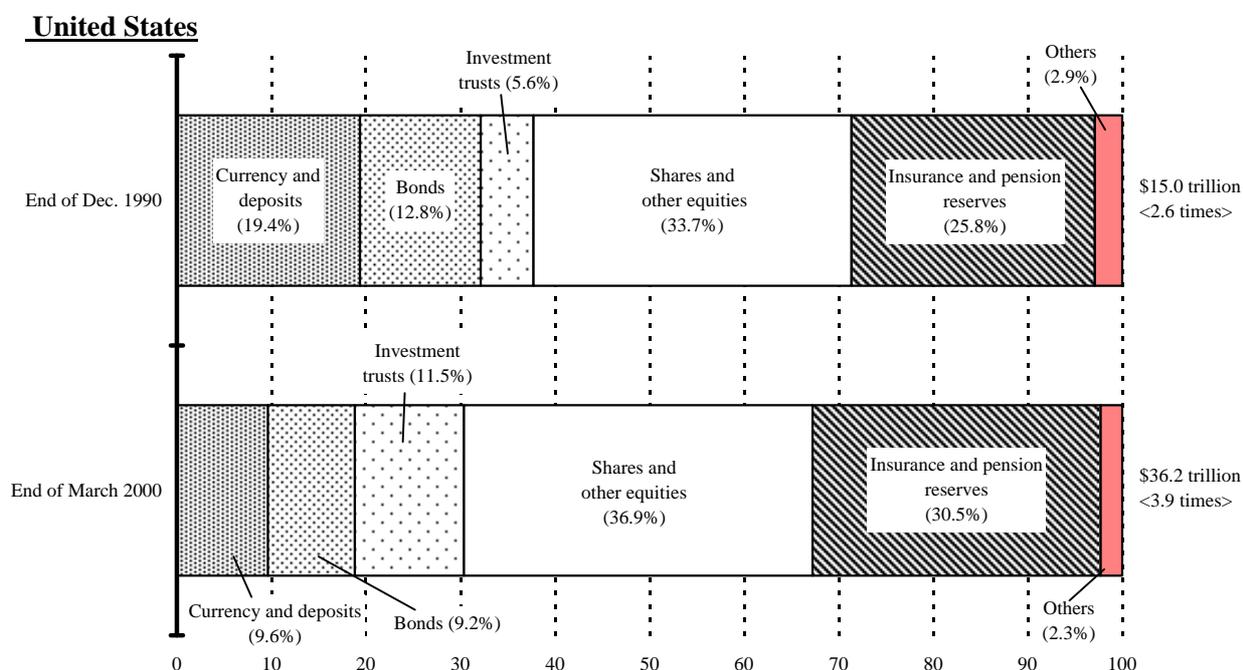
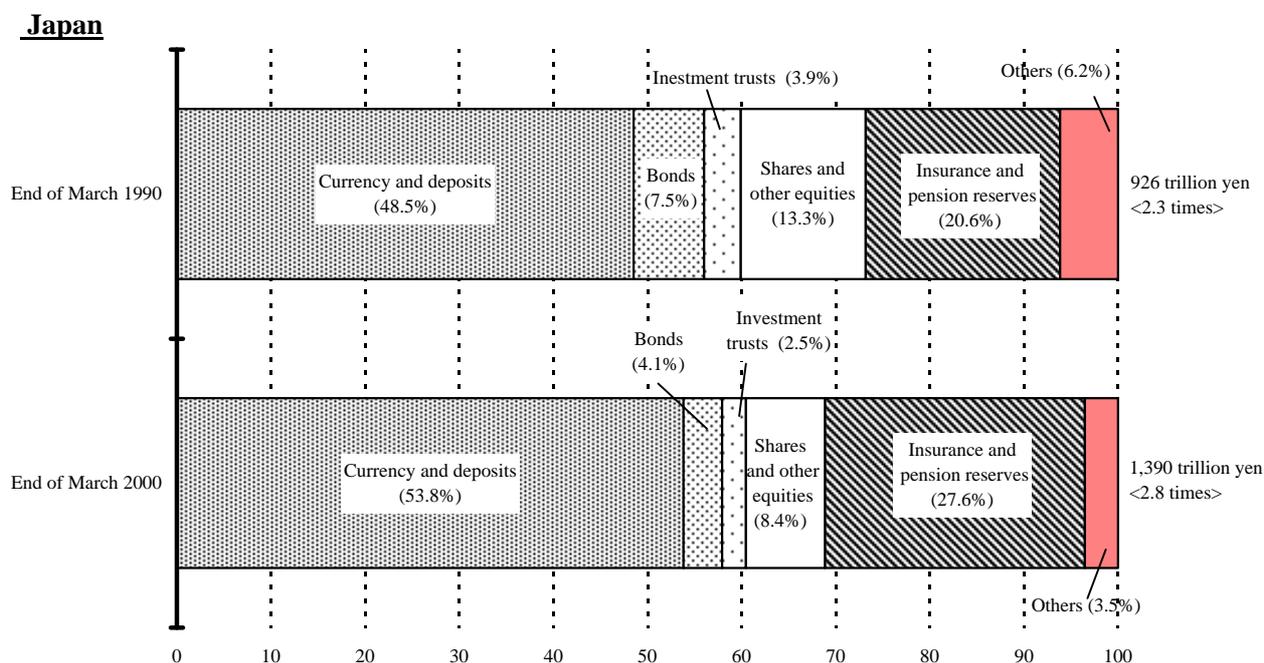
Notes: 1. Nominal GDP is based on 68SNA. QE data are used for FY 1999.

2. In this chart, the inherited claims factor of JNR Settlements Corporation and the special accounts for the National Forest Service are adjusted.

	Adjustments in FY97	Adjustments in FY98
Central government	Financial investment - 30,035 Fund raising - 30,035  The following factor is adjusted. Public corporation securities held by the Trust Fund Bureau (3 trillion yen) were taken over by the central government in the form of issuing and allocating central government securities. As a result, these securities were replaced by inherited government bonds. At the same time, the central government has lent non-interest loans to the JNR Settlements Corporation.	Financial surplus + 272,322 Financial investment + 83,237 Fund raising - 189,085  The following factors are adjusted. All debts of the JNR Settlements Corporation (24.4 trillion yen) and part of the special accounts for the National Forest Service (2.8 trillion yen, <public corporation securities, loans>) were taken over by the central government (Issuance and allocation of inherited government bonds of each corporation and take over the borrowings). Among this, borrowings of the JNR Settlements Corporation from the central government (8.3 trillion yen) were abandoned.
Public nonfinancial corporations	No adjustments	Financial deficit - 272,322 Fund raising + 272,322
of which JNR Settlements Corporation	No adjustments	Financial deficit - 243,901 Fund raising + 243,901
of which the special accounts for the National forest service	No adjustments	Financial deficit - 28,421 Fund raising + 28,421
Other sectors	No adjustments	No adjustments

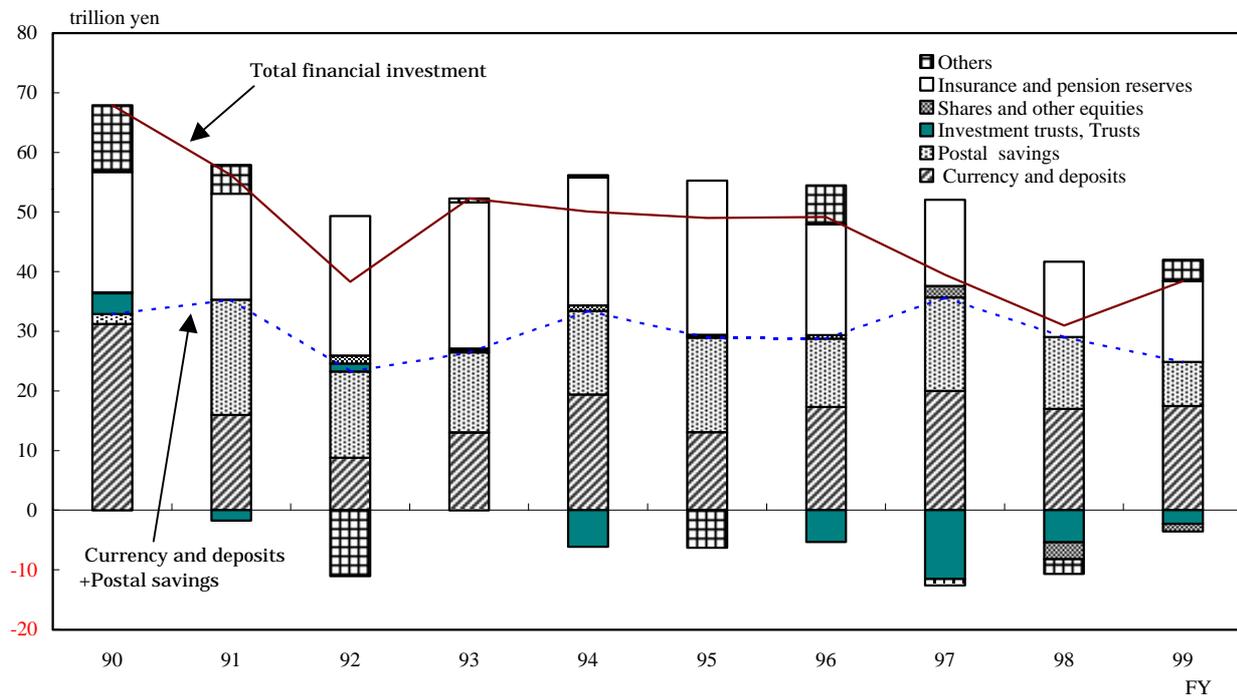
\* Public corporation securities issued by JNR Settlements Corporation are transformed into government bonds (inherited government bonds). This does not affect the outstanding of total financial investment and total fund raising by sector.

### Financial Assets held by Households (Comparison between Japan and US)



- Notes: 1. The horizontal axis is the percentage of total financial assets.  
 2. Items in angle brackets are the ratio to nominal GDP.  
 3. See appendix for sectors and transaction items in the U.S. FFA.

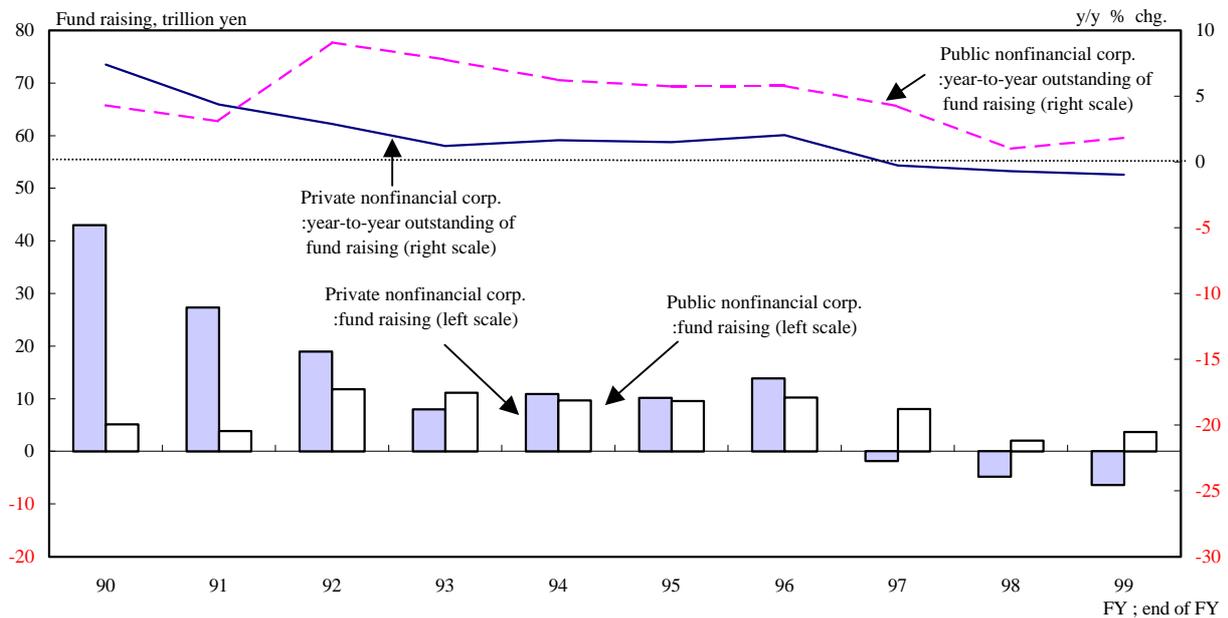
### Financial Investment by Households (Flow)



Note: Here, "Currency and deposits" does not include "Postal savings."

(Chart 10)

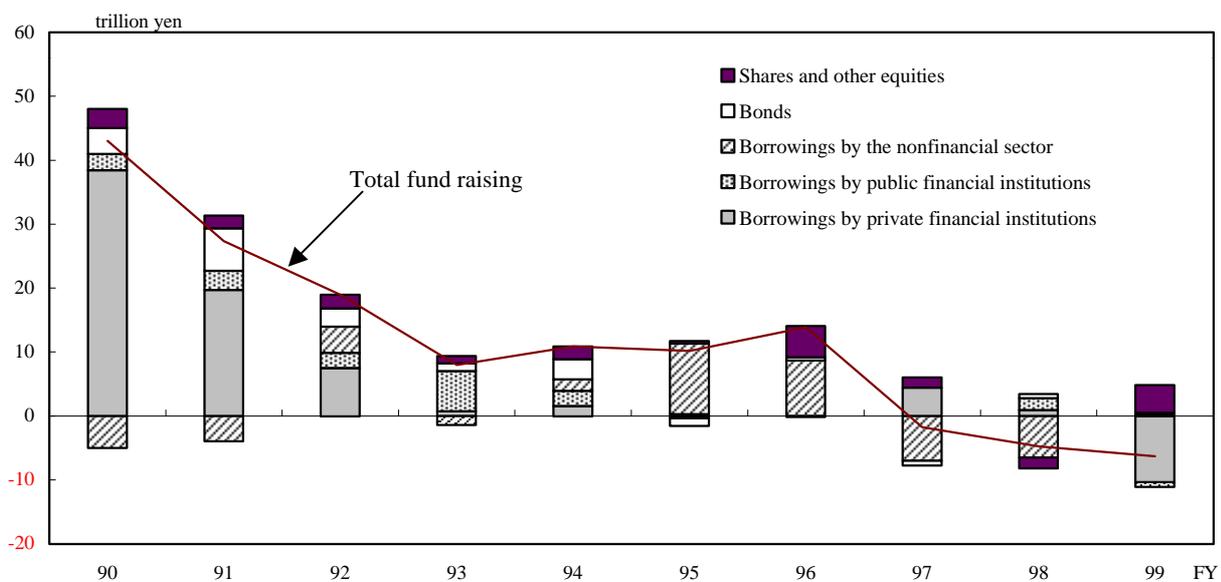
### Fund Raising by Nonfinancial Corporations



- Notes: 1. Fund raising = "Borrowings" + "Securities other than shares" + "Shares and other equities"  
2. "Shares and other equities" of private nonfinancial corporations is based on book value (Annual "Financial Statements Statistics of Corporations by Industry" <share holders' equity and capital surpluses>).  
3. For public nonfinancial corporations, the inherited claims of JNR Settlements Corporation and the special accounts for the National Forest Service are adjusted.

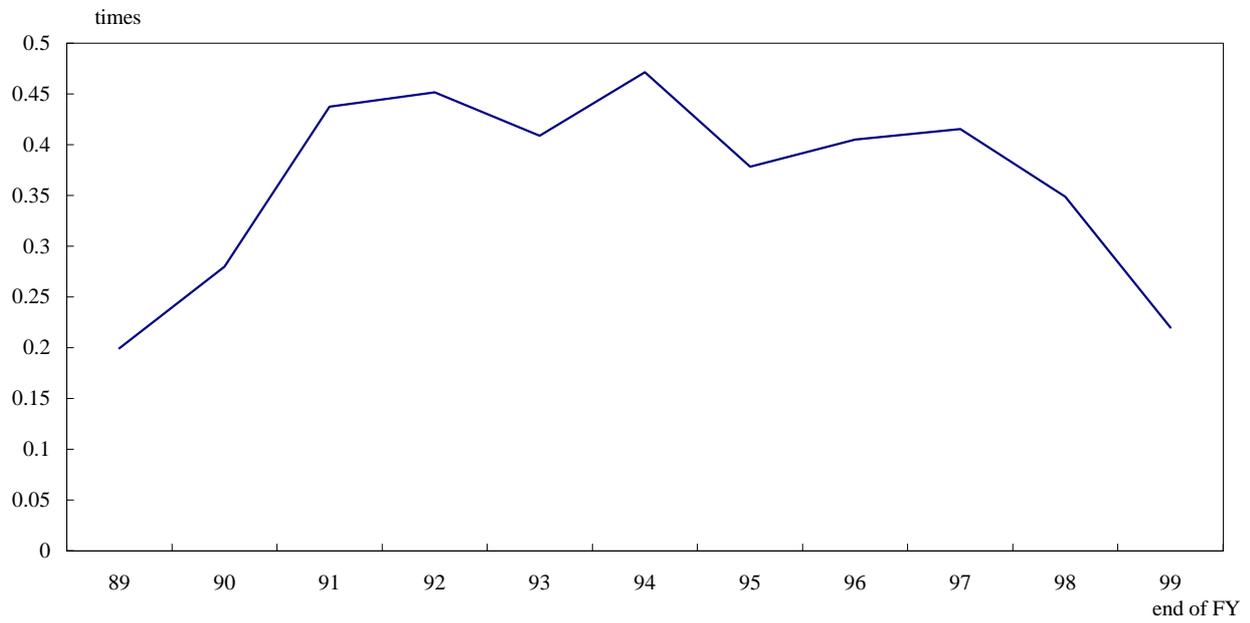
(Chart 11)

### Fund Raising by Private Nonfinancial Corporations



- Notes: 1. "Borrowings by the nonfinancial sector" is consolidated.  
2. Total fund raising = "Borrowings" + "Securities other than shares" + "Shares and other equities"

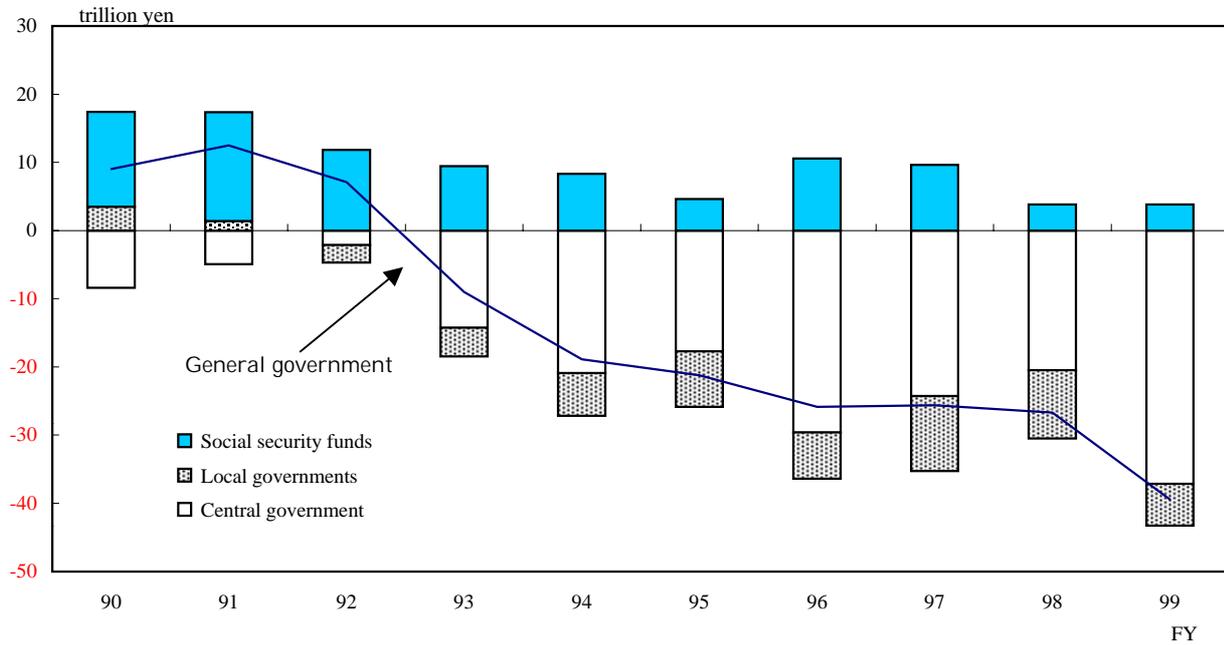
**Net Financial Positions of Private Nonfinancial Corporations**  
**(Ratio to nominal GDP)**



Notes: 1. Net financial positions = outstanding financial liabilities - outstanding financial assets  
2. Financial liabilities exclude "Shares and other equities."

(Chart 13)

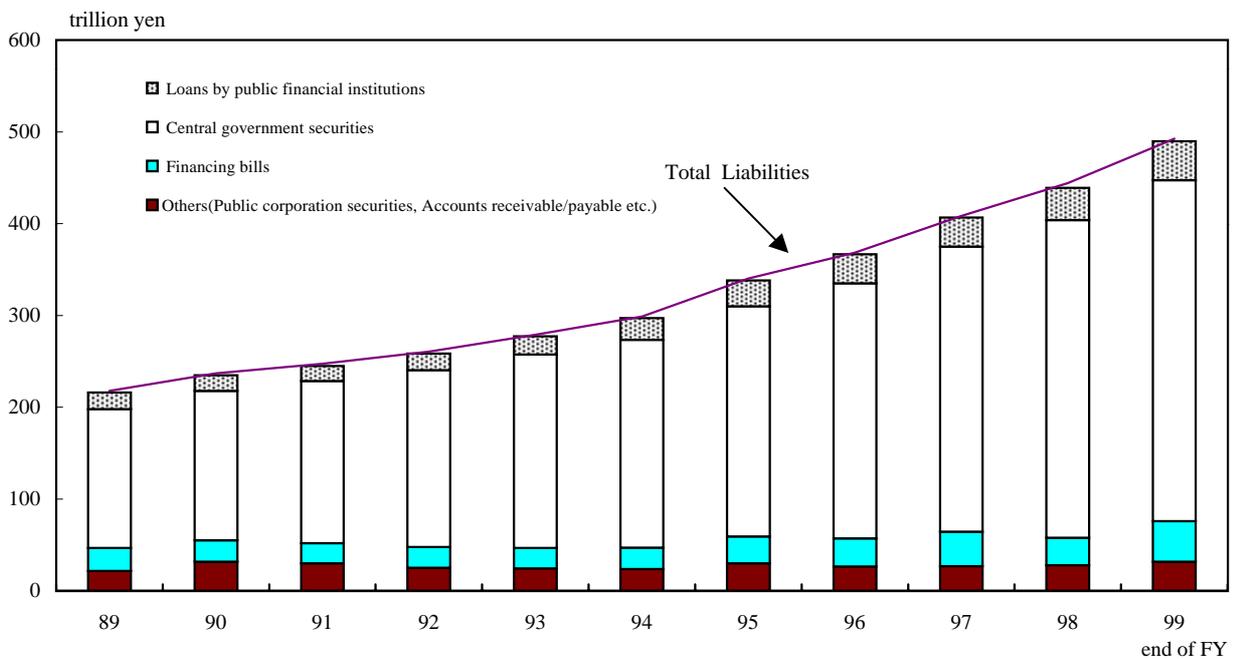
### Breakdown of Financial Surplus or Deficit by General Government



Note: Figures for fiscal 1998 are adjusted. For the details, see note 2 (Chart 7).

(Chart 14)

### Outstanding Liabilities of Central Government



(Chart 15)

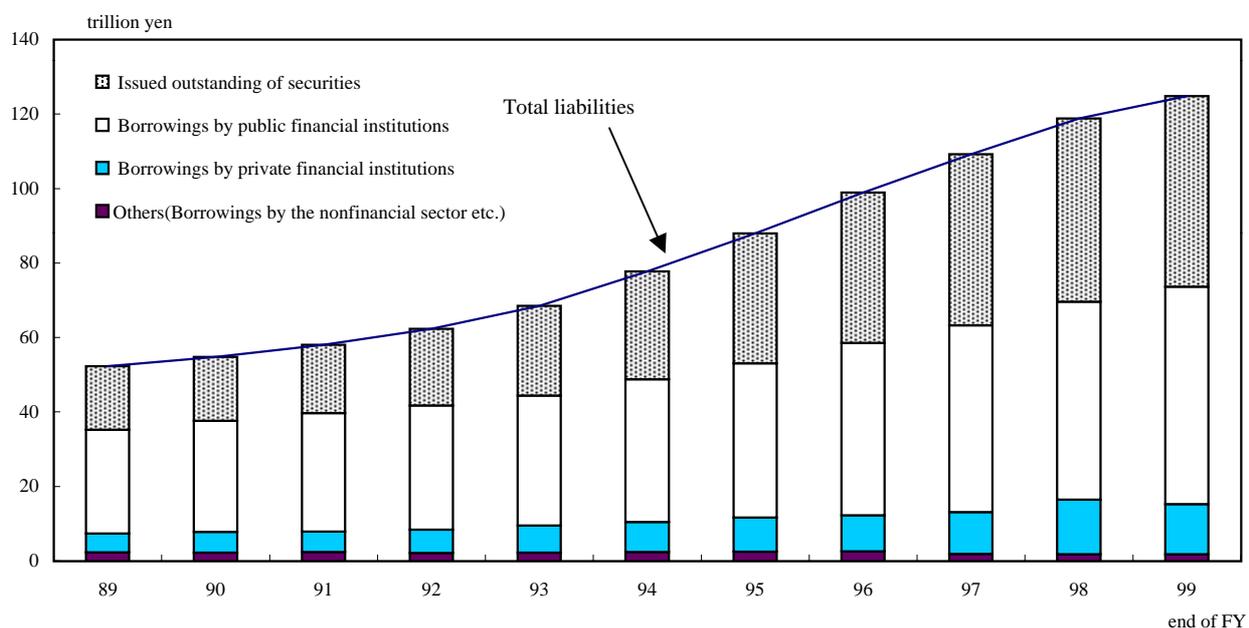
**Central Government Securities and FBs by Holder**

trillion yen; %

	End of FY89		End of FY99	
	Amount held	Ratio of amount held	Amount held	Ratio of amount held
Financial institutions	154.6	87.6	360.6	86.7
Public sector	85.9	48.7	187.3	45.1
Of which Central bank	32.0	18.1	49.8	12.0
Postal savings	3.9	2.2	28.1	6.8
Postal life insurance etc.	0.5	0.3	26.1	6.3
Trust Fund Bureau	48.5	27.5	79.9	19.2
Government financial institutions	1.0	0.6	3.4	0.8
Private sector	68.7	38.9	173.3	41.7
Of which Private depository corporations	48.5	27.5	95.8	23.0
Private life and nonlife insurance , Pension funds	8.4	4.8	52.6	12.7
Private other financial intermediaries	11.5	6.5	22.5	5.4
Nonfinancial corporations	1.1	0.6	0.4	0.1
General government	6.7	3.8	12.1	2.9
Households	7.9	4.5	7.2	1.7
Private nonprofit institutions serving households	1.5	0.9	11.7	2.8
Overseas	4.6	2.6	23.8	5.7

(Chart 16)

### Outstanding Liabilities by Local Governments



(Chart 17)

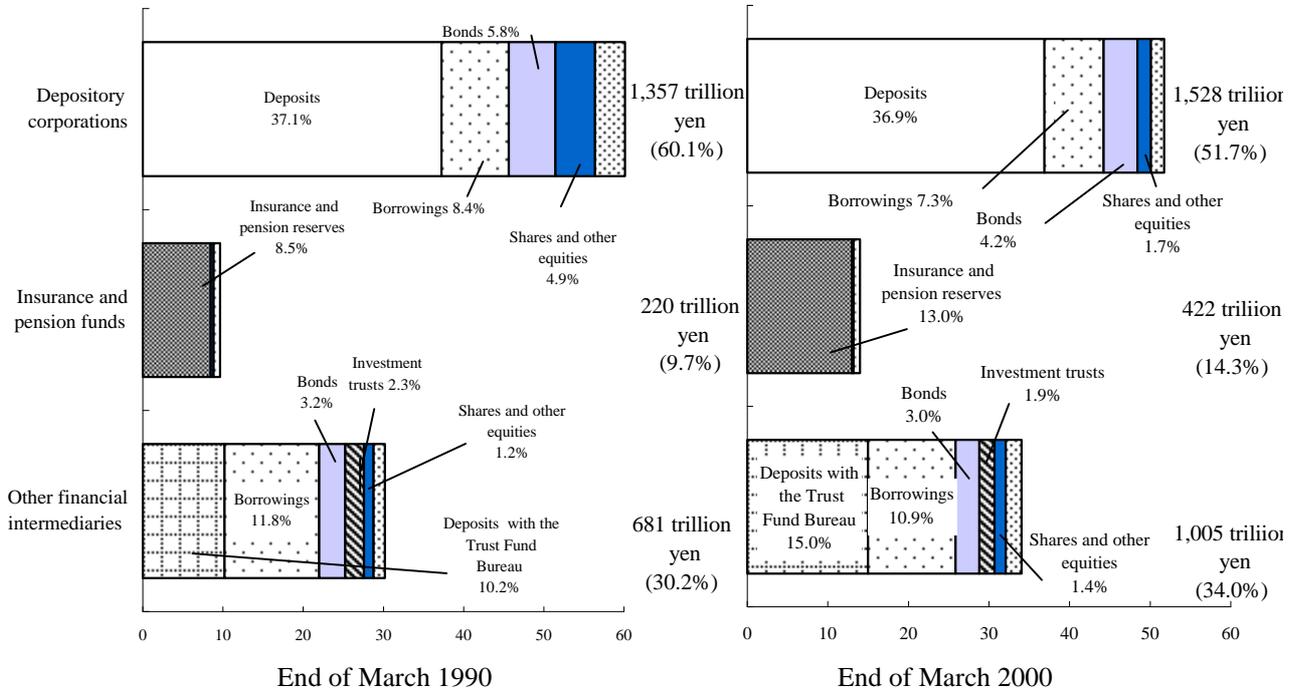
### Local Government Securities by Holder

trillion yen; %

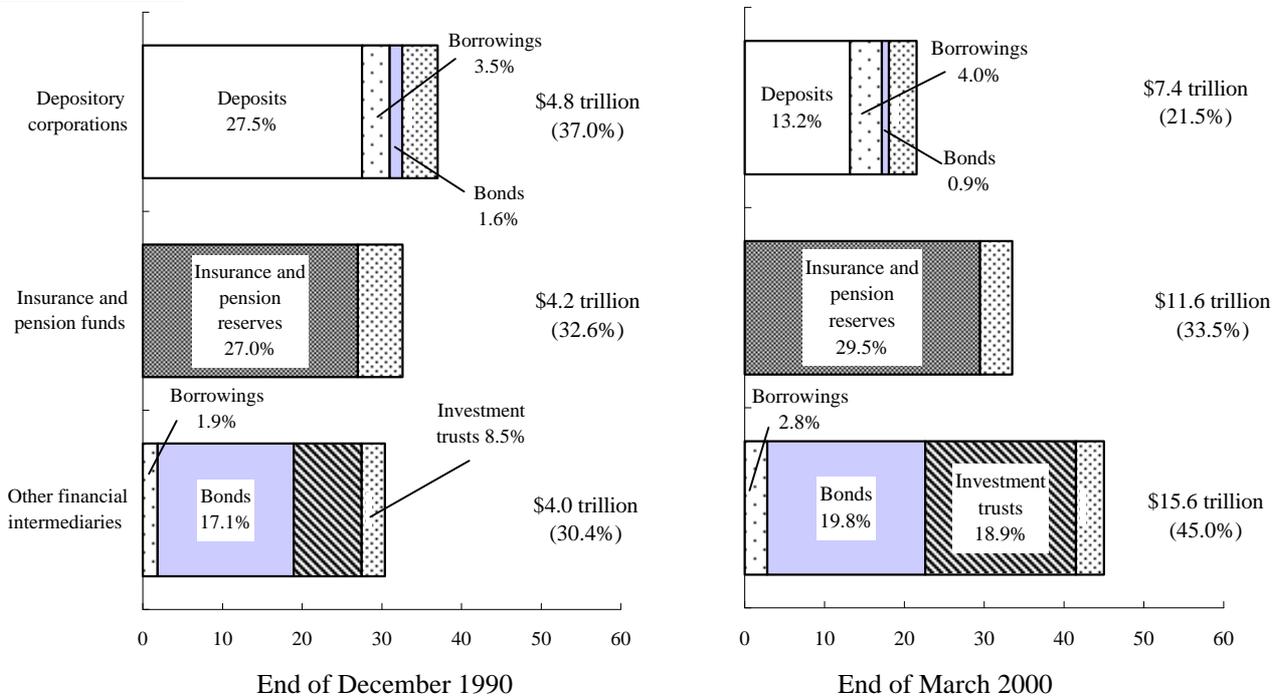
	End of FY89		End of FY99	
	Amount held	Ratio of amount held	Amount held	Ratio of amount held
Financial institutions	16.2	85.9	50.9	89.1
Public sector	3.7	19.6	18.0	31.5
Of which Postal savings	0.3	1.6	10.0	17.5
Postal life insurance etc.	3.4	18.0	8.0	14.0
Private sector	12.5	66.3	32.9	57.6
Of which Private depository corporations	9.9	52.5	16.6	29.1
Private life and nonlife insurance , Pension funds	2.3	12.2	14.6	25.6
Private other financial intermediaries	0.3	1.6	1.6	2.8
Nonfinancial corporations	0.4	2.1	0.2	0.3
General government	1.2	6.1	3.3	5.7
Households	0.4	2.3	1.2	2.0
Private nonprofit institutions serving households	0.7	3.6	1.6	2.9

## Liability Composition of Financial Intermediaries (Comparison between Japan and US)

### Japan



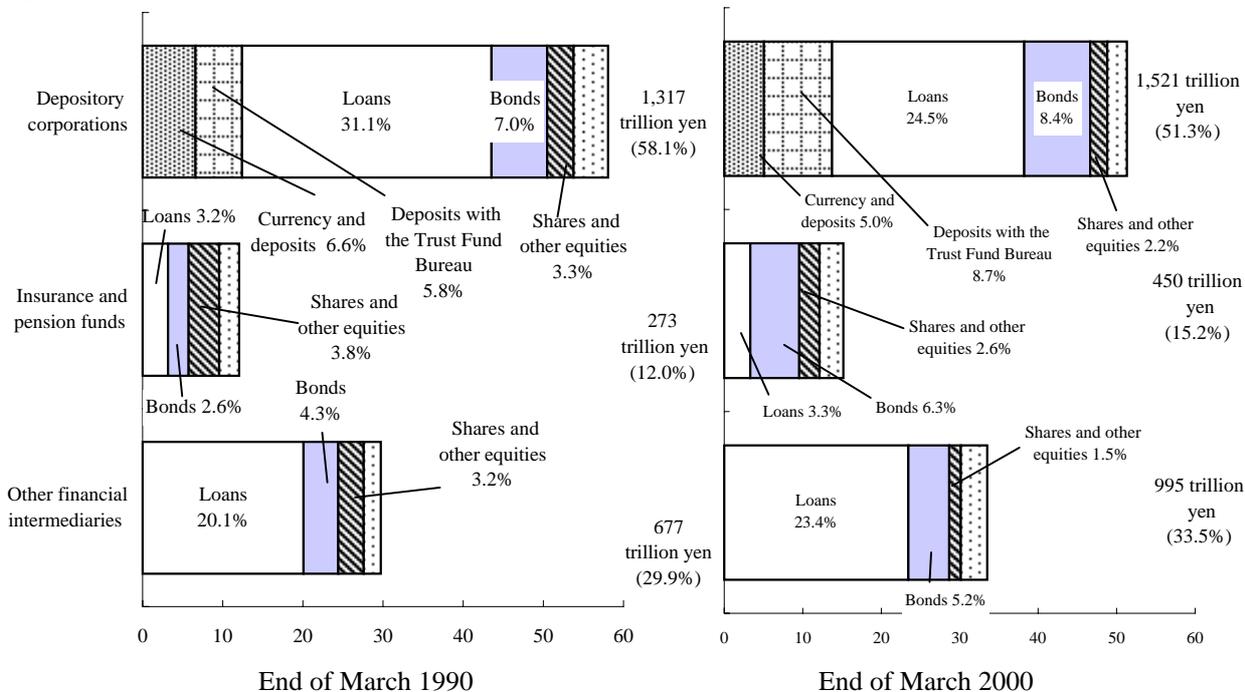
### United States



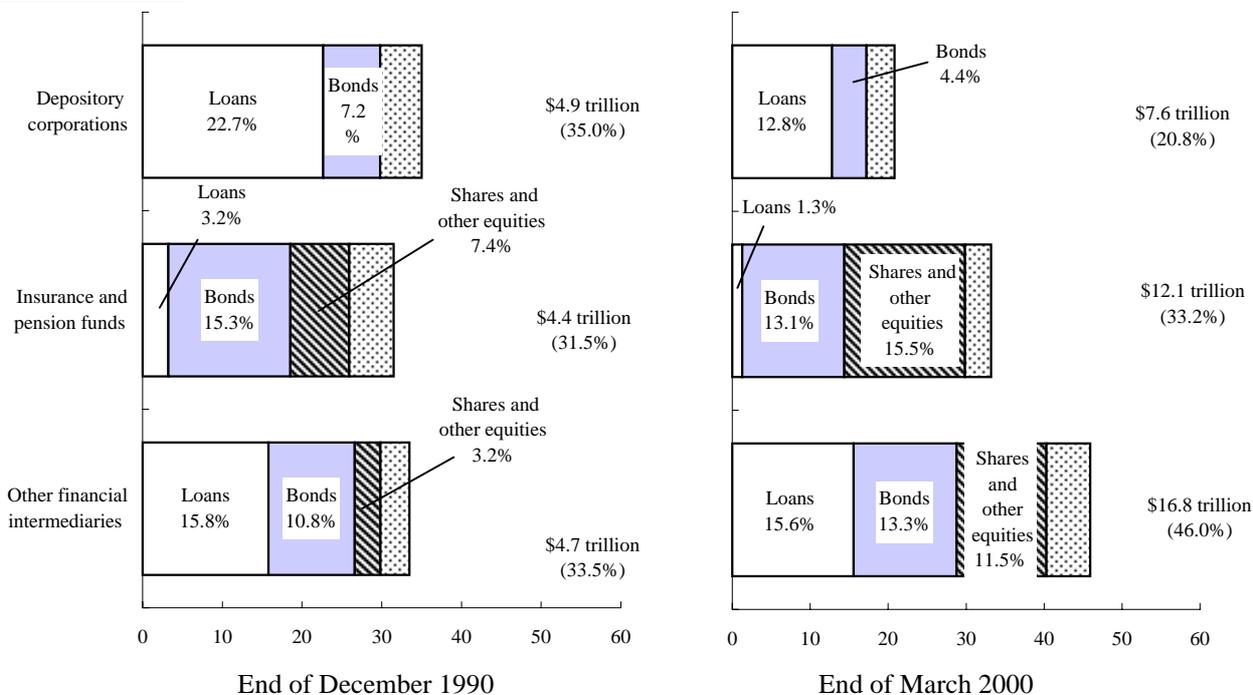
- Notes: 1. The horizontal axis is the percentage of total financial liabilities of financial intermediaries (excluding central bank).  
2. For details on the U.S. FFA, see the appendix.

## Asset Composition of Financial Intermediaries (Comparison between Japan and US)

### Japan



### United States



Notes: 1. The horizontal axis is the percentage of total financial assets of financial intermediaries (excluding central bank).  
2. For details on the U.S. FFA, see the appendix.

(Chart 20)

## Composition of Financial Intermediaries by Sector

### Outstanding Assets

trillion yen; %

	End of FY89		End of FY99	
	Outstanding assets	Composition ratio	Outstanding assets	Composition ratio
Depository corporations	1,317	58.1	1,521	51.3
Banks	1,098	48.4	1,138	38.4
Postal savings	143	6.3	321	10.8
Collectively managed trusts	76	3.4	62	2.1
Insurance and pension funds	273	12.0	450	15.2
Insurance	222	9.8	354	11.9
Pension funds	51	2.3	96	3.2
Other financial intermediaries	677	29.9	995	33.5
Securities investment trusts	53	2.3	56	1.9
Nonbanks	127	5.6	123	4.1
Public financial institutions	350	15.4	653	22.0
Financial dealers and brokers	87	3.8	119	4.0
Noncollectively managed trusts	61	2.7	44	1.5
Total	2,267	100.0	2,966	100.0

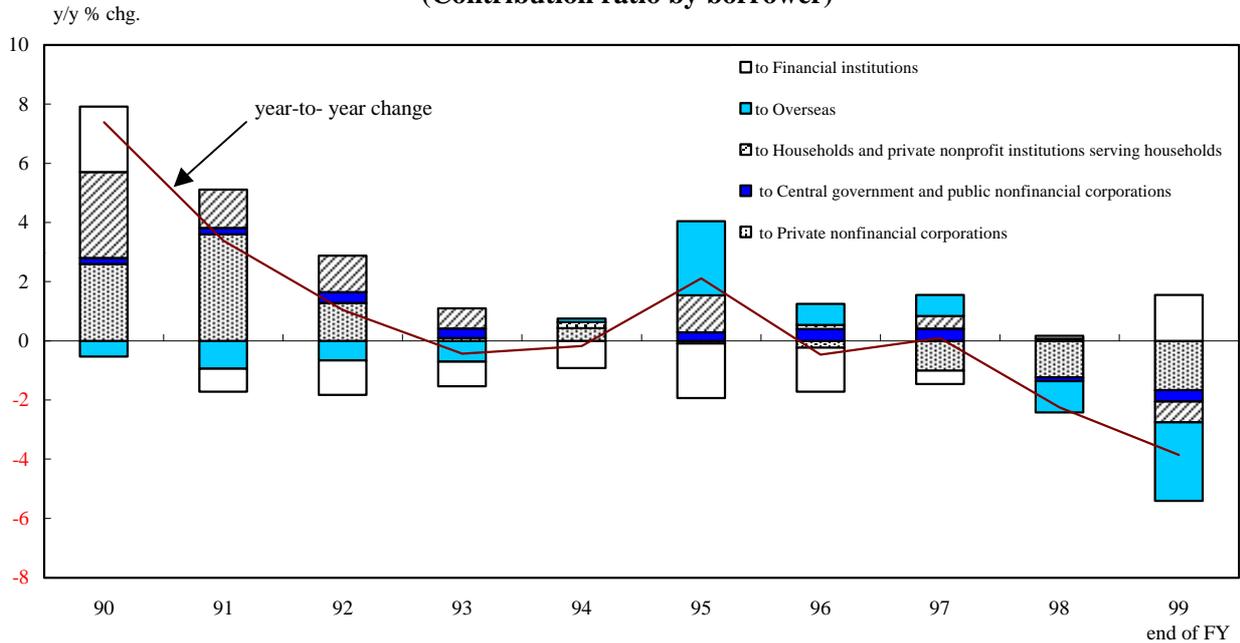
### Outstanding Liabilities

trillion yen; %

	End of FY89		End of FY99	
	Outstanding liabilities	Composition ratio	Outstanding liabilities	Composition ratio
Depository corporations	1,357	60.1	1,528	51.7
Banks	1,142	50.6	1,146	38.8
Postal savings	144	6.4	321	10.9
Collectively managed trusts	72	3.2	61	2.1
Insurance and pension funds	220	9.7	422	14.3
Insurance	177	7.9	331	11.2
Pension funds	42	1.9	91	3.1
Other financial intermediaries	681	30.2	1,005	34.0
Securities investment trusts	53	2.3	56	1.9
Nonbanks	149	6.6	146	4.9
Public financial institutions	348	15.4	640	21.7
Financial dealers and brokers	83	3.7	125	4.2
Noncollectively managed trusts	48	2.1	38	1.3
Total	2,258	100.0	2,955	100.0

(Chart 21)

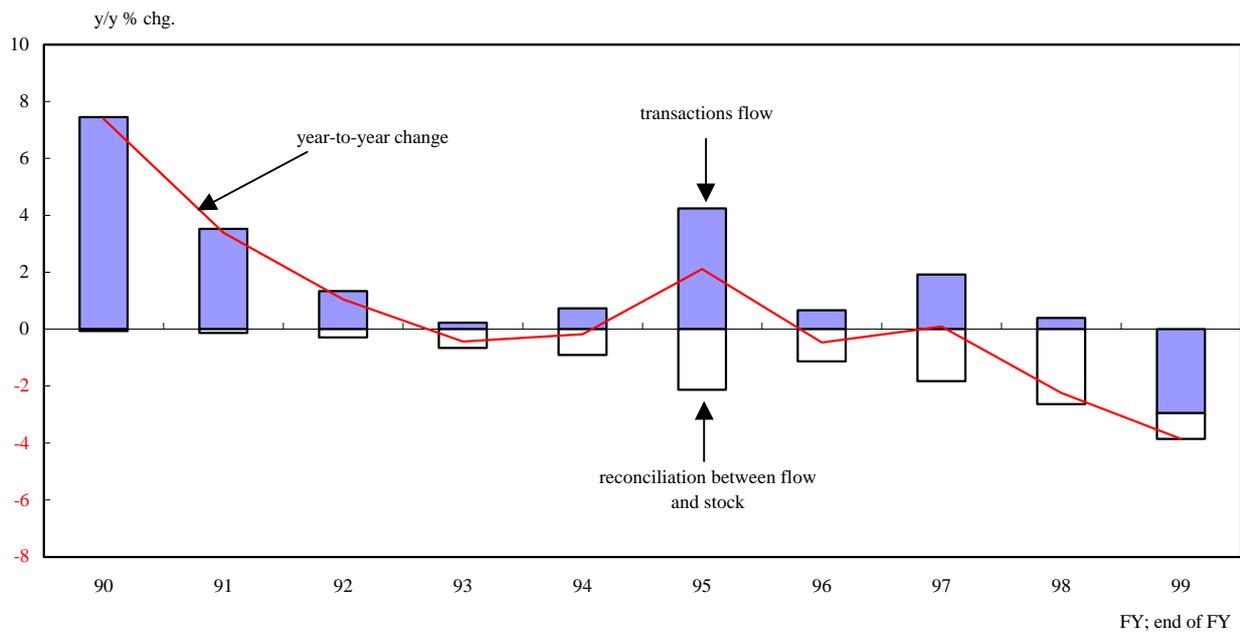
**Loans by Depository Corporations (excluding Postal Savings)**  
**(Contribution ratio by borrower)**



Notes: 1. "Loans by Depository corporations (excluding postal savings)" are shown on a consolidated basis.  
2. "Loans to financial institutions" are shown as loans to "Insurance and pension funds," "Other financial intermediaries," and "Financial auxiliaries."

(Chart 22)

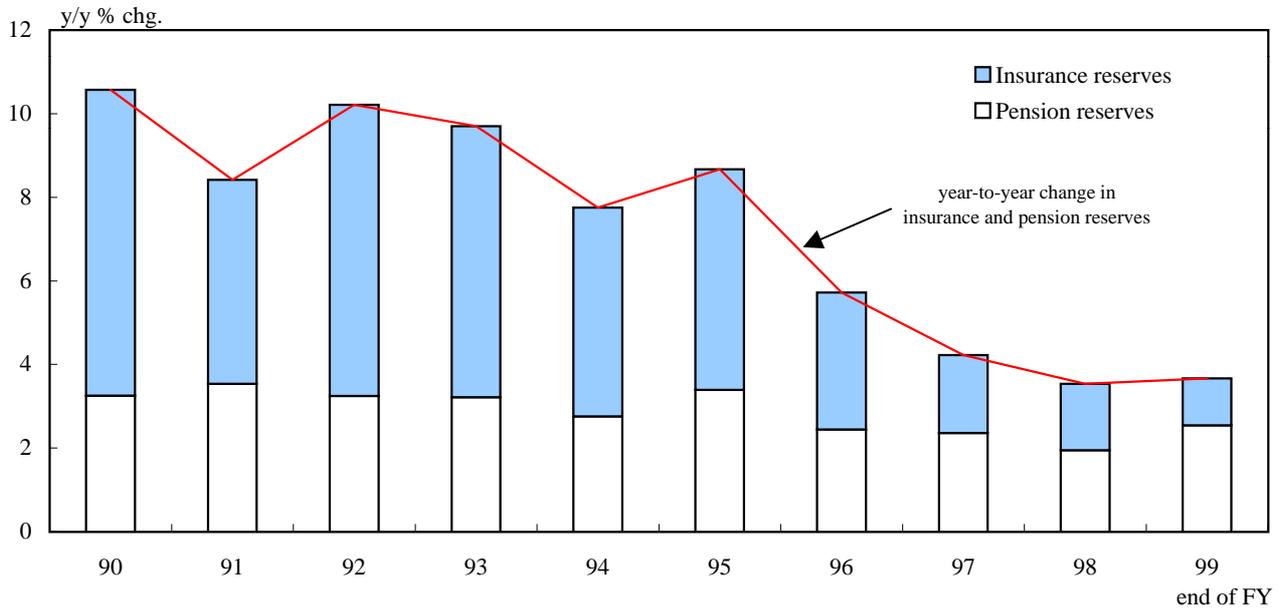
**Loans by Depository Corporations (excluding Postal Savings)**  
**(Contribution ratio by factor)**



Note: See chart 21 for definitions on "Loans by Depository corporations (excluding postal savings)."

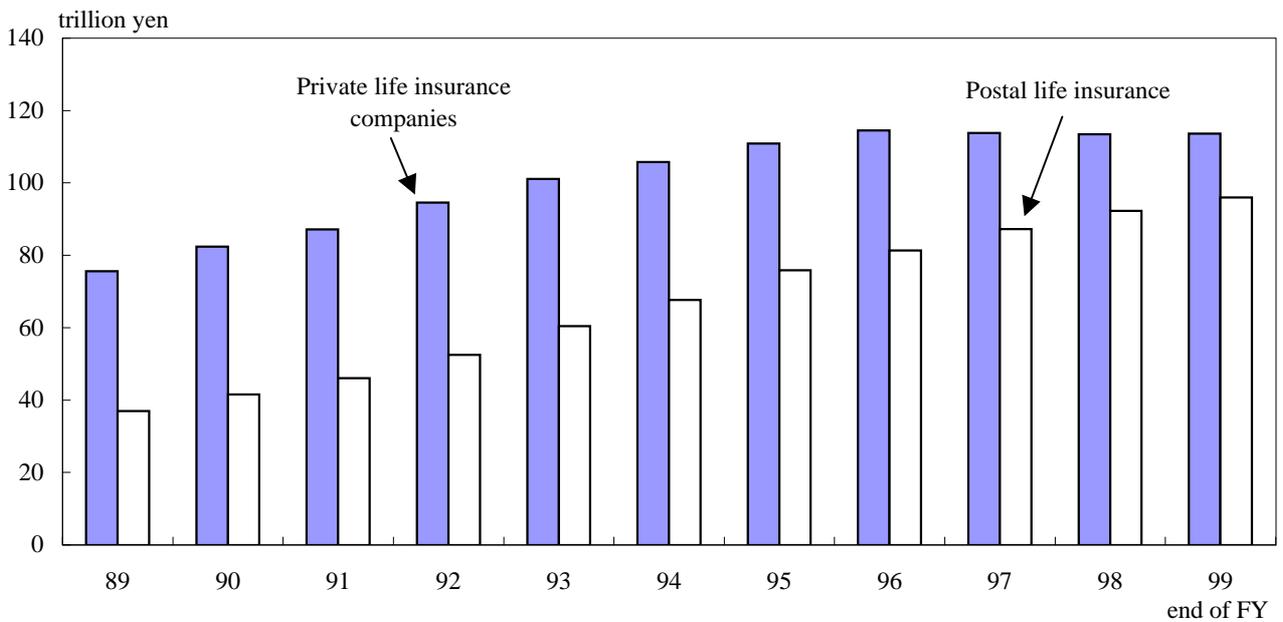
(Chart 23)

### Insurance and Pension Reserves (year-to-year percent change)



(Chart 24)

### Outstanding of Insurance Reserves

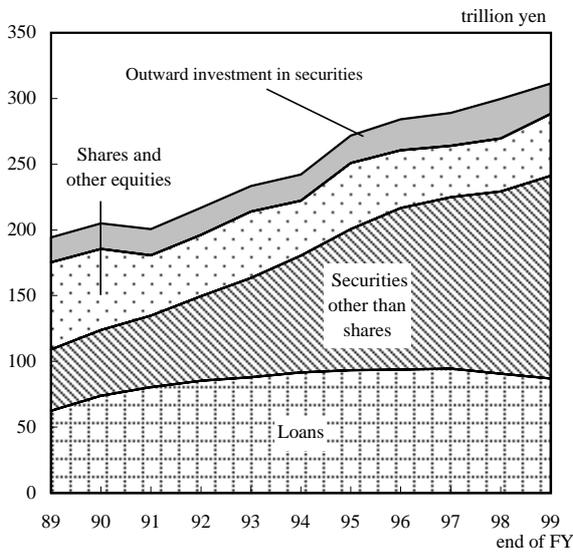


Note: Postal life insurance=Life insurance-Private life insurance companies

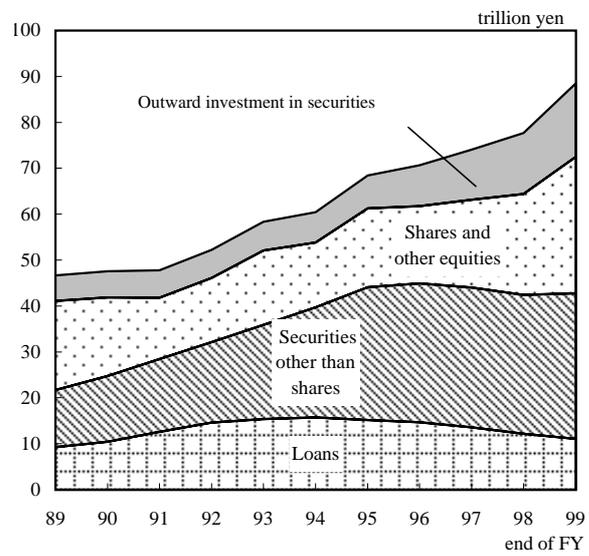
(Chart 25)

### Asset Outstanding of Insurance and Pension Funds

#### Insurance



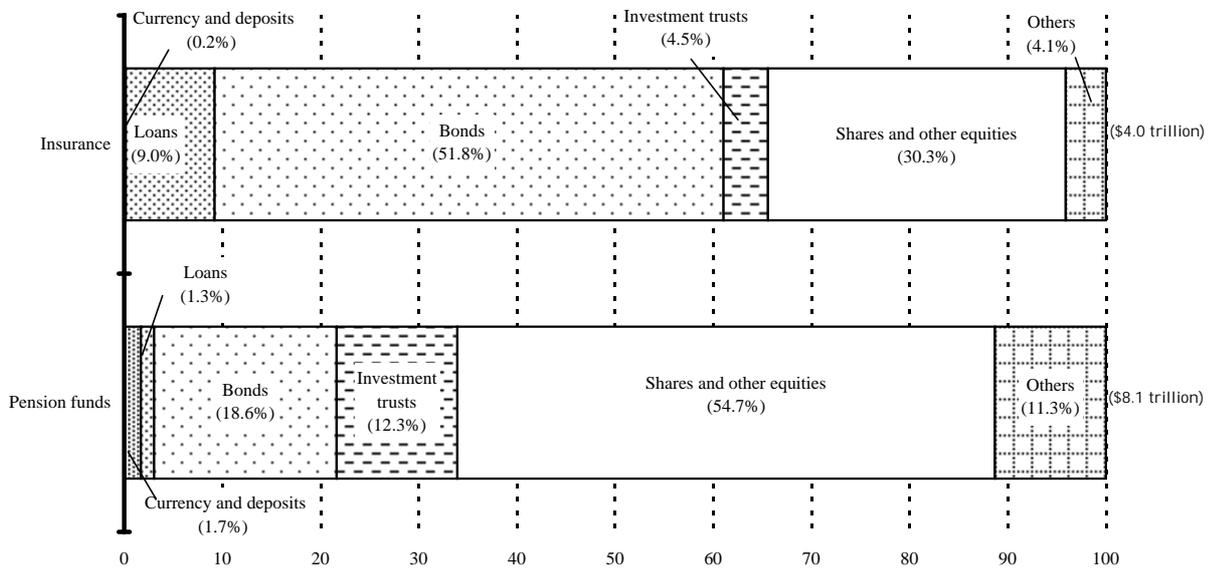
#### Pension funds



(Chart 26)

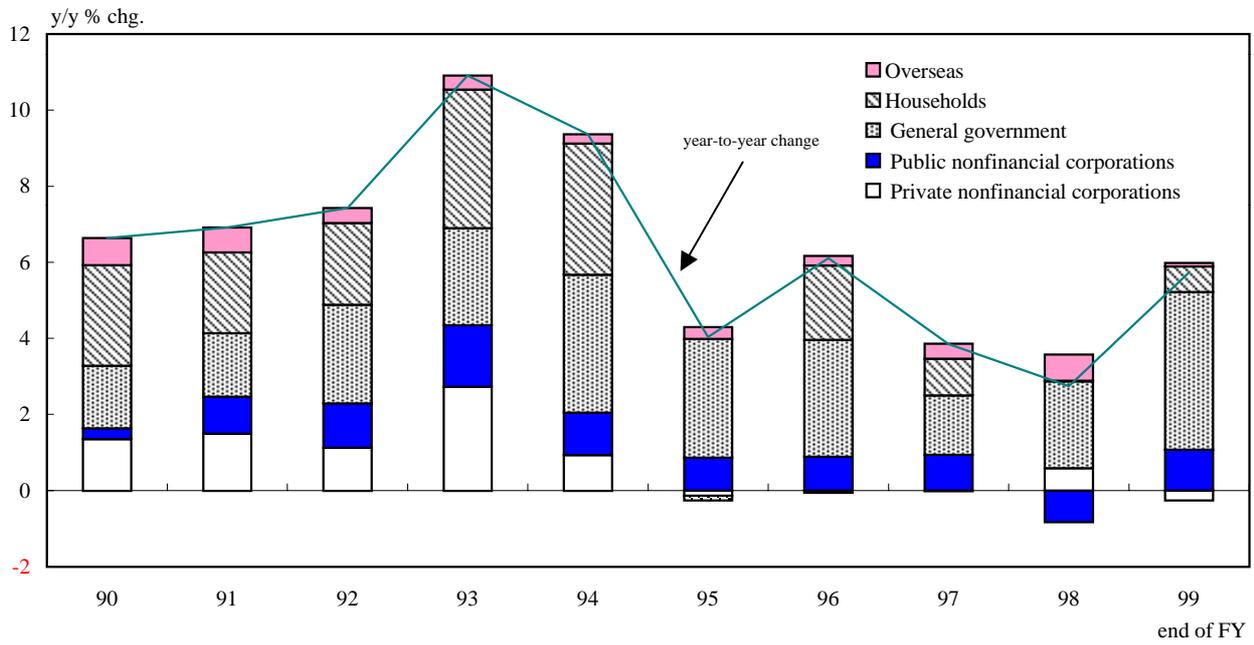
### Asset Composition of Insurance and Pension Funds in the United States

(End of FY 1999)



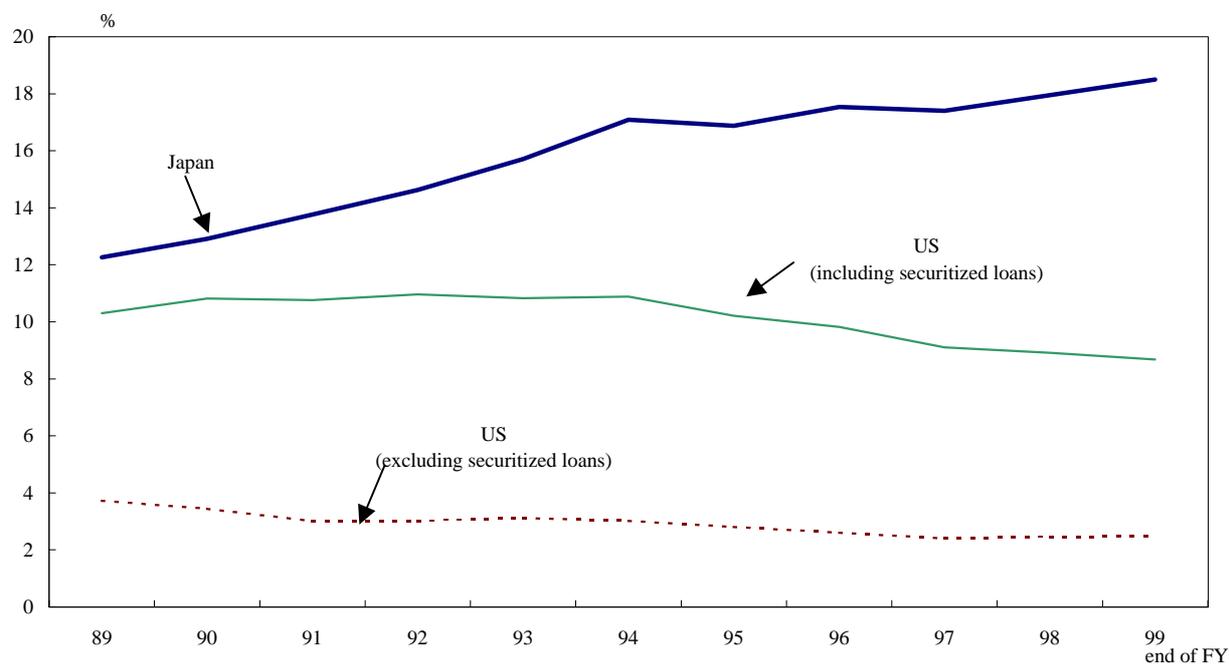
- Notes: 1.The horizontal axis is the percentage of total financial assets.
- 2.For details on U.S.FFA, see the appendix.

### Outstanding Loans by Public Financial Institutions



Note: "Loans by public financial institutions" are shown on a consolidated basis.

**Ratio of Loans by Public Financial Institutions to Total Assets of Financial Intermediaries**  
**(Comparison between Japan and US)**



Notes: 1. The definitions of each transaction item are as follows:

Ratio = Loans / Assets of financial intermediaries (excluding central bank)

Loans (US) : Bank Loans not Elsewhere Classified, Other Loans, Total Mortgage, Consumer Credit

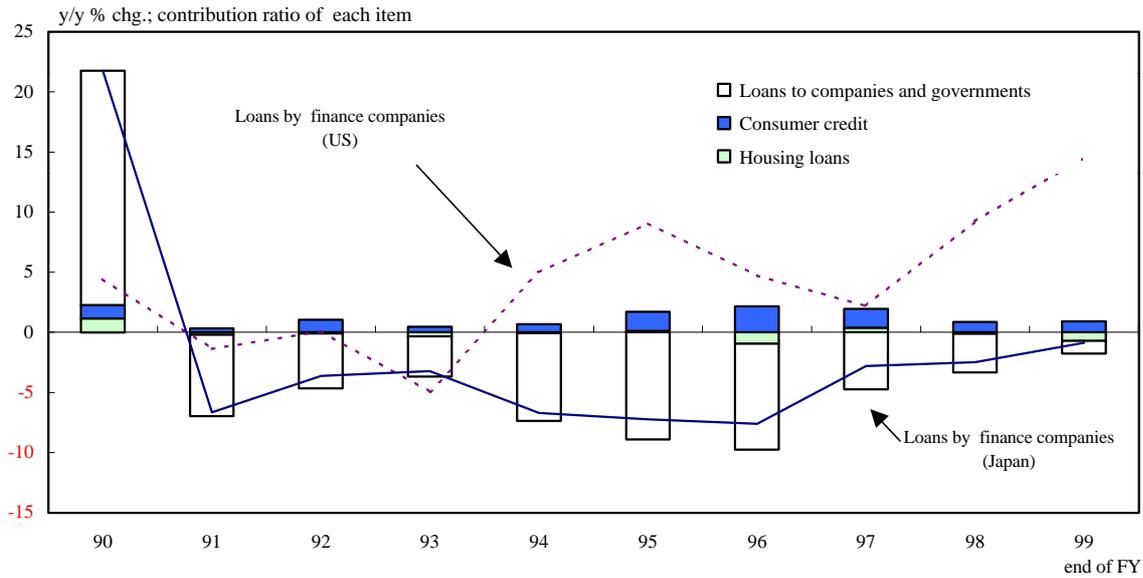
Loans (Japan) : Loans by public financial institutions

Public financial institutions (US) : Government Sponsored Enterprise, Federally Related Mortgage Pools

2. The data for the United States is at end of December.

(Chart 29)

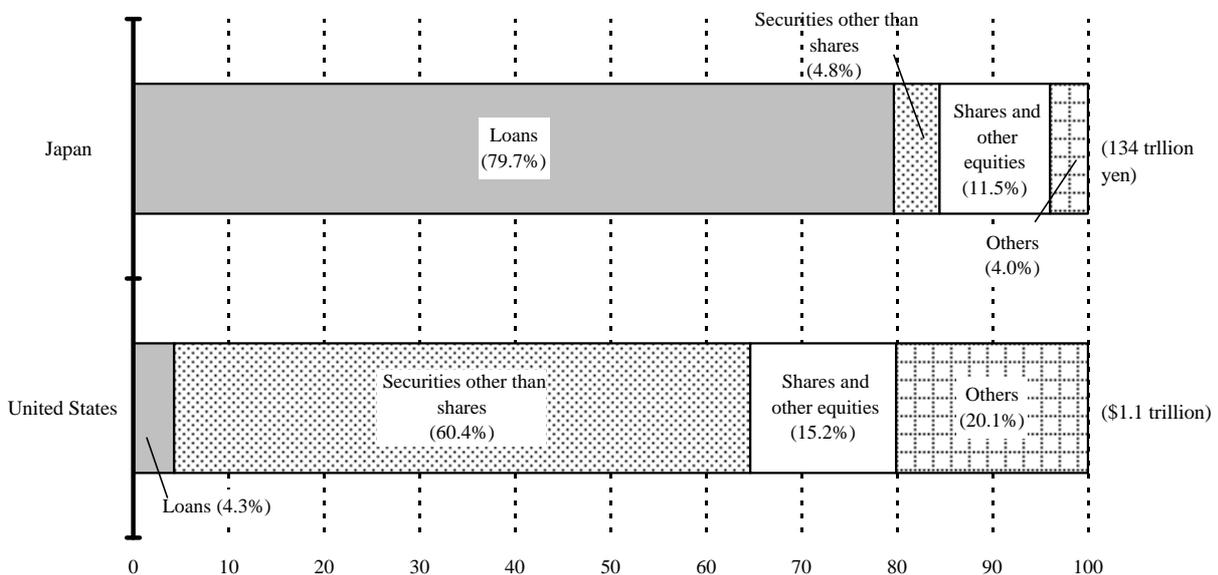
### Outstanding Loans by Finance Companies



(Chart 30)

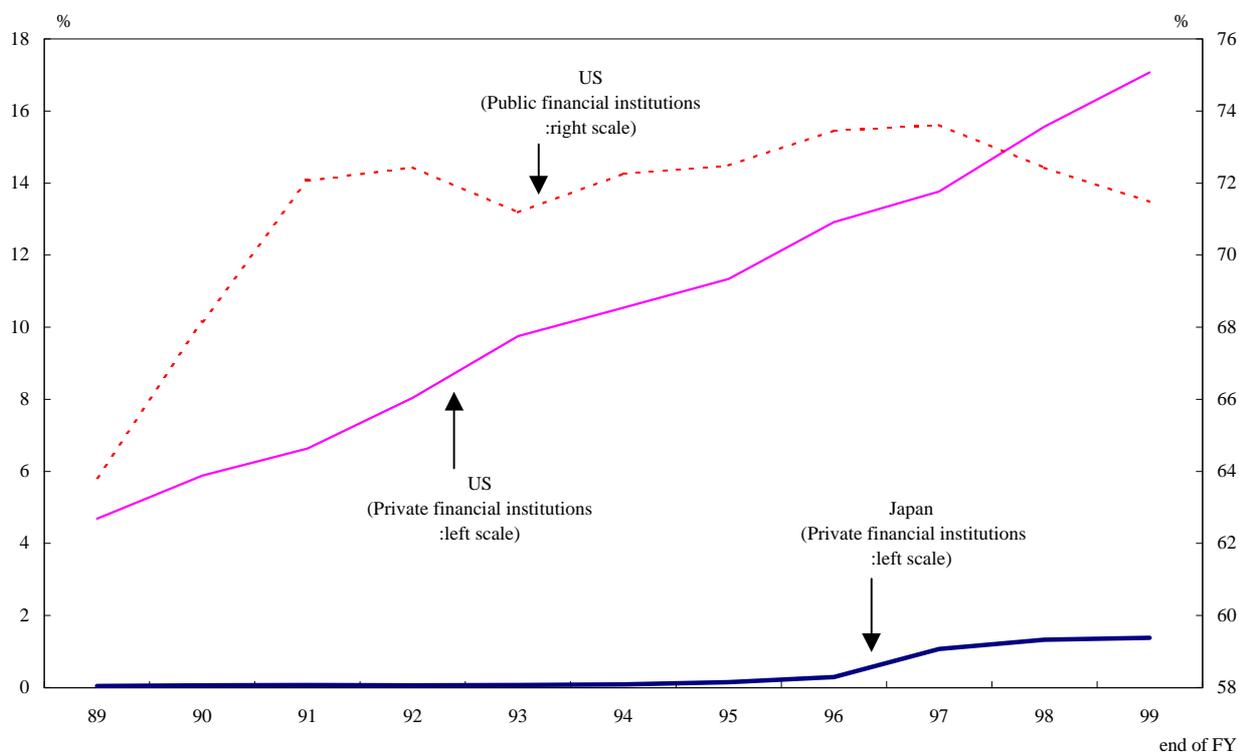
### Liability Composition of Finance Companies (end of March 2000)

(Comparison between Japan and US)



- Notes: 1. The horizontal axis is the percentage of total financial liabilities.  
2. For U.S.FFA, "Finance Companies" + "Mortgage Companies."  
See appendix for definitions of each transaction item.

**Ratio of Securitized Loans to Total Loans**  
**(Comparison between Japan and US)**



Notes: 1. The ratio of securitized loans is calculated as follows:

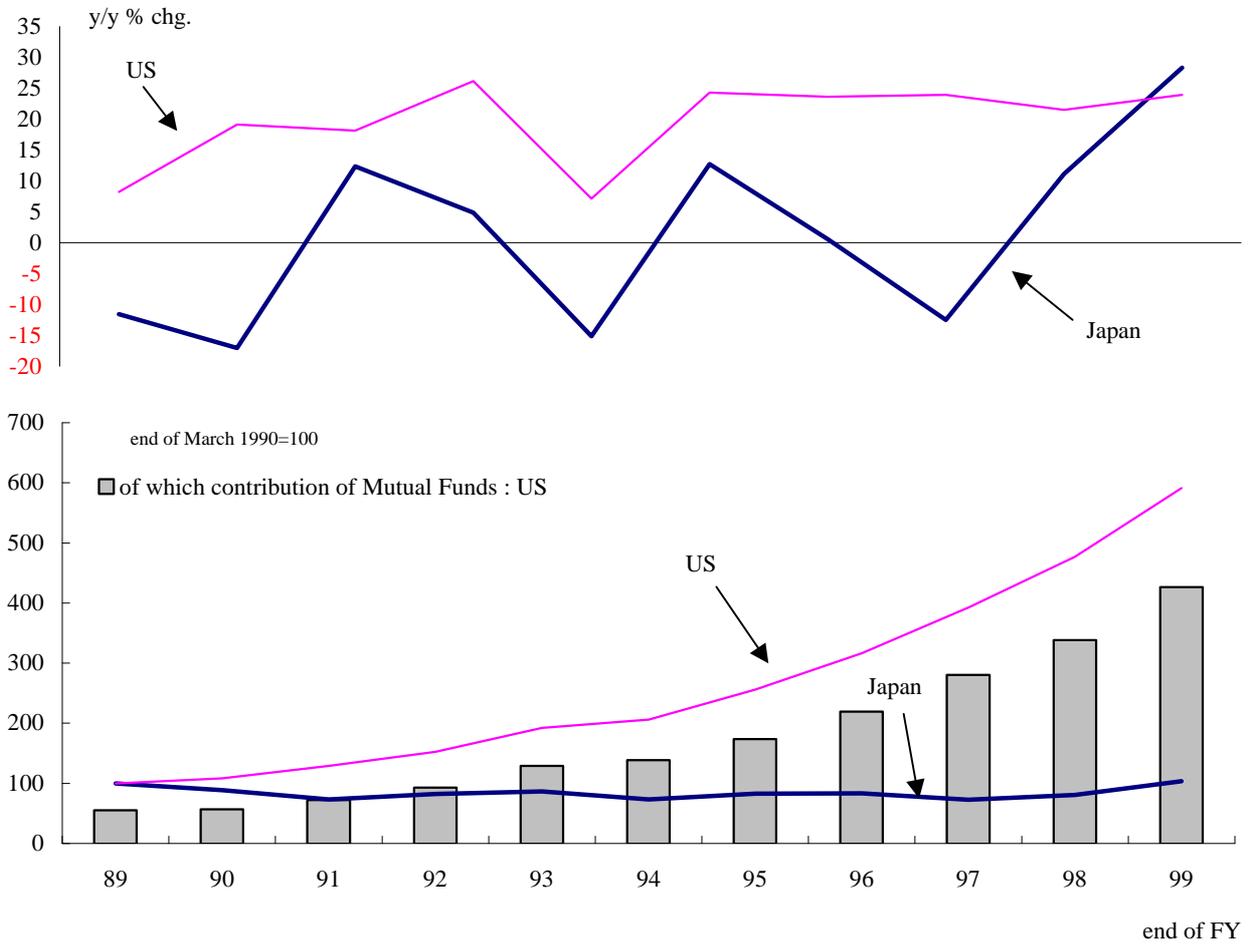
Japan: Private	Structured-financing instruments/(Loans by private financial institutions+Installment credit)
US: Private	Assets-backed securities/Loans by private financial institutions
US: Public	Mortgage pools/Loans by public financial institutions

2. Loans by private financial institutions, Loans by public financial institutions in the U.S. are defined as follows:

Loans	Bank Loans Not Elsewhere Classified, Other Loans, Total Mortgage, Consumer Credit
Public financial institutions	Government Sponsor Enterprise, Federally Related Mortgage Pools
Private financial institutions	Financial institutions excluding Public financial institutions.

3. In Japan, loans by public financial institutions are not structured-financed at the end of March 2000.

### Securities Investment Trusts (Comparison between Japan and US)



Notes : 1. Investment trusts(US) = "MMMF" + "Mutual Funds" + "Closed-End Funds"  
2. The data for the United States is at end of December.

## **Sectors and Transaction Items of Flow of Funds Accounts of the United States**

Sectors and transaction items of the United States are classified according to Flow of Funds Accounts of Japan.

### **Data source**

FRB, *Flow of Funds Accounts of the United States, 1982-1990*( released on March 10, 2000)

FRB, *Flow of Funds Accounts of the United States, 1991-1999*( released on June 9, 2000)

FRB, *Flow of Funds Accounts of the United States, Second Quarter 2000*( released on September 15, 2000)

### **Sectors**

Central bank

Monetary Authority

Depository corporations

Commercial Banking, Savings Institutions, Credit Unions

Insurance and pension funds (Sectors marked with an asterisk indicate pension funds)

Life Insurance Companies, Other Insurance Companies, Private Pension Funds\*, State and Local Government

Employee Retirement Funds\*

Other financial intermediaries(Sectors with an asterisk indicate investment trusts. Sectors with double asterisks indicate nonbank.)

Bank Personal Trusts and Estates, Money Market Mutual Funds\*, Mutual Funds\*, Closed-End Funds\*,

Government-Sponsored Enterprises, Federally Related Mortgage Pools, Issuers of Asset-Backed Securities,

Finance Companies\*\*, Mortgage Companies\*\*, Real Estate Investment Trusts, Security Brokers and Dealers,

Funding Corporations

Nonfinancial corporations

Nonfinancial Business

General government

State and Local Governments, Federal Government

Households

Households and Nonprofit Organizations

*\* In FFA of Japan, "Households" excludes "Private nonprofit institutions serving households".*

Overseas

Rest of the World

### **Transaction items**

Currency and deposits

U.S. Deposits in Foreign Countries, Checkable Deposits and Currency, Time and Saving Deposits

Loans

Net Interbank Transactions, Federal Funds and Security Repurchase Agreements, Bank Loans Not Elsewhere Classified, Other Loans and Advances, Consumer Credit, Total Mortgages, Security Credit

*\* "Borrowings" is equivalent to the liabilities of "Loans."*

Bonds

Open Market Paper, Treasury Securities, Agency Securities, Municipal Securities and Loans, Corporate and Foreign Bonds, Investment in Bank Personal Trusts

*\* In FFA of Japan, "Bonds" is equivalent to "Securities other than shares" (excluding "Investment trust beneficiary certificates.")*

Investment trusts

Money Market Mutual Fund Shares, Mutual Fund Shares

Shares and other equities

Corporate Equities, Proprietors' Equity in Noncorporate Business

Insurance and pension reserves

Life Insurance and Pension Fund Reserves

Others

Trade Credit, Taxes Payable by Businesses, Gold and Official Foreign Exchange Holdings, SDR Certificates and Treasury Currency, Total Miscellaneous Financial Claims, Sector Discrepancies, Instrument Discrepancies