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**Risk-Averting Portfolio of Japanese Households**

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**Economic and Industrial Research Department  
Development Bank of Japan**

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# Risk-Averting Portfolio of Japanese Households

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## Summary

1. The household sector invests giant assets in excess of five times GDP. Its investment stance exerts a huge influence on the capital markets and on the supply of funds to corporations. Particularly in recent years, its direction has been monitored closely in light of changes in the investment environment driven by the so-called financial Big Bang, and of the transfiguration of financial institutions in conjunction with reform of the financial system. In this report we study changes in the household asset investment stance, particularly those relating to safety, and examine their impact on future fund supply.

2. As of the end of 1998, total household assets exceeded ¥2,529 trillion and accounted for 34% of total national assets. Net wealth (after subtraction of liabilities) were ¥2,156 trillion, and accounted for 67% of national wealth (government net assets, national net assets). Household assets are the largest single component of total assets and net wealth.

Seventy to eighty percent of the physical assets in household accounts is land. After peaking in 1990, however, the value of land holdings declined in conjunction with the collapse of the Bubble, leading to a corresponding decline in the total value of physical assets. In contrast, household financial assets have increased nearly every year, and on a total assets base have come to exceed the value of land holdings.

3. Despite this increase in net financial assets, the proportion of physical assets is large. This is one of the special characteristics of Japanese portfolios. To review its background, we see that over the period from the 1970s up until recently, the long-term average risk-return relationship was characterized by a slightly lower rate of return on physical assets and a considerably lower volatility risk compared to another risk asset, equities. Although the latter had a higher rate of return in the 1980s, on into the 1990s both showed negative rates of return, with that of equities being larger. Further, in comparing income gains (dividends on stocks and rent from physical assets) and capital gains, the income gain on equities was smaller and its proportion declined year by year. Physical assets were thus superior for stable asset holdings.

4. When we compare recent U.S. and Japanese balance sheets (the outstanding balance of financial asset liabilities) by segment as of the end of 1999 in order to educe the respective portfolio, Japanese household holdings of financial assets amounted to ¥1,377 trillion, the bulk of which coincided with liabilities in the financial sector. For this reason, financial sector assets in loans and equities are exposed to volatility, while those of the household sector are in cash and deposits, insurance, pensions and other low-risk assets.

The U.S. household sector holds financial assets amounted to \$35 trillion as of the end of 1999, exceeding those of Japan on a per capita basis. They were managed mainly in direct investment to corporations by means of stockholdings, and via such institutional investors as

insurance, pensions and mutual funds. Their asset values are exposed to more risks than that of the Japanese household sector.

5. Looking at the portfolio held by households in Japan, the U.S. and Germany, we see that in Japan the proportion of safe cash and deposits is higher, and that of such risk assets as equities is lower. From the 1980s to the 1990s, moreover, the proportion of safe assets rose.

In the U.S. the proportion of deposits has always been low, but a recently rising stock market has boosted the weight of equities and pensions. In Germany the proportion of deposits was high until the 1970s, but that of insurance and pensions rose in the 1980s and that of equities rose in the 1990s.

6. The stock market, as a typical supplier of risk funds, was bearish in the wake of the Bubble's collapse, but since 1999 it has been active again. Investment trusts are mainly relatively low risk public and corporate bond funds and those for equities have a low weight, but their overall outstanding balance is slowly increasing.

7. Marketable securities holdings increased for all income brackets during the Bubble years, but thereafter they shrank sharply centering on the higher brackets and in the past five years have returned to pre-Bubble levels. Originally the higher the household income the greater the share of securities among portfolio, but the differential has been muted in the recent five years. Rough estimation of relative risk aversion show an increase in this tendency up to the second half of the 1990s, suggesting a stronger emphasis on safety. The same tendency is apparent in surveys of portfolios as well.

8. In the 1990's, the household sector shifted portfolios to safer assets reflecting the decline of the return on both physical and risk assets after the burst of the Bubble, and the more conservative stance. Looking forward, enhanced financial services brought about by the financial Big Bang would make risk assets more attractive and encourage households to take more risks in search of returns. The conditions, therefore, are expected to result in households becoming prime suppliers of risk money.

## **Introduction**

Amid declining asset values and interest rates in the wake of the Bubble's collapse, households as the largest holders of assets exert major influence on the capital market and the supply of funds to corporations. It is feared that if there is no change in the household economy's stress on safety, it will be unable to respond adequately to rising demand for risk money to foster new businesses and the like.

In this report we examine recent changes in the risk-averting portfolio trends of household asset management, including physical assets, and consider their future impact on the supply of funds to corporations.

The structure of this report is as follows. In Chapter I, we confirm the scale of household assets using principally SNA statistics, and analyze the overall direction of their management, together with the management situation of physical assets. Chapter II considers the current situation and outlook for the special characteristics of financial asset holdings, as deduced from international comparisons and observations of the situation by age and income bracket. In Chapter 3 we turn our attention to asset management, particularly the securities and others into which household funds are starting to be directed, and review household management attitudes and the impact on the supply of funds.

## I. Present Situation of Household Assets

### 1. Situation of Total Asset and Net Asset Holdings: Households as the Largest Holder of Assets

As preparation for consideration of household asset management, we will review the asset situation in Japan and undertake confirmation of the size of the household economy (Figure 1-1). As of the end of 1998 (the same point in time applies hereinafter), Japan's total national assets were ¥7,407 trillion, of which financial assets were ¥4,334 trillion and physical assets ¥3,073 trillion. National wealth, defined as net assets (total assets minus liabilities), was ¥3,206 trillion. National wealth is equivalent to physical assets plus net foreign assets<sup>1</sup>, but physical assets exceeded ¥3,073 trillion as against net foreign assets of ¥133 trillion.

**Figure 1-1. Situation of Japan's Total Asset and Net Asset Holdings**

(As of end-1998. Unit: ¥trillion)

	Total assets		Net assets			
		Financial assets	Physical assets		Financial assets	Physical assets
<b>Household sector</b>	<b>2,529</b>	<b>1,193</b>	<b>1,336</b>	<b>2,156</b>	<b>820</b>	<b>1,336</b>
Non-financial corporations	1,786	694	1,092	564	▲ 528	1,092
Financial corporations	2,052	1,986	66	46	▲ 20	66
Government	943	417	526	374	▲ 152	526
Nonprofit organizations	97	44	53	66	13	53
<b>Totals for Japan</b>	<b>7,407</b>	<b>4,334</b>	<b>3,073</b>	<b>3,206</b>	<b>133</b>	<b>3,073</b>
	Total assets			National Wealth	Net foreign assets	

Note: Owner-operated corporations are included in the household sector.

Source: Cabinet Office, "Annual Report on National Accounts"

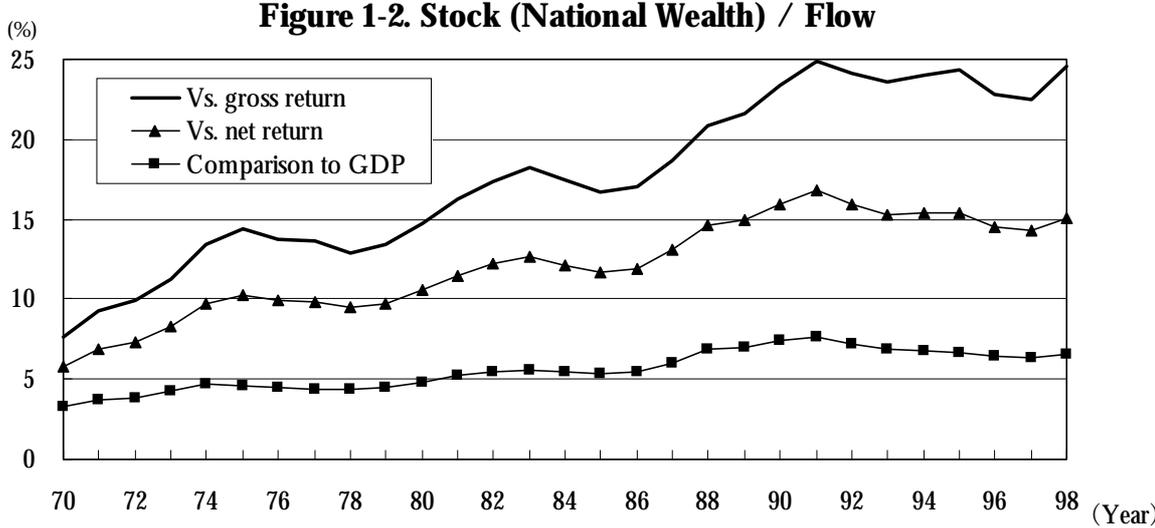
This asset stock, impacting substantially as it does on the flow represented by the real economy, has come to be monitored closely in its configuration as the so-called "stocking"<sup>2</sup> of the economy. To observe the progress of "stocking," Figure 1-2 compares national wealth and GDP since the 1970s; in it we see that the stock/flow ratio advanced in the 1980s and went flat in the 1990s. In light of the fact that national wealth is material or physical capital,<sup>3</sup> a comparison with the corresponding flow of material return (GDP minus the income of employed persons) on both a gross base (including capital consumption in material return) and a net base (subtracting

<sup>1</sup> Because aggregated financial assets and liabilities are offset by domestic sectors.

<sup>2</sup> Refer to Japan Development Bank (1994) for the "stocking" concept. (In this report, however, the portions of both that appear to be expanding are omitted from "stocking" in discussion of net assets.) The increase in the value of stock influences consumption as the "asset effect," and in the aspects of collateral value and current liquidity influences also corporate fund procurement.

<sup>3</sup> As a contrasting concept, there is human capital. As a recent estimation example, refer to the Japan Economic Research Center, Financial Research Section (2000). Unlike other assets, human capital does not exist clearly as an asset in market valuations. Therefore its estimated amount depends strongly on discount ratios and the like, and estimation is difficult. But keying off wage cuts, growing restructuring and other rising instabilities related to employment, we believe it possible that the value has recently declined.

capital consumption from material return) shows that the ratio rose from the 1970s to the 1980s, and then declined slightly in the 1990s. "Stocking," in the sense of a rising ratio of stock to flow, declined somewhat in the 1990s. However, we believe that material goods declined while net financial assets rose, pointing to greater freedom in asset management. This will be confirmed later in relation to the household sector.

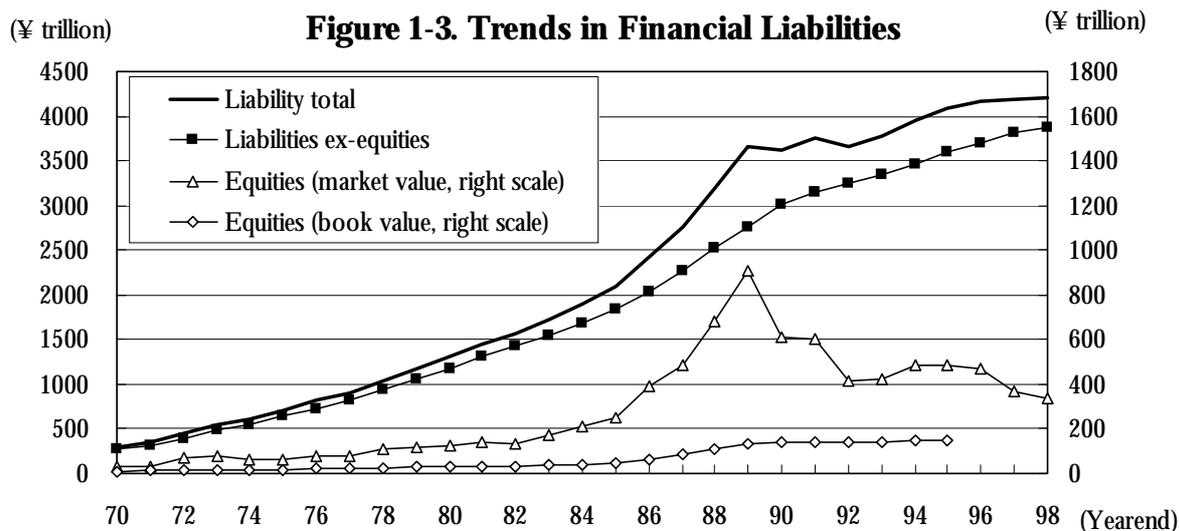


Note: Gross return = GDP - income of employed persons  
 Net return = Gross return - fixed capital consumption  
 Source: Cabinet Office, "Annual Report on National Accounts"

In regard to the financial liabilities whose situation changed dramatically in the 1990s, a look at trends in their breakdown (Figure 1-3) shows a slowdown in the growth of liabilities (borrowings and the like, not including equities) that had been so torrid in the 1980s, but with little progress in their recovery they continued to expand. The market capitalization of equities shrank substantially in the decade due to sinking prices. Book values were flat in the 1990s, indicating a contraction in corporate fund procurement from stocks.

The principal assets of non-financial corporations are ¥1,092 trillion in physical assets. They hold ¥694 trillion in gross-base financial assets, for a net negative ¥528 trillion (procurement). Although net assets exceed ¥564 trillion, funds their basic shape is that they collect funds from households and others and carry out production investing in production facilities that are physical assets.

At ¥2,052 trillion, the financial sectors assets are substantial, but almost all are financial assets. They have a large presence in the financial markets, though most of the assets consist of cash deposited by households and others. Net assets are small at ¥46 trillion.



Note: Market value: Market price for households, private sector corporations, private sector financial institutions and overseas; cost price for others.

Book value: Par value for households and private sector corporations, cost price for others.

Source: Cabinet Office, "Annual Report on National Accounts"

Total assets of the household sector<sup>4</sup> exceed ¥2,529 trillion and account for 34% of total national assets. Further, at ¥2,156 trillion, net assets constitute 67% of national wealth (national net assets and people's net assets). Within the national economy, households have the largest single share of both total and net assets. Of the total for households, financial assets amount to ¥1,193 trillion,<sup>5</sup> or 47%. Physical assets amount to ¥1,336 trillion, of which ¥1,016 trillion, or 76%, is represented by land.

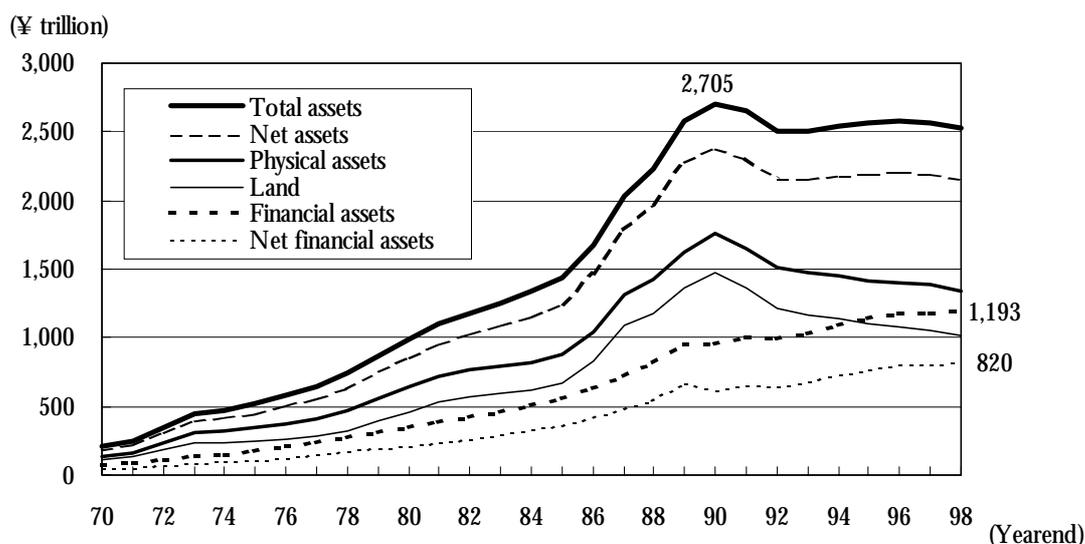
## 2. Trends in Household Assets: Financial Asset Accumulation

We now examine trends in the household asset breakdown from the 1970s onward (Figure 1-4). Total household assets peaked in 1990 at ¥2,705 billion, declined to 1992, and since then have trended flat at slightly over ¥2,500 trillion. Although 70~80% of physical assets is land, the value of landholdings rose with land prices to a 1990 peak and then declined with the collapse of the Bubble. This is the reason for the contraction in the total amount of physical assets. In contrast, household financial assets have increased almost every year and on a total assets base have exceeded the value of landholdings. Despite the Bubble's collapse, we can say that the accumulation of financial assets has proceeded steadily. We observe this in more detail below.

<sup>4</sup> Including owner-operated corporations.

<sup>5</sup> When considering the scale of net assets, it must be borne in mind that some bad debt is effectively uncollectible but in SNA statistics is not yet included with exactitude. Accounting allowances are being made, but actual disposition remains ahead. In financial institution balance sheets it has been largely recognized as a liability, but this recognition has been made an expected burden of the future, with the possibility that it will restrain present consumption.

**Figure 1-4. Long-term Trends in Household Total and Net Assets**

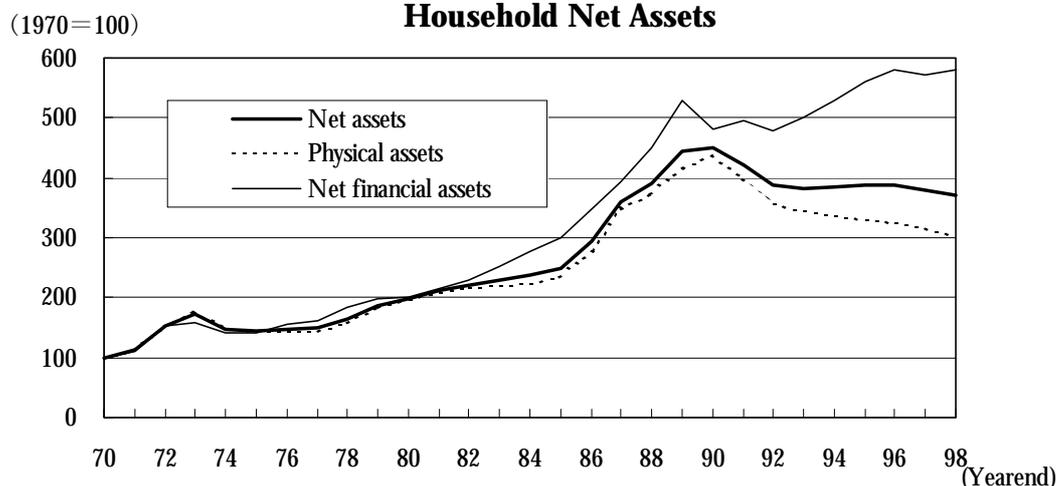


Note: Owner-operated corporations are included in the household economy.

Source: Cabinet Office, "Annual Report on National Accounts"

The movement of the net assets that are the real wealth of households broadly parallels that of total assets. But in examining the real levels of the component physical (land, dwellings, others) and net financial assets since the 1970s (Figure 1-5), we see that from that decade to the 1990s they increase about four- to fivefold at the same pace. In the 1990s, however, there began a divergence wherein net financial assets increased while physical assets declined.

**Figure 1-5. Real Level Comparisons in the Breakdown of Household Net Assets**



Notes: 1. Owner-operated corporations are included in the household economy.

2. Extracted from Ministry of Public Management, Home Affairs, Posts and Telecommunications' Consumer Price Index," indexed to 100 as of end-1970.

Source: Cabinet Office, "Annual Report on National Accounts"

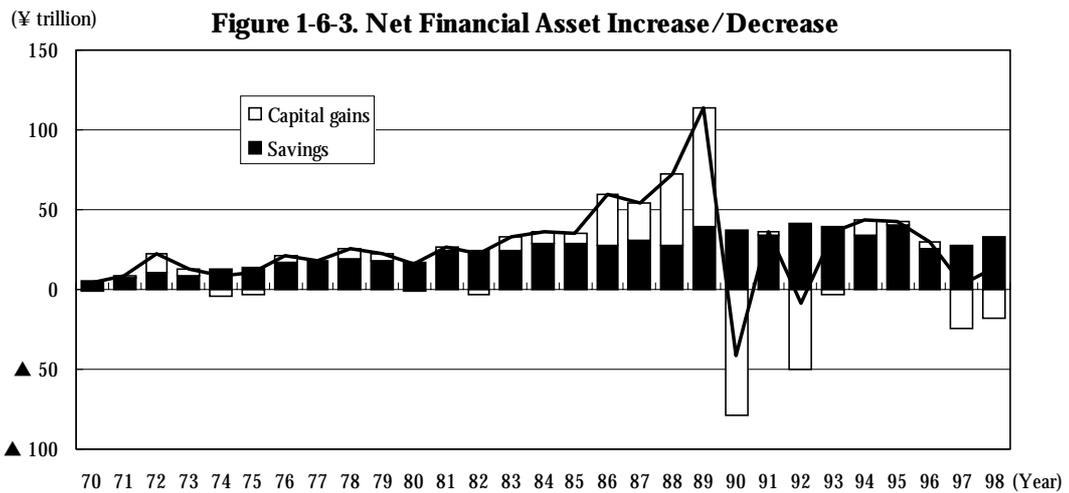
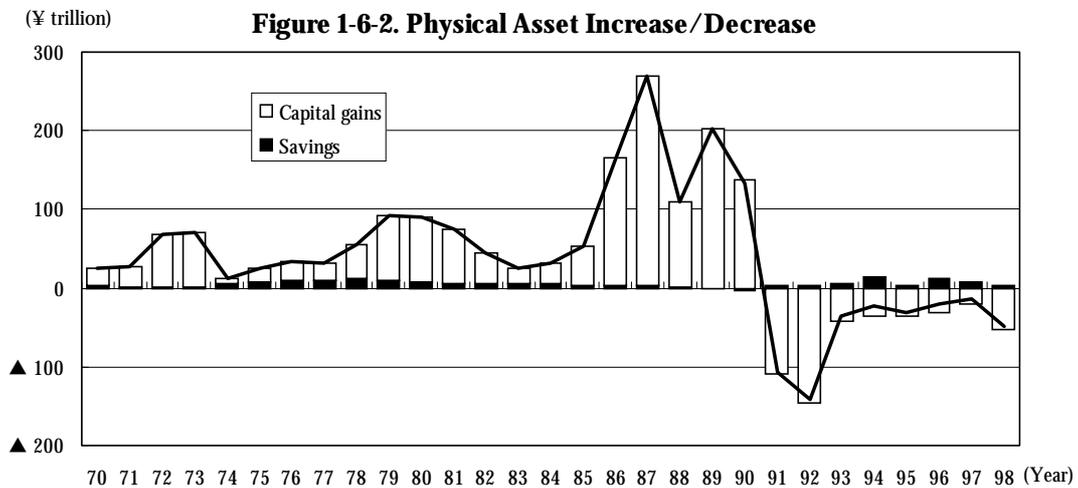
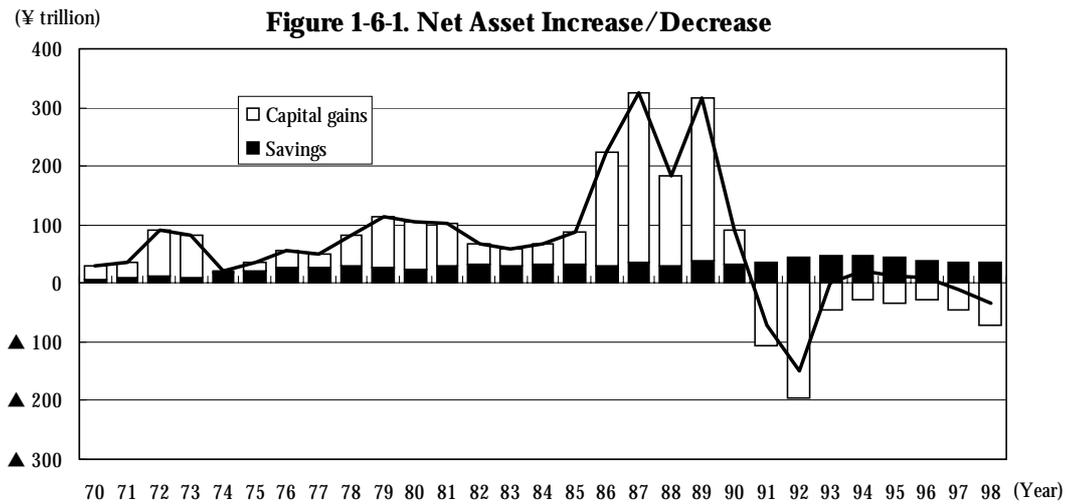
Increases and decreases in the household sector's net assets (sum of physical and net financial assets) can be broken down as deriving from savings<sup>6</sup> and from capital gains/losses (Figure 1-6-1). Savings increase almost constantly, a little at a time, and amounted to ¥30 ~ 40 trillion in the 1980s and 90s. Capital gains showed wide variation from minus ¥200 trillion or less to plus ¥300 trillion or more. From the chart we see that the basic source of household asset accumulation is savings, but the capital gain-driven increase in the Bubble period was greater.

Further, classifying net asset increase/decrease by physical and net financial assets (Figures 1-6-2, 1-6-3), we see that the contribution of savings to physical asset increase/decrease was small; since the bulk of the latter consists of land, which cannot be traded except to other sectors, most of the increase/decrease derives from capital gains/losses. For this reason, in the overall household sector physical asset acquisition is not large, and the bulk of the savings that constitute the basic source of asset accumulation go into net financial assets.

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<sup>6</sup> Here "savings" is a term in economics, meaning the flow of "the portion of income not consumed."

**Figure 1-6. Household Sector Net Asset Increase/Decrease and Breakdown**



Note: Net assets = physical assets + net financial assets

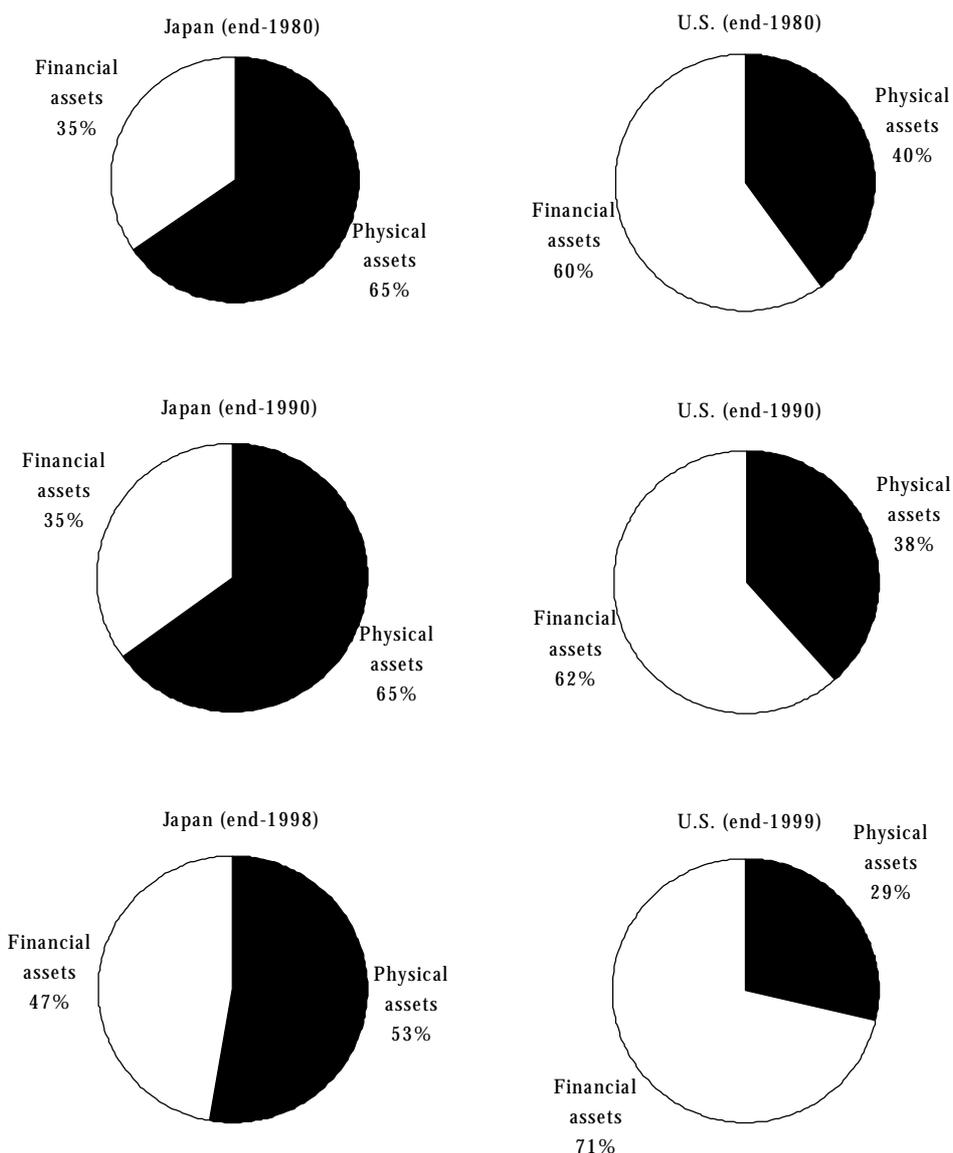
Source: Cabinet Office, "Annual Report on National Accounts"

### 3. Situation of Physical Asset Holdings and Rates of Return

#### 3.1. Ratio of Physical Asset Holdings

Despite the increase in net financial assets in recent years, in the breakdown of Japanese household asset holdings the high ratio of physical assets is a special feature. Comparing this ratio to that of the U.S. as of end-1998 (Figure 1-7), we see that in Japan's case it constitutes the bulk of total assets but less than 30% in the U.S. case. Because land prices are high in Japan, asset values become large and the holding ratio high. Yet we can observe that asset management is biased toward physical assets.

**Figure 1-7. Ratio of Household Financial/Physical Assets (U.S.-Japan Comparison)**



Note: Includes non-profit organizations

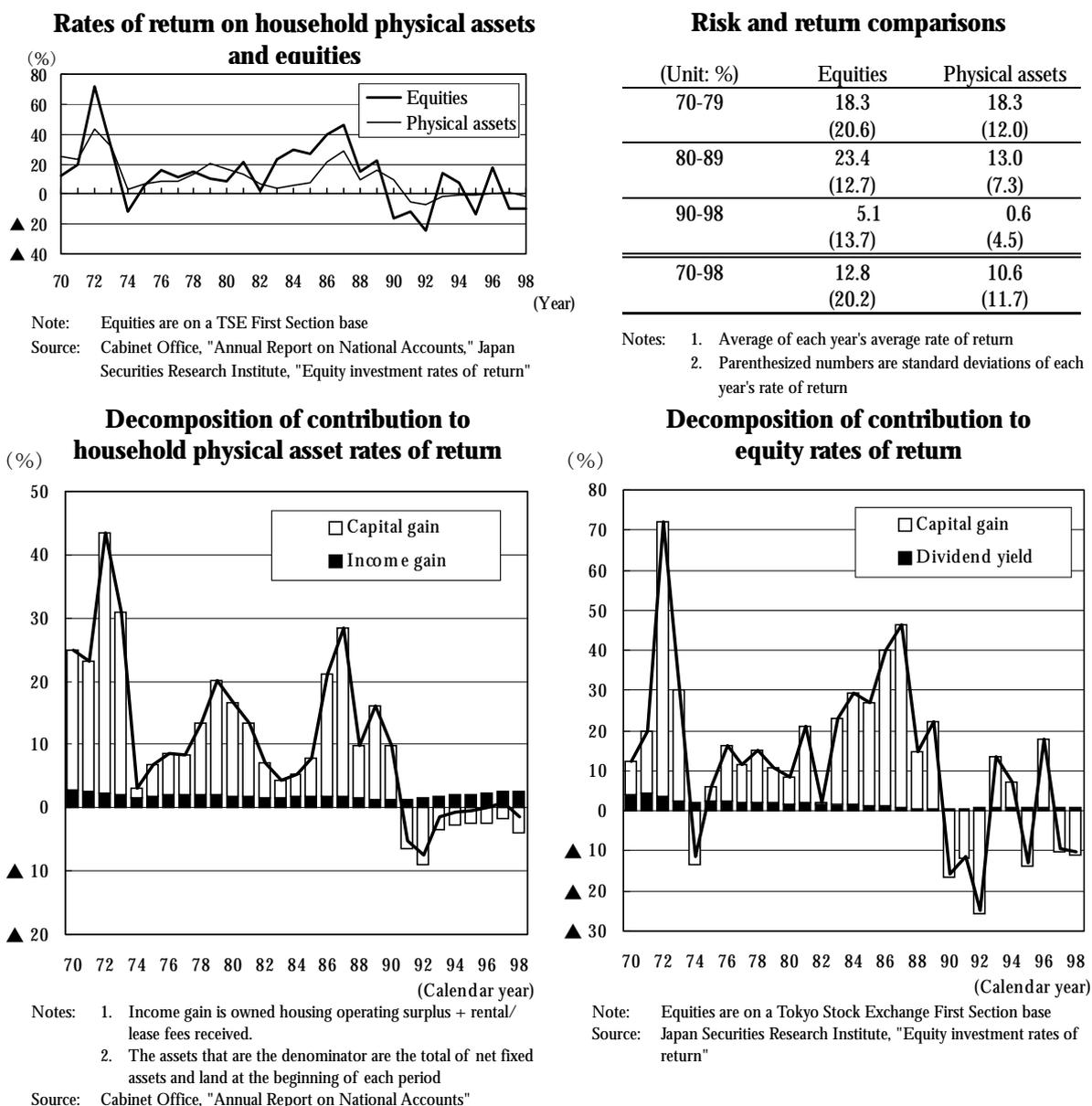
Source: Cabinet Office, "Annual Report on National Accounts," Flow of Funds Accounts of the United States

Seen in a time series, there were no great changes in either country from the 1980s to the 1990s, but in the latter decade both moved forward in financial asset accumulation, sending its holding ratio up.

### 3.2. Risk and Return on Physical Assets

To consider the background to the high proportion of physical assets in the breakdown of asset holdings, we observe long-term trends, spanning about 30 years, in the average risk-return relation between rates of return on household physical assets and those of equities. Although the equity rate of return was somewhat higher, the variability risk was considerably more so (Figure 1-8). The return on equities was higher in the 1980s, but in the 1990s both slipped into negative territory, with that of equities far lower.

**Figure 1-8. Comparison of Rates of Return on Physical Assets and Equities**



Comparing income gain (dividends on stocks and physical asset use benefits) and capital gain, we see that the former was smaller for equities and its proportion declined year by year. If seeking simply return, the distinction has no great meaning. But the stable, use benefit portion of physical assets is large, and possesses the aspect of a sense of security for their holders.

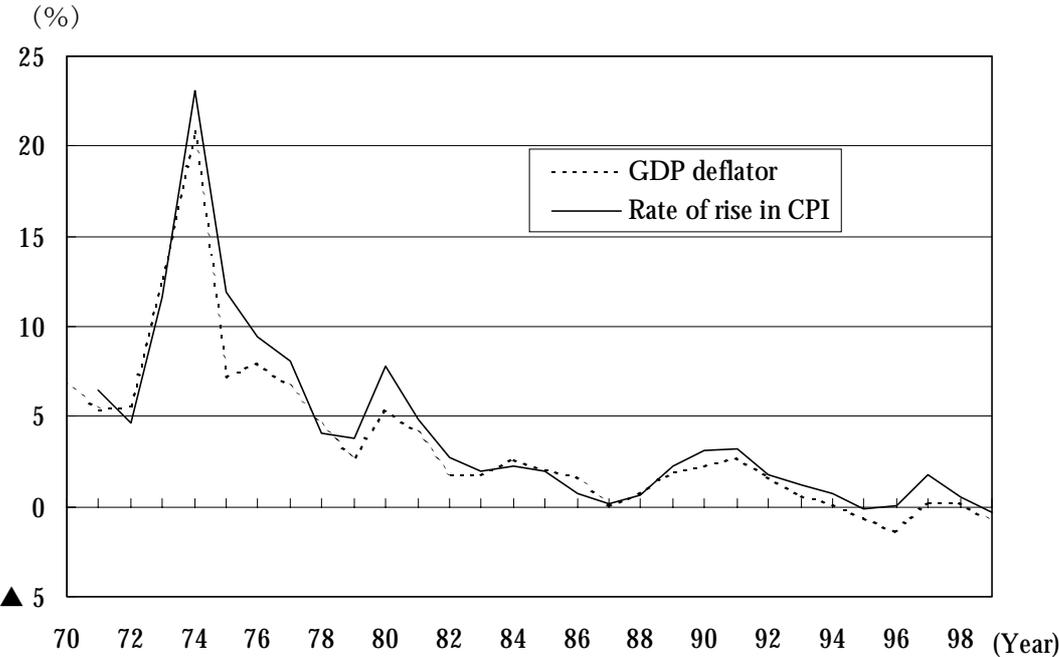
As we saw earlier, increases in physical assets are not the result of aggressive savings with their purchase in mind. The principal portion of the increase derives from capital gains. It was acceptance of this change that has biased households slightly toward investment in physical assets.

**3.3. Deflation and Physical Assets**

We believe that deflationary tendencies have exerted influence on the recent advances in the financial asset ratio.

It is generally said that assets linked to physical assets possess the merit of avoiding diminution in inflationary times because they have inflation hedge functions, but in deflationary times financial assets are superior in that they fix principal nominally. In the case of stable assets in particular, even when interest rates are close to zero, the more the inflation rate declines the greater the real rate of return, and they become superior. If the rate of inflation is negative, even cash will have a positive real rate of return, and become a profitable investment measure.

**Figure 1-9. Trends in Rates of Commodity Price Increases**



Source: Cabinet Office, "Annual Report on National Accounts," Ministry of Public Management, Home Affairs, Posts and Telecommunications' "Consumer Price Index"

Looking at inflation rate trends, we see in Figure 1-9 that the rate was strikingly low in the 1990s and was recently negative, signaling deflation. We believe that this is one reason for the growing proportion within financial assets of low-return stable assets.

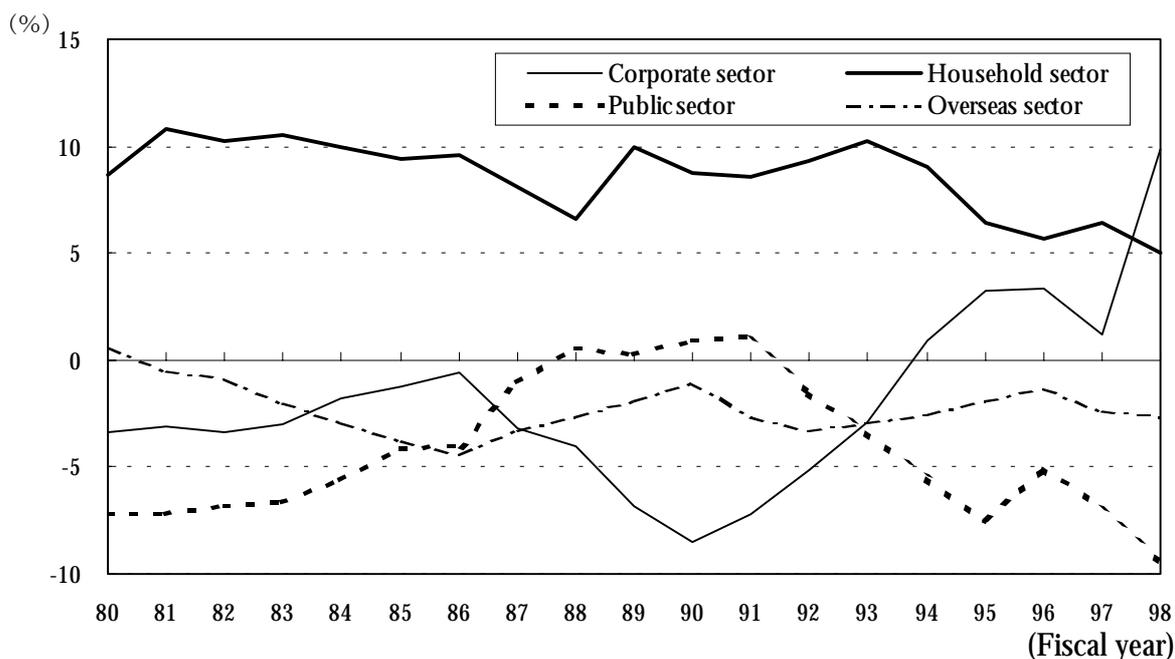
Land, homes and other physical assets, as well as assets like stocks whose capital gain portion is large, can show large negative rates of return depending on the economic situation. Stable assets like deposits, on the other hand, have the advantage of low risk when nominal interest rates are at zero. In the next chapter, we will examine in more detail the direction of stable assets in households' asset management.

## II. Structure of the Financial Sector and Situation of Financial Asset Holdings

### 1. Household Sector Fund Procurement and Asset Management

As we have seen in Chapter I, household savings are channeled through the financial sector into the physical assets of corporations. This increase in net financial assets is the basic flow of money. At the same time, however, when we look at the excess or shortfall of the money flow in Figure 2-1, we see that in the 1990s the corporate sector came to have a large cash surplus, and through the financial sector the household sector's money flow was redirected into the government sector.

**Figure 2-1. Momey Excess/Shortfall by Sector (Comparison to GDP)**



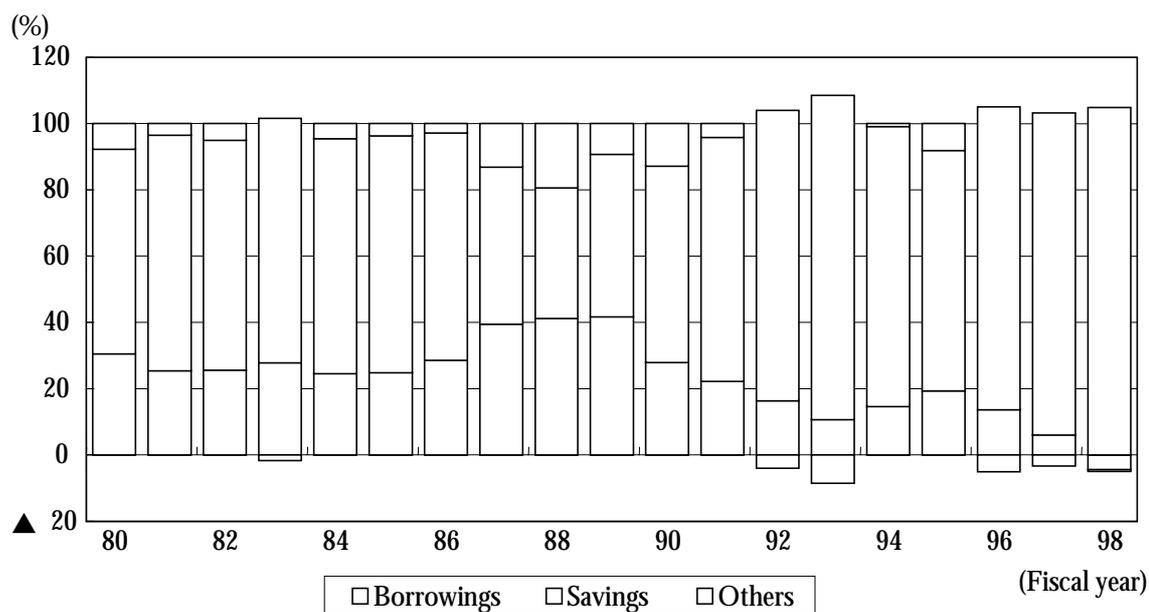
Note: The household sector includes owner-operated corporations.

Source: Bank of Japan, "Money Circulation Account"

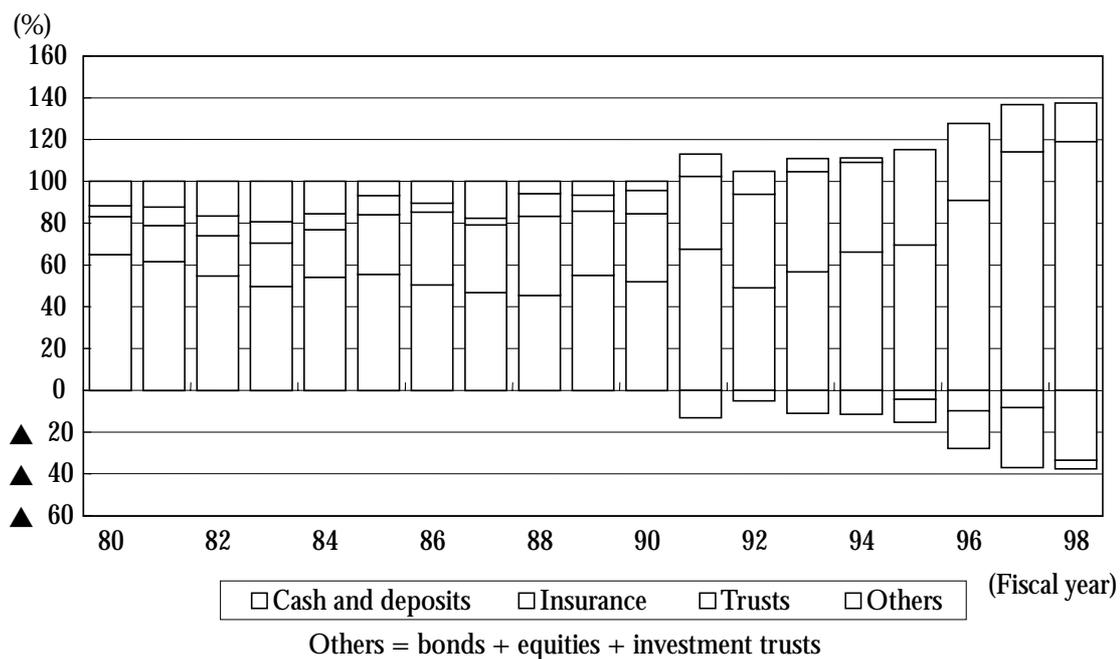
In the Bubble period in the second half of the 1980s there was heavy capital investment by corporations, leading to money flow shortfalls that were nearly balanced by the boom-driven increase in government sector tax revenues. This generated a virtuous cycle wherein household economy money fueled corporate investment activity. After the Bubble's collapse, however, capital investment fell off and the corporate sector became cash-flush, while government sector cash shortfalls have grown because of successive economic pump-priming measures and in 1993 exceeded the corporate sector's shortfall. The latter went into surplus in FY 1994, and its surplus in FY 1998 exceeded that of the consistently cash-rich household sector.

Examining the flow of household sector money, we observe that in the 1990s borrowings were restrained (Figure 2-2) and fund procurement limited largely to savings. In the management aspect (Figure 2-3) risk assets were reduced, especially in the decade's second half, and cash and deposits swelled enormously.

**Figure 2-2. Household Sector Fund Procurement**



**Figure 2-3. Household Sector Asset Management**



Note: The household sector includes owner-operated corporations.

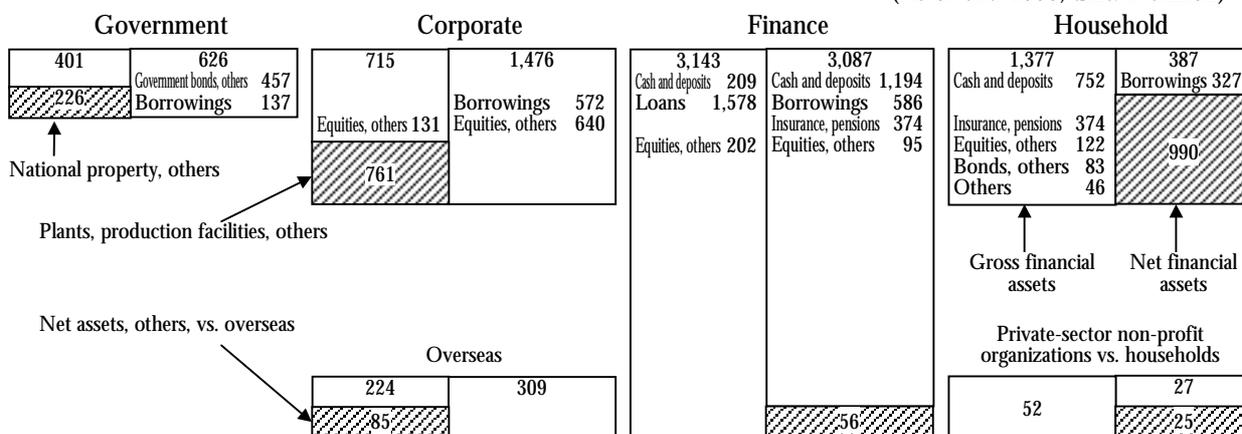
Source: Bank of Japan, "Money Circulation Account"

## 2. Financial Sector and its Asset Holding Structure: U.S.-Japan Comparison

To examine the special features of financial asset management, we will compare recent U.S. and Japanese balance sheets (outstanding balances of financial assets and liabilities) by sector Figures 2-4 and 2-5).

**Figure 2-4. Outstanding Balances of Japanese Financial Assets and Liabilities**

(As of end-1999, unit: ¥ trillion)

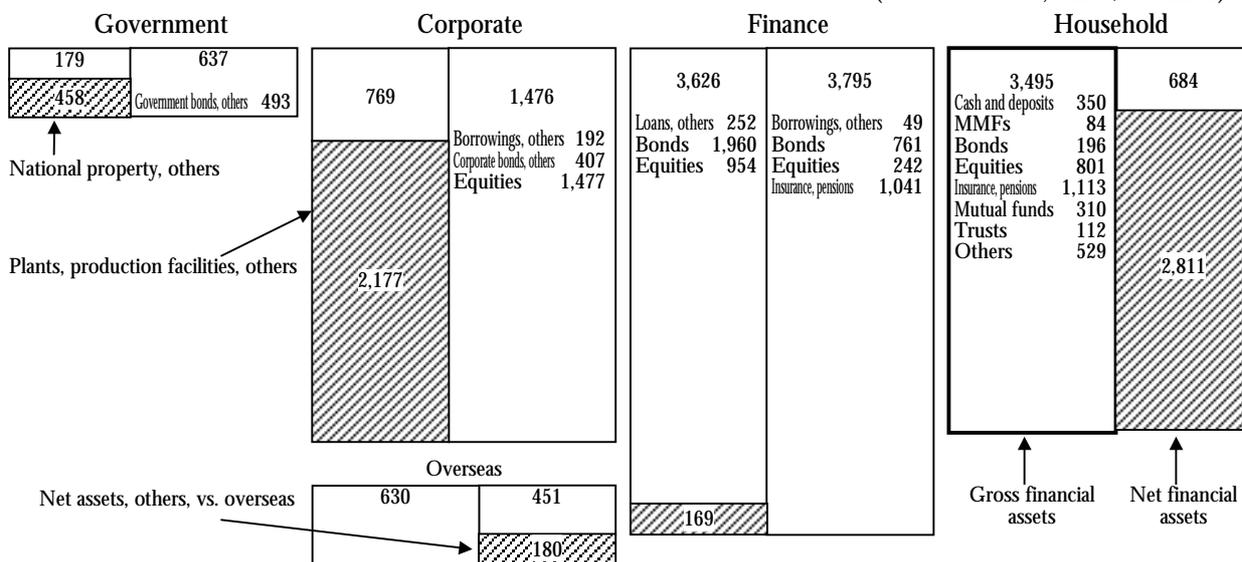


Note: Financial assets for borrowers, financial liabilities for lenders. The areas shadowed are net assets and liabilities. Net financial liabilities show the names of the corresponding physical assets and others.

Source: Financial asset and liability balances in Bank of Japan's "Money Circulation Account"

**Figure 2-5. Outstanding Balances of U.S. Financial Assets and Liabilities**

(As of end-1999, unit: \$10 billion)



Notes: 1. Financial assets for borrowers, financial liabilities for lenders. The areas shadowed are net assets and liabilities. Net financial liabilities show the names of the corresponding physical assets and others.

2. Household accounts include non-profit organizations vs. households.

Source: Flow of Funds Accounts of the United States

As of end-1999, Japan's household economy held financial assets of ¥1,377 trillion, most of which corresponded to financial sector liabilities. The content was low-risk cash and deposits, insurance, pensions and the like, with direct holdings of equities and others less than 10% of the total. For that reason, the wealth effect on consumption of share price advances was not all that large.<sup>7</sup>

Financial sector assets of loans, equities and others subject to variability risks are much larger, and in actuality sustained a major blow in the form of damage to latent profits when the Bubble collapsed, whereas the direct effect on household assets was mitigated. When loan obligations go bad they affect the providers of cash, and depending on how they are handled there is concern that in the end there can also be an impact on households.

As of end-1999, U.S. households held \$35 trillion in financial assets. These were mainly direct supply of funds to corporations through stock ownership, and investments in insurance, pensions, mutual funds and so forth through institutional investors. Compared to Japanese households, this is a structure allowing for greater exposure to asset price variability.<sup>8</sup>

### **3. Trends in Household Financial Asset Holdings by Country**

#### **3.1. Trends in Safe Assets and Risk Assets in the U.S. and Japan**

Comparing U.S. and Japanese household holdings of financial assets in a time series (Figure 2-6), it is clear that Japan has always had a high ratio of safe cash and deposits, and a low ratio of equities and other risk assets. The former ratio rose from the 1980s to the 1990s. Part of the background to this is believed to be the Bubble and its collapse. It can be said that the investment sentiment that atrophied in the wake of that collapse has yet to recover its former level.

The cash and deposit ratio has always been low in the U.S. Driven by the recent rise in share prices, the weighting of equities has been rising. This is why there is such a contrast with the Japanese trends.

#### **3.2. Background to the Advance in Equity Holding Ratio in Germany<sup>9</sup>**

In Germany the ratio of cash and deposits was high up to the 1970s, but in the 1980s there were advances in that for insurance and pensions, and in the 1990s for equities (Figure 2-6).

In Germany, banking and securities are a single business handled by the "universal bank" system, whose functions have made it easier to borrow from banks than to issue securities; there is also the historical situation wherein postwar recovery necessitated securing cash for housing construction. In the capital markets, then, procuring funds for housing was the main activity, taking precedence over corporate fund-raising, and initially direct fund procurement from the financial markets and through equities was not fully developed. In the second half of the 1980s, however, there appeared the international competition-driven necessity to raise large amounts of money, a greater willingness by individual investors to move into stocks, and other factors that encouraged corporations to issue stock in plenty, and the capital markets grew apace.

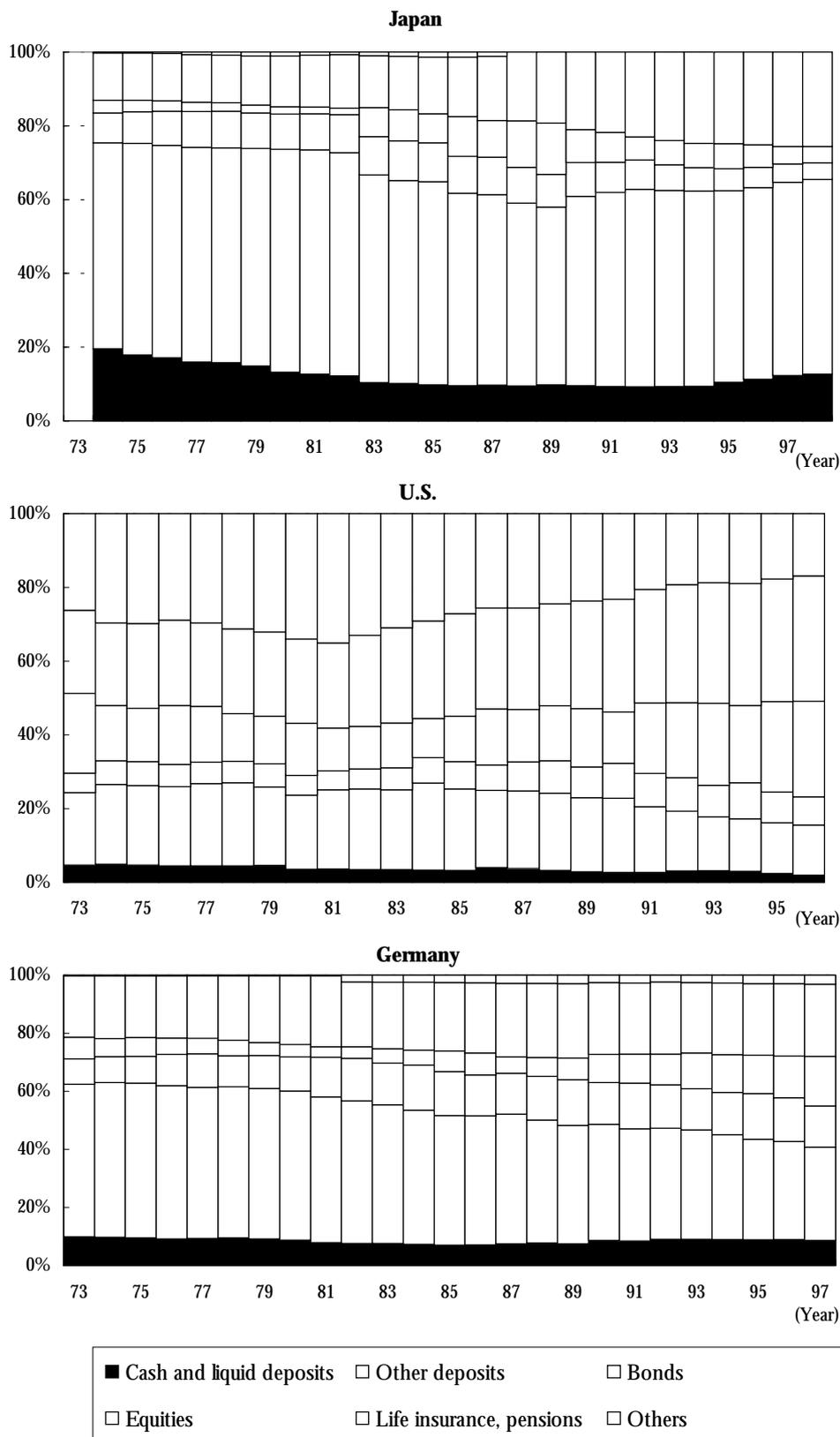
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<sup>7</sup> In this regard, refer to Japan Development Bank (1998), Chapter 3, section 3.

<sup>8</sup> In regard to the point that U.S. price variability (capital gain/loss) has a considerable influence on the real economy, see Japan Development Bank (1998) and Development Bank of Japan (2000).

<sup>9</sup> Hamori (2000) has details on Germany's financial system and financial liberalization. And Aizawa (2000) discusses German financial reform with comparisons with Japan in mind.

**Figure 2-6. Household Financial Asset Holdings: Japan, Germany and U.S. Comparisons**



Source: OECD, "Financial Accounts of OECD Countries"

Development of the Euromarkets in the 1960s saw liquidity flow into and out of Germany, and from around the end of that decade to the early 1970s interest rate liberalization was quickly accomplished. Moreover, from the second half of the 1970s, fiscal support of small deposits, which had been carried out from the social welfare standpoint, were cut back to reduce costs. These actions pulled money mainly out of savings-type deposits and channeled it into other assets seen as having greater profitability and marketability. Further, and especially in and after the second half of the 1980s, supplementary liberalizations measures were undertaken centering on capital market deregulation. In the background here were innovation in financial technology, stiffer international competition in the capital markets (touched off by the U.K.'s Big Bang) and other factors that to some extent expanded the markets.

In this way, the policy of encouraging savings-type deposits was basically changed and holding of risk assets promoted, with a push from capital market changes, and the ratio of stock and investment trust holdings rose. In addition, banks stressed small-lot business for individuals. The 1997 privatization of Deutsche Telekom and listing of its stock enhanced general interest in securities investment and accelerated the flow of individuals' money into risk assets. Unlike Japan, share prices in Germany have been broadly bullish, and individuals' capital gains on stocks are in principle tax-free (other than for large transactions and short-term trades within one year); these factors, too, operated to stimulate the stock market.

#### **4. Financial Asset Holdings by Age and Income Bracket**

Figure 2-7 shows financial asset holdings by age. In it we see that the proportion is 36% for those 60 or older. In holdings by age and income bracket, the proportion rises substantially as both advance. And in the higher age ranges there are large differences (Figure 2-8).

Going forward, amid the trends toward fewer young people and aging of society, we believe that the proportion of financial asset holdings among the elderly will rise and that differentials will widen. For that reason, the impact on the financial markets of higher income bracket elderly persons will likely become more pronounced.<sup>10</sup>

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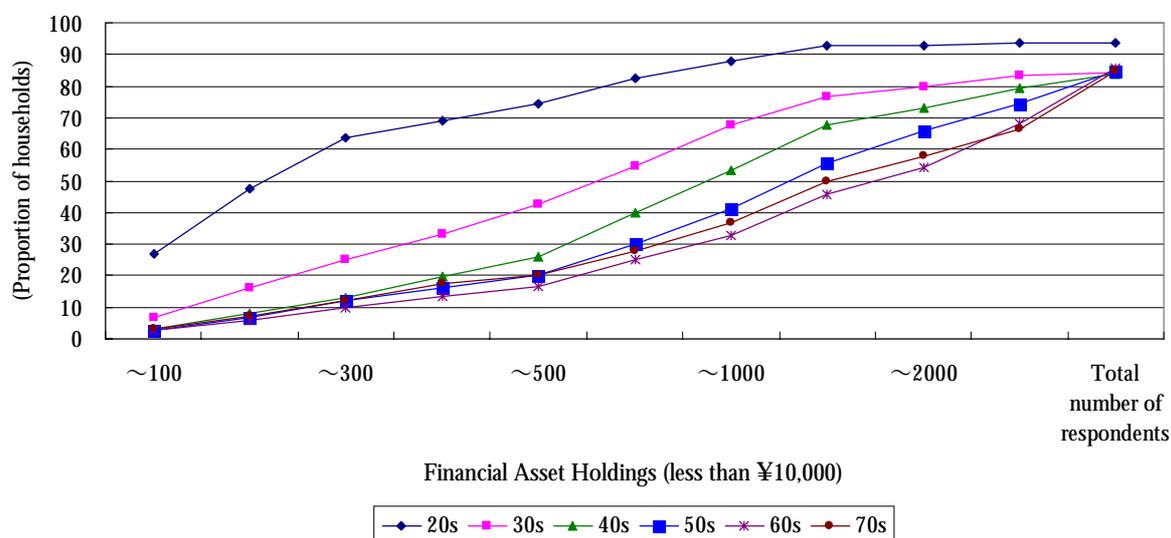
<sup>10</sup> On the outlook for financial asset holdings, see Maki and Nakamura (1998).

**Figure 2-7. Financial Asset Holdings by Age and Income Bracket**

(Unit: %)

	Overall	Less than ¥1 mil	¥1 mil~less than ¥2 mil	¥2 mil~less than ¥3 mil	¥3 mil~less than ¥4 mil	¥4 mil~less than ¥5 mil	¥5 mil~less than ¥7 mil	¥7 mil~less than ¥10 mil	¥10 mil~less than ¥15 mil	¥15 mil~less than ¥20 mil	¥20 mil~less than ¥30 mil	Over ¥30 mil	No answer	Overall
20s	2.6	26.8	20.6	16.5	5.2	5.2	8.2	5.2	5.2	0.0	1.0	0.0	6.1	100
30s	13.1	6.7	9.5	8.9	8.3	9.3	12.1	13.0	8.9	3.2	3.6	1.0	15.5	100
40s	21.4	3.3	4.7	4.8	6.8	6.3	13.8	13.5	14.5	5.5	6.1	4.7	16.0	100
50s	26.6	2.7	4.2	5.1	4.0	4.0	10.2	10.9	14.7	9.9	8.8	10.3	15.2	100
60s	24.0	2.6	3.4	3.7	3.7	3.4	8.5	7.5	13.1	8.5	13.8	17.5	14.3	100
70s	12.3	3.0	4.3	5.0	5.2	2.6	7.8	8.8	13.1	8.0	8.6	18.3	15.3	100
Totals	100.0	4.0	5.3	5.5	5.3	4.9	10.5	10.5	13.1	7.3	8.5	10.3	14.9	100

**Figure 2-8. Cumulative Distribution**



Source: Savings Public Information Central Committee, "Public opinion survey of savings and consumption (1999)"

## 5. Postal Savings as Safe Assets

Payment of principal and interest on postal savings is publicly guaranteed, and like bank deposits it is an asset with high safety. Term deposits made during the high interest rate era of the early 1990s are maturing in large volumes after April 2000, and the question of whether or not the money will go into risk assets is favorable for demand for safe assets.

The bulk of the maturing funds will be redirected into postal savings (Figure 2-9). If we consider that this number is an outstanding balance amount that includes ten years' worth of interest, and that the upper limit permissible for savings is ¥10 million, it is clear that a considerable amount of principal can be redirected into savings. This is one indication that basically households are looking for safety.

Part of the money will go into securities and the like, and it is possible that in future investment trusts will be the conduit. Last August, the re-savings rate declined slightly. The money that did not flow out is seen awaiting opportunities until interest rates begin rising, and will be monitored closely going forward.

**Figure 2-9. Redirection of Maturing Postal Savings**

(Unit: ¥100 million)

	Amount redirected	Re-savings rate	Cumulative redirected amount	Cumulative proportion
April 2000	35,700	53.8%	35,700	53.8%
May	11,302	53.3%	47,002	53.7%
June	10,518	51.6%	57,520	53.3%
July	11,175	53.7%	68,695	53.3%
August	7,967	51.0%	76,662	53.1%

Source: Ministry of Posts and Telecommunications

### III. Direction of Securities Investment and Household Asset Management Attitudes

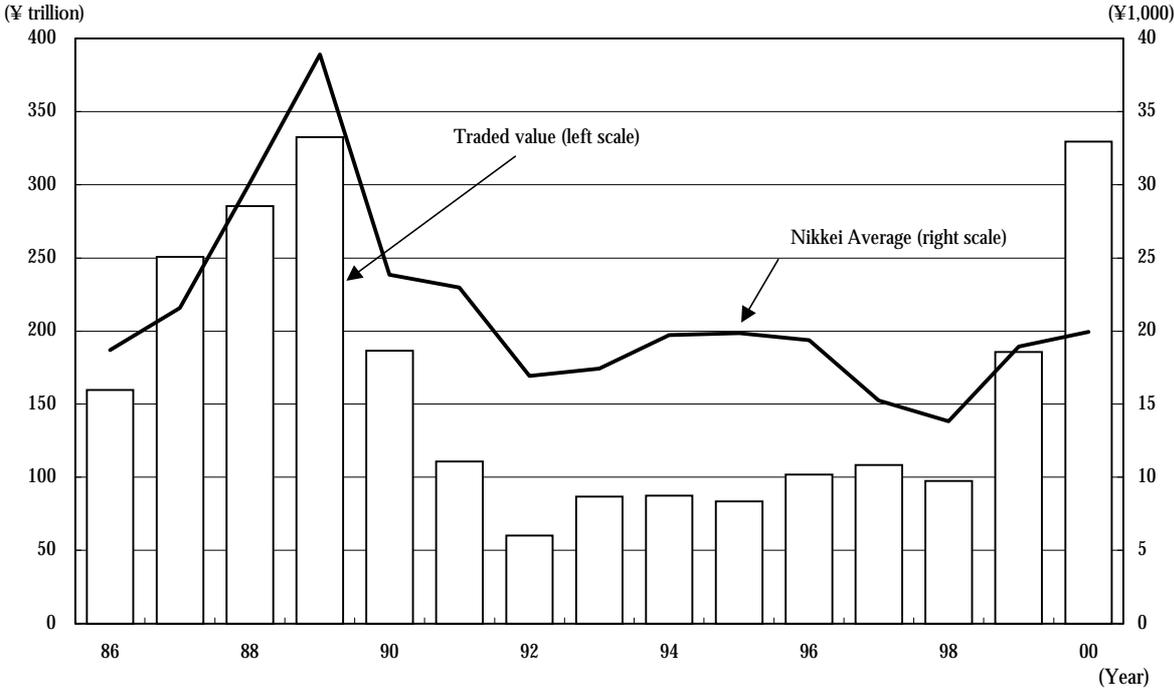
#### 1. Stock Market Directions

The stock market, a typical supplier of risk money, was long bearish in the wake of the Bubble's collapse, but again became active from 1999.

##### 1.1. Share Price Trends

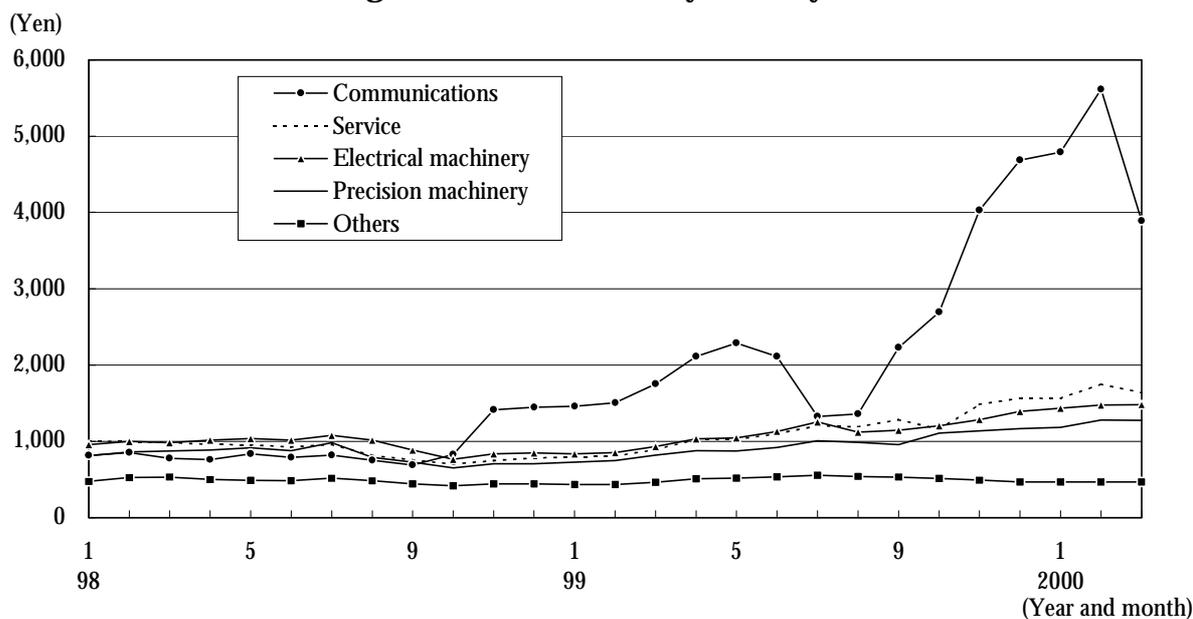
The Nikkei Average closed 1989 at ¥38,916, and then declined substantially into 1992 (Figure 3-1). In the 1994 ~ 96 period it rallied back close to ¥20,000, then sank as far as ¥13,842 in 1998. There was a sharp recovery in 1999, to cross over the ¥20,000 mark in March 2000 for the first time in about two and a half years. Price-wise, that recovery was led by communications, electricals and other information-related issues (Figure 3-2). Since then, impacted by a volatile Wall Street and other factors, the index has slipped down below ¥20,000 but the basic tone can be said to be bullish. Share prices have a tendency to run ahead of business conditions, and are indicating that we can anticipate their future recovery.

**Figure 3-1. Share Prices and Value of Shares Traded**



Note: Traded value for 2000 is the first quarter's annual rate. Share price is the first quarter's month-end average value.  
 Source: "TSE Statistical Monthly." Traded value is on a Tokyo market basis. Share price is the year's close.

**Figure 3-2. Share Prices by Industry**



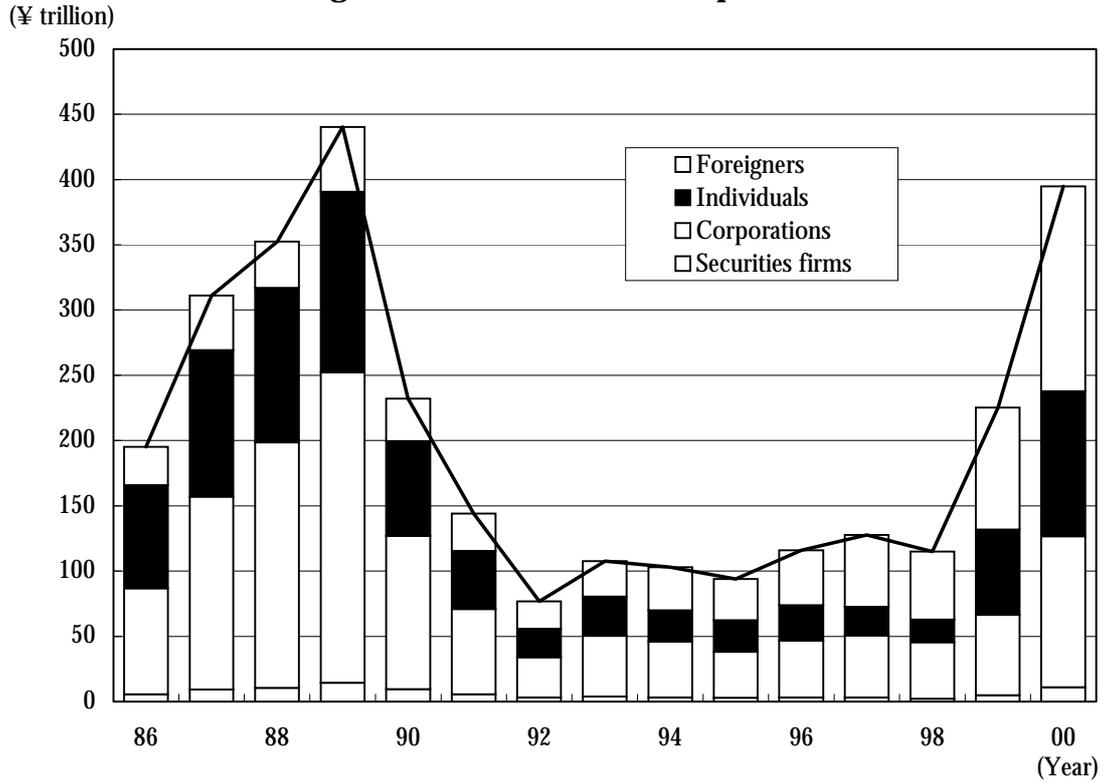
Note: "Others" is the simple average for industries other than those specified.

Source: Tokyo Stock Exchange, "TSE Statistical Monthly"

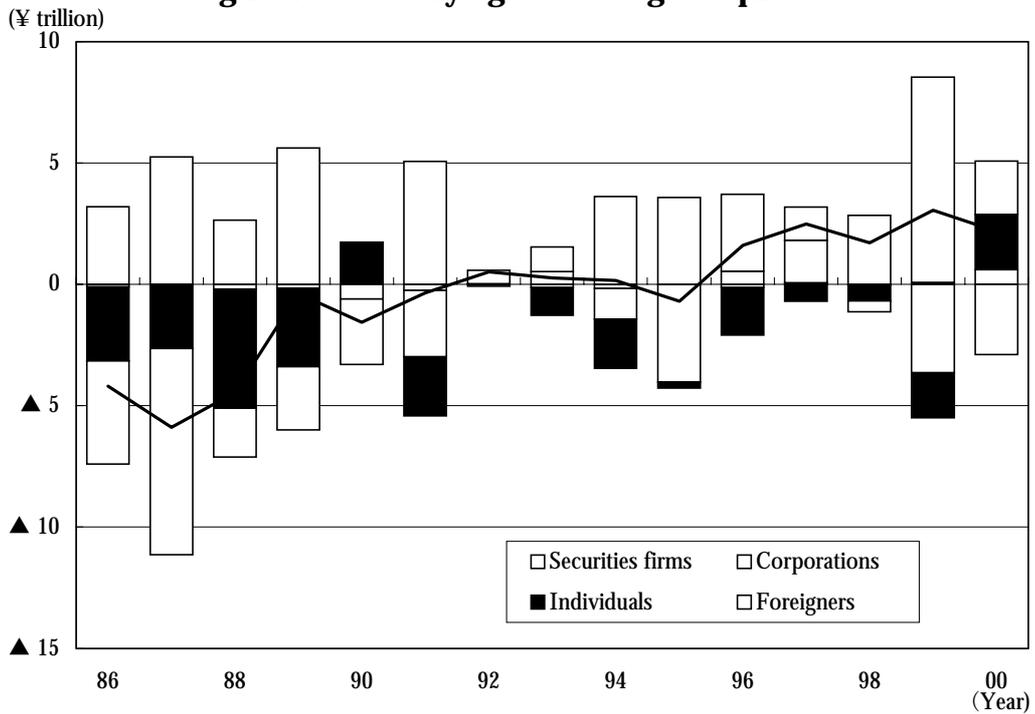
### 1.2. Trends in Value of Shares Traded

The TSE traded value trends shown in Figure 3-1 indicate that after expansion to ¥333.6 trillion in 1989, there was a dramatic contraction to ¥186.7 trillion in the following year. The figure remained bearish from 1991 to 1998, barely over ¥110 trillion at most, then in 1999 jumped sharply to ¥185.5 trillion. On a monthly basis, the November 1999 reading of ¥24.7 trillion was the highest since December 1989's ¥30.6 trillion in the Bubble period. Figure 3-3's illustration of trends in TSE First Section traded value (buying + selling) by investor category shows which of the latter expanded in 1999, and highlights the substantial increases for foreigners and individuals in particular. Net buyers (buying – selling) in that year were chiefly foreigners, while individuals and corporations were net sellers (Figure 3-4). It appears that the direction of foreigners was one of reweighting Japan within their international portfolio strategies. On into 2000, individuals were net buyers.

**Figure 3-3. Traded Value of Equities**



**Figure 3-4. Net Buying and Selling of Equities**



Note: TSE First Section agency (brokerage) trading base.

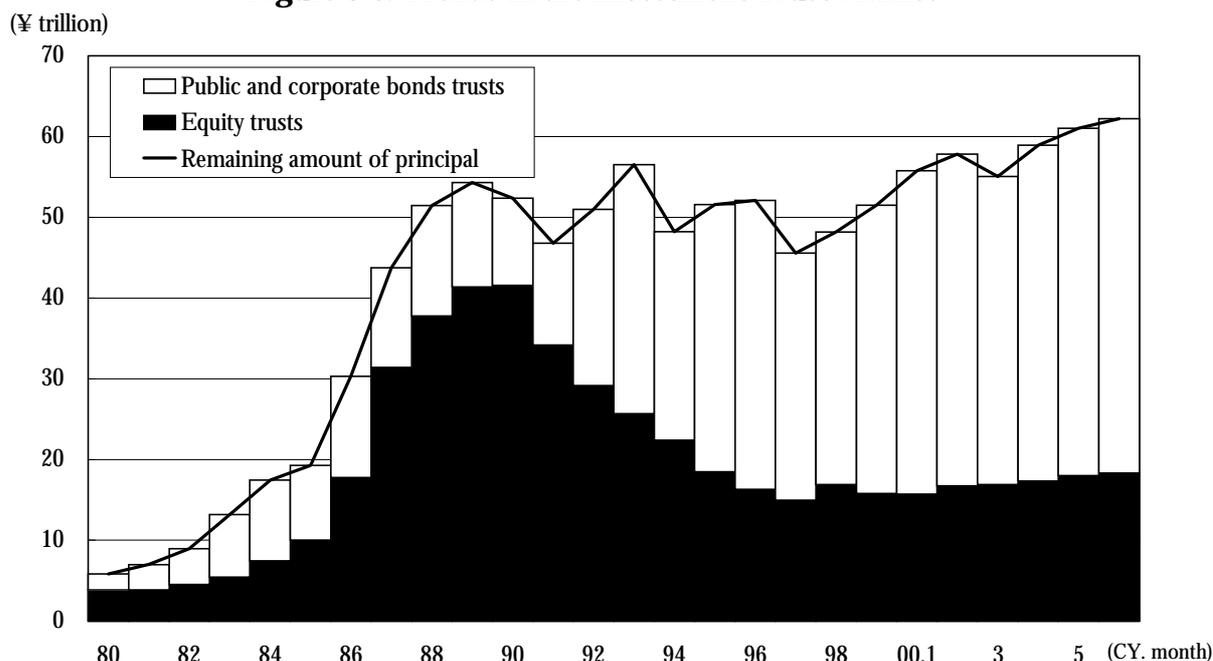
Source: "TSE Statistical Monthly." The figure for 2000 is an annualization of the first quarter's.

## 2. Investment Trust and Foreign Currency Deposit Directions

Investment trusts mainly comprise public and corporate bond trusts. Those for equities have a low weighting. The overall outstanding balance of investment trusts is slowly growing (Figure 3-5), driven largely by gains in bond trusts, with a relatively small contribution from gains in their equity counterparts. In that sense, it is hard to say that there has been any great change in stress on safety.

In the recent situation of foreign currency deposits (Figure 3-6), there has been ongoing high growth relative to other investment measures. First quarter 2000 preliminary data showed a 65% YoY increase.

**Figure 3-5. Trends in the Investment Trust Market**



Note: Balances are as of each yearend. For January ~ June 2000, month-end values.

Source: Bank of Japan, "Financial and Economic Statistics Monthly"

**Figure 3-6. Growth in Household Equities, Foreign Currency Deposits, Others**

	(YoY % change)					
	1998		1999		2000	
	4Q	1Q	2Q	3Q	4Q	1Q
Cash and deposits	4.5	4.2	3.6	3.7	3.4	3.5
Current deposits	5.5	6.0	7.0	8.7	7.9	8.7
Time deposits	4.0	3.4	2.5	2.3	1.8	1.5
Transferable deposits	▲ 19.0	▲ 11.0	▲ 39.3	▲ 25.9	1.4	76.2
Foreign currency deposits	47.2	45.6	44.9	67.9	61.3	65.0
Equities, capital funds	▲ 7.5	6.3	19.9	43.8	56.8	24.7
Non-equity securities	▲ 8.8	▲ 6.9	▲ 5.9	▲ 8.3	▲ 3.2	▲ 1.7
Insurance, pension reserves	4.0	3.9	4.1	4.1	3.9	3.3
Overseas securities investment	▲ 18.7	5.6	78.9	89.7	▲ 14.7	▲ 30.4
Total balance of financial assets	2.5	3.7	6.0	7.1	8.4	6.7

Note: First quarter 2000 data are preliminary.

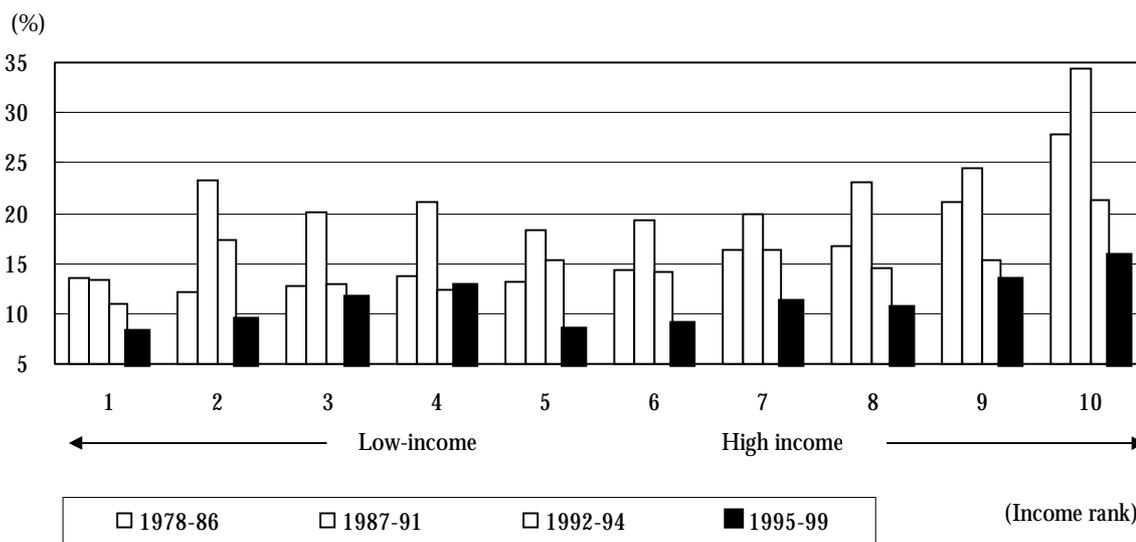
Source: Bank of Japan, "Money Circulation Table"

### 3. Household Attitudes toward Securities Investment Management: Safety Consciousness Increases

#### 3.1. Trends in Marketable Securities Holding Ratios

In Figure 3-7, we observe that in the Bubble era the ratios of securities holdings increased for all income brackets and shrank sharply in its aftermath, centering on the higher income groups, and in the recent five-year period have been below pre-Bubble levels. A sinking economy driving stock prices down has worsened the investment environment and cooled interest in deploying funds there. The higher the income the greater the tendency to invest in securities, but recently the differentials in holding ratios by income have narrowed. It is clear that the high-income households with the highest Bubble-era ratios have been the worst hurt.

**Figure 3-7. Holding Ratios of Securities among Financial Assets**



Note: Holding ratios are averages of each yearend's figure.

Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Survey of Savings Directions"

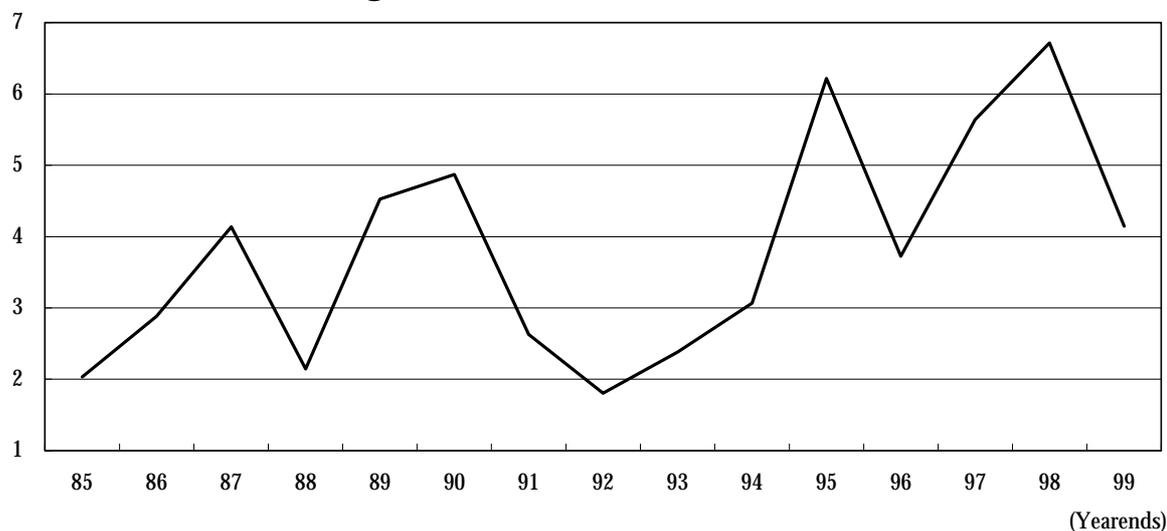
#### 3.2. Measuring Relative Risk Aversion<sup>11</sup>

As shown in the definition formula, relative risk aversion is an indicator of attitudes toward risk that cannot be understood solely by an increase in holding ratios. For example, if the rate of return on a risk asset is high its holding ratio will naturally also be high, but this indicator takes that into account.

<sup>11</sup> For other measurement examples, see Economic Planning Agency (1999), and Nakayama and Katagiri (1999). But using the same methods, both derived different conclusions about the risk attitudes of Japanese and U.S. investors. As the reasons for Japanese household negativity toward risk assets, aside from risk-return considerations, Nakayama and Katagiri (1999) cited the following structural causes for declining preferences for risk assets: (1) Insufficient information necessary for investment, (2) the structure whereby commissions and other costs make small-lot investment unprofitable, and (3) compared to savings and the like, the tax system and other merits are relatively inferior.

Though trial-calculated on fixed assumptions, recent relative risk aversion (Figure 3-8) showed a tendency to rise in the second half of the 1990s. This can be said to suggest greater stress on safety.<sup>12</sup>

**Figure 3-8. Relative Risk Aversion**



<p>Relative risk aversion</p> $= \frac{\text{rate of return on risk assets} - \text{rate of return on safe assets}}{\text{variance of rate of return on risk assets}} \times \frac{1}{\text{risk asset holding ratio}}$ <p>Note: Rates of return are estimates.</p>
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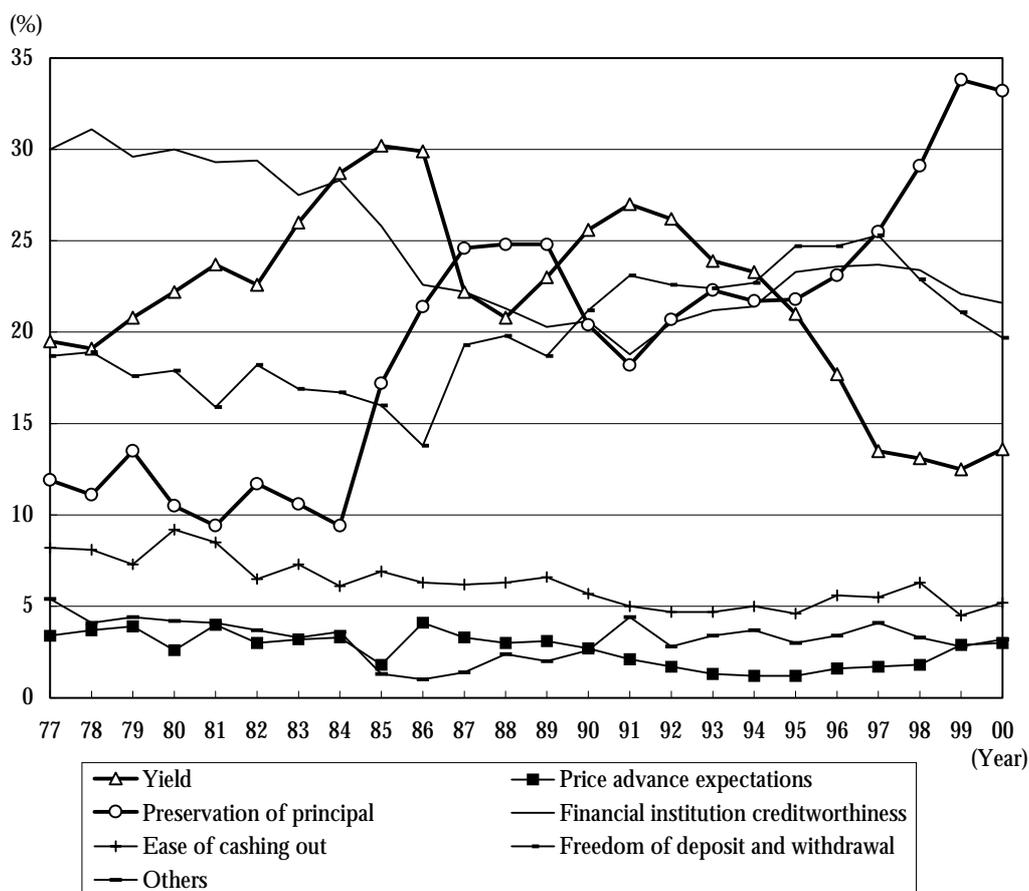
Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Survey of Savings Directions," Bank of Japan, "Financial and Economic Statistics Monthly," Nikkei Average, others

<sup>12</sup> The "relative risk aversion" measured is one parameter showing household preferences (see supplementary discussion). Therefore, it should essentially be more stable. High volatility in values is thought to be the limits of theory and measurement. As the method for using this technique, it is preferable to observe the broad trend and not detailed year-by-year moves. Within the context of "asset pricing model verification," academic research is going forward on more minute or subtle measurements using analytical methods that mitigate the fixations of the function model, but it is not easy to obtain clear conclusions. As a research example, see the Economic Planning Agency (1997). And for a bibliography of detailed surveys from both the theoretical and corroborative proof aspects of this point, see Keiichi Hori (1999).

### 3.3.Safety Concerns as Seen in Surveys

In surveys of asset management we have also seen heightened concern with safety (Figure 3-9). According to the Savings Public Information Central Committee's "Public opinion surveys of savings and consumption," the proportion of those who gave "preservation of principal" as their standard for financial asset selection was no more than 18.2% in 1991, but had risen to 33.8% by 1999, while those citing "yield" declined substantially to 12.5% by the same year. Further, in the Ministry of Posts and Telecommunications' "Report on the sixth survey (1997) of savings behavior and savings consciousness," what was most stressed as a selection standard was "preservation of principal and safety," with 47.9% -- far over "good yield and high profit" with 16.3%. This survey is carried out every four years, and on the three occasions since 1989 this tendency was striking.

**Figure 3-9. Financial Asset Selection Standards**



Source: Savings Public Information Central Committee, "Public opinion surveys of savings and consumption"

## **4. Safety Concern and Fund Supply: Role of Financial Intermediation Institutions**

### **4.1. Safety Concern and Risk Money Shortfalls<sup>13</sup>**

The heightening of interest in safety by households, the largest supplier of funds can interfere with the activity of corporations, the ultimate recipients of those funds. To develop new businesses, it is to some extent necessary to take risks in pursuit of returns, and there are concerns about insufficient supply of the required risk money. In today's low-growth situation, lateral support in funding of challenging enterprises has become important, but if the suppliers of funds atrophy, shortfalls of fund will inevitably constitute an economic bottleneck.

Further, heightening safety concern is not only a problem of quantity. It impacts as well on the cost of funds, and has the effect of restraining investment.<sup>14</sup> If money is concentrated only in investments on which returns are seen as certain, there arises the problem of loss of dynamic economic activity.

### **4.2. Reduction of Risk and Burden by Financial Intermediation Institutions**

In the direct financial markets, funds are supplied on the principle of self-responsibility, but risk can be reduced by diversification. Households can also do the same to some extent through investment trusts. In respect of whether or not a corporation's detailed management situation can be continuously studied and understood, we believe there are some limitations on direct finance. To some extent information output in concentrated form is more efficient.

Financial intermediation institutions select from among corporate applicants and investment projects those that are achievable, and that appear to offer a degree of return and safety; such institutions play the role of reducing deployment risks of the funds supplied. Toward that end, it is required that they develop their screening capabilities, and have the power to bear as much as possible the risk of unforeseen bankruptcies that to some extent inevitably arise despite such screening.

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<sup>13</sup> Regarding the effect on corporate finances of household emphasis on safety, Niimi (1995) has carried out a detailed analysis up to the first half of the 1990s. In it he pointed out that the background to safety emphasis includes the burdens of housing loans and education costs, leaving little room for risk asset investment.

<sup>14</sup> Heightened safety concern on the part of fund suppliers raises the profitability rate of investment projects excessively, causes investment to be cancelled and holds down growth. In this regard, see Ando (2000).

## Conclusion

Household physical assets have declined in conjunction with the Bubble's collapse, while their financial assets have increased steadily almost every year and on a total assets basis have exceeded the value of landholdings.

Yet, the special characteristic of Japan's asset management is that the proportion of physical assets is high. Looking at the long-term average risk and return relationships for physical asset rates of return and equity rates of return, we see no great gaps. But the variability risk of the former is small, which we believe is one reason for the preference for physical assets within the risk asset category.

On an international comparison of household financial asset holdings, the ratio of cash and deposits as safe assets is highest in Japan and the ratio of equities and other risk assets is low. Because Japanese household investment in physical assets via the financial sector is large, those assets are little affected by variability in their value.

In the 1990s overall, household investment attitudes were still cautious. Although the ratio of marketable securities to financial assets rose, it has in the past five years declined back to pre-Bubble levels. Particularly striking is the contraction among high-income households. On the results of rough estimation of relative risk aversion and surveys, it is clear that the 1990s were more a decade of rising concern about safety.

The stock market again became active in and after 1999. At present, there can be no confidence that household cash inflow into it will increase constantly. But recent observation of direct purchases of equities, and of investment in foreign currency deposits and investment trusts, suggests the possibility of gradual activation. Though risk-taking/return-seeking investment behavior is limited, it may yet appear.

What has been made clear in this report as a whole is that present household stress on safety has deep roots. Although the accumulation of financial assets with a high degree of freedom in their administration is progressing, deployment in cash, deposits and other safe media is still at the center. And even as investment in marketable securities and other risk assets increases, the rate of gain is slow.

Going forward, the improvement in financial services made possible by the Big Bang has boosted the attractiveness of risk assets and raised expectations for more diversified deployment of household assets. Toward that end, it is anticipated that conditions will be prepared whereby households and others will become providers of risk money.

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## References

- Aizawa, Koetsu (1999), *Search for a Japanese-style financial system*, Toyo Keizai Shimposha
- Ando, Koichi (2000), "Does 'Stress on earnings' management restrain growth?" Nihon Hyoronsha, *Economic Seminar*, June 2000
- Economic Planning Agency (1997), *Annual Economic Report for FY 1997*
- Economic Planning Agency (1999), *Annual Economic Report for FY 1999*
- Nakayama, Shinobu and Katagiri, Tomoko (1999), "Financial asset selection behavior of Japanese households: Why are Japanese households negative toward risk asset investment?" Bank of Japan, *Research Monthly*, November 1999
- Niimi, Kazumasa (1995), "Changes in household financial asset selection behavior and their effect on corporate finance: Re-discussed – Are there no risk-taking investors in Japan?" Nihon Sogo Kenkyujo, *Japan Research Review*, March 1995
- Japan Development Bank (1994), "Stocking of Japan's economy and its consequences," *Chosa* **186**
- Japan Development Bank (1998), "Impact of Asset Price Fluctuations on Household and Corporate Behavior," *JDB Research Report*, **89**
- Japan Economic Research Center, Financial Research Section (2000), "Household financial asset selection and optimum resource allocation," Japan Economic Research Center, *The bad debt problem and the financial markets*, chapter 4
- Development Bank of Japan (2000), "U.S. economic expansion and the savings and investment balance," *Chosa*, **8**
- Hamori, Naoko (2000), *Germany's financial system and financial policy*, Chuo Keizaisha
- Hori, Keiichi (1999), "Corroborative research on asset pricing models: Outlook," *Modern Finance*, **6**, September 1999
- Maki, Hirohisa and Nakamura, Akihiro (1998), "Future directions for individuals' financial assets," *Postal Research Institute Monthly Report*, June 1998
- Mitsubishi Sogo Kenkyujo (1999), "Defined contribution pensions and the outlook for Japanese individuals' financial assets: Trial calculations for each tax system break"
- Muramoto, Tsutomu (1998), *Financial asset selection by Japanese: Effects of Bubble Experience and the Big Bang* Toyo Keizai Shimposha
- Yonezawa, Yasuhiro and Maru, Junko (1984), *Japan's Stock Market*, Toyo Keizai Shimposha



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