

The Disappearing Household Financial Surplus— An Analysis of the Recent Plunge in Saving Rate

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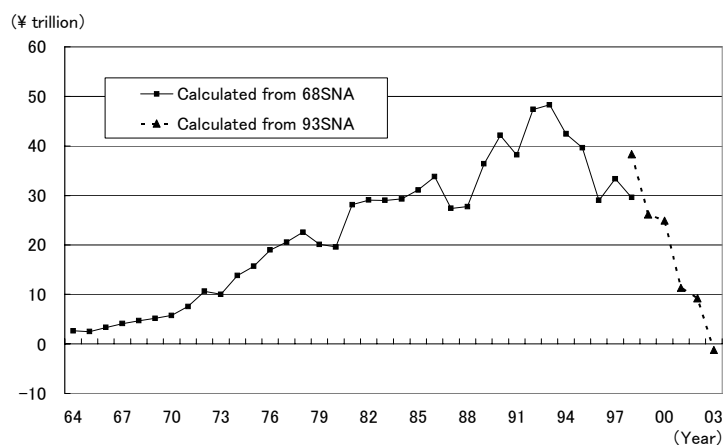
1. Saving Rate Plunge Leads to Unprecedented Household Deficit

The collapse of Japan's bubble economy has eradicated many myths about the economy. The latest one pertains to Japan's high household saving rate and abundance of domestic funds.

At the individual household level, financial deficits are not unusual; for example, home purchases and other large expenditures are typically financed by debt. The household sector as a whole, however, normally generates a financial surplus, since consumption spending and residential investment usually do not exceed annual income. The surplus is channeled into saving accounts, financial assets such as stocks and bonds, and cash on hand. In contrast, the corporate sector normally experiences a financial deficit. Companies constantly demand financing for their capital investment and other needs, and thus rely on the household surplus either indirectly by borrowing from financial institutions, or directly by issuing stocks and bonds.

However, in the post-bubble economy, an anomaly has occurred since the late 1990s in which companies have actually experienced a financial surplus. Moreover, in 2003 households experienced an unprecedented financial deficit amounting to one trillion yen (Figure 1).

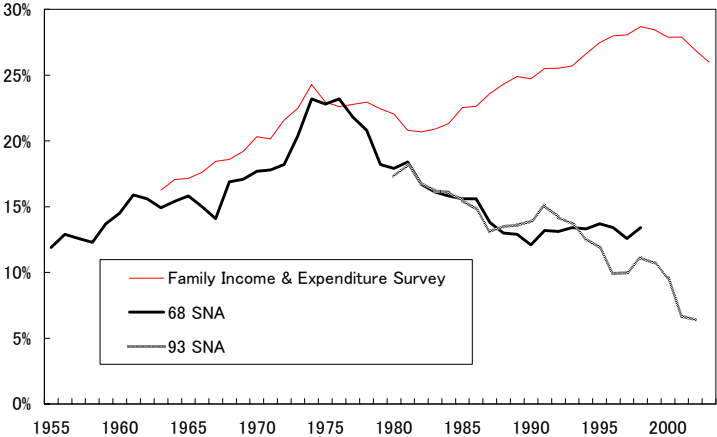
Figure 1 Household Sector's Unprecedented Financial Deficit in 2003



Source: Bank of Japan, *Flow of Funds Accounts*.

The household deficit is not caused by a growing household demand for funds, but by the fact that savings have shrunk. In fact, the saving rate of Japanese households has plummeted in recent years. According to SNA data (System of National Accounts), the saving rate has trended downward since 1970, but still remained above 10% as late as fiscal 1999 (Figure 2).

Figure 2 Household Saving Rate



Note: The *Family Income and Expenditure Survey* data pertains to workers' households with two or more persons. Sources: Cabinet Office, *Annual Report on National Accounts*; Ministry of Public Management, Home Affairs, Posts and Telecommunications, *Annual Report on the Family Income and Expenditure Survey*.

However, by fiscal 2002, the saving rate had plunged to 6.2%, falling even further in 2003. And as savings dwindled, the household financial balance was thrown into deficit.

2. Saving Rate's Decline Not Fully Explained by Aging

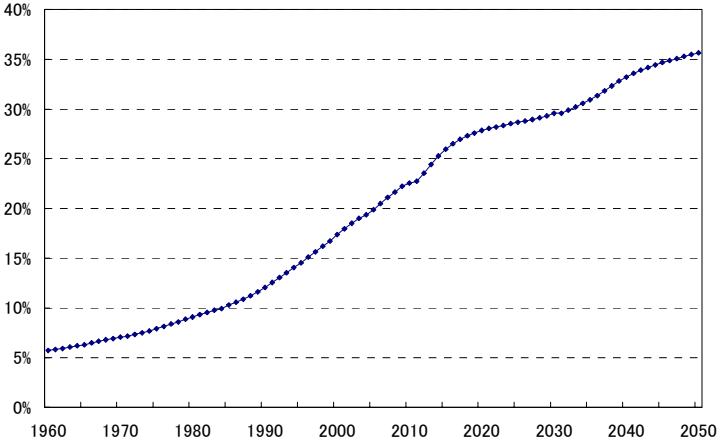
Over the long term, the aging of Japan's population structure plays a major role in reducing the saving rate. Economists have long predicted an impending household financial deficit as the proportion of elderly persons grows, since retirement life is financed out of accumulated savings. However, the financial deficit was not predicted to occur for another ten to twenty years. According to population projections by the National Institute of Population and Social Security Research, the ratio of elderly persons aged 65 and over in the population will grow from 17.4% in 2000 to 35.7% in 2050. Considering that the ratio was 12.1% in 1990, aging has progressed rapidly over the past decade, but not inordinately in the past few years. Thus aging by itself does not explain the saving rate's sharp plunge since 1999.¹

Looking ahead, aging is predicted to accelerate as the baby-boom generation enters old age in

¹ In contrast to SNA data, the *Family Income and Expenditure Survey* data shows only a moderate decline in the saving rate, which still remains high. This is due to differing statistical conventions: (1) while the *Family Survey* expresses the saving rate of workers' households, SNA data covers all households including unemployed households with a negative saving rate, and (2) SNA data treats imputed rent of owner-occupied homes as consumption, which reduces the calculated saving rate. Adjusted for these differences, the *Family Survey* would also show a declining saving rate.

the 2010s (Figure 3). Thus if aging is the primary cause of the saving rate's recent sharp decline, we can expect the household deficit to expand rapidly in the future. But as explained below, the saving rate's recent decline can also be attributed to a combination of three other factors: (1) decline in saving rate of elderly households, (2) decline in saving rate of working-age households, and (3) statistical issues and the perception gap of households.

Figure 3 Ratio of Elderly Persons in the Population

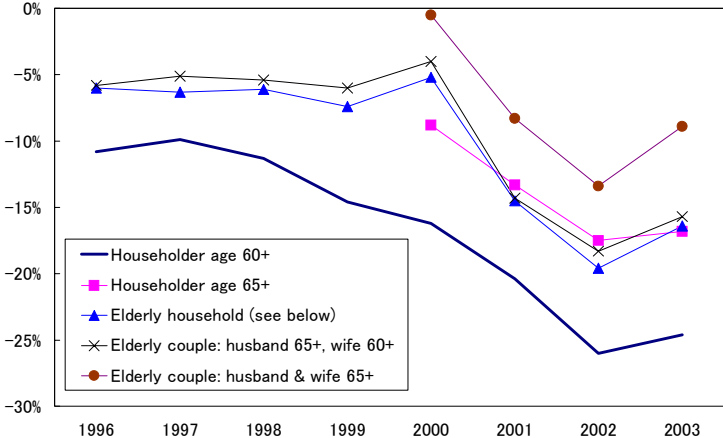


Source: National Institute of Population and Social Security Research, *Population Projections for Japan: 2001-2050*, January 2002.

3. The Plunging Saving Rate of Elderly Households

Since households with nonworking elderly householders must consume out of savings, their saving rate as measured by the *Family Survey* has always been significantly negative. Since 2000, however, the saving rate has turned even more sharply negative (Figure 4).

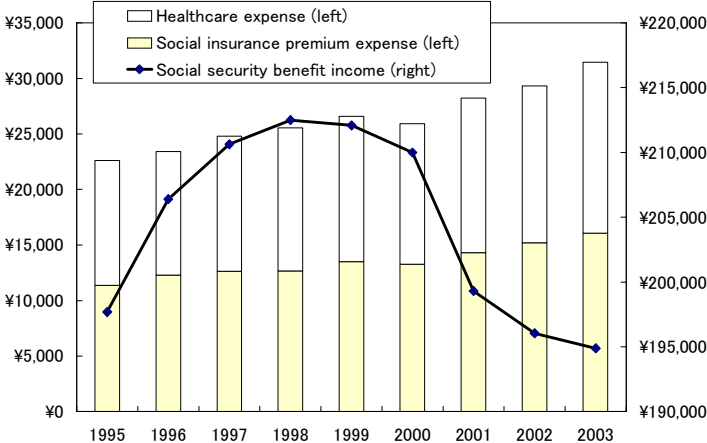
Figure 4 Saving Rate of Nonworking Elderly Households



Note: For elderly households, householder is either a man age 65+ or woman age 60+, with at least one other person age 65+. Source: MPMHAPT, *Annual Report on the Family Income and Expenditure Survey*.

These households have suffered cuts in social security benefits, while their social insurance premiums and healthcare expenses have risen—specifically, the eligibility age for the old-age welfare pension (fixed portion, for men) is being gradually raised from fiscal 2001, the long-term care (LTC) insurance premium was introduced in fiscal 2000, and out-of-pocket expenses for health insurance and LTC insurance have risen (Figure 5). These reforms have reduced the disposable income of nonworking elderly households, forcing them to consume more out of savings and reducing the saving rate.

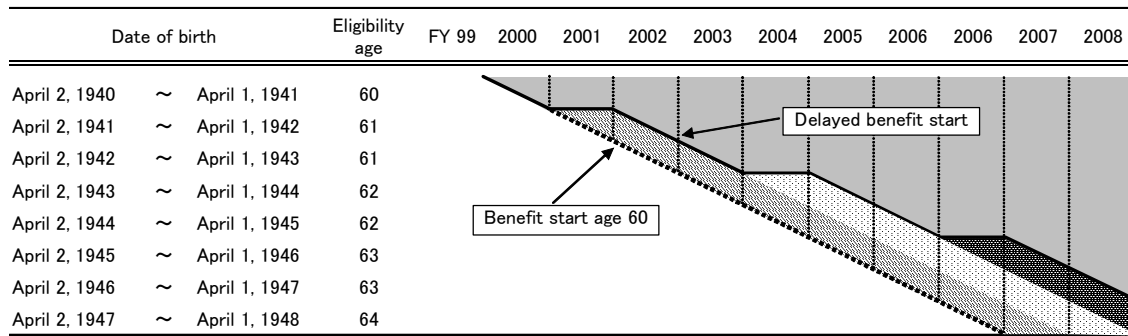
Figure 5 Social Insurance Premiums & Healthcare Expenses



Note: For households with nonworking householder age 60 or older.
 Source: MPMHAPT, *Annual Report on the Family Income and Expenditure Survey*.

The eligibility age for the old-age pension (fixed portion) was raised from 60 to 61 in fiscal 2001. Thus persons turning 60 after April 2001 must wait another year to receive benefits. In Figure 6, if population changes are not considered, raising the eligibility age to 61 reduced income in 2001 by the amount of the shaded triangle; the reduction in income doubled from fiscal 2001 to 2002, and remained constant in fiscal 2003. As a result, the annual change in saving rate was large and negative in fiscal 2001 and 2002, and smaller in 2003. When the pension eligibility age is raised to 62 in fiscal 2004, we will again see the negative impact on income double in fiscal 2005. Thus the saving rate may dip again in the next two years.

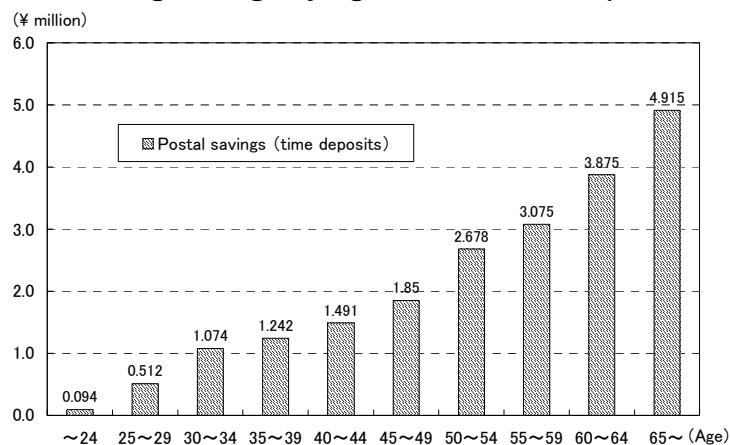
Figure 6 Effect of the Rising Eligibility Age for the Old-Age Welfare Pension



Source: Ministry of Health, Labor and Welfare

Moreover, since elderly households have greater financial wealth than working-age households, they are subject to larger wealth effects that boost the propensity to consume, such as from an increase in real financial wealth due to deflation, or growth in liquidity on hand due to the maturing of the massive amount of postal savings time deposits from 2000 (Figure 7).

Figure 7 Outstanding Savings by Age of Householder (all households, 2002)

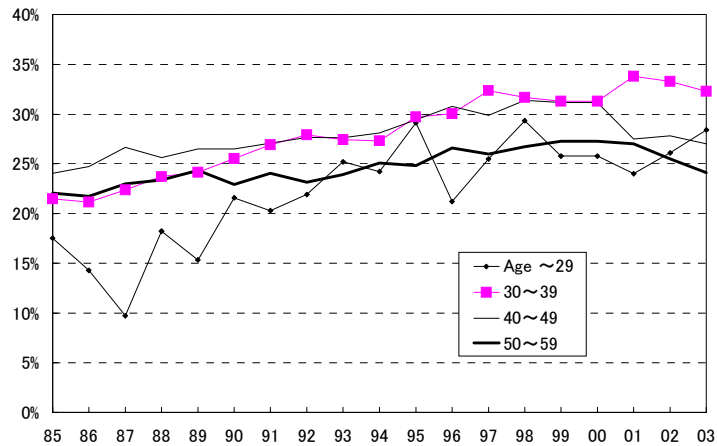


Source: MPMHAPT, *Survey of Saving Trends*.

4. Decline in Saving Rate of Working-Age Households

By comparison, the *Family Survey* indicates that saving rates of working-age households of all age groups have as yet not declined as drastically as those of nonworking elderly households (Figure 8).

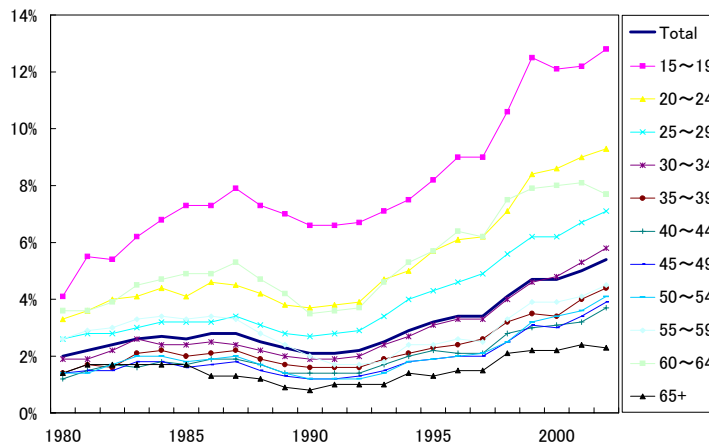
Figure 8 Saving Rate by Age of Householder



Source: MPMHAPT, *Annual Report on the Family Income and Expenditure Survey*.

However, we must note that the *Family Survey* actually covers only workers' households, whose householders are employed and earn income—that is, working-age households who are unemployed or nonworking are omitted. This omission has become increasingly important as the unemployment rate rises in the post-bubble recession, particularly among younger age groups (Figure 9). In addition, indications are that the saving rate of nonworking households under age 65 has deteriorated more than that of nonworking elderly households.

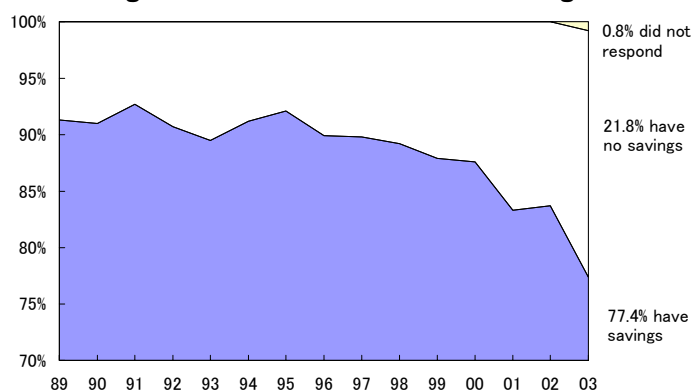
Figure 9 Unemployment Rate by Age Group



Source: MPMHAPT

Turning next to the *Public Opinion Survey on Household Financial Assets and Liabilities* (Central Council for Financial Services Information), we find that while the average holding of financial assets has increased moderately among households with such assets, the proportion of households without any savings has grown sharply in recent years (Figure 10).

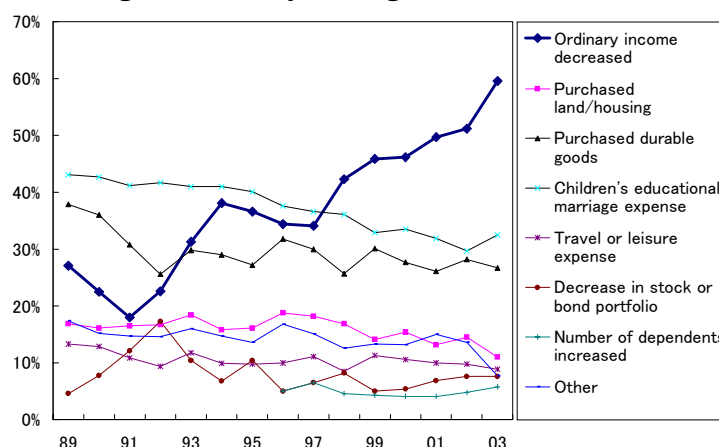
Figure 10 Households with Savings



Source: Central Council for Financial Services Information, *Public Opinion Survey on Household Financial Assets and Liabilities*.

As to why savings have decreased, a growing percentage in the 1990s cites a decrease in regular income (Figure 11). Thus while some working-age households are steadily increasing their financial assets, a growing proportion of households is saving less or consuming more out of savings due to unemployment and corporate restructuring.²

Figure 11 Why Savings Have Decreased



Source: Central Council for Financial Services Information, *Public Opinion Survey on Household Financial Assets and Liabilities*.

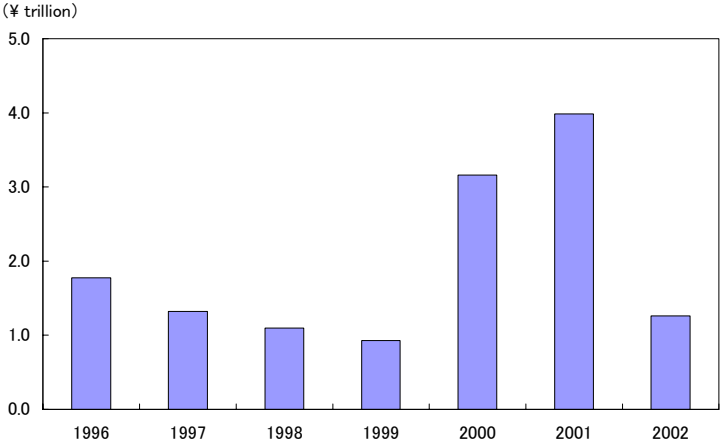
5. Statistical Issues and the Perception Gap of Households

Three SNA accounting conventions have tended to exaggerate the saving rate's decline in recent years, adding to the perception gap of households in the *Family Survey*. First, for deposits such as postal savings time deposits, where principal and interest are payable in full at maturity, SNA data counts the interest income accrued every year. However, the

² Deflation can affect the saving rate in several ways. One is by causing deflationary expectations, which restrain present consumption and boost the saving rate. However, wealth effects are more pronounced. By increasing the real value of outstanding financial assets, deflation can stimulate consumption and decrease the saving rate. But deflation can also produce a negative wealth effect by decreasing real asset prices of land and stocks.

withholding tax uses a cash basis approach on the full amount at maturity. As a result, when a massive amount of postal savings time deposits matured in fiscal 2000 and 2001, tax payments surged, reducing disposable income and causing the saving rate to be underestimated (Figure 12).

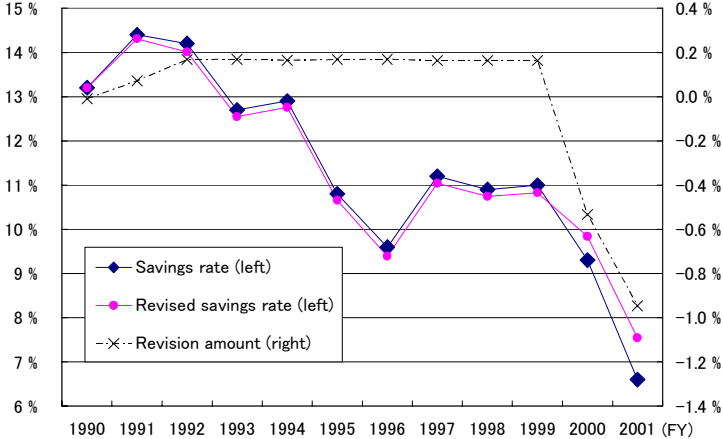
Figure 12 Interest Income (from withholding tax data)



Source: National Tax Agency

However, if the withholding tax on interest income of time deposits is recalculated on an accrual basis, we find that saving rates published by the government are overestimated by 0.2% until fiscal 1999, and underestimated by approximately 1% in fiscal 2001 when the massive amount of time deposits reached maturity (Figure 13).³

Figure 13 Effect of Income Withholding Tax on the Saving Rate



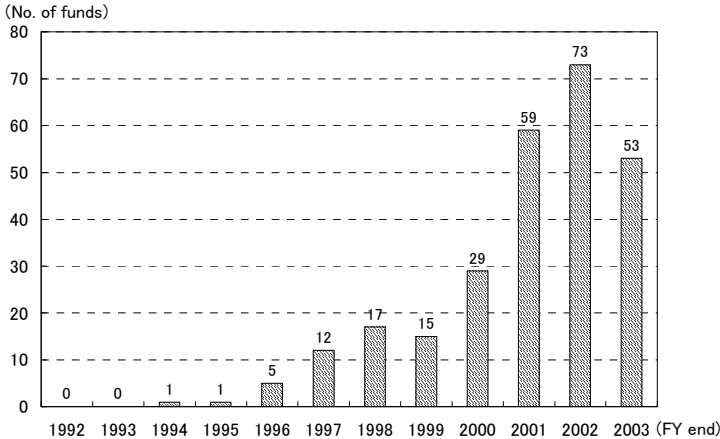
Source: Calculated by NLI Research Institute.

Second, under current SNA conventions, the Employees' Pension Fund (EPF) and Organization for Workers' Retirement Allowance Mutual Aid (*Kintai-kyo*) are treated as

³ Another statistical discrepancy is that in SNA and flow of funds data, the household sector includes sole proprietorships.

pension funds, and their reserves as financial assets of households. The recent surge in EPF plan terminations has caused pension reserves to shrink, pushing down the saving rate derived in SNA data (Figure 14). Economically, the pension benefit rights of households is equivalent to direct ownership of the same amount of financial assets. However, unlike directly held financial assets, when corporate pension funds decrease, the decrease is not immediately recognized by households as a decrease in savings, and thus unlikely to alter their consumption behavior.

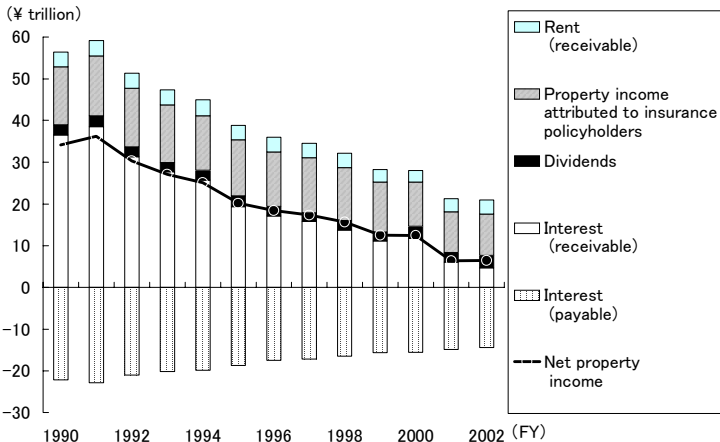
Figure 14 Number of EPF Plan Terminations



Source: Pension Fund Association, *Basic Data Regarding Corporate Pensions*.

A third factor contributing to the recent decline in saving rate is that households apparently fail to perceive interest and dividend income as part of disposable income. Declining interest rates in the post-bubble era have reduced interest income, and the resulting decrease in disposable income has driven down the saving rate derived in SNA data (Figure 15).

Figure 15 Trend in Property Income of Households



Source: Cabinet Office

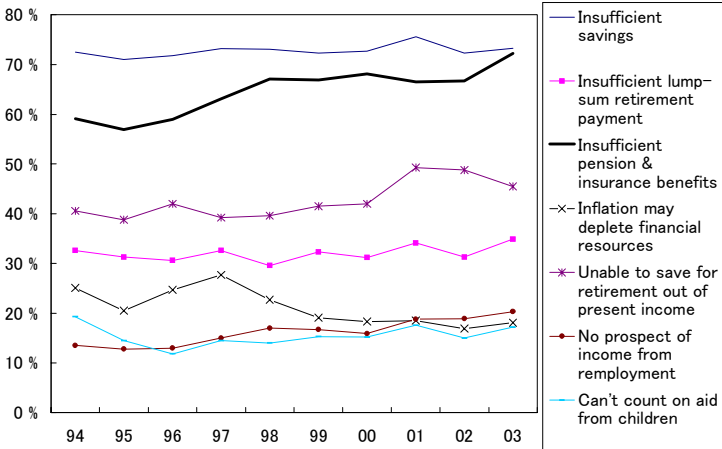
However, compared to SNA data, asset (property) income in the *Family Survey* comprises a much smaller part of the reported disposable income, suggesting that households essentially have little awareness of interest income. If households fail to perceive the decrease in interest income and its impact on disposable income, they will maintain the same spending behavior. This helps explain why the saving rate has not decreased in the *Family Survey* despite indications to the contrary in SNA data.

6. Aging Will Reduce Saving Rate in the Future

As the benefit eligibility age for public pensions is gradually raised from 60 to 64, we predict that the saving rate will drop in the medium term as the affected age group consumes more out of savings. However, the overall impact on the nation’s saving rate may be mitigated by the following factors: (1) working-age generations will expect pension benefits to decrease and thus save more, and (2) the rising benefit eligibility age will encourage people to postpone retirement, reducing the growth of nonworking elderly households who consume out of savings.

For example, in the *Public Opinion Survey on Household Financial Assets and Liabilities*, the two largest concerns about retirement are that savings are inadequate, and that pension and insurance benefits are insufficient (Figure 16). Indeed, if public programs attempted to ensure adequate pension, health and long-term care benefits for the elderly, working-age generations would be overburdened to the point of risking systemic collapse. Thus in the future, the burden of preparing for retirement and old age will increasingly rest on individuals.

Figure 16 Retirement Concerns (householder under age 60, multiple response)

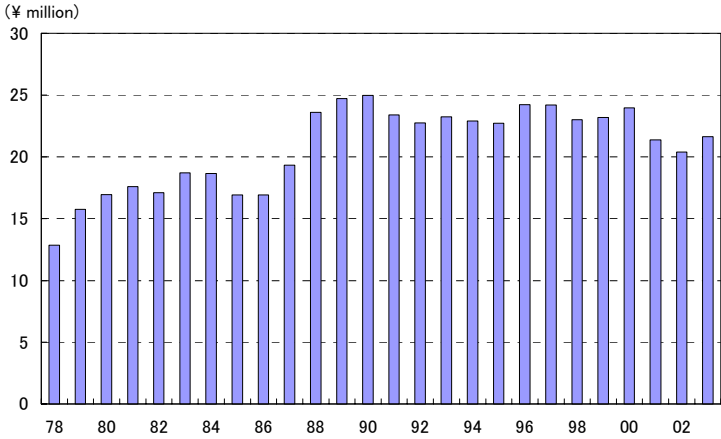


Source: Central Council for Financial Services Information, *Public Opinion Survey on Household Financial Assets and Liabilities*.

One factor behind the decrease in savings is that even though the economic recession has caused incomes to fall, households have difficulty reining in consumption any further.

The survey also found that the target level of savings has not decreased significantly. This suggests that households are still strongly inclined to save, and that the saving rate may rise as household incomes improve.

Figure 17 Target Level of Savings



Source: Central Council for Financial Services Information, *Public Opinion Survey on Household Financial Assets and Liabilities*.

Moreover, if the economy can shed the post-bubble doldrums and achieve a sustained recovery, rising interest rates and dividends will boost the asset income of households, while unemployment will decline. And if ultra-low interest rates helped drive down the saving rate in the past by reducing interest income, rising interest rates will work to pull up the saving rate. Thus in the medium term, statistical factors understating the saving rate will vanish, and if the economy recovers and deflation ends, we fully expect the saving rate to rise and restore the household financial surplus.

However, these factors will only delay the inevitable decline in saving rate. Over the long term, the population’s aging will take its toll. When the baby boom generation enters old age around 2012 and aging starts to accelerate, the saving rate is sure to plunge again. Then at some point, Japan’s economy will no longer be able to rely on the household sector to generate an abundant financial surplus.

7. Contemplating a Society Without a Household Financial Surplus

Once the household financial surplus disappears, Japan’s economy will transform greatly. The economy’s traditional profile of “excess savings, insufficient demand, abundant labor

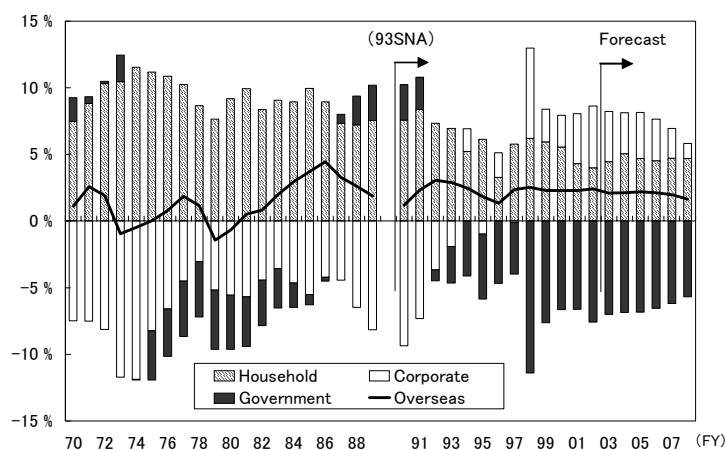
force, deflation and low interest rates” will shift to “insufficient savings, excess demand, insufficient labor force, inflation and high interest rates,” accompanied by massive structural changes.

Since the Nixon shocks of 1971, the economy has been plagued by the yen’s secular strength. This has occurred against the backdrop of a household financial surplus that was too large to be absorbed by domestic investment, and thus generated a large current account surplus. But in the future, as the saving rate drops further, the current account balance should turn to deficit. This is because the financial deficit of the overseas sector (equal to Japan’s current account surplus) is equivalent to the aggregate saving-investment surplus of all domestic sectors (government, corporate, household), and if the household surplus shrinks or turns to deficit, the aggregate domestic surplus will not persist. As a result, the yen will lose its secular strength and start to weaken.

Moreover, the declining saving rate is predicted to cause domestic interest rates to rise. Despite a large fiscal deficit, long-term interest rates have remained low and stable. This is because the fiscal deficit has not only been financed by the large household surplus, but has been instrumental in absorbing the surplus. Given the inevitable growth of entitlement spending as aging progresses, the fiscal deficit will be difficult to trim. Thus if the household surplus disappears, the domestic demand and supply of funds will tighten, pushing up interest rates.

By sector, the corporate sector’s saving-investment balance used to be persistently in deficit due to the strong demand for capital investment, but turned to surplus in the mid 1990s, and recently exceeded the surplus of the household sector (Figure 18). This indicates that the corporate sector has been recoiling from the spending binge of the bubble era and reducing accumulated debt.

Figure 18 Saving-Investment Balance by Sector (as a ratio to nominal GDP)



Note: Shows 68SNA to fiscal 1989, and 93SNA from fiscal 1990.
Source: Economic and Social Research Institute

From the perspective of the aggregate saving-investment balance, the corporate surplus occurring on top of the large household surplus makes it all the more difficult to slash the fiscal deficit, and aggravates the yen's appreciation by expanding the current account surplus. In this sense, the shrinking household surplus serves to restore balance in the economy in the medium term. However, in the long term, it implies that capital investment to expand production can no longer be financed domestically, thus slowing down economic growth. Under these circumstances, the corporate sector must above all else strive to improve investment efficiency, while the economy once again must address the issue of how to increase household savings.

In the postwar era, rapid economic growth was sustained by artificially low interest rates, which enabled companies to finance investment inexpensively using the abundant household surplus. When rapid growth turned into stable growth, the domestic economy was awash with funds to the point of generating a large current account surplus. After the collapse of the bubble economy, an ultra-low interest rate policy was adopted to overcome deflation, thereby reducing financing costs to ultra-low levels as well. While companies have grown accustomed to low cost and plentiful financing, in the future they must learn to use scarce funds as efficiently as possible.

In the post-bubble era, although Japan has persistently trailed the U.S. in economic growth, the ratio of capital investment to GDP has remained higher than in the U.S. This indicates that Japan lags behind the U.S. in investment efficiency, something which is apparent at the company level from the low return on assets of Japanese companies.

The household sector's financial deficit of 2003 might be construed as an outcome of the abnormal structure of the post-bubble economy. But as aging progresses in the future, the once plentiful financial surplus of the household sector is destined to disappear. For a long

time, the central part of Japan's economic policy had been to find ways to use the large household surplus generated by the high saving rate. A key policy issue was how to keep the household surplus under control by expanding consumption and other means. In addition, the large surplus bred a wanton disregard for the efficient use of capital, creating the investment frenzy of the bubble era. Looking ahead, when the baby boom generation enters old age around 2010, Japan's economy will shift to a serious financial deficit. This will make it all the more critical to find ways to boost the household saving rate and use scarce funds as efficiently as possible.