

Interpreting household fund deficit

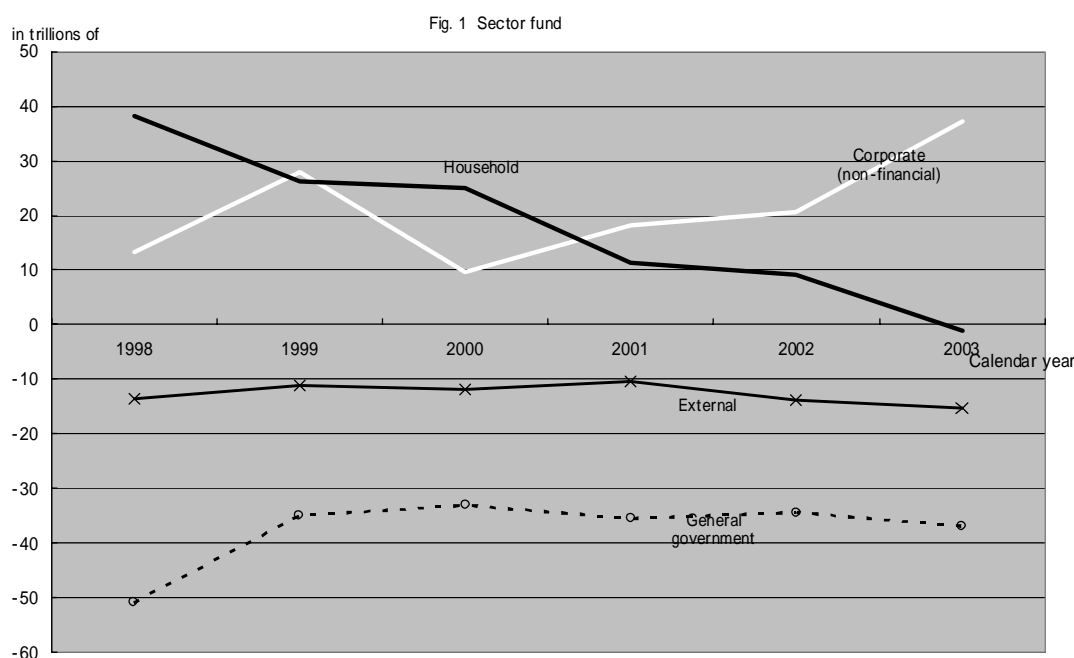
July, 2004

Yuichi Kaneko

Senior Economist, The Japan Center for Economic Research

According to the Bank of Japan's recently released "flow of funds accounts" for 2003 (preliminary), the household sector took out more new liabilities than it added to its financial assets under management that is, it incurred a fund deficit during the year (Fig. 1). Japanese households had never before experienced such a deficit since the BOJ began compiling the statistics in 1954. By contrast, the corporate sector scored a gain in fund surplus. The general (central and local) government sector and the external sector both saw their deficits slightly widen over the year.

Fund surpluses or deficits in the flow of funds accounts, specifically in the report's financial transaction tables, are determined by saving and investing activities in the real economy. In other words, a household sector in deficit means that it invested more than it saved. The sector is expected to display a similar excess of investment in the forthcoming final edition of the "system of national accounts" (SNA) statistics of the Cabinet Office's Economic and Social Research Institute.



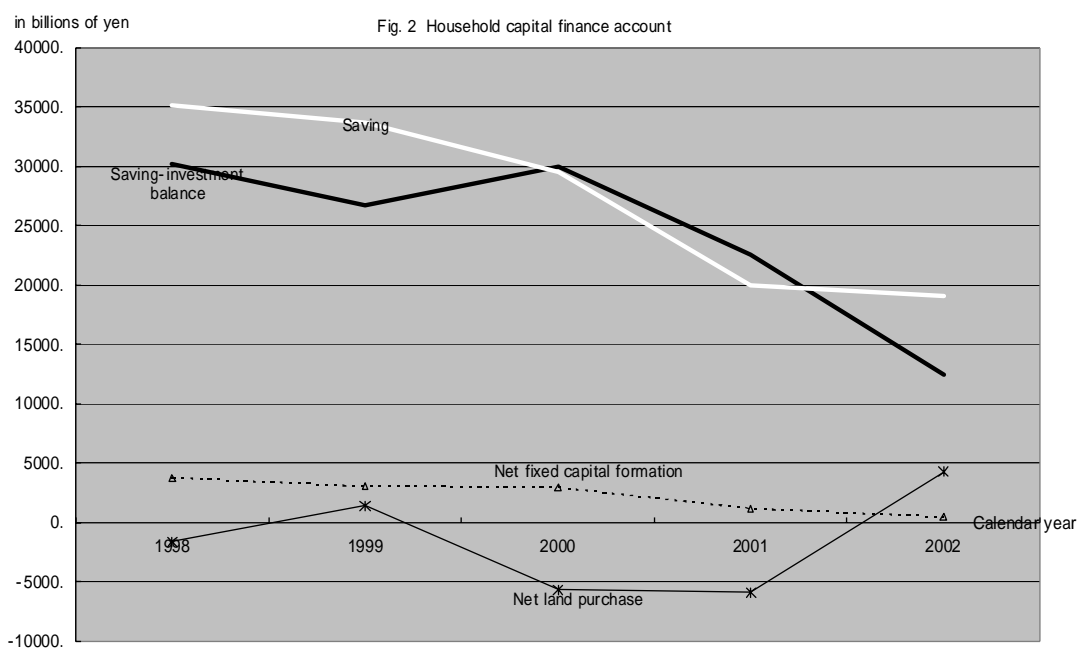
In a normally working economy, the household sector runs fund surpluses which are supplied to the corporate and other sectors. With households in collective deficit, the economy is denied the accumulation of capital and consequently sustained growth. This would be the more serious if engendered by some structural change. How is the

unusual deficit in the household sector to be interpreted? The following study addresses the question from the viewpoint of macroeconomic equilibrium.

In terms of real economic transactions, fund surplus or deficit can be analyzed as follows:

$$\begin{aligned} \text{Surplus/deficit} &= \text{difference between saving and investment} \\ &= \text{saving} + \text{net capital transfer receipt} - \text{net fixed capital formation (gross fixed capital formation} \\ &\quad - \text{fixed capital consumption)} - \text{inventory increase} - \text{net land purchase (purchases} - \text{sales)} \end{aligned}$$

Fig. 2 illustrates how these factors behaved for households in the latest SNA statistics through 2002. Saving fell sharply while net fixed capital formation, down though it also was, moved in a relatively stable manner, and land transactions marked a net purchase in 2002 reversing a basic net-sale trend previously. To paraphrase, investment in real assets held relatively firm even as saving fell precipitously, eroding excess saving relative to investment. For the household sector, the keynote of fixed capital formation is set by housing investment since business fixed investment (by individuals) is of minor importance.



A 2003 household fund deficit, if confirmed, would signify that investment in real assets, notably housing and land, surpassed saving in the sector. Housing investment dropped only a bit that year. Assuming no major change in land purchase activity, on which data are unavailable, saving is assumed to have continued falling.

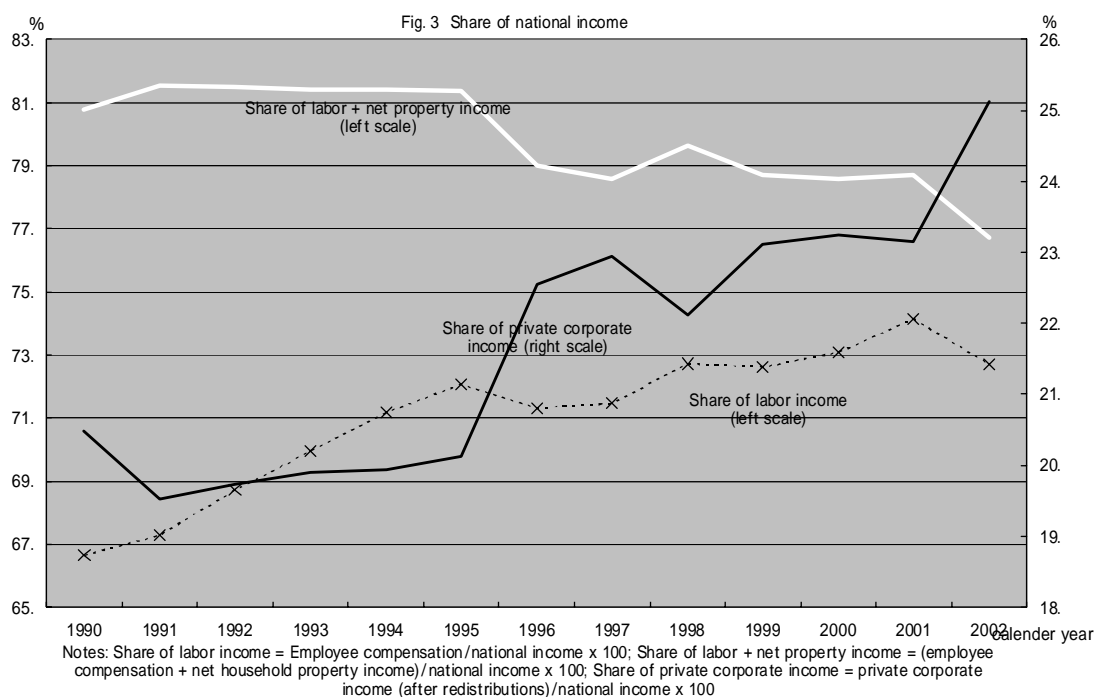
Why the plunge in saving, then?

Saving equals: disposable income + change in pension fund reserve - final household consumption (individual consumption expenditure). According to the SNA statistics up to 2002 (the last year relevant comparisons are possible), household disposable income declined 5.7% from 1999 to 2002, while household final consumption (individual consumption) fell 1.4% over the same period. That is to say, disposal income contracted and so did consumption expenditure, but the former downturn was

greater and saving diminished as a result.

To sum up, over recent years household consumption expenditure, though down, was steady relative to disposable income which declined faster, and saving decreased as a result. Similarly, housing and other real asset investment held up relative to shrinking saving, slicing the sector fund surplus (excess saving). One of the views advanced to explain these developments attributes them to structural changes in household behavior. The proponents maintain that households have elected to boost consumption and investment relative to income, including those who emphasize the graying of the population as a depressant of the saving rate ¹. In this regard, the present report focuses on changes in household income.

Household income (the primary income balance in the SNA statistics) consists of employee income, operating surplus and mixed income, and net property income, each of which declined in absolute terms toward and into 2002. The downturn, of course, reflected falling nominal GDP growth in a deflationary economy, but that was not the only cause. Regarding employee income and the sum of it and net property income, and specifically their share of national income, the labor share took a dip in 2002 following a mild uptrend, and the combined share of labor and net property income fell sharply in 1996 and has trended lower since 1999 (Fig. 3).

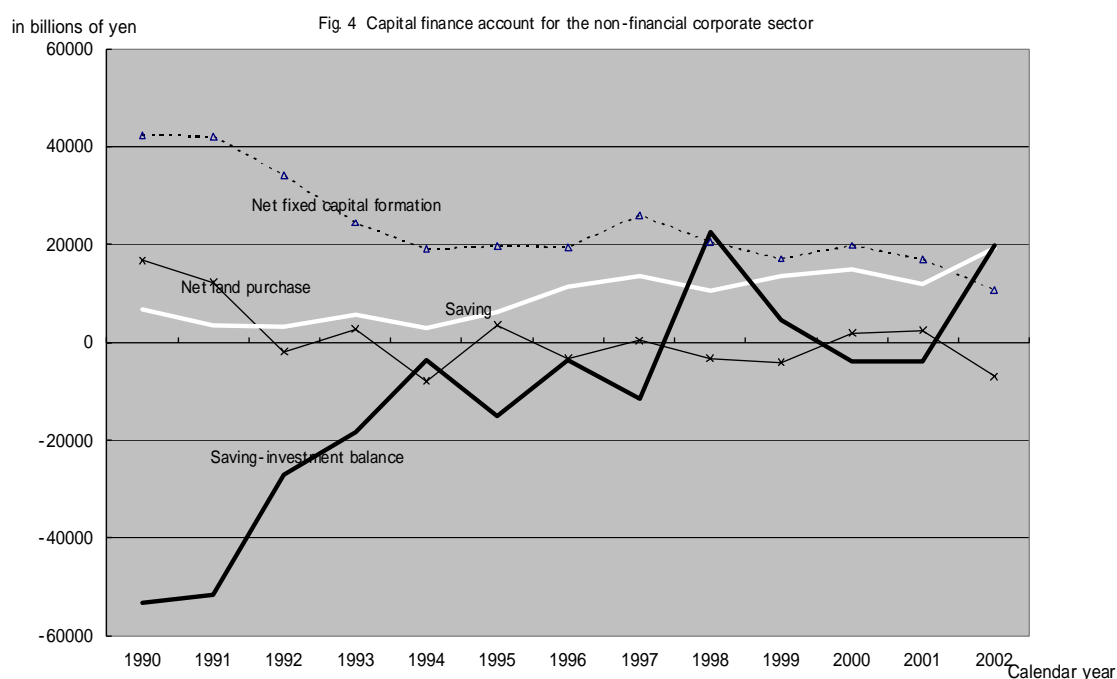


On the other hand, the share of private corporate income trended higher, if with ups and downs from year to year, in the last half of the 1990s. In the 1999-2002 period,

¹ The decrease rate of saving exceeded that of income, and the saving rate (= saving/(disposable income + change in pension fund reserve) fell dramatically from 11.1% in 1999 to 6.4% in 2002. Various analyses have been made regarding the recent decline in the saving rate, including those pointing up structural factors such as an aging population. If those structure-based views are right, the falling saving as well as the fund deficit underway in the household sector should be deemed largely structural, providing ground for pessimistic assessments over the future of the Japanese economy.

to take the example of non-financial business corporations, their income collectively increased 8.6% while the sum of employee income and net property income in the household sector was down 7.9%. This reflected effects of falling interest rates in the second half of the 1990s reductions in household interest income on the one hand and in corporate interest costs on the other. In 2002 alone, corporate earnings recovered while employment and employee compensation remained under pressure, resulting in a drop in labor's share of national income. The tendency is reckoned to have continued in 2003.

As observed above, comparison between the corporate and household shares of national income, with reduced interest rates and change in property income factored in, reveals that the decrease in household income has had to do with a shift in income distribution in favor of the corporate sector ². The other side of the coin is that corporate income has gained at the expense of households as businesses have tightened up on payments to households in property-linked outlays and employee compensation. In the SNA capital finance account for the non-financial corporate sector (Fig. 4), in recent years saving (= income) climbed while net investment headed lower, and land transactions, which used to register net purchases as a rule, continued to be in near-equilibrium. As a result, excess investment versus saving shrank and actually reversed into excess saving in 1998, 1999 and 2002. With all the gain in corporate income due to an increased share of national income, persistent restraint on capital investment set the conditions for excess saving and fund surpluses. Capital investment picked up in 2003, but not as strongly as earnings so funds ended up in larger surplus.



² Household disposable income declined in 2000 and 2001 also because, to a considerable extent, of an increase in taxes paid on interest from postal deposits, of which there were heavy concentrations of maturities in those years. (cf. JCER Staff Report Nos. 10 and 31)

It is clear from Fig. 1 as well that growth in household fund deficit is roughly matched by growth in corporate fund surplus. The picture is of one sector's deficit and the other's surplus being closely intertwined in parallel progression.

For a perspective on the relationship between the household and corporate sectors, let's assume an economy of which these are the only constituent sectors. In this case:

Household income + corporate income = national income.

Assuming no change in national income, a rise in the corporate share of it means an increase in corporate income and a corresponding decrease in household income.

Meanwhile,

Corporate income - corporate investment = corporate saving-investment balance, and

Household income - household consumption - household investment = household saving-investment balance.

Thus an increase in corporate income without a matching increase in investment results in excess saving relative to investment.

The macroeconomy is so structured that

Household saving-investment balance + corporate saving-investment balance = 0

and that

Household consumption + household investment + corporate investment = gross product (national income)

so the economy goes out of equilibrium when the household sector responds to a drop in income by consuming and investing less, leaving its saving-investment balance unchanged. With investment falling short of saving overall, the economy has to take a decline in gross product (national income) in a process of downward adjustment to a new equilibrium.

There are two competing schools of opinion regarding the relationship between different economic sectors as concerns the saving-investment balance. One holds that one sector exerts precedential influence on others. The rival camp insists on a coincidental determination of events in a complex interplay of causes and effects. Typical are the arguments over whether an external balance of payments surplus is born of domestic excess saving. Whatever the mechanisms involved, as far as that two-sector (corporate and household) economy is concerned, it is inevitable that when corporate income rises and both household income and corporate investment fall, household consumption and investment have to hold steady, to the erosion of household saving, if the economy is to retain equilibrium after all the income and spending behavior in both sectors.

Then, the household sector's decline in saving and reversal into fund deficit not only reflect choices of households but also result from overall income and spending behavior and exchanges of funds in the economy including the other sectors, especially the private corporate sector. As economic recovery goes on, the household share of national income is expected to move up as employee income improves and property income gains from rising interest rates. As for the corporate sector, further growth in capital investment will cut into excess funds or even go so far as to tip the sector into fund deficit. Unless the saving and investing structure of the government and external sectors change, household surplus funds will need to be funneled into the corporate sector. It is probable that in the household sector investment and consumption will not recover as much as income, producing excess saving and resolving a significant part of the unusual fund deficit.