

On the Financial Situation of Elderly Households— A Structural Analysis of Income, Expenditure, and Wealth

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1. Introduction

Knowing the exact financial situation of elderly households is essential to the current debate on social security reform, particularly regarding the public pension on which retirees depend most. Although often lumped together, the elderly population is quite diverse—in fact, financial disparities are greatest among households with elder members. We examine the current income, expenditure and wealth situation of the so-called standard elderly household now featured in the public pension debate—retired married-couple households.

2. Financial Situation of the Standard Elderly Household

1. Standard Elderly Household Consists of Retired Married Couples

According to the *Comprehensive Survey of Living Conditions of the People on Health and Welfare* (Ministry of Health, Labor and Welfare), Japan has a total of 48.0 million households as of 2007. Of these, as many as 19.3 million households (40.1%) have an elder member aged 65-or-over. Although often treated as a homogenous group, these households are rather diverse—79.9% have an elder householder, including married-couple (29.0%) and one-person (22.5%) households. In the other 20.1% of households, the householder is a child or other person (Exhibit 1).

Households headed by elders account for 27.576 million elders, of whom 33.9% do not have a spouse—3.4% of these single persons are never-married, 4.1% are separated by divorce, and 26.4% are separated by death. In other words, most elderly one-person households consist of a surviving spouse. Considering that women live longer than men, the proportion of elderly female one-person households is expected to grow in the future.

Elderly married-couple households are defined as consisting of a husband aged 65-or-over and wife aged 60-or-over. Of these, 75.7% are non-working households, meaning that the householder does not work (Exhibit 2). Available data shows that including the spouse, elderly non-working households have an average of 0.05 income earners. In other words, the dependent spouse is an income earner in

Exhibit 1 Composition of Households with an Elder Member (2007)

	Households (millions)	As percent of total
Total households	48.027	-
Households with elderly (aged 65-or-over)	19.259	100.0%
Elderly householder	15.388	79.9%
One-person	4.325	22.5%
Two-or-more person	11.063	57.4%
Married-couple	5.585	29.0%
(both aged 65-or-over)	4.391	22.8%
Married, w/ unmarried children	2.086	10.8%
Three-generation	1.363	7.1%
Other	2.029	10.5%
Non-elderly householder	3.871	20.1%

Source: Ministry of Health, Labor and Welfare, *Comprehensive Survey of Living Conditions of the People on Health and Welfare*

Exhibit 2 Ratio of Non-Working Households (2007)

	Non-working
Among elderly households	76.3%
(one-person)	88.0%
(two-or-more person)	70.3%
(married-couple)	75.7%

Source: MIC, *Family Income and Expenditure Survey*.

5% of these households, and neither spouse earns an income in the other 95%. Thus the standard elderly household can be characterized as a non-working married-couple household. We assume that when a one-person household consists of a surviving spouse, its wealth holdings remain unchanged from and closely resemble those of married-couple households. However, we must also note that with the never-married rate rising among both men and women, a growing number of one-person households in the future will have had no marriage experience.

Below we examine the financial situation of the so-called standard elderly household—a non-working, married-couple household (referred to as “retired-couple household.”) Specifically, we compare the structure of income, expenditure and wealth of the average retired-couple household with that of a typical working household. We defined the working household as a four-member nuclear family (married couple and two children) with householder under age 60 and one income earner, for the reasons explained below.

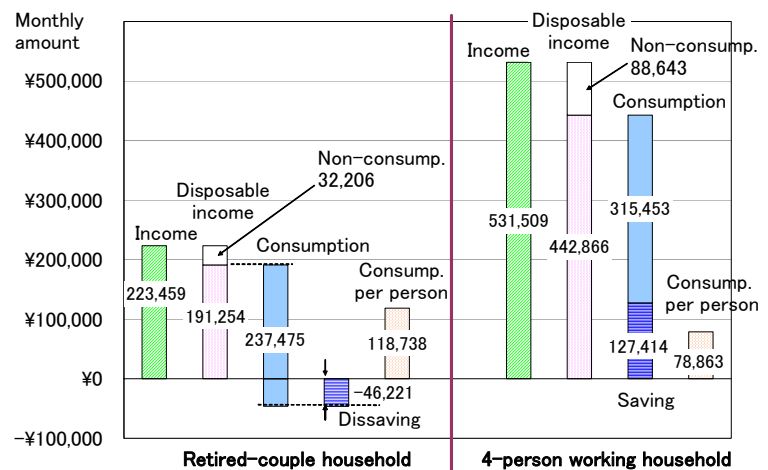
In general, household income sources include earned income, income from self-employment and piecework, income from public pension or other social security benefit, and interest or dividend income from financial assets. Clearly, for retired-couple households, public pension benefits are a primary source of income. To draw a clear distinction with working households, we omitted working households in which an elder member receives a public pension benefit. In addition, we restricted the household size and number of income earners because these characteristics strongly affect household income and expenditure. Thus for comparison purposes, the working household is defined as a nuclear family with all members under age 60 and one income earning spouse.

Exhibit 3 compares the average monthly income and expenditure of retired-couple and working households. The retired-couple household has an average income of 223,459 yen, disposable income of 191,254 yen, and consumption expenditure of 237,475 yen. Since consumption exceeds disposable income by -46,221 yen, the gap must be financed by dissaving from accumulated assets.

Aside from large differences in the scale of income and expenditure between the two household types, the most prominent disparity occurs on the income side. Compared to the working household, while the retired-couple household has 50% the disposable income (gross income minus non-consumption expenditure such as taxes and social security contributions), its consumption expenditure is 75% as much. Moreover, when divided by household size, the retired-couple household actually consumes more at 118,735 yen per person, compared to 78,863 yen per person for the working household.

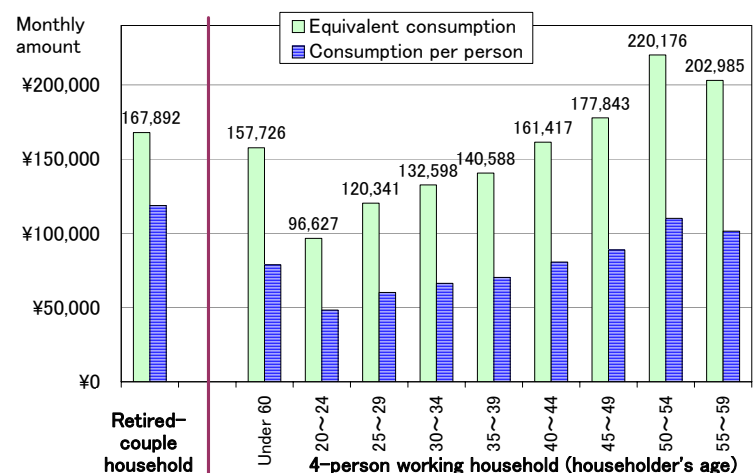
In assessing the standard of living and quality of life, consumption per person is generally regarded as

Exhibit 3 Income, Consumption & Saving by Household Type



Note: “Saving” is referred to as “surplus” in the survey data.
Source: MIC, Family Income and Expenditure Survey.

Exhibit 4 Equivalent Consumption by Household Type (2007)



Source: MIC, Family Income and Expenditure Survey.

a more appropriate economic indicator than consumption per household. However, consumption per person tends to be understated in large households due to economies of scale. To adjust consumption for household size, the concept of equivalent consumption is often used, which divides household consumption by the square root of number of members. Even then, however, the retired-couple household consumes at a relatively high level.

The equivalent consumption of retired-couple households is 167,892 yen, which falls short of working households aged 50 to 59, but roughly matches working households aged 40 to 49. However, householders aged 50 to 59 often have children in high school or college, and must spend an additional forty thousand yen or more on education. Since retired-couple households do not have this expenditure, they can at least live comfortably. As this example shows, to correctly assess the financial situation of households—in particular, to compare standards of living by household type—we must delve deeper into the income and consumption data. Thus we next examine income and expenditure patterns by item and category.

2. Income Sources of Retired-Couple Households

For the average retired-couple household, the monthly public pension benefit of 206,567 yen that they receive comprises 92.4% of income, which is a high ratio considering that earned income comprises 97.3% of income in the four-person working household. However, this pension benefit is -26,433 yen below the “model pension benefit” of 233,000 yen that married couples with one income earner should receive under the fiscal 2004 public pension reform. Moreover, the benefit is equivalent to only 40% of the working household’s earned income.

Meanwhile, none of the retired couple’s other income sources exceeds 4,000 yen, including income from the spouse’s part-time job, self-employment and piecework income, interest and dividend income, or money transfers and gifts from children. Thus the public pension benefit is by far the main income source of retired-couple households.

According to a recent survey by the Ministry of Health, Labor and Welfare (*Survey Report on Public Awareness Regarding Social Security in Old Age*), the prevailing sentiment of survey respondents is that “As a primary funding source for retirement life, I count most on my public pension, and second on savings (financial assets) or retirement allowance.” Less emphasis is put on earned income, property income, and financial assistance from family members. These results mesh closely with the actual choices made by households in the *Family Expenditure and Income Survey*.

Exhibit 5 Comparison of Income by Source (monthly)

	(Yen)		(Percent)	
	Retired-couple household	4-person working household	Retired-couple household	4-person working household
Income	223,459	531,509	100.0	100.0
Current income	217,631	522,436	97.4	98.3
Wages & salaries	2,678	517,192	1.2	97.3
Householder	0	517,192	0.0	97.3
Spouse	2,678	0	1.2	0.0
Other member	0	0	0.0	0.0
Self-employment & piecework	3,483	544	1.6	0.1
House rent	1,544	448	0.7	0.1
Other self-employment	127	2	0.1	0.0
Piecework	1,811	95	0.8	0.0
Property income	3,337	114	1.5	0.0
Social security benefits	207,574	4,130	92.9	0.8
Public pension benefits	206,567	46	92.4	0.0
Other benefits	1,006	4,082	0.5	0.8
Remittance	560	455	0.3	0.1
Non-current income	5,828	9,073	2.6	1.7
Gifts	2,948	5,702	1.3	1.1
Other	2,880	3,372	1.3	0.6

Source: MIC, *Family Income and Expenditure Survey*.

3. Expenditures of Retired-Couple Households

Besides consumption, household expenditure includes non-consumption expenditure such as income tax, inhabitant tax, and social security contributions. By definition, income that remains after deducting non-consumption expenditure is disposable income, and disposable income that remains

Exhibit 6 Non-Consumption Expenditures (monthly)

	(Yen)		(Percent)	
	Monthly amount		As percent of total	
	Retired-couple household	4-person working household	Retired-couple household	4-person working household
Income	223,459	531,509		
Non-consumption expenditure	32,206	88,643	14.4	16.7
Direct taxes	15,121	40,592	6.8	7.6
Earned income tax	43	17,488	0.0	3.3
Inhabitant tax	5,093	16,435	2.3	3.1
Other tax	9,985	6,669	4.5	1.3
Social insurance premiums	17,048	47,934	7.6	9.0
Public pension insurance	368	29,193	0.2	5.5
Health insurance	11,505	15,222	5.1	2.9
Nursing care insurance	5,173	1,142	2.3	0.2
Other premiums	2	2,377	0.0	0.4
Other non-consump. expen.	36	116	0.0	0.0
Home ownership rate (%)	89.5	65.8		

Source: MIC, Family Income and Expenditure Survey.

Exhibit 7 Consumption Expenditures (monthly)

	(Yen)					
	Retired couple	4-person working household				
		~29	30~39	40~49	50~59	
Consumption expenditure	237,475	315,453	235,681	275,520	335,284	430,675
Food	58,092	69,456	49,624	60,003	76,818	88,370
Housing	15,342	19,664	23,033	22,451	17,359	17,100
Fuel, light & water	18,681	20,901	19,450	18,525	22,105	25,984
Furniture & utensils	8,674	9,547	9,052	8,848	9,417	12,829
Clothing & footwear	7,916	15,384	10,950	13,182	17,554	18,538
Medical care	16,396	11,538	12,418	11,086	11,713	11,747
Transport. & commun.	22,256	43,762	36,144	42,916	41,511	57,031
Education	2	32,451	13,322	17,545	36,820	79,264
Culture & recreation	27,524	38,217	22,559	33,301	46,102	37,026
Other	62,593	54,533	39,131	47,664	55,886	82,785

	(As percent of consumption)					
	100.0	100.0	100.0	100.0	100.0	100.0
Consumption expenditure	100.0	100.0	100.0	100.0	100.0	100.0
Food	24.5	22.0	21.1	21.8	22.9	20.5
Housing	6.5	6.2	9.8	8.1	5.2	4.0
Fuel, light & water	7.9	6.6	8.3	6.7	6.6	6.0
Furniture & utensils	3.7	3.0	3.8	3.2	2.8	3.0
Clothing & footwear	3.3	4.9	4.6	4.8	5.2	4.3
Medical care	6.9	3.7	5.3	4.0	3.5	2.7
Transport. & comm.	9.4	13.9	15.3	15.6	12.4	13.2
Education	0.0	10.3	5.7	6.4	11.0	18.4
Culture & recreation	11.6	12.1	9.6	12.1	13.8	8.6
Other	26.4	17.3	16.6	17.3	16.7	19.2

Source: MIC, Family Income and Expenditure Survey.

after deducting consumption expenditure is called saving.

Non-consumption expenditure is detailed in Exhibit 6. Retired-couple households devote 32,206 yen to non-consumption expenditure, or only 36% that of the four-person working household. In descending order, expenditures consist of health insurance premium, taxes other than income and inhabitant taxes, nursing care insurance premium, and inhabitant tax. These expenditures are all small, ranging from 11,505 yen to 5,093 yen. The property tax is the most prominent tax-related burden, and reflects the high home ownership rate compared to the four-person working household. The inhabitant tax exceeds the income tax because many retired-couple households fall short of the minimum taxable income threshold.

In Exhibit 7, consumption is classified into ten categories. To determine whether age-specific factors affect consumption patterns, we separated working households into four age groups and compared them with retired-couple households. Since food and utilities are largely fixed expenditures and subject to economy of scale (household size), we would expect a wide spending gap between household types. However, the spending share of retired-couple households is at most only 4-percentage points higher compared to working households in these categories, and absolute differences are also small. For furniture and household utensils, the disparity is so small that no

clear differences occur even at the itemized level.

In housing expenditure, since the home ownership rate rises with age, rent expenditure per household tends to decline with age. In other categories, the spending ratio of retired-couple households is especially low in transportation & communication and education. This reflects their diminished use of automobiles, cell phones and the Internet compared to working households. In addition, for retired-couple households, education spending usually ends when the children leave

home.

Compared to working households, large spending gaps arise in both relative and absolute terms in the medical care and other categories, as described below.

At the itemized level, retired-couple households spend at least 3,000 yen more than the average working household (four-person, under age 60) in repair and maintenance of owner-occupied home, medical care services, package tours, and money gifts (Exhibit 8). The higher home repair and maintenance cost reflects the correlation of home ownership rate with age, and the deteriorating condition of the owned house. As for medical services expenditure, the largest component is the deductible paid under public health insurance, which naturally increases with age because older people are more prone to illness.

Exhibit 8 Unique Spending Pattern of Retired Couples (2007)

(Yen)

	Retired couple	4-person working household				
		Average	~29	30~39	40~49	50~59
Retired couples spend more on:						
Home repair & mainten.	7,487	2,081	551	1,446	1,799	5,964
Medical services	10,378	7,101	6,687	6,771	7,533	6,775
Package tours	6,656	2,827	1,314	2,219	3,814	2,502
Money gifts	20,812	5,639	4,155	5,230	5,261	9,311
Retired couples spend less on:						
Eating out	6,457	12,700	8,985	11,794	14,086	13,239
Maintenance of vehicles	9,782	16,847	16,888	17,638	15,570	18,056
Communication	6,204	14,348	15,357	13,210	14,168	18,384
Remedial education	0	7,243	150	2,463	11,005	15,023
Pocket money	7,240	17,051	8,999	15,875	16,867	26,076

Note: Shows expenditures that differ by at least 3,000 yen.
Source: MIC, *Family Income and Expenditure Survey*.

Interestingly, compared to the average working household, the retired-couple household spends considerably less (at least 3,000 yen less) in the categories of eating out, automobile maintenance, and communication, while spending much more (at least 3,000 yen more) on package tours and money gifts. Since retired-couple households have more leisure time than working households, the consumption of time-consuming package tours is understandable. In addition, their large expenses tend to focus on selected items.

In the sense that spending on package tours and money gifts can be eliminated without affecting the quality of life, these items top the list of unnecessary expenditures. Indeed, eliminating the two would reduce consumption by 27,468 yen, thereby easing dissaving to 18,753 yen. Stated differently, necessary expenditures alone do not explain the monthly dissaving of 46,221 yen and consumption of 237,475 yen. Instead, elders may be deliberately spending a certain amount from accumulated assets. From this perspective, the income shortfall does not necessarily mean that retired-couple households are impoverished.

4. Dissaving and the Balance Sheet of Retired-Couple Households

As explained above, retired-couple households must dissave to finance consumption in excess of disposable income, and thus have a significantly negative saving rate. Among non-working elderly households, the saving rate is -24.2%.

In contrast, working households have a positive saving rate that is as (28.8%). Obviously, working households must save diligently today to accumulate wealth if they intend to dissave at retirement.

But a widespread misperception exists that Japan's elders would even prefer to save rather than consume their large pension benefit.

Theoretically, there are three ways to finance the excess consumption amount of 46,221 yen per month (554 thousand yen per year)—by drawing down financial wealth, increasing debt, or selling off real assets (housing and land). In practice, the most used method is to dissave from financial wealth (494 thousand yen per year). For elders, this is a more rational choice than to increase debt, and as Exhibit 10 shows, they are actually dissaving to pay down debt and reduce liabilities. Meanwhile, funding from the sale of real assets is minimal, which reflects the fact that only a very small minority of households are involved, and not that households are selling off housing and land in small portions.

Next, in comparing financial assets and liabilities by age group, we find that net financial wealth

Exhibit 9 Consumption and Saving by Household Type (2007)

	Retired couple	4-person working household				
		Average	~29	30~39	40~49	50~59
Income	223,459	531,509	348,104	468,339	595,234	633,848
Non-consumption exp.	32,206	88,643	42,986	67,180	108,643	120,125
Disposable income	191,254	442,866	305,117	401,159	486,591	513,723
Consumption	237,475	315,453	235,681	275,520	335,284	430,675
Saving	-46,221	127,414	69,436	125,639	151,307	83,049
Propensity to consume (%)	124.2	71.2	77.2	68.7	68.9	83.8
Saving rate (%)	-24.2	28.8	22.8	31.3	31.1	16.2

Notes: Propensity to consume = Consumption ÷ DI. Saving rate = Saving ÷ DI.
Source: MIC, Family Income and Expenditure Survey.

(financial assets minus liabilities) increases with age, peaking out in the non-working age 60-64 group and subsequently decreasing. Incidentally, the same pattern is seen with the home ownership rate. Thus the stock data corroborates the flow data on saving behavior—households accumulate wealth while working, and start to dissave at retirement.

Exhibit 10 Dissaving of Retired-Couple Households (2007)

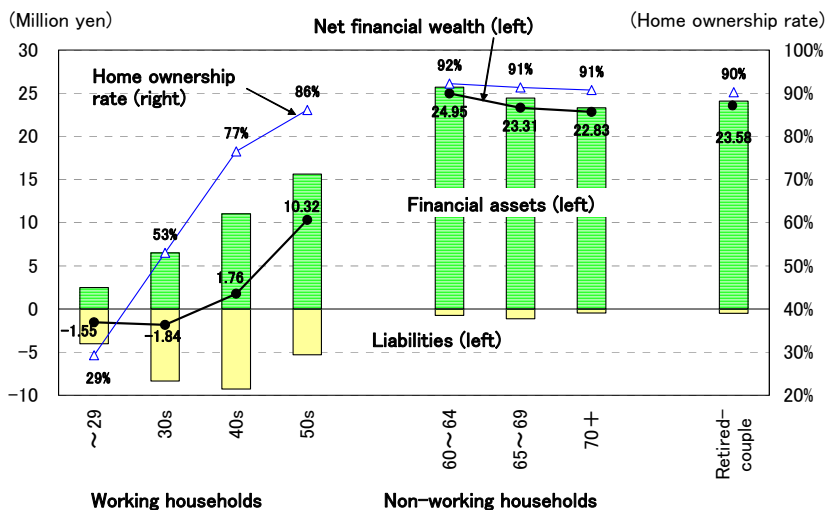
	Per month	Per year
① Dissaving	-46,221	-554,000
② Consumption in excess of income	46,221	554,000
③ Financed by financial assets	41,246	494,000
Deposits	36,037	432,000
Private pension reserve	14,351	172,000
Private insurance reserve	-9,509	-114,000
Other financial assets	367	4,000
④ Financed by increase in loans	-1,158	-13,000
Housing loans	-2,839	-34,000
Other loans	1,681	20,000
⑤ Financed by sale of real assets	6,132	73,000

Notes: ① × (-1) = ② = ③+④+⑤. Negative value indicates an increase in asset value for ③ and ⑤, and decrease in liability value for ④.
Source: MIC, Family Income and Expenditure Survey.

The average net financial wealth of retired-couple households is 23.58 million yen. Assuming that the CPI, public pension benefit, and interest rate remain constant, they could dissave at the current rate of 554,000 yen per year for a period of 42 years. At age 65, since the average life expectancy is 18.6 years for men and 23.6 years for women, the average financial wealth is ample to last them for the rest of their lives. Even if they set aside 10 million yen for contingencies, they can still dissave for 24 years.

Thus based on average values, retired-couple households currently have sufficient wealth to live out the rest of their lives in comfort. Indeed, to fully enjoy life, it is important for them to dissave at a rational pace rather than to leave an oversized estate. While the majority of dissaving now comes from financial wealth, elderly households actually own a larger proportion of wealth in the form of housing and land (Exhibit 12).

Exhibit 11 Net Financial Wealth by Householder's Age (2007)



Notes: Other than elderly married-couple households, household size is not established. Net financial assets are negative for working households under age 40 due to the large impact of housing loans.
Source: MIC, Family Income and Expenditure Survey.

The small size of Japan's existing home market is both a cause and effect of the infrequency with which elderly households sell off real assets as a way to dissave. Whether selling off a vacant property or moving down from an oversized owner-occupied home to a small condominium, tapping the home equity value should be a matter of rational choice.

Households that possess no owner-occupied home nor sufficient net wealth are inclined to dissave at a more modest pace because they

might outlive their wealth. In that case, a possible solution is to reallocate wealth to a whole life annuity plan. For example, by partially liquidating assets and paying the lump-sum premium, they could receive a fixed annuity for the rest of their life.

Two important factors that affect retirement finances and dissaving are the consumer price inflation rate and macro indexing of public pension benefits, which will be discussed later.

Exhibit 12 Average Net Wealth of Elderly Households (2004)

(Million yen)	
Net wealth	56.79
(+) Financial assets	21.79
Deposits	14.14
Private pension	0.62
Private insurance	3.70
Other	3.33
(-) Liabilities	2.09
(+) Housing & land	37.09

Notes: For two-or-more-person households with householder age 65-or-over, including non-working households.
Source: MIC, *Family Income and Expenditure Survey*.

3. Large Income and Wealth Disparities Among Elderly Households

Strictly speaking, the foregoing discussion addresses only the average values of the standard elderly household (that is, the retired-couple household), and does not necessarily apply to all elderly households (householder aged 65 or over). However, compared to other households, elderly households as a group exhibit significant disparities in income and other factors, as described below.

1. Wide Income Disparity Due to Diverse Work Status

As we saw in Exhibit 2, the non-working ratio of elderly two-or-more-person households (householder aged 65-or-over) is 70.3%, slightly below that of retired-couple households (75.7%). This lower ratio is attributed to the fact that larger elderly households contain unmarried children or other dependent members, which encourages the householder to continue working as long as possible. Of the other 29.7% of working householders, 9.1% are employees, and 20.6% are self-employed.

Exhibit 13 Income, Consumption, and Saving of Elderly Households (2007)

	2-or-more-person household				1-person household
	Working	Non-working	All elder members	Married-couple	
No. of persons	2.61	2.37	2.04	2.00	1.00
Income	¥390,867	¥227,658	¥223,859	¥223,459	¥123,986
Householder	¥200,791	-	-	-	-
Public pension	¥134,004	¥197,327	¥206,724	¥206,567	¥113,422
Non-consump. exp.	¥52,406	¥32,416	¥32,130	¥32,206	¥11,373
Disposable income	¥338,462	¥195,242	¥191,729	¥191,254	¥112,613
Consumption	¥301,399	¥243,143	¥238,863	¥237,475	¥142,042
Saving	¥37,063	-¥47,902	-¥47,134	-¥46,221	-¥29,429
Saving rate	11.0%	-24.5%	-24.6%	-24.2%	-26.1%

Notes: All-elder households are defined as consisting of only men aged 65-or-over and/or women aged 60-or-over, with at least one member aged 65-or-over
Source: MIC, *Family Income and Expenditure Survey*.

Income and expenditure data from the *Family Income and Expenditure Survey* shows that a large income disparity exists between elderly working households (390,875 yen per year) and non-working households (227,558 yen), including retired-couple households (223,459 yen; Exhibit 13).

Moreover, after deducting consumption and non-consumption expenditures from income, we find that the saving rate is positive for working households, but negative for non-working households. In particular, elderly working households, whose saving rate used to exceed 20% and rival that of under-60 households, now have a saving rate of only 11.0%. The misperception that Japan's elderly tend to save even in retirement apparently stems from this previous saving behavior of a small minority of working elderly households.

Incidentally, the above comparison merely compares averages based on the householder's occupation. To measure income disparity across all households, the widely used Gini coefficient must be

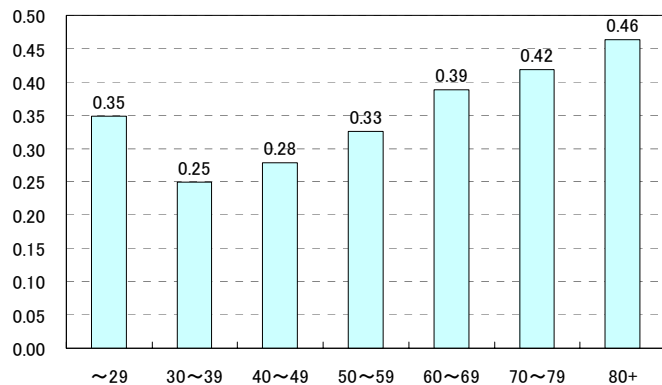
calculated for each age group. In this way, we can tell whether income disparity among elderly households is greater than among other households.

Using income data tabulated by age group from the *Comprehensive Survey of Living Conditions of the People on Health and Welfare* (MHLW), we calculated the Gini coefficient by age group (Exhibit 14). The Gini coefficient is lowest in the 30s age group and steadily rises with age, indicating that income disparity within each age group widens as age increases. This corroborates our earlier observation that income disparity among elderly households is large because of the diverse work status of householders.

From a broader perspective, the results indicate that as society ages, the overall income disparity of society tends to grow. This is because as the elderly population grows, their large income disparity boosts the overall income disparity.

Given the large income disparity among elderly households, average values must be approached with caution, particularly because their financial situation is complex. With working households, a large income disparity would likely translate into a large disparity in living standards. However, this is not necessarily so with elderly households. Some have sufficient wealth to dissave and live comfortably without any earned income, while others must keep working to preserve wealth.

Exhibit 14 Gini Coefficient of Income Inequality by Householder's Age (2005)



Source: MHLW, *Comprehensive Survey of Living Conditions of the People on Health and Welfare*.

2. Wealth Disparity

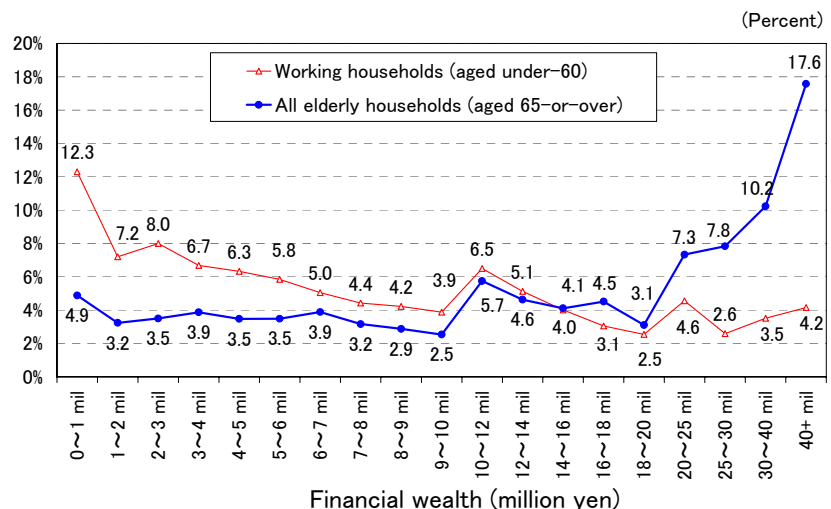
As seen above, the wide income disparity based on occupational status was relatively easy to confirm. We next turn to the measurement of wealth disparity and its relationship to income disparity.

Unlike income disparity, financial wealth disparity based on occupational status is surprisingly small among elderly 2-or-more-person households. Compared to 24.81 million yen for all elderly households, average financial wealth is 24.45 million yen for working households, 29.01 million yen for self-employed households, and 23.67 million yen for non-working households.

Exhibit 15 plots the distribution of elderly 2-or-more-person households by financial wealth. Unlike working households, the distribution is strongly skewed toward the high end. For example, as many as 17.6% of elderly households own at least 40 million yen in financial wealth. The proportion rises to 27.8% for financial wealth of at least 30 million yen, and to 43.0% for financial wealth of at least 20 million yen.

On the low end, 34.9% of elderly households own under 10 million yen in

Exhibit 15 Distribution of Households by Financial Wealth (2007)



Source: MIC, *Family Income and Expenditure Survey (Savings and Liabilities)*.

Exhibit 16 Distribution of Elderly-Couple Households by Income & Financial Wealth

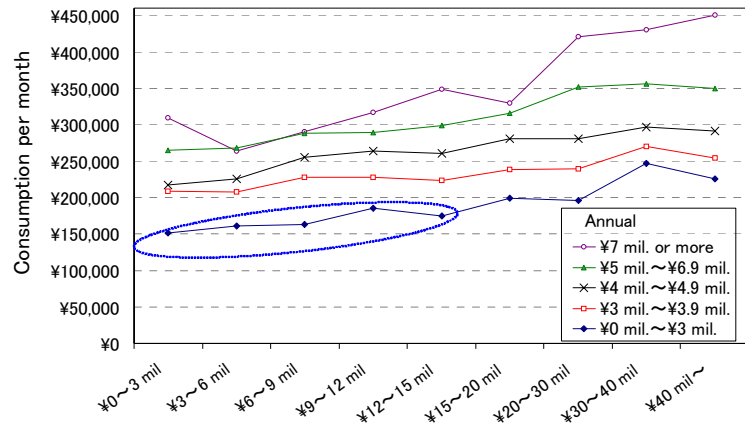
Annual income (million yen)	Financial assets (million yen)									(Subtotal)
	< 3	3~6	6~9	9~12	12~15	15~20	20~30	30~40	40+	
< 3	4.3% (3.1%)	3.7% (2.8%)	2.8% (2.2%)	1.9% (1.5%)	1.7% (1.3%)	1.6% (1.3%)	1.6% (1.3%)	0.7% (0.6%)	0.5% (0.5%)	18.8% (14.7%)
3~4	2.6% (1.8%)	3.3% (2.5%)	3.7% (3.0%)	3.2% (2.5%)	2.6% (2.2%)	3.3% (2.9%)	4.6% (4.1%)	2.1% (1.8%)	2.3% (2.1%)	27.8% (23.0%)
4~5	1.0% (0.6%)	1.7% (0.9%)	1.6% (1.0%)	1.8% (1.3%)	1.5% (1.1%)	2.2% (1.8%)	3.1% (2.3%)	2.4% (1.9%)	3.5% (3.1%)	18.8% (14.0%)
5~7	0.6% (0.3%)	1.3% (0.4%)	1.2% (0.4%)	1.6% (0.7%)	0.9% (0.5%)	1.6% (1.0%)	2.7% (1.6%)	2.2% (1.6%)	4.2% (3.1%)	16.4% (9.5%)
7+	0.3% (0.1%)	0.4% (0.1%)	0.5% (0.0%)	0.6% (0.0%)	0.3% (0.1%)	0.9% (0.2%)	1.4% (0.3%)	1.5% (0.3%)	4.6% (1.1%)	10.6% (2.1%)
(Subtotal)	8.8% (6.0%)	10.3% (6.7%)	9.8% (6.5%)	9.1% (6.1%)	7.1% (5.1%)	9.7% (7.2%)	13.4% (9.6%)	8.9% (6.2%)	15.1% (9.7%)	

Notes: Top number shows percentage of all elderly married-couple households; bottom number (in parentheses) shows percentage of retired-couple households. Numbers due not necessarily add up to 100% due to unidentified households.
 Source: MIC, National Survey of Family Income and Expenditure (Savings and Liabilities).

financial wealth, while 8.1% own less than 2 million yen. These proportions are roughly one-half those of working households under age 60 (63.9% and 19.5% respectively). Still, the existence of low-wealth elderly households raises two questions—how many also have low income, and what is their standard of living?

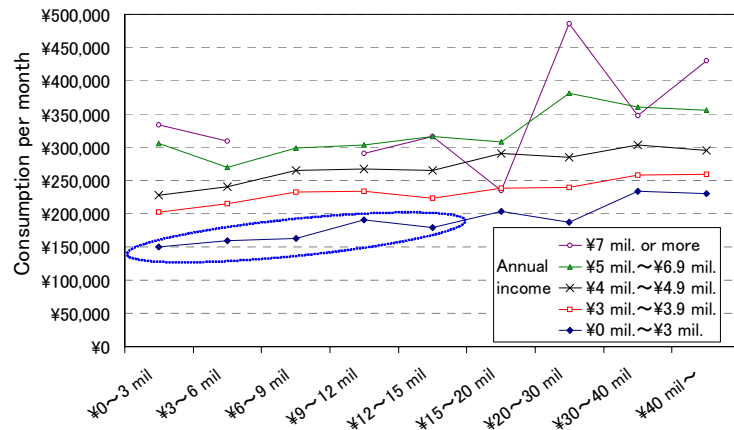
Exhibit 16 shows the composition of elderly-couple households by annual income and financial wealth, as tabulated from the 2004 National Survey of Family Income and Expenditure (MIC).¹ As the marked area shows, only 18.8% of elderly-couple households have an annual income below the 3 million yen threshold. Moreover, when we combine this with the financial wealth threshold of below 15 million yen, the proportion decreases to 14.4% (sum of 4.3%, 3.7%, 2.8%, 1.9%, and 1.7%). We set the thresholds for annual income and financial wealth to slightly exceed the averages found in the Family Income and Expenditure Survey (2.68 million yen in annual income, and 13.30 million yen in cumulative dissaving over 24 years at 554,000 yen per year). Stated differently, households that fall below both the income and wealth thresholds are likely to contain impoverished

Exhibit 17 Consumption of Elderly-Couple Households by Income and Financial Wealth (2004)



Source: MIC, National Survey of Family Income and Expenditure.

Exhibit 18 Consumption of Retired-Couple Households by Income and Financial Wealth (2004)



Source: MIC, National Survey of Family Income and Expenditure.

households.

For each of the 45 combinations of income and wealth in Exhibit 16, we plotted monthly consumption by wealth (in Exhibit 17) and income (in Exhibit 18). Exhibit 17 includes all elderly married-couple households, while Exhibit 18 includes only retired-couple households. In both cases, however, it is clear that households that consume below 200,000 yen per month indeed tend to have an annual income below 3 million yen and financial wealth below 15 million yen. In other words, to achieve a particular consumption threshold, households need to meet either the income or wealth threshold. In our case, where the consumption threshold is 200,000 yen, the income threshold is 3 million yen, and financial wealth threshold is 15 million yen.

As mentioned earlier, retired-couple households on average consume 237,475 yen per month according to the *Family Income and Expenditure Survey*. Our consumption threshold of 200,000 is approximately 90% of this level, and thus not exceedingly low. More precisely, it becomes difficult to consume at 90% of the average consumption level if annual income falls below 3 million yen or financial wealth is below 15 million yen. But although the 90% level is a fairly high threshold, our calculation suggests that only 14.4% of households have difficulty meeting it.

From these results, we surmise that few elderly households are genuinely impoverished and forced to endure a low standard of living. In fact, the same 14.4% of households who have difficulty meeting our thresholds actually exhibit a high home ownership rate of 77.4%, which means they could convert their home equity into financial assets if necessary.

Thus despite income and wealth disparities that exist among elderly households today, the majority appear to live in comfort and without financial hardship.

4. Outlook for Elderly Households

Judging from statistical averages, when today's elderly persons turn age 65, they will own sufficient financial wealth to fully finance expenditures exceeding income for the rest of their lives. Despite wide financial disparities among elderly households, only a small minority has failed to accumulate the minimum wealth needed to finance retirement life. Looking ahead, however, recent changes in the economy and society threaten to significantly alter their financial outlook.

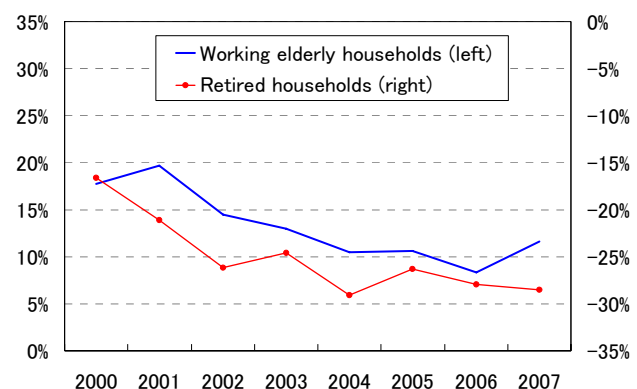
1. Changes in the Public Pension

The first concern is the effect of trends in the public pension system. With the pensionable age being stepped up to age 65 by 2025, efforts are underway to increase employment of elderly persons. However, even if re-employment programs can provide income from age 60 to 65, that income is likely to be far below what workers earned before age 60. This partly explains why since 2000, the saving rate has dropped among working households aged 60-or-over, and grown more negative among non-working households of the same age.

Since most workers face mandatory retirement at age 60, they must bridge the period until the public pension starts by finding other employment or income, or else start dissaving before retirement. In the latter case, the risk emerges that their financial wealth at age 65 will shrink compared to current retirees.

Moreover, the 2004 public pension reform introduced macro indexing of pension benefits, which reduces benefit growth based on the growth of average longevity and decline in number of Employees' Pension Plan participants. At present, the indexing reduces benefit growth by -0.9% below the CPI inflation rate (-0.3% for growth of average longevity, and -0.6% for decline in number

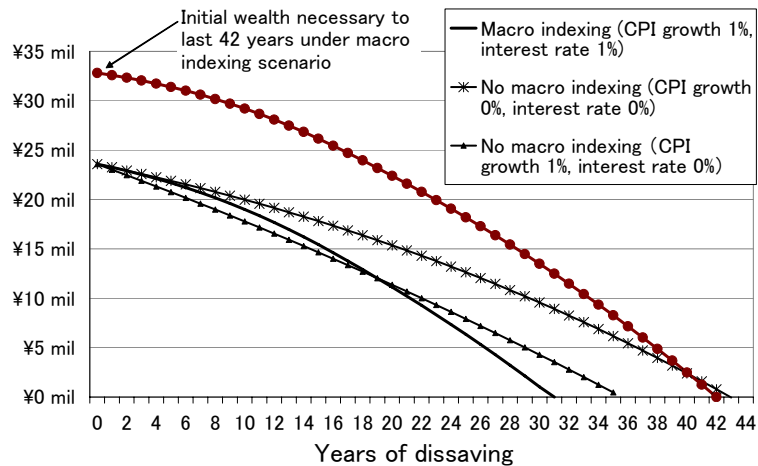
Exhibit 19 Household Saving Rate



Source: MIC, *Family Income and Expenditure Survey*.

of participants). Thus in a scenario with macro indexing and 1.0% annual CPI inflation rate, the benefit would grow 0.1% per year until macro indexing is terminated in 2023, and subsequently grow at 1.0%. With consumption growth outpacing benefit growth, dissaving would accelerate and deplete all net financial wealth in 30 years, as opposed to 42 years without macro indexing. Stated differently, to offset the effect of macro indexing and allow net financial wealth to last 42 years, the starting net financial wealth must be increased to 33 million yen.

Exhibit 20 Effect of Macro Indexing and Interest Rate on Depletion of Net Financial Wealth



Source: NLI Research Institute

Our simulation results are strongly affected not only by the CPI inflation rate but by the interest rate. In the above scenario, the nominal interest rate is assumed to be 1.0%, so that the real interest rate is 0%. However, if the real interest rate is reduced to -1.0%, net financial wealth would be depleted seven years sooner.

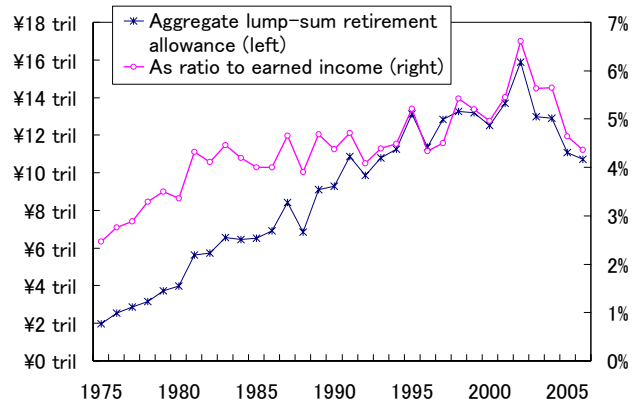
2. Expanding Employment of Elders and Trend in Lump-Sum Retirement Allowance

Second, changes in the wage system will make it increasingly difficult for workers to accumulate as much savings as in the past. As seen by the large difference in financial wealth between elderly and under-60 households, the lump-sum retirement allowance from employers comprises a significant part of financial wealth of elderly households.

In the past, as the population aged, lump-sum retirement allowances used to rise each year both as an aggregate amount and as a ratio to earned income. However, it peaked out in 2002 at approximately 16 trillion yen and 6.6% respectively, and has steadily fallen. This downturn is partly attributed to temporary factors such as the dip in number of workers turning age 60 (the generation born during World War II), and to the economic recovery, which eased pressure off of employers to restructure the work force and encourage early retirement.

However, structural factors have also contributed, including changes in the seniority-based wage system, which has reduced the lump-sum retirement allowance per person; growth of non-regular employees, who are ineligible for the lump-sum retirement allowance; and growth of employers not

Exhibit 21 Lump-sum Retirement Allowance (nationwide total)



Source: NTA, National Tax Agency Annual Statistics Report.

Exhibit 22 Employers Who Offer Retirement Plans

Year	Retirement benefit plan (Percent)			No retirement plan
	Lump-sum allowance only	Pension only	Pension & allowance	
1985	89.0	46.2	12.7	11.0
1989	88.9	43.8	10.0	11.1
1993	92.0	43.2	17.1	8.0
1997	88.9	42.2	18.0	11.1
2003	86.7	40.3	17.0	13.3

Source: MHLW, Comprehensive Survey of Employment Conditions.

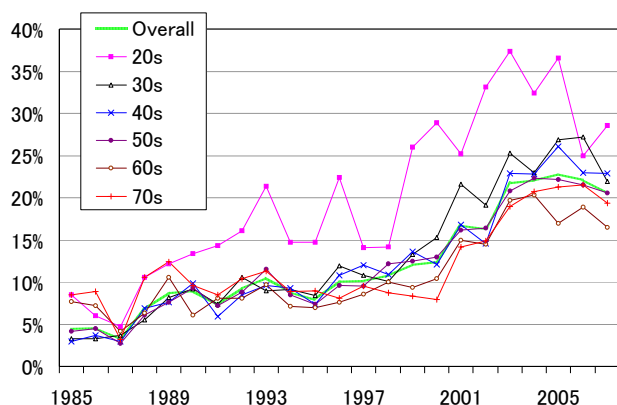
offering a lump-sum retirement allowance. In addition, among employers who offer retirement plans, the proportion who offer only a lump-sum retirement allowance is declining, while more employers are offering only a pension. Prompted by the 2006 Revised Law Concerning Stabilization of Employment of Older Persons, employers have introduced continuous employment systems and taken the opportunity to revise their lump-sum retirement allowance. It now appears employers may contain labor costs in the future by deemphasizing the lump-sum retirement allowance.²

In response to aging of the labor force, employers are dismantling the seniority wage and employment system, causing the age profile of wages to flatten. Looking ahead, the declining birth rate makes it certain that older workers will continue to outnumber younger workers in the labor force. Thus we predict the age profile of wages will further flatten as young workers receive higher starting wages while older workers' wages are reined in. The declining relative wage of older workers will make it more difficult to accumulate financial wealth in their later years. Meanwhile, aging will push up social insurance premiums for working generations, further limiting their ability to save.

3. Growing Financial Disparity Among the Young and its Effect

Even if average financial wealth is sufficient today, the widening financial disparity in working generations threatens to swell the number of less wealthy elders in the future. As mentioned earlier, growth of the Gini coefficient in recent years is largely attributed to the growing ranks of elders, who as a group exhibit large income disparities. However, a disturbing trend is the widening income disparity among persons under age 30. This is attributed to growth of non-regular workers—part-time workers, temporary staff workers, and “freeters” (job hoppers)—who earn less income than regular workers.

Exhibit 23 Percent of Households With No Financial Wealth



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

According to the *Public Opinion Survey on Household Financial Assets and Liabilities* (Central Council for Financial Services Information, Public Relations Department, Bank of Japan), the proportion of households with no financial wealth surged from 4.5% in 1985 to 20.6% in 2007. This suggests that more elderly households are dissaving and depleting their financial wealth. But a growing ratio of younger households also has no financial wealth, which is explained in part by growing income disparity. Of course, other factors also account for the surge, such as sustained low interest rates, economic recession, and even a deterioration in the quality of the survey itself.

employment. Unable to receive adequate on-the-job training, they remain unskilled workers at risk of being stuck in low-income jobs for the rest of their career. Since low-income households have difficulty saving for retirement, these households may not accumulate sufficient financial wealth by age 65.

In the long-term economic slump following the bubble economy, many young workers had little choice but to accept non-regular

In addition, not only are non-regular employees ineligible for the occupational Employees' Pension (EP), but many fail to enroll in the universal National Pension (NP), or else have stopped paying contributions. Including persons exempted from contributions, these workers will likely receive sub-average pension benefits when they retire. Moreover, even if they do participate in EP, benefits are proportional to income and thus likely to be low.

In this way, employment and income disparities among young workers leave long-term effects on their public pension benefits and financial wealth, eventually causing widening income and wealth disparities at retirement. Thus we surmise financial disparities among elderly persons will likely widen in the future.

4. Future Trend of Elderly Households

To see how elderly households will fare financially 15 years from now, it is informative to look at how their financial situation has changed in the previous 15-year period from 1992 to 2007.

Compared to 15 years ago, monthly income has declined 5,323 yen. This is largely attributed to the plunge of interest rates, which has reduced interest income on assets. Disposable income has declined by 20,377 yen, of which 15,055 yen is attributed to growth of non-consumption expenditure.

Consumption expenditure has increased 12,475 yen, which consists of a 7,348 yen increase in medical care, and almost 5,817 yen increase in transportation & communication. As a result, dissaving has surged 32,854 yen and the saving rate is far more negative. In other words, nursing care insurance premiums have increased non-consumption expenditure, while higher deductibles for health and nursing care have weighed down consumption expenditure.

As aging progresses, household finances will be subject to rising premiums and deductibles for health and nursing care insurance. As rising premiums reduce disposable income, and rising medical expenditures expand consumption expenditure, dissaving will have to increase.

Exhibit 24 Financial Comparison of Retired-Couple Households in 1992 and 2007

	(Yen)			
	2007	(Excluding ag, forest, fisheries)	1992	Change
Income	224,433	(223,459)	229,756	-5,323
Social security benefit	208,418	(207,574)	197,726	10,692
Wages & salaries	2,700	(2,678)	4,225	-1,525
Self-employment & piecework	3,584	(3,483)	3,669	-85
Property income	3,323	(3,897)	14,487	-11,164
Non-current income	5,840	(5,828)	9,649	-3,809
Non-consumption expenditure	32,189	(32,206)	17,134	15,055
Disposable income	192,245	(191,254)	212,622	-20,377
Consumption	237,314	(237,475)	224,839	12,475
Medical care	16,368	(16,396)	9,020	7,348
Transport. & commun.	22,147	(22,256)	16,330	5,817
Saving	-45,070	(-46,221)	-12,216	-32,854
	(Percent)			
Saving rate (%)	-23.4	(-24.2)	-5.7	-17.7

Note: Parentheses indicate households not employed in agriculture, forestry and fisheries.
Source: MIC, *Family Income and Expenditure Survey*.

5. Conclusion

After retiring, the average elderly household starts to live on the public pension, and exhibits a strongly negative saving rate due to dissaving from financial wealth. Indeed, there is ample data to support the view that based on average consumption and financial wealth levels, elderly households on average now possess enough financial wealth to live past age 100.

However, the data also shows that financial disparities are greatest among elders. This is because elderly household income critically depends on their occupational status. In addition, among retired households, who rely primarily on the public pension, approximately 10% receive small pension benefits and also possess inadequate financial wealth. In the event of illness or confinement in bed, there is a risk that medical and nursing care expenditures will require additional dissaving and deplete their financial wealth. In such cases, even households with average financial wealth may face hardship over the long term.

Although not addressed in this paper, a growing number of people circumvent the typical life course of marriage, raising a family, becoming a married-couple household when the children leave, and finally becoming a one-person household when the spouse dies. This has major implications for their financial situation later in life. For example, when a married couple divorces before accumulating adequate financial wealth, or when a person remains single for life, they are likely to receive a lower public pension, and to possess less wealth compared to either an elderly married couple or single surviving spouse. A surviving spouse is entitled not only to an old-age pension but a survivor's pension equivalent to three-fourths of the deceased spouse's old-age pension. In addition, the surviving spouse also enjoys the financial wealth accumulated by the married couple. Such alternatives are not available to divorced or never-married single-person households.

Unfortunately, the present social security system often fails to take into account the growing number of such single-person households. Sooner or later, however, these households will need to be addressed.

Endnotes

1. According to the *Family Income and Expenditure Survey*, in 2004 retired-couple households had an average financial wealth of 24.23 million yen and net financial wealth of 23.66 million yen. Compared to 2007, the differences are only 220,000 yen and 80,000 yen respectively. The difference in timing between the 2004 national survey (held every five years) and the 2007 annual survey is thought to have only a slight effect on results.
2. Considering that employers implement changes to reduce total labor cost, total benefits are also likely being reduced. Thus it is unlikely that the sum total remains unchanged for lifetime wages, corporate pension, and lump-sum retirement allowance, with only the lump-sum retirement allowance being reduced.