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Household Model in the Era of the 100-Year Life

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≺Summary≻

- With the increase in longevity, the former image of the elderly as socially and economically vulnerable has changed, with elderly people now able to sustain an average level of enjoyment of life. As we move into the era of the "100-year life," will the elderly people of the future also be able to lead such a positive life? With this question in mind, this paper compares household income and expenditure in households where the head of the household is 80 years of age. The year of birth of the household head is used as the basis for comparison.
- The targeted elderly households are divided into three groupings: two-person households consisting of a husband and wife, single-male households, and single-female households. The income is largely a pension received from the age of 65 (Economic Case IV of "Current Status and Outlook of Public Finance for the National Pension and the Employees' Pension—FY 2019 Financial Verification Results" by the Ministry of Health, Labour and Welfare). As for expenditure, that for consumption is assumed to be the same as the current level ("Family Income and Expenditure Survey 2018"), and non-consumption expenditure is calculated by subtracting direct tax and medical and long-term care insurance premiums from pension income and medical and long-term care benefits. In addition to this base case, this paper also compares cases in which pension benefits are deferred to age 70 and cases in which the economy continues to grow at a high rate (Economic Case I).
- The results can be summarized as follows.
 First, in the base case and in the case of deferral of pension benefits, large gaps in household wealth have not been confirmed among different generations. In the case of continuing high

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growth, gaps are likely to be eliminated. This suggests, conversely, that the gaps between generations will grow if the economy declines.

Second, in the base case, the balance of household finances comes out in the red for all generations, while in the case of pension deferral and in the case of high economic growth, household finances are in the black. However, it should be noted that there are many uncertainties in terms of individual health and economic factors.

Third, by household composition, single-female households face the greatest difficulties. This is because the level of wages earned when working is low and the amount of pension benefits received is small. As symbolized by the "employment ice age generation," the amount of pension benefits is reduced if the commencement of employment is delayed and the number of working years shortened. In such cases, the same results would be expected for both men and women.

The following responses are necessary to enjoy a 100-year life with peace of mind. The first is to enhance people's ability to help themselves and improve the general environment around this. As individuals engage in asset building and health management from the time they actively start looking ahead to the future, the government needs to support these efforts while at the same time creating an environment that bolsters the selfsupporting ability of low-income and physically vulnerable people.

The second is to drastically reform the medical and long-term care insurance systems, which will realize drastic cuts in benefits. There is a limit in the ability to simply raise the out-of-pocket costs of elderly people in order to curb increases in medical and long-term care insurance premiums, which would put pressure on elderly households. It is necessary to scrutinize the appropriateness of benefits from a comprehensive perspective, including necessity and cost-effectiveness.

The third is to restructure the medical and long-term care insurance system and shift to a non-age-based system. In order to eliminate the sense of unfairness felt by some generations, and restore and ensure the understanding of the burden, it is essential to restructure the system so that the insured can benefit from the system while bearing the burden according to their ability and needs, rather than their age.



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1. Introduction

More than 60 years have passed since 1947, the year that the average life expectancy of both men and women exceeded 50 years¹ and people talked about the "50-year life." Japan is now moving into the era of the "100-year life."

With the increase in longevity, the image of the average elderly person has changed dramatically. Until now, policies and efforts have been developed by society on the whole to support the elderly, who were seen as socially and economically disadvantaged. A typical example of this is the introduction of free medical care for the elderly in 1973².

Today's elderly, however, have become a major political force due to their large numbers and high voter turnout, making it difficult to implement policies that are disadvantageous to them. This is the so-called "silver democracy." Moreover, when the amount of actual income per person after expenditures such as rent, education expenses, direct taxes and social insurance premiums is compared by age of head of household, those aged 70 and over have more than those under 50. The distribution of income among the elderly themselves is wide, so this cannot be said as a general rule, but on average at least the elderly have more economic leeway than those currently working.

From this point of view, it can be said that the elderly are no longer socially or economically vulnerable but rather are people who enjoy life from a position of strength (however, it should be noted that the discussion is only on an average level).

Will such a rich life in old age be guaranteed in the future? With further increases in longevity and the number of single-person households (an increase in the number of unmarried singles), as well as the progress of economic development, will the present and future generations, when they become older, be able to enjoy the same standard of living as today's elderly people or even live better?

With this in mind, this paper presents a model for future household budgets. The structure of this paper is as follows.

Chapter 2 summarizes the current and future trends in longevity and changes in household types as factors affecting future household budget models. Chapter 3 shows the income and expenditure status of elderly households when the head of the household is 80 years of age, classified by household type. Specifically, two-person households consisting of a husband and wife, single-male households, and single-female households are compared based on the year of birth of the head of the household. Finally, Chapter 4 examines the measures and policies necessary to enable people to continue to enjoy security after retirement in the future.

2. Longevity and Changes in Types of Households

When considering the future of the household budget, it is likely that 1) the age to which members of the household will live (longevity) and 2) whether they live with their children or live separately, and if they live separately, whether they are a couple or one person (household type), etc., will be influential factors. In this

¹ Male: 50.06 years old; female: 53.96 years old ("Abridged Life Table" by the Ministry of Health, Labour and Welfare).

 $^{^2\,}$ System under which the burden of medical expenses for people aged 70 or older was borne by the government. It was abolished in January 1983.



chapter, the past and future trends in longevity and changes in types of households will be summarized.

(1) Longevity

Looking at changes in the average life expectancy (average life expectancy at birth), the average life expectancy in 1947 was 50.06 years for men and 53.96 years for women. This increased to 80.21 years for men and 86.61 years for women in 2013, exceeding 80 years for both men and women. The average life expectancy increased to 81.09 years for men and 87.26 years for women in 2017 (Figure 1).

The reasons for this increase in longevity are pointed out as follows: A) improvement of nutritional status and living environment as a result of an increase in income level, B) improvement of medical technology, and C) enhancement of the public medical system.



A. Improvement of nutritional status and living environment

In terms of nutrition, the increase in intake of animal protein in line with a shift from carbohydrate-centered meals is cited. In particular, it has been pointed out that Japan's food culture has led to a longer life span than is found in other developed countries, partly because a diet rich in fish and fermented foods, which are considered to be good for health, has taken root in Japan.

On the other hand, with regard to the living environment, it is said that major contributory factors include the reduction of physical labor load due to the shift of the economic center from primary industries to secondary and tertiary industries, the abatement of domestic work due to the spread of electrical appliances, and the improvement of the sanitary environment as a result of the expansion of water and sewerage services.

B. Improvement of medical technology

Advances in medical technology include the development of chemotherapeutic agents to treat infections. The death rate from tuberculosis, as an example of infectious disease, per 100,000 people was 187.2 in 1947, making it a leading cause of death. The death rate, however, has since fallen sharply to 9.5 in 1975 and 1.8 in 2018.

In addition, improvements in medical technology, such as the development of various new drugs, the spread of endoscopic surgery, which is a minimally invasive surgery, and the advancement of imaging diagnosis, have contributed to the early detection and early treatment of diseases and the improvement of the cure rate. As a



result, many diseases that were previously difficult to cure have been overcome.

C. Enhancement of the public medical system

As for the enhancement of the public medical care system, it can be pointed out that access to medical care, especially for the elderly, has greatly improved due to the improvement of the insurance benefit rate, that is, the reduction of out-of-pocket expenses.

Looking at the trends in the self-pay medical expenses of the elderly aged 70 or older (Table 1), before 1972 it was 30% for those subscribing to the National Health Insurance (Kokuho) and 50% for those subscribing as a family member to the health insurance scheme managed by a health insurance association such as an Employee Health Insurance (EHI) program. At that time, the income level of elderly people was relatively low, and it was considered problematic that many elderly people were reluctant to seek medical care, even if they were sick or suffering from chronic disease. Therefore, a system was introduced in 1973 to relieve the financial burden of

Until December 1972		Until January 1973		After February 1983	September 1997	After January 2001	After Octobe r 2002	After April 2003	After Octobe r 2006	After Ap	oril 2008	
Prior to Medical Expense Payment System for the Elderly			Medical Exp Payment Sy for the Eld (Act on Sc Welfare Ser	ense stem erly ocial vice)	Insurance System for the Ederly							Latter- stage Elderly Medical Care System
National Health Insurance (Kokuho)	30%	Elderly 9%	No Burden		Inpatients: 300 Yen/Day	→ 1,000 Yen/Day → 500 Yen/Month (Up to 4 Times per Month) + Drug Co- payments	Fixed Rate of 10% (With a Monthly Upper Limit)	Fixed 1	Rate of	Fixed Rate of 10% (30% for the Elderly	Aged 75 and Over	10% (30% for the Elderly with an Income Level Similar to that of the Working Population)
Employees	Fixed				Outpatients: 400 Yen/Month		Abolition of Drug Co- payments	with an Inc Similar to Working F	ome Level that of the Population)	with an Income Level Similar to that of the Working Population)	Aged betw een 70 and 74	20% (30% for the Elderly with an Income Level Similar to that of the Working Population; Note 3)
	amount		Kokuho		30%	Inpatients: 30% Outpatients: 30% + Drug Co-payments (Note 1)						
Employees' Family Members	50%	Young People	Employees	Fixed amount →10% (After 1984)		Inpatients: 20% Outpatients: 20% + Drug Co-payments			30% Abolition of		Under the Age of	30%
			Employees' Family Members	30% →Inp (At Ou (At	atients: 20% fter 1981) Itpatients: 30% fter 1973)	Inpatients: 20% Outpatients: 30% + Drug Co-payments (Note 1)			payments		70	(Note 2)

Table 1.	Trends in	Self-pay	Medical	Expenses
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Source: Materials by the Ministry of Health, Labour and Welfare

Note 1: 20% for infants under the age of 3 (after October 2002)

Note 2: 20% for children yet to start compulsory education

Note 3: 10% for those aged 70 and over as of March 31, 2014



medical care by covering the out-of-pocket expenses of the elderly with public funds. This is the so-called "free medical care for the elderly."

Against the backdrop of an increase in the burden of public expenses due to the expansion of medical expenses for the elderly and the deterioration of insurance finances, a fixed amount of out-of-pocket expenses was introduced in February 1983. Since then, the out-of-pocket expenses of the elderly have been gradually raised by increasing the level of the fixed amount and changing the fixed amount to a fixed rate. Even now, however, those aged between 70 and 74 pay 20% of their own medical expenses in principle, and those aged 75 and over pay 10% in principle (however, the percentage is set at 30% for the elderly with an income level similar to that of working people), which is still lower than the 30% burden borne by those in the workforce.

So will this longevity continue? In terms of nutritional status and living environment, it has been pointed out that the risk of lifestyle-related diseases has increased due to the excessive intake of fat and lack of exercise. In fact, the death rate from malignant neoplasms, heart disease, and cerebrovascular disease, which are common lifestyle-related diseases, is increasing. As for access to medical care, the government is considering raising the out-of-pocket costs for people aged 75 or older, which could be a negative factor.

However, it is expected that there will be more room to control lifestyle-related diseases through the comprehensive implementation of preventive medicine and further improvement of medical technology. In addition, a mechanism has been established under the high-cost medical expense benefit system to control excessive out-of-pocket expenses. This indicates that the increase in longevity will continue, although at a slower rate than in the past.

According to an estimate by the National Institute of Population and Social Security Research (April 2017, median-mortality), the average life expectancy for men and women (average life expectancy at birth) is expected to increase, respectively, from 81.09 years and 87.26 years in 2017 to 84.95 years and 91.35 years in 2066. However, given the fact that life expectancy increases with each estimate (for example, looking at the past estimations of life expectancy [media-mortality] for men and women in 2055, which were 83.67 years and 90.34 years in the 2006 estimation, 83.88 years and 90.62 years in the 2012 estimation, and 84.35 years and 90.74 years in the 2017 estimation, respectively), the actual average life expectancy may exceed these projections.

(2) Changes in Household Types

Looking at general households excluding those residing in care facilities, etc. in terms of proportional changes in the number of 1) nuclear family households (households consisting of a husband and wife only or a husband and wife or single parent with children), 2) households consisting of a husband and wife and their parents, 3) three-generation households (households consisting of a husband and wife or a single parent, their children, and their parents), and 4) single-person households, the proportion of nuclear family households has decreased from 60.3% in 1980 to 55.8% in 2015, the proportion of three-generation households has decreased from 12.2% to 3.6%, and that of single-person households has greatly increased from 19.8% to 34.5% (Figure 2).

Comparing the ratio of single-person households by age in 1980 and 2015, the number of single-person households increased across all age groups starting at 15 years, particularly those aged from their mid 20s to their 50s (Figure 3).



Factors contributing to the increase in the number of single-person households include: 1) economic factors, such as inability to afford marriage due to income stagnation following the collapse of the bubble economy; and 2) social factors, such as the diversification of lifestyles due to economic selfreliance resulting from the social advancement of women and more flexible views on marriage (for example, abandoning of the idea that "if you don't get married, you are not a full-fledged person").

As for the elderly, on the other hand, it has been pointed out that the enhanced pension system has made it possible for them to live independently and without being supported by their children.

In fact, the level of pension benefits has been gradually increased since 1965.

First, in 1965, the amount of pension benefits was raised from 3,500 yen per month to 10,000 yen per month for those who had participated in the Employees' Pension Plan for 20 years. This is the so-called "10,000 yen annuity." In the following year, pension benefits of 10,000 yen (5,000 yen per person) per month became payable to married couples who had participated in the National Pension Plan for 25 years.

Next, in 1969, the amount of benefits was raised to



Source: "Population Census" by the Ministry of Interna Affairs and Communications

Ratio of Single-Person Households

Figure 3.



20,000 yen as the need for income security for retirement increased due to the improvement of living standards accompanying the rapid economic growth and the trend toward nuclear families. Specifically, in the case of the Employees' Pension Plan, the benefit amount was increased to 20,000 yen per month, including the supplemental pension benefits³ (12,000 yen) for married men. In the case of the National Pension Plan, a voluntary additional pension scheme (pay a fixed monthly premium and receive benefits based on the number of months the premium is paid) was established, and the benefit amount, including the voluntary additional pension benefits, was increased to 20,000 yen per month for married couples who had participated in the pension plan for 25 years.

Subsequently, pension benefits were further improved in 1973. Against the backdrop of an aging population, the trend toward nuclear families, and a decline in the real value of pension benefits due to soaring prices, it was decided that 50,000 yen per month would be provided to those married men who had participated in the

³ The benefits are provided when certain conditions are met, such as the insured period is 20 years or more or there is a spouse under 65 years of age who maintains their own livelihood or a child under 18 years of age.



Employees' Pension Plan for 27 years, and 50,000 yen per month, including the voluntary additional pension benefits, would be provided to married couples in the case of the National Pension Plan. Incidentally, 1973 has been referred to as the "first year of welfare" due to the advancement of welfare policies for the elderly such as the "50,000 yen annuity" and the free medical care for the elderly mentioned above.

At the same time, the wage revaluation system and the price indexing system were introduced for both the Employees' Pension Plan and the National Pension Plan in 1973. In the case of the Employees' Pension Plan, the benefit level was set at around 60% of the average wage of the currently insured under the Employees' Pension Plan.

So will the changes in household types, specifically, the increase in single-person households, continue in the future? First of all, it cannot be denied that as a variety of lifestyles have come to be socially accepted the trend for working people to become less and less interested in formal marriage will increase.

On the other hand, in the case of the elderly, taking the following factors taken into consideration, it seems highly likely that more and more elderly people will live in single-person households. First, it is expected that pension benefits will continue to function as form of income security in the future. With regard to pensions, there have been a series of unfavorable changes in the pension system for recipients, including the raising of the pension eligibility age and the introduction of the "macroeconomic slide" mechanism. However, given that the government has set a policy to ensure at least 50% of the average income of a standard working-age household consisting of a married couple (Pension System Reform in 2004), it is unlikely that the level of benefits will be significantly reduced in the future.

Second, the number of unmarried people is expected to increase in the future. Looking at the change in the lifetime unmarried rate⁴, the rate rose sharply from 1.3% for men and 2.1% for women in 1960 to 24.9% for men and 14.9% for women in 2015 (Figure 4). According to estimates by the National Institute of Population and Social Security Research, the figure is expected to continue rising, reaching 29.4% for men and 18.7% for women in 2040. Considering that the increase in the lifetime unmarried rate since the 1980s is one of the reasons for the current number of elderly single-person households, the number of these households is likely to continue to rise in the future.



"Population Census" by the Ministry of Internal Affairs and "Future Projections of Number of Households for Japan" by the National Institute of Population and Social Security Research Note 1: The lifetime unmarried rate is based on the percentage of unmarried people aged betw een 45 and 54. Note 2: Figures after FY 2020 are estimates.

3. Future Elderly Household Budget Model

As longevity and the number of elderly single-person households are expected to continue to increase in the

⁴ Percentage of unmarried people aged between 45 and 54. The National Institute of Population and Social Security Research defines the lifetime unmarried rate as the average of those aged between 45 and 49 and those aged between 50 and 54. In this paper, the unmarried rate at the age between 45 and 54 is taken as the lifetime unmarried rate, taking into account the population differences among age groups.



(%)

future, what is the outlook for the elderly household budget?

This chapter compares the income and expenditure of households with a householder age of 80 by generation. Given the increase in the number of single-person households, three types of households⁵ will be considered: 1) two-person households consisting of a husband and wife, 2) single-male households, and 3) single-female households. It is assumed that all households will receive pensions from the age of 65.

(1) Preconditions

As a precondition of income, Economic Case IV of "Current Status and Outlook of Public Finance for the National Pension and the Employees' Pension—FY 2019 Financial Verification Results" (hereinafter, "FY 2019 Financial Verification Results") by the Ministry of Health, Labour and Welfare has been adopted. More specifically, it is based on the baseline case⁶ of the "Mid- to Long-Term Economic and Fiscal Estimates, July 2019" by the Cabinet Office, which predicts that real wages will increase by 1.0% after FY 2029 on the basis of a 1.1% rise in prices and a 0.8% rise in total factor productivity (TFP) (Table 2). The FY 2019 Financial Verification Results show the projected pension benefits for existing recipients of the Basic Pension and Employees' Pension. The pension benefits for future elderly households shown in this paper are largely based on these data⁷. The amount of pension benefits is as of 2019.

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		FY	EV 2020~									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	F12029.4
Case IV	Price Increase Rate	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	1.1
	Wage Increase Rate	0.4	0.4	0.1	0.3	0.5	0.7	0.0	0.7	0.7	0.7	1.0
	Investment Yield	1.0	0.9	1.0	1.0	0.7	0.6	0.7	0.9	0.9	0.8	2.1
	Total Factor Productivity (TFP) Increase Rate	0.4	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Case I	Price Increase Rate	0.7	0.8	1.0	1.4	1.7	2.0	2.0	2.0	2.0	2.0	2.0
	Wage Increase Rate	0.4	0.4	0.0	0.8	1.2	1.3	1.4	1.3	1.3	1.3	1.6
	Investment Yield	1.0	0.9	0.7	0.3	0.0	-0.3	0.0	0.3	0.5	0.6	3.0
	Total Factor Productivity (TFP) Increase Rate	0.4	0.6	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.3

Table 2. Economic Assumptions

Source: "Current Status and Outlook of Public Finance for the National Pension and the Employees' Pension—FY 2019 Financial Verification Results" by the Ministry of Health, Labour and Welfare Note: The wage increase rate and investment yield are real values (relative to prices).

⁵ The premise of the household types is as follows. For the 1) two-person households with a husband and wife, the wife is a full-time housewife who is the same age as her husband (Category 3 insured person). The heads of 2) single-male households and 3) single-female households receive their own Basic Pension benefits and Employees' Pension benefits only (for example, in the case of bereavement, Employees' Pension benefits are chosen instead of the survivor's pension benefits of their spouses).

⁶ The baseline case refers to the following cases: 1) the rate of increase in total factor productivity (TFP) will remain around 0.8% in the future; 2) the rate of labor participation will increase to a certain extent; and 3) the number of foreign workers arriving will increase by around 345,000 over five years. The real GDP growth rate after FY 2029 is set at 0.2%.

⁷ As for the standard remuneration, which is a factor for calculating the Employees' Pension benefits, the



On the expenditure side, consumption expenditure is assumed to remain the same as presently (data source: "Family Income and Expenditure Survey 2018" by the Ministry of Internal Affairs and Communications). Specifically, the consumption expenditure of a non-working two-or-more person household with a household head aged 75 years old and over is adopted for two-person households consisting of a husband and wife, and the consumption expenditure of a non-working one-person household with a household head aged 65 years old and over⁸ is adopted for both single-male households and single-female households. Although nominal expenditures fluctuate year by year according to the rate of price increases, the same price data is used to discount them to 2019 prices, so the consumption expenditure per month is 219,000 yen and 150,000 yen, respectively, regardless of the year of birth.

Next, social insurance premiums and direct taxes related to non-consumption expenditures, specifically medical and nursing care-related expenditures, are calculated based on the average per capita insurance premiums estimated from pension income and medical and nursing care benefits. It is assumed that the current system will continue, including the method of calculation for insurance premiums and measures to reduce them, the self-pay ratio for medical and nursing care expenses, and income deductions and tax rates.

(2) Household Budget Model for Elderly Households

Figure 5 shows the household income and expenditure of elderly households by the year of birth of the household head for two-person households consisting of a husband and wife, single-male households, and single-female households. The bar graph shows income. The portion of actual income excluding non-consumption expenditure is disposable income. Meanwhile, the line graph shows consumption expenditure. When consumption exceeds disposable income, the household balance is in the red, and when it is below disposable income, it is in the black. The results can be summarized as the following three points.

A. There is no major generational gap.

First, no significant inter-generational gaps were identified in the household balance.

To be more specific, every household type continues to suffer a deficit. In the case of two-person households consisting of a husband and wife, the size of the household deficit increases from 17,000 yen for household heads born in 1954 to 32,000 yen for household heads born in 1974, and then shrinks to 27,000 yen for household heads born in 2004. In the case of single-male households, the household deficit deteriorates from 26,000 yen for household heads born in 1954 to 32,000 yen for household heads born in 1954 to 32,000 yen for household heads born in 1964, and then slightly improves to 23,000 yen for household heads born in 2004. In the case of single-female household heads born in 1974, and then slightly improves to 23,000 yen for household heads born in 2004. In the case of single-female household heads born in 1974, and 44,000 yen for household heads born in 2004.

In all household types, the household deficit is the largest for households whose head is currently aged

remuneration for women is assumed to be two-thirds of that for men.

⁸ Since the data for household heads aged 75 years old and over was not available, the data for household heads aged 65 years of age and over was adopted. The average age of those surveyed was 76.5 years old.



between 40 and 50 years old (household head born between 1964 and 1974), and the household budget balance improves for the subsequent generations. This reflects an increase in pension income. In other words, based on Economic Case IV, which is the premise of this paper, the activation of the "macroeconomic slide" mechanism is scheduled to be suspended for the Employees' Pension Plan (remuneration-based portion) in FY 2030 and for the Basic Pension Plan in FY 2053, resulting in an increase in pension benefits for all types of households after the mid 2050s.

In addition, the size of the household deficit is almost the same for all types of households regardless of the year of birth of the household head, and it has not been confirmed that the size of the household deficit increases for later generations. This suggests that there is no significant intergenerational gap in the future household balance of elderly households. However, it is conditional upon on the assumptions of the estimation—such as an economic downturn, a further reduction in the level of pension benefits, and the abolition of measures to reduce insurance premiums—not failing.

Incidentally, if a person lives to 100 years of age, it is calculated that two-person households with a husband and wife and single-male households will need to have saved between five million yen and seven million yen, and single-female households would need to have saved between 10 million yen and 13 million yen at the age of 80. According to a report by the Financial Services Agency ("Asset Formation and Management in an Aging Society [June 3, 2019]" by the Financial System Council, Market Working Group), a retirement fund of between 13 million yen and 20 million yen is needed at the age of 65 in order to live another 20 to 30 years. This is based on the fact that a household consisting of a married couple with the

Figure 5. Household Income and Expenditure of Elderly Households by Generation (2019 Price)



Note 1: The assumptions are based on Economic Case IV, and population projections are based on medianfertility/median-mortality assumptions. Note 2: Household heads aged 80. Note 3: Annual grow th rate of cost per person is assumed to be 2.5% for medical care and 2.0% for nursing care.



Source: Prepared by The Japan Research Institute Note: Same as notes for Figure 7-1).







head of the household aged 65 has a monthly shortage of 50,000 yen in living expenses. However, the results are virtually the same considering the following points: 1) consumption expenditure differs between households with a head aged 65 versus 75 (in fact, households with the head of household aged 75 tend to spend 20,000 less per month than households with the head of household aged 65); and 2) there is a question as to whether they live to 85 to 95 years old or to 100 years old.

B. Primary cause of the deficit is social insurance premiums

Second, the main cause of the household account deficit is an increase in social insurance premiums, which exceeds the increase in pension benefits.

In other words, the increase in insurance premiums related to medical and nursing care services offsets the increase in pension income and, as a result, the deficit margin remains unchanged. Incidentally, the average insurance premiums per person related to medical care for the elderly in the latter stage of life and long-term care are expected to increase from 5,857 yen and 5,869 yen, respectively, in FY 2020 to 9,800 yen and 10,500 yen, respectively, in FY 2034, when a person who was born in 1954 reaches the age of 80 years, and to 31,200 yen and 21,900 yen, respectively, in FY 2084, when a person who was born in 2004 reaches the age of 80 (all based on 2019 prices).

The fact that the increase in social insurance premiums hinders the improvement of the income and expenditure of elderly households can indicate that the increase in pension benefits after the mid 2050s keeps the size of the deficit constant regardless of the year of birth of household heads. In other words, if the assumptions of Economic Case IV fail, such as the reduction of pension payments and the postponement of the timing of the suspension of the activation of the macroeconomic slide mechanism due to the prolonged economic slump and unexpected progress in the aging of the population, not only will the deficit widen, but also the timing of the bottoming out of the deficit will be delayed, or the deficit will continue to widen, resulting in an increasing generational gap in the household balance.

C. The income and expenditure of single-female households suffer the most

Thirdly, although the household balance shows a deficit in all types of households, the deficit is the largest among single-female households.

The main reason for this is that the average income of women is lower than that of men, and this applies to both men and women in the time of the "employment ice age." This is because if the commencement of employment is delayed and participation in the Employees' Pension Plan is delayed, the amount of the Employees' Pension benefits is reduced according to the insured period. At present, the employment of the employment ice age generation is being promoted, but when a male or female member of that generation reaches the age at which they can receive pension benefits in the future, it cannot be denied that the problem of low pension benefits, which is pointed out to affect women at present, will become prominent regardless of gender.



(3) Cases of Deferred Receipt of Pension Benefits Until Age 70

At present, efforts are being made to create an environment conducive to the realization of a society where people aged 70 are still working, such as securing employment opportunities for people until age 70 and

reviewing the old-age pension for active employees. Considering the increase in the number of people aged 65 and over who are willing to work and the increase in pension benefits due to deferral (a one-month deferral increases the amount of Employees' Pension benefits by 0.7%), there is a possibility that the trend of deferring the receipt of pension benefits from the age of 65 will spread in the future. For reference, the balance of household income and expenditure of two-person households with a husband and wife is calculated based on a scenario in which the receipt of pension benefits is deferred to the current upper limit of 70 years of age (Figure 6).





According to this calculation, the household

balance will be in the black for all generations. Social insurance premiums will also increase in line with the increase in pension benefits due to the deferral of the receipt of pension benefits, but this does not lead to an increase in social insurance premiums to the extent that savings and consumption expenditures are reduced.

Specifically, after declining from 57,000 yen for household heads born in 1954 to 27,000 yen for household heads born in 1974, the balance of household income and expenditure starts to increase, reaching 42,000 yen for household heads born in 2004. Unlike in the case of receiving pension benefits at the age of 65, the household balance shows a surplus, but the level of surplus does not tend to increase or decrease for later generations, and no large gaps between generations have been confirmed.

(4) High-Growth Case

So far, the future of household income and expenditure has been examined on the assumption that economic growth and labor participation progress to a certain extent (Economic Case IV). As a result, it has been found that when people receive pensions at the age of 65, regardless of the type of household, the household balance continues to show a deficit, but there is no significant difference between generations. The results also indicate the possibility that if economic conditions change, not only will the deficit widen, but the gaps between generations will widen.

Therefore, the future household income and expenditure of a two-person household consisting of a husband and wife was examined, based on the assumption that economic growth and labor participation would proceed



further as shown in "Economic Case I" of the FY 2019 Financial Verification Results (Figure 7). The assumptions regarding prices and wage increases are shown in Figure 6 above. The real GDP growth rate after FY 2019 is set at 0.8%, which is higher than that of Economic Case IV (0.2%).

Looking at the household balance by the year of birth of household heads, the deficit expands from 23,000 yen for household heads born in 1954 to 30,000 yen for household heads born in 1959, then the balance improves, turning into a surplus of 4,000 yen for household heads born in 1979. The balance for household heads born in 2004 is a surplus of 27,000 yen.



Note: The assumptions are based on Economic Case I; other notes are the same as those for Figure 7-1).

The reason for this improvement in income and expenditure for the later generations is that prices and wage increases will continue to exceed the slide adjustment rate in the macroeconomic slide mechanism (a fixed rate set by taking into consideration the rate of decrease in the number of insured persons eligible for public pensions + the rate of increase in life expectancy [0.3%]). It can be seen that if the economy continues to grow at a high rate, it will not only benefit the households of elderly people, but also eliminate the gaps between generations that will become more disadvantageous for later generations.

(5) Summary of Results

The results scan be summarized as the following three points.

First, no significant inter-generational differences have been identified in the balance of household finances of elderly households. Rather, the results have shown that if the economy continues to grow at a high rate, the gaps will start to disappear.

However, it should be noted that the results depend on assumptions. If the economy declines or if longevity increases beyond expectations, not only will the deficit in the household account expand, but the gaps among generations will also widen.

Second, by household type, the income and expenditure of single-female households suffer the most. This is because the wage level for women is lower than that for men and the amount of pension benefits received by women is smaller than that of men. Similar results are expected in cases where the number of years of work decreases due to a delay in the commencement of employment and pension benefits subsequently decrease.

Third, the deferral of the receipt of pension benefits and high economic growth will benefit elderly households. However, there are many uncertainties regarding whether or not a person will be able to work after the age of 65 (for example, whether they can maintain their health, whether appropriate employment opportunities are available, etc.) and whether or not the economy will continue to perform well. Therefore, in order for elderly people to enjoy a secure retirement, it is essential to take measures to deal with risks from the time they are still



actively working.

4. Looking Ahead to the Era of the 100-Year Life

Based on the foregoing, the following measures and response are necessary if we are to enter the era of the "100-year life" with peace of mind.

(1) Efforts to Strengthen Self-Help and Environmental Improvement

Firstly, efforts to strengthen people's ability to help themselves and improve the general environment around this are needed.

Above all, it is necessary for individuals to recognize anew that public pensions should not be expected to provide 100% of their security during old age but should be considered a "partial guarantee" and for them to work on asset formation and health management from the time they are active, looking ahead to the future.

On the other hand, the government needs to support the efforts of individuals to help themselves and, at the same time, to create an environment that supports the self-help efforts of pensioners who live on minimal pension payments and physically disabled people.

Specifically, in order to improve the environment for helping oneself, the private pension system is currently being reviewed, including the expansion of the application of the individual-type defined contribution pension plan (iDeCo), and preventive medicine is being strengthened through medical examinations and health guidance. In the future, it will be important to eliminate the characteristic negative view Japanese people have toward investment by enhancing financial and economic education, especially with regard to asset formation during a person's working life.

According to a nationwide survey of junior high school and high school teachers, only 20% of first-year junior high school students and 30% of second-year junior high school students receive financial and economic education, compared with 85% of third-year junior high school students. In addition, the content of classes is mainly consumer-related, such as consumer issues, consumer protection, and consumer rights and responsibilities, and is far from practical, such as providing instruction on financial mechanisms and economic trends.

In contrast, outside Japan, education on household management and financial knowledge is developed from childhood. In the United States, for example, the Financial Literacy and Education Board was established in 2003 to promote financial and economic education at the national level. While the actual content of classes varies from state to state, it is noteworthy that elementary school students play a game called Monopoly in which they aim to increase their own assets by managing real estate and collecting high rental yields.

In the United Kingdom, financial education activities are carried out mainly through the Financial Services Organization in cooperation with other government agencies and private organizations. Since September 2002, economics classes, including on an ideal financial system, have been made a compulsory subject for students aged between 14 and 16 years old. In Japan, while financial and economic education has been implemented since FY 2005, the so-called "first year of financial and economic education," education with more practical



content, including on financial mechanisms and economic conditions, will be required in the future.

Next, with regard to the development of a support environment for pensioners who live on minimal pension payments and physically disabled people, flexible and diverse efforts are required, with an anticipated increase in the number of single women, those who had a late entry into the workforce due to difficulty in finding employment, and those with physical concerns, including those requiring nursing care. For example, for those who are concerned about their future living expenses, making housing for elderly people, such as serviced apartments for the elderly, available to people who are under 60 years old⁹, can be expected to reduce housing costs when they are still working and support their preparations for the future¹⁰ (more flexible housing policies). In addition, by providing a workplace where people with physical concerns can work, it will be possible for them to remain active throughout their lives even if their health is not perfect (diversification of employment policies).

(2) Radical Reform of the Medical and Long-Term Care Insurance Systems to Realize a Drastic Curtailment of Benefits

Secondly, a radical reform of the pension system is needed in order to drastically reduce benefits.

The main reason the income and expenditure balance of elderly households does not improve even if pension benefits increase is the increase in medical and long-term care insurance premiums, and the main reason for the increase in insurance premiums is the increase in medical and long-term care benefits. At present, discussions are underway with a view to raising the out-of-pocket costs of the latter-stage elderly medical care system and the long-term care insurance system. However, when it comes to changing the behavior of patients seeking medical care and reducing benefits, it is clear from past experience that such effects are temporary and limited.

In order to drastically reduce the cost of benefits, it is necessary to review the current system of benefits and medical examinations. At present, the need to consider the introduction of a "primary care physician" system, which limits initial medical examinations to a specific doctor, exclusion of drugs that can be substituted by overthe-counter drugs from the scope of insurance coverage, and the provision of services for persons requiring support and persons requiring a moderate level of care have been pointed to. It is also necessary to review the appropriateness of applying insurance to other items from a comprehensive perspective, including necessity and cost-effectiveness.

⁹ In principle, tenants in serviced apartments for the elderly must be 60 years of age or older, but if they are certified as requiring long-term care or support, they can move in even if they are under 60 years of age.

¹⁰ Early acceptance of tenants into the housing for elderly people is rated highly from the viewpoint of elderly care. According to the international basic principles of welfare for the elderly, or "Andersen's three principles," emphasis should be placed on 1) respect for the self-determination of the elderly themselves (self-determination), 2) living with continuity and without discontinuity from their previous lives (continuity of life), and 3) focusing on their existing abilities and supporting their independence (utilization of remaining capacity) when considering the ideal form of welfare for the elderly. Indeed, in Denmark, more than 10% of tenants living in housing for elderly people are under the age of 60, and are living in well-equipped homes before becoming physically disabled, which helps to avoid the deterioration of their physical condition and social isolation.

In particular, it has been pointed out that it is difficult for elderly people to move into general rental housing in Japan. From the viewpoint of avoiding housing refugees among the elderly, it is necessary to consider early admittance into housing for elderly people.



(3) Restructuring of Medical and Long-Term Care Insurance Systems to Make Them Non-Age-Based

Thirdly, the restructuring of the medical and long-term care insurance system is needed to make them nonage-based.

Age is a major factor in Japan's medical and long-term care insurance system. For example, working-age people pay out-of-pocket expenses at a rate of 30%, those who are aged between 70 and 74 years old 20%, and those who are aged 75 years old and over 10%. In the case of long-term care, those who are aged 65 years old and over are eligible for insurance benefits in principle. However, it cannot be denied that such unequal mechanisms in terms of both burdens and benefits are a source of moral hazard among the elderly, leading to issues such as the excessive use of services, as well as distrust of the system among the working-age population and their anxiety about the future.

At present, 70% of social security benefits go to the elderly, and it is inevitable that the benefit costs will increase as the lives of the elderly are extended. The shift to a non-age-based system, in which benefits and burdens are provided according to need and capacity to bear them rather than age, may have limited effects if it is restricted to the financial aspect of curbing benefit costs as mentioned above. However, it is essential to resolve inter-generational inequities, restore trust in the system, and ensure an understanding of the burdens involved. In view of this, the government should restructure the medical and long-term care insurance system to make it non-aged-based as early as possible.

Finally, with increasing uncertainty both domestically and internationally, concerns about the future are more prevalent than ever. Even if we continue to follow the conventional patterns of behavior and policy responses, there is no guarantee that we will be able to achieve the same results and effects as before. It can be said that both individuals and the government will have to make relentless efforts to make the era of the "100-year life" a fruitful one.

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