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**Japanese Social Security Pensions  
in the Twenty-first Century**

By

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## **1 Introduction**

In the past, families and occupational benefit schemes on a private basis were the major old age safety net in Japan. The principal social security pension program was introduced during the World War II. It had developed gradually under the period of high-speed economic growth. Its development looked like a dividend from economic growth. An enormous shift of the population from farmers to salaried-men took place during the rapid growth period, along with longer life expectancy. The household size has become smaller and smaller on average. The rise and the fall of private enterprises has been very common in this period. These factors forced major source of old age income to shift from families and occupational schemes to social security pension programs.

The future demographic and economic situations of Japan will make the current, generous social security pensions hard to maintain, however. It is still an open question whether or not Japan will manage to contain the increasing social security pension cost, while assuring its people stable lives over the whole life-cycle.

This paper discusses social security pensions of Japan in the 21st century. Section II explains changes in Japan's social security pension programs. Current Japanese pension programs are outlined in Section III. Section IV describes the content of current Japan's pension debates. Sections V and VI proposes how the public and private mix of safety net in old age income has to be implemented. Those proposals will be alternative policy options to those envisaged by the current government officials.

## **2 Changes in Japan's Social Security Pension Program**

Japan currently has six social security pension programs covering different sectors of the population. The earliest plan was established in 1890; the most recent, in 1961. The earliest plan was for military servants, which asked no individual contributions. It was totally financed by general revenue. The scheme was then expanded to civil servants. The old age benefit for military and civil servants was based on the final salary and its level was generous from the outset.

The principal program mandatory for private sector employees is the Kosei-Nenkin-Hoken (KNH), which was enacted in the wartime in 1942. Old age pensions of the KNH were forced to suspend immediately after the end of the war and the KNH contribution rate was reduced from 11% to 3%. The KNH was rebuilt in 1954 shifting from an earnings-related pension to a two-tier benefits system with flat-rate basic benefits.

### **2.1 High-speed Growth Period**

The social security pension system was and is to be reformed at least every five years. In the early stages, the KNH benefit level was not attractive yet, and for old age retirees at that time, a lump-sum retirement benefit provided on a private basis by their employers was often of much more significance. On the other hand, pension benefits for civil servants were considerably higher. This difference induced "gap-decreasing" adjustments in benefit levels between private and public sector employees. Drastic improvements in the KNH old age benefits took place in 1965 and in 1973; the replacement ratio in gross wage terms was increased to 40% and then to 60%. In 1973 updating past salary together with the benefit indexation enabled people to manage in their old age with the generous KNH benefits. In the meantime, there happened the sharp decline in the real significance of their lump-sum retirement benefits provided privately by their employers.

Under the KNH, equal percentage contributions are required of employees and their employers. The 3% contribution rate had been gradually increased and the total percentage went up to 7.8% in 1973.

At the outset, the KNH was established as a defined-benefit plan on a fully funded basis. It was initially regarded as a compulsory saving program to prevent inflation. Its finance shifted gradually from funded to pay-as-you-go. Currently the KNH has a reserve fund of about 130 trillion yen in 1998. KNH contributions have been accumulated in a reserve fund to be invested in social overhead capital for the construction of highways, railways, bridges, airports, and other public projects.

Before 1961 the self-employed, people engaged in agriculture/forestry/fishery, the unemployed, persons with no occupation, and employees working in small firms were still excluded from the social security pension system. The Kokumin-Nenkin (KN) Law was put into effect in April 1961, embracing all the people, previously uncovered, under social security. Participation in the KN has been compulsory for everyone (including the jobless persons) between 20 and 59 years old.

The basic structure of the KN is a flat-rate basic benefit and a flat-rate contribution on an individual basis. One-third of the KN benefits were (and are) financed by subsidy through general revenue. Initially the full old age benefit of the KN was payable initially after 25 years of contributions from age 65, although an actuarially reduced or increased benefit could be claimed at any age between 60 and 70. The transitional KN old age benefit with a special 10-year-contribution requirement began to be paid actually in 1971. A majority of the elderly took advantage of this special benefit, which contributed to the increased public awareness of the significance of social security pensions in old age income security. "Go and Go" policies were immediately adopted. The benefit formula of the KN had been revised to be more and more generous. Meanwhile indexation of the KN benefit was also enforced in 1973.

## **2.2 Period of Diminished Expectations**

The KN started with a very small contribution, which was politically difficult to increase. The KN soon faced severe difficulties in financing benefits. An enormous shift of the population from farmers to salaried-men during the rapid growth period made some revenue-sharing scheme between employees' and non-employees' pensions necessitated. The scheme was established in 1986, and since then, the first-tier basic flat-rate benefits of all the pension systems have been financially integrated. Currently the flat-rate pension benefit is financed on a fully pay-as-you-go basis. The 1986 reform has changed some requirements of the KN; the full old age pension is payable after 40 years of contributions, provided the contribution were made before 60 years of age. There have been introduced special transitional provisions for those born after 1926 with at least 25 years of coverage. They can receive the maximum pension even with fewer contribution years, provided they had been contributing since 1961.

It should be noted that those covered by the KNH (and the other employee pension systems) are not required to make individual contributions to the KN, while the KNH itself is responsible for the financial participation in the integrated first-tier, flat-rate basic pensions.

Since the 1986 reform, if the husband has the contribution deducted from his salary and placed in the KNH, his dependent wife has been automatically entitled in her own name to the flat-rate basic benefits, and she has not been required to make any individual payments to the public pension system. Through this, the women's right for pension has been comprehensively established.

The 1986 reform included another advance in the flat-rate disability pensions. A dependent child of age less than 20 got to be entitled to the flat-rate basic benefits in case of disability. Though medical check was (and is) very strict, the handicapped children largely came to be supported by the social security pension system and not by the special welfare program.

Through the 1986 pension reform, the accrual rate for the earnings-related component of the KNH old age benefits was to be reduced gradually from 1.0% per year to 0.75% cohort by cohort. The reductions corresponded to the longer average contribution years of the younger cohorts. On average, each cohort was expected to receive 30% of his career average monthly real earnings as the earnings-related component.

The future demographic situation of Japan has been getting darker and darker; the total fertility rate (TFR) showed an unexpected sharp decline from 1975 and the current level in 1999 is 1.34 (see Figure 1). There is still little sign that the TFR will stabilize or return to a higher level. Japan's total population will soon begin to fall sharply to reach 40% of its current level by 2100 (see Figure 2). On the other hand, life expectancy was steadily increasing. Consequently, the proportion of the elderly (65 years and above) will be 17.8% in 2001, making Japan the front runner in the world. It is expected to reach 25% by 2015 and more than 30% around 2040 (see Figure 3). In the 1990s, the Japanese economy changed dramatically, too, when the asset bubble finally burst. In fiscal 1997, Japan's GDP showed negative growth in real terms, and in fiscal 1998, the economy appeared to have shrunk further, with fiscal deficit around 10% of its GDP. Thus the colorful dreams that Japanese youth have placed in their economy would be likely to be destroyed.

Both demographic and economic factors in the future will probably impose greater stresses on social security pension programs which are based on pay-as-you-go defined-benefit financing. The biggest political issue in the Japanese pension system was when to start benefit payments. The pension age was 60 years for workers in the 1990s. The government had proposed twice in 1979 and 1989 to raise the eligibility age for all workers to 65. The proposal was turned down by the Diet both times since trade unions and opposition parties were strongly against the bill.

In summer 1993, the political situation changed dramatically. The Liberal Democratic Party, which had been ruling Japan ever since the end of the Second World War, fell from power. It was replaced by a coalition of opposition parties (excluding the Japanese Communist Party). It was this coalition that prepared the 1994 legislation.

The approved legislation guarantees that the tier-2 earnings-related benefits for retired employees between 60 and 64 will be paid without any reduction. The tier-1 basic benefits for this age group are to be phased out by stages (between 2001 and 2013 for men), and eventually nobody under 65 will receive full basic benefits (the phasing out of basic benefits for female employees will be delayed by five years starting only in 2006).

Up until October 1994, benefits were adjusted in line with the hikes in gross wages, but since 1994, they have been in net wages.

In December 1998, the Japanese government decided to temporarily freeze increases in social security contribution rates for pensions starting fiscal year 1999, as well as a partial funding shift to general revenue from one-third to one-half in financing basic benefits from fiscal year 2004 at the latest. The funding shift will

enable the contribution rate for social security pensions to decrease by one percentage point for the KNH, and by 3,000 yen per month for each non-employee person. If increased general revenue is to be financed by the earmarked consumption-based tax, a 0.9 percentage point increase in the consumption tax rate (currently 5 per cent) will be necessary, though the type of tax increases has not yet been specified. It is still quite uncertain, as well, whether or not the funding shift is on the way to assuring a universal, tax-financed basic pension for all members of the community.

Also, in December 1998, the government decided to increase existing pension benefits of fiscal year 1999 to reflect only changes in the CPI over the previous calendar year, though fiscal year 1999 was previously anticipated as seeing net-wage indexation of existing pension benefits after a five-year interval.

In July 1999, the government submitted the 1999 pension reform bill to the parliament and the bill was passed through it in March 2000. Its main points are as follows:

- a) Earnings-related benefits are to be reduced by 5 per cent; specifically, the current annual accrual rate of 0.75 per cent is to be decreased to 0.7125 per cent from fiscal year 2000.
- b) Both the flat-rate basic benefits and the earnings-related pension benefits once paid are to be CPI-indexed after age 65 from fiscal year 2000.
- c) The normal pensionable age for earnings-related old age benefits is to be increased step by step from age 60 to 65 for men from fiscal year 2013 to 2025. The phasing out of earnings-related old age benefits for female employees in their early 60s will be delayed by five years starting only in 2018. In exchange, those between 60 and 64 will become eligible for newly provided advance payment, at a reduced rate, out of the earnings-related benefits. The rate of reduction will be 0.5 per cent by one month (6 percent by one year). If a person begins to receive the advance payment from age 60, his/her benefit level will be 70 per cent of the normal amount.
- d) An earnings test for those aged 65 to 69 is to be introduced from fiscal year 2002 (currently Japan has no such test for them). Increases in earnings-related old age benefits for delayed retirement between ages 65 and 69 are to be abolished accordingly.
- e) Employers are to be exempted from paying their share of social security pension contributions for their employees on child-care leave from fiscal year 2000.
- f) The monthly standard earnings base for social security pensions is upgraded to the 98,000 to 620,000 yen range from October 2000.
- g) The benefit/contribution base is to be shifted from monthly standard earnings to annual earnings including semi-annual bonuses from fiscal year 2003. The shift is to be adjusted to induce no changes in aggregate income from contributions in 2003.
- h) The rebates on contributions for contracted-out schemes are to be frozen from fiscal year 1999.
- i) A 50 per cent reduced flat-rate contribution for the non-employees is to be newly introduced from fiscal year 2002. This is mainly for low-income groups. Their basic benefit will be two-thirds of the full amount. Students aged 20 and over are to be able to postpone paying in their flat-rate contributions for ten years at the most. They are, however, to be eligible for the full basic disability benefit during years of non-payment.

By these measures, aggregate pension benefits will be reduced by 20 per cent by 2025. As a result, the contribution rate for the KNH will peak by 2025 at 25.4 per cent, instead of 34.5 per cent anticipated without any reforms (the rate estimated on

the basis of monthly standard earnings). The flat-rate monthly contributions for non-employees will peak by 2021 at 18,500 yen (instead of 26,400 yen) based on 1999 prices.

### **3 Outline of Current Japan's Pension Programs<sup>1)</sup>**

#### **3.1 Public Pensions**

##### ***Old age Benefits***

The present system is based on the 1985 reform. Under the new system, which became effective on 1 April 1986, all sectors of the population receive a common, flat-rate basic benefit. The other five systems for employees provide a supplement on the top of it related to the contributions. Although each system has its own contribution and benefit structure, all systems are similar, operating largely like pay-as-you-go defined-benefit systems.

This section will focus on the KNH (see Takayama, 1998 for more details of Japan's pension system).

The maximum basic benefit is 65,000 yen<sup>2)</sup> per month at 1994 prices. The benefit is indexed automatically each fiscal year (from 1 April) to reflect changes in the consumer price index (CPI) of the previous calendar year. The current maximum basic benefit for 2001 fiscal year is 67,017 yen per month. In principle, benefit payments begin at the age of 65, but there was a special legal provision allowing employees to receive the full amount of the basic benefit from age 60. The tier-1 basic benefits are to be phased out by stages between 2001 and 2013 for men in their early 60s. The phasing out for female employees will be delayed by five years starting in 2006. Eventually nobody under 65 will receive full basic benefits. In exchange, employees between 60 and 64 will become eligible for advance payments at a reduced rate from the basic benefit.

Under the KNH, the accrual rate for the 2nd-tier, earnings-related component of old age benefits is 0.7125 percent per year. Thus, 40-year contributions would earn 28.5 percent of the career average monthly real earnings. The career average monthly earnings are calculated over the employee's entire period of coverage, adjusted by a net wage index factor, and converted to the current net earnings level. These conversions are carried out at least every five years; after each conversion, benefits are indexed automatically every fiscal year to reflect changes in the CPI.

The full earnings-related portion is currently payable from age 60 to an employee who is fully retired. On reaching the age 60, an individual who has not fully retired can receive a reduced pension with the earnings test. The tier-2 earnings-related benefits are to be phased out by stages between 2013 and 2025 for men in their early 60s. The phasing out for female employees will be delayed by five years starting in 2018. In exchange, they will become eligible for advance payments at a reduced rate from the earnings-related benefit.

Under the KNH, equal percentage contributions are required of employees and their employers. The contributions are based on the monthly standard earnings. The total percentage in effect from October 1996 was 17.35 percent.

Since April 1995, contributions have been deducted from bonuses. The rate

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<sup>1)</sup> Takayama (1996, 1998) gives a detailed explanation of the Japan's social security pension system.

<sup>2)</sup> 10,000 yen = US\$ 85.7 = EURO 94.2 = £ 59.4 = DM 182.4 as at 26 February 2001

is 1 percent of the bonuses, with employees and their employers each contributing half this amount. These contributions are not used for benefit calculation purposes.

The total annual cost of the flat-rate basic benefits is shared by all the programs on a fully pay-as-you-go basis. This cost sharing is in proportion to the number of persons covered.

The government covers one-third of the total cost of the flat-rate basic benefits. There is no subsidy for the earnings-related part of the KNH. The government pays administrative expenses, as well.

### ***Disability Benefits***

A disability pension is payable to any disabled person if he or she has contributed to social security for two-thirds or more of the covered period. Japan has a special arrangement for dependent young disabled people, since they are eligible for the disability pension benefit from age 20 if they have become disabled before reaching 20.

The two-tier benefits are provided as disability pensions. The first-tier basic benefit is 65,000 yen per month at 1994 prices. Japan gives the seriously disabled persons a basic disability benefit of 81,250 yen (25 percent up from the normal amount) per month. The earnings-related component of disability pensions is calculated essentially in the same way as old age pensions. There are two differences between the two. One difference is that the covered period for disability pensions is regarded as 30 years if it is less than 30 years. The other is the 25 percent increase in the level of earnings-related disability benefits for seriously disabled persons<sup>3)</sup>.

A medical check for qualifying for disability pensions is usually very strict in Japan and it is believed that there are minimum cases of abuse. The aggregate amount of disability pension benefits was only 4.6 percent of the total sum of the 1996 pension benefits.

### ***Survivor's Benefits***

A surviving child (or children) of less than 18 years old is eligible for the basic survivor's benefit if the dead father has contributed to social security for two-thirds or more of the covered period, or if the dead father has contributed for 25 years or more. If the child's (or children's) mother is alive, the basic survivor's benefit is paid in the name of the surviving widow.

The basic survivor's benefit is 65,000 yen per month at 1994 prices. There are additional basic payments for surviving children; the first and the second child receive 18,700 yen per month each and from the third child he or she receives 6,233 yen per month each at 1994 prices.

The earnings-related survivor's benefit is payable for the dependent spouse, the dependent parents (or dependent grandparents) of age 60 and over, or the dependent child (children) of age less than 18. The normal amount is three-fourths of the old age equivalent benefit. If the covered period is less than 30 years, then it is regarded as 30 years. For the surviving dependent widow aged 35 or over with no child, an additional pension benefit is given between ages from 40 to 65. Its monthly amount is 48,750 yen at 1994 prices.

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<sup>3)</sup> There is another special arrangement for slightly disabled persons who are not eligible for the basic disability pension. They can be eligible for the earnings-related disability pension with a minimum of 48,750 yen per month at 1994 prices (i.e., three-fourths of the normal basic benefits).

Any Japanese are usually eligible for only one pension from old age, disability and survivor's benefits. One exception is that a survivor can receive his or her own basic old age benefit and an earnings-related survivor's benefit. For the surviving spouse aged 65 or over of a dual-earner couple, the earnings-related benefit is the best of the following three options: his or her own old age benefit, three-fourths of the old age benefit for the dead partner, or one half of the combined old age benefits.

### 3.2 Occupational Pensions

Japanese employees receive occupational pensions and/or lump-sum retirement benefits. Currently the coverage of occupational retirement benefits is close to 90 percent, although the coverage of occupational pension plans is about 50 percent. Typical in retirement benefits is a final pay scheme. Both manual and desk workers within each company are covered by the same plan.

The average lump-sum retirement benefits paid to mandated career male retirees were 20 to 24 million yen in large firms and 10 to 13 million yen in smaller firms in 1989. The main purpose for employers to have their occupational pension plans is not to pay annuities, but to accumulate funds under favorable tax treatments. In fact, very often, retiring employees choose lump sum retirement benefits, although their employers have a formal pension plan whose basic form is an annuity.

There are three major schemes for employers to prepare for paying retirement benefits.

- (a) Pay-as-you-go schemes with book reserve accounting (started in 1952, similar to that of Germany). Book reserves are tax deductible within certain limits: namely 20 percent of the benefit liability can be deducted from income tax calculations as a corporate expense. Originally a deduction was permitted on 100 percent of the liability.
- (b) Tax-qualified plans (started in 1962). The plan must be funded outside through a group annuity contract or a trust agreement. The employers' contributions to a tax qualified plan are 100 percent tax deductible as a business expense. A special 1.173 percent corporate tax is levied annually on fund assets<sup>4</sup>. The plan must contain a provision for annuity payments, though a lump sum option is permitted.
- (c) Contracted-out plans (started in 1966) through the Kosei-Nenkin-Kikin (KNK, Employees' Pension Fund). The benefits of the KNK consist of two components: the equivalent benefit of the earnings-related portion of the social security (excluding the benefit resulting from indexing), and the supplementary benefit. The latter is primarily financed by the employer. It can be received in a lump sum at the discretion of the employee, although in principle it should be in the form of a life annuity. The plan must be funded through a trust fund or an insurance contract. The tax treatment of the contracted-out plan is virtually the same as that of the tax qualified plan, except that the KNK does not pay taxes on accrued benefit liabilities equal to 2.7 times the equivalent benefit of the earnings-related portion of the State scheme (with only the undynamized benefit).

Book reserves are not funded outside, but actually have been retained as internal profits, contributing to further investments of the firms. The funded reserve of the tax qualified plans and contracted-out plans has been rapidly growing. It

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<sup>4</sup> This tax has been provisionally suspended since 1999.



contributes to an increase in national savings in Japan. Prefunding has gradually become common since the introduction of the tax-qualified plans and the contracted-out plans. Today, occupational retirement benefits in Japan still remain partially funded. It is mainly the tax advantage that decides how much these benefits are funded.

### 3.3 Personal Pensions

The accumulation of private saving in Japan is among the highest in the world. The distribution of monetary asset holding, however, is very much skewed. Most elderly own small monetary assets. In the past, the role of personal pension plans was not so great. It has been rapidly growing, however. The household coverage of personal pension plans had risen to about 35 percent in 1994.

In April 1991, a special defined-benefit type of personal retirement pension accounts, called the Kokumin-Nenkin-Kikin became available for non-employees and their spouses (aged 20 to 60). A contribution of up to 68,000 yen *per month* per person is now tax-exempt, which is very generous compared with 50,000 yen *per year* (for all) for personal "pension" insurance policy premiums.

## 4 Pension Debate in Japan

Due to demographic and economic changes mentioned earlier in Section 2.2, Japan will probably suffer from difficulties in managing its social security. Followings are the examples of topics in the current pension debate. Are there any solutions for containing the social security pension costs? Are social security pension benefits still too generous?<sup>5)</sup> Is privatization of social security pensions a good idea? Is it possible for Japan to freeze any increases in the contribution rate of social security pensions to avoid further damages to the economy? Should an earmarked consumption-based tax be introduced as a new income source of pension benefits? Is it inevitable to increase the normal pensionable age to 65 or further to 67? Are there any alternatives? How to arrange the pension provisions for women? Should the existing contracting-out option be deleted? This section examines these topics one by one.

### 4.1 Pros and Cons for a Pay-as-you-go Defined Benefit Plan

Japan has a pay-as-you-go defined-benefit (PAYG DB) system for social security pensions. Japanese have once had a successful story of this system when the economy enjoyed a relatively high speed of growth with relatively young populations. It has been effective in reducing poverty among the elderly and also in providing people with a stable living standard after retirement. Further, administrative costs of this system have been quite low, showing quite an efficient system-operation<sup>6)</sup>.

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<sup>5)</sup> In the past, the elderly were one of the largest poverty groups in Japan. Most of the older population suffered from serious economic deprivation; their income was inadequate and inflation further reduced their real income and eroded their savings. The relative status of elderly however, has been changing rapidly. In the past 25 years, dramatic changes in the level of income and wealth for older pensions have resulted in a significant improvement in their general economic status. They are now receiving massive income transfers from the younger generations through public pensions, and the majority are now experiencing no economic suffering (see Figure 4). The majority can even afford to continue to save more, increasing their monetary assets. One may say that the elderly in Japan are currently better off than the young or the middle aged in terms of living conditions (see Figures 5 and 6). Those who face the harshest economic difficulties are not the elderly but the younger people of ages 25-44 with a child or children. Further reforms in income transfer schemes are necessary for a more balanced income between generations.

<sup>6)</sup> See Beattie-McGillvray (1995) for defending the PAYG DB public pension system.

For the past 20 years, however, the PAYG DB plan for public pensions have been facing severe and growing criticisms in Japan. Among others, financial stresses are becoming so severe under a declining rate of economic growth with the population aging. The system is now quite unpopular among younger people.

It becomes quite difficult for Japan to increase the contribution rate for social security pensions. In fiscal 1999, its contribution amounts to 30 trillion yen, while personal income tax is 15.7 trillion yen and corporate income tax is 10.4 trillion yen respectively in the same year (see Figure 7). Hikes in the contribution rate will bitterly damage domestic companies which have been facing the “mega-competition” on a global scale, thereby exerting adverse effects on the economy, inducing a reduced employment rate, lower economic growth, lower saving rates and so on.

Hikes in the contribution rate will induce an incentive compatibility problem, too. The internal rate of return in the public pension system will be quite low or will become negative for the younger cohorts, and younger generations will find that their participation in the public pension system does not pay.

There is another criticism on the current PAYG DB plan. It exerts perverse redistribution. Through a massive transfer of income by public pensions, the rich elderly are becoming richer, while other elderly people still suffer from low income.

Political resistances in cutting the benefits level or in increasing the normal pensionable age have been so intense. Indeed, many people in Japan feel that the government is breaking its promise. There has been a growing distrust against the government commitment.

With a better understanding of the PAYG DB system, however, some of the criticisms may disappear. Moreover, we can rectify some of deficiencies and inequities in the existing system.

We can draw some lessons from the past 20 years experiences in other OECD countries, where they have committed painstaking reforms of social security pensions. The important lessons are as follows.

First, the PAYG DB system has been working not as a pure insurance system but rather as a tax-and-transfer system involving huge amounts of income transfers between generations. It is possibly a problem between managers and trade unions, but mainly is a problem *between generations*.

We have a political difficulty in this sense. Seniors are strong voters while the younger people and future generations currently have weak or no political powers. The interest of future generations is likely to be neglected.

Second, the nature of the intergenerational contract is difficult for many people to understand. Maintaining a fixed rate of replacement in gross income terms is by no means “a contract.” It is found to be quite risky, pushing its costs entirely to actively working generations or future generations.

In a PAYG system, pension benefits don't come from the heaven. Pension benefits for the aged parents are financed mainly by contributions of their children and grandchildren. It is a socialized system of intergenerational transfers between parents and their children. Without a socialized system, ordinary parents and their children would have responded quite flexibly to a changing circumstance. The retired parents are expected to maintain their dignity, while actively working children should be adequately rewarded for their labours. There should be little difference in the design of a PAYG DB social security pension plan and the privately based income

transfers between aged parents and their children. The PAYG DB system should prescribe the rules for satisfying both needs of the aged parents and their children.

The benefits and contributions in PAYG DB plan should be changed flexibly to respond to changing circumstances. As Diamond (1996) explained, it partly comes from the incompleteness of planning for different possible outcomes in the future. Consequently we have found that the replacement rate embedded in the law is not a “promise” in a strict sense, but it is just the “starting place” of an ongoing process of adaptation to a changing and unpredictable world. Everlasting reforms are required to keep the system viable, while they can be viewed as “political risks.” Japan succeeded three times in reducing a part of “earned entitlements” to nil in 1985, 1994 and 1999. These efforts are to continue in the future.

The third lesson is that continued economic growth is definitely in need to maintain the PAYG finance healthy. Were the economy to fail to expand when the share of senior citizens in the population increased, the real after-tax pay of workers would decline. Younger people would despair of achieving a higher standard of living than their parents, and the present level of intergenerational transfers from workers to the retired would become hard to maintain.

In this light, we need to approach the question of funding from the perspective of circumventing constraints on economic growth. We must ask which revenue sources will slow down growth the least. The answer is not a wage tax nor an income tax, but a consumption-based tax. The consumption tax does not function as a direct levy on the saving and investment that powers the economy. In this respect, social security contributions (wage tax) are highly problematic. It will make sense in Japan to fund part of the increased costs of our greying society by raising the rate of consumption-based tax. Current reforms in Spain, Portugal, Switzerland and Germany followed this approach by reducing the contribution rate for public pensions, with increasing the rate of VAT, instead<sup>7)</sup>. Through these reforms, as well, pension burdens will be shared more evenly over the whole life cycle of each person.

#### **4.2 Advantages and Disadvantages of the Funded Defined Contribution Plan**

Due to a reduction of benefit levels in a PAYG DB plan, there has been a move, passive or active, toward a funded scheme of pensions in many OECD countries. A funded DC scheme has a potential advantage over the PAYG DB plan. It is mainly because the rate of return from the financial market could now become much higher than the internal rate of return in PAYG systems, on average.

All economists in Japan agree with the opinion that we should not ignore or make light of the current move toward more prefunding. Partial prefunding by mandating or encouraging private pensions is inevitable. It has due reasons, and is to be accepted.

Obviously the funded DC scheme has some other advantages such as possible increase in the saving rate, possible higher rates of economic growth, understandability or transparency, and flexible response to increasing diversity of a life-course of ours (increasing heterogeneity, increasing freedom to choose a working place, working hours, and working periods, widening choices of no-kids, divorce, and remarriage, etc.). It also encourages people to make responsible for themselves and to support themselves on self-reliance, not allowing to behave irresponsibly to impose

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<sup>7)</sup> The generalized social contribution (the so-called “CSG”) introduced in France can be viewed as the same line of this argument.

cost on others, especially on future generations who have no political influence today.

The funded DC plan will have several difficulties, however. First, the market rate of return is quite volatile in the short-term, as is known as “the NIKKEI effect.” Its differentials are quite large. The rate of return from the financial market will decline with an ongoing population aging, and with ample supply of funded money. It is not inflation-proof.

Consequently the insured people will face the investment risk. The income disparity after retirement will get widened, and the increasing proportion of the elderly will suffer from low income. Some of the current retirees, namely, asset-holders will also have some damages from a possible decline in the market rate of return on their assets.

Second, we have to have relevant regulations on the funded scheme. We can learn something from experiences of the Anglo-Saxon countries. But, so far we have had insufficient knowledge about them. Missing are institutions against investment risks.

Third, there exists an administrative cost problem. Take the Chilean case, for example. Chilean pension funds earned a real rate of return about 11 percent per annum on average between 1981 to 1998, but it went down at 4.2 percent in net terms after deducting administrative costs. If we look at the period after 1990, the real rate return turned minus on average in net terms<sup>8)</sup>. This problem will be quite serious especially for the low-income earners. They are forced to have a relatively low rate of return.

We have other problems here in shifting from a PAYG to a funded system. Among others, a “twice-burden” problem should not be ignored. It is still an open question whether people can politically accept the heavier burdens on the middle-aged generations at the start-up of the transitional period. The Singaporean case is another example. Its contribution rate for pensions still remains at 4 percent. More than 40 years have passed since Singapore introduced the provident fund. It is said that not a few aged people in Singapore still depend on their children to maintain their standard of living<sup>9)</sup>.

Feldstein-Samwick (1998) proposed 2 percent personal retirement accounts (PRA) to combine reduced social security pension benefits in the US, thereby freezing any increases in the contribution rate of social security from current 12.4 percent. Three fourths of equivalent benefits from the PRA are to be reduced from social security benefits. Their idea is to assure old age income security given by the current PAYG DB system at least on the one hand, and to avoid the twice-burden problem by making tax credit for the proposed 2 percent DC plan on the other hand. The essence of Feldstein proposal is a combination of the existing PAYG DB plan with a funded DC plan. Privatization of social security will remain partial.

We have also had an important intellectual innovation from recent reforms in Sweden. The “notional” rate of return is to be introduced in shifting to a PAYG DC plan from a PAYG DB plan. With this shift, we can entirely escape from the “twice-burden” problem. As James(1996) observed, unfunded DC schemes can produce a close transparent relationship between contributions and benefits, thereby

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8) See Bravo, J. (2001) for more details.

9) See Asher-Karunaratne (2001) for more details.

detering evasion and other distortionary behavior, as well. They can eliminate undesirable redistribution within the same cohort of individuals, too. On the other hand, the real level of pension benefits will decrease step by step in the future.

### **4.3 A Diversified Multi-pillar System**

Some emphasized advantages of the PAYG DB plan more than its disadvantages, alerting risks involved in the funded DC plan, while others did the opposite, calling for a “paradigm shift” to a funded scheme. Nonetheless, they all seemed to agree that a diversified multi-pillar system is most advisable. Differences would be in the magnitude of reforms and in the speed of adjustments.

For Japan, increased costs are still required to prevent poverty with securing stable income after retirement. We have no painless solutions for the future. No reforms without tears.

Partial prefunding, mandatory or voluntary, is inevitable<sup>10</sup>. Missing are better instruments to minimize risks involved on the funded system. Missing as well are better understandings in the induced individual behaviors, the macro economic impacts, and the distributional outcomes from increased prefunding.

Different objectives are often competing. Promoting later retirement may induce higher unemployment for younger people. Encouraging occupational and individual pensions can lead to early retirement. Tax smoothing or advance increases in the contribution rate for the long-term sound financing will cause higher unemployment in the short-term. Solutions will be different depending on which objective is more important.

What we want to have is not a society with so small a cradle with so many graves. We are moving to a society of compassion with a harder edge. Time is now not to deliver generous benefits, but rather to manage to share the increased costs. Who shares them and when? How are they shared? These are the imminent questions before us. More specifically, are the costs to be shared by increasing social security contributions? By increasing taxes? By increased individual savings? By later retirement? Or by reducing benefits? Who is to bear basic living costs arising from longer life expectancy? Are there any differences in responding to this question when longer life expectancy is expected in well advance to take place and when unexpected? How much is increased freedom to choose accompanied by self-reliance in old age? How much is the exchange of income resources between generations allowed through a public program? Is there any room for a universal or differential cut of benefits for the elderly? Can it be accepted at once or gradually? What devices (other than cutting benefits) can we have in making part of increased costs shared by current pensioners? What economic differences will come from all of the alternative solutions? The answers will be different individual by individual.

In the end, life is still risky. We have to realize that we cannot eliminate all of risks in our long life completely. But we have been making great efforts to control these risks at a minimum level. I eagerly hope that Japanese will be wise enough to manage them.

### **4.4 Pension Problems for Specific Risk Groups**

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<sup>10</sup>) In a funded public system, the so-called “political risks” in managing the funded reserve will be inevitable. Politicians and bureaucrats often misuse the reserve, with a quite inefficient allocation of the funded money. A typical example is given by the recent performance of the Japanese fiscal investment and loan program. More prefunding, therefore, should be done not in the public, but in the private scheme.

The variety of one's life is getting wider and wider in industrial countries, while the existing social security pension provisions still assume a very simple single-track life course. Studies are in growing need whether the prevailing pension program provides an adequate benefit to atypical persons such as women with a variety of life stages, part-time workers, quasi-employees and those in disadvantaged families. Japan represents one of the most illustrative examples of difficulties that await most of the world in the coming century.

Descriptions given in section III of this paper are just half a story. Japan still has several "coverage", "fairness" and "social adequacy" problems in social security pensions.

This section examines the Japanese scene in this respect. Main concerns are a drop-out problem, a treatment of full-time housewives, those engaging in child care, divorced or remarried persons, part-time employees, temporal or seasonal workers and those engaged in short-term contract jobs. A possible solution for specific risk groups is provided in the Japanese context.

### ***Drop-Out***

The first-tier, basic benefit is not universal, yet. Nearly 100 percent typical employees are currently covered by the social security pension programs, but non-employees are virtually not necessarily covered, though their enrolment is legally mandatory. In 1997, more than 40 percent of independent workers, the self-employed and persons with no occupations dropped out from the basic level of protection, due to exemption (18.6 percent), delinquency in paying contributions (20.4 percent) or non-application (7.7 percent). This drop-out rate (due to exemption or delinquency in paying contributions) was increased from 28 percent in 1990, and will probably hike further with future increases in flat-rate contributions since they intensify a so-called incentive compatibility problem.

In principle, the full basic benefit is payable for a person with 40 years of contributions. Those dropped out in paying contributions will receive a smaller amount of pensions or not at all in old age. They would be most likely to be dependent on means-tested public assistance programs, then. The principal idea for a public pension should have been old age income security without depending on means-tested support. A social insurance system has its own drawbacks in promising old age security to all members of the community<sup>11</sup>. The current legislation of a basic pension is virtually becoming hollow for the non-employed people.

### ***Universal Benefits: Yes or No?***

Many have been proposed in Japan for a change from the current, contribution-based basic benefit to a tax-based one, universal to all residents, to accomplish the long-cherished old age income security.

What tax should be implemented for attaining a universal pension benefit? This is a long disputed topic in Japan. Some advocated an increase in income tax, others advised to introduce an earmarked consumption-based tax, both replacing the current flat-rate contributions and (part of) wage-proportional pension contributions. There will be different impacts on labor supply, savings and income redistribution

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<sup>11</sup>) The administrative cost of the basic flat-rate pension for non-employees in Japan is currently equivalent to about 10% of their aggregate amount of contributions.

between the two funding sources, though public understanding of them still has to be deepened before a political conclusion to come in Japan.

### ***Treating Full-time Housewives***

The most controversial problem in Japan is how to treat full-time housewives in social security. The current public pension system assumes that a full-time housewife is still quite typical. Currently dual-income couples and single women are steadily increasing in number and full-time housewives have turned to be no longer a majority.

Under the current system, dependent wives of employees are automatically entitled to the flat-rate basic benefits, and the wife is not required to make any individual payments to the public pension system. This treatment is often attacked as too generous and unfair by single women and dual-income couples. It can be said, however, that it is quite fair as far as the old age benefits are concerned, since benefits/contribution relations are essentially neutral to couples' combined earnings under the current provisions.

But one can say that the survivor's benefits are unfair between dependent wives and wives of dual-income couples. Both can receive three-fourths of earnings-related old age benefits of their husband. The level of wages and salaries for men with his dependent wife is by and large higher than the level for husbands of dual-income couples. Consequently it is often a case that survivor's benefits are less for wives of dual-income couples, provided the level of their combined earnings was the same.

Either benefits or contributions can be adjusted for the system to get fairer. One idea comes from adjusting from the contribution side, asking the couple with a full-time dependent wife to contribute more. One can proceed further to change the benefit/contribution unit wholly from on the current household basis to on an individual basis, asking the full-time dependent wife to directly contribute to social security. The other idea asks to adjust the system from the benefit side, changing the survivor's benefit to equal three-fourths of earnings-related old age benefits of the couple combined (not of their husband).

The point at issue is whether the principle is purely individualistic or earnings-split. While a purely individualistic principle is simple and understandable to everybody, it has some drawbacks: the survivor's benefit will consequently be abolished and a majority of women would seriously suffer from a decrease in pension benefits after the death of their husband, since the level of salaries for women are still considerably lower than that for men, in general. Besides, the individualistic approach will force the couple with a full-time housewife to contribute more to social security in spite of a downturn of the Japanese economy, which seems not so realistic. A majority of people in Japan are likely to prefer an earnings-split principle, but no conclusions have yet come to.

Others prefer supporting both childbirth and child-rearing not by decreasing pension contributions but by increasing benefits (including childbirth benefits, child benefits and pension benefits for parents) through a special funding from general revenue. This group are regarding the possible amount of the child-support deduction in calculating pension contributions, as remaining quite a minor level. We should have more evidences before reaching a conclusion on this matter.

### ***Other Problems for Women***

Four other problematic points involving pensions for women have also been

raised. First, a full-time housewife who divorces have no right to claim part of the earnings-related benefits her husband accumulated while she was married. It has been suggested that the right to these benefits be divided between the two.

Second, payments of survivor's pensions terminate upon remarriage, but critics say they should continue. The current provision is inducing cohabitation among pensioners without remarriage, causing an inheritance trouble.

Third, critics also find it strange that a spouse who marries after beginning to receive an old age pension becomes entitled to claim a survivor's pension. If a woman is identified as being virtually a spouse of some retired man without formal marriage, she is entitled to claim a survivor's pension. This route is often fictitiously misused.

Fourth, while a fatherless family has the right to a survivor's annuity, a motherless family does not. This, it is said, violates equality of the sexes.

### ***Pensions for Part-time Employees***

Turning now to a debate over providing the pension coverage to part-timers (mostly females), we find that the current system does not directly apply to those who work fewer than 33 hours (or three-fourths of the normal working hours) per week. In principle, these part-timers are treated like full-time homemakers. But if their annual pay exceeds 1,300,000 yen, they lose the right to be treated as a dependent spouse. They then become obligated to participate in the system and are forced to pay the flat-rate pension contributions like non-employed persons.

This arrangement often tends to encourage part-time jobs that pay less than 1,300,000 yen per year. Critics say that this is the main reason for part-timers to remain low-income earners.

One solution will be a reduction in the higher earnings limit of 1,300,000 yen to a negligible level as is the case in the US where any amount of earnings is covered by social security, in principle. Employers, however, are strongly against this kind of change, since they stick to avoid higher handling costs of social security.

The Japanese pension system involves a massive transfer of income from higher earnings groups to lower earnings ones, because the benefits include the flat-rate component (irrespective of earnings levels), while contributions are proportional to earnings. A reduction in the higher earnings limit for part-timers will intensify this transfer element. This is a second reason for employers to oppose to that reduction.

The element of income transfers above mentioned can be partly diminished, however, if the flat-rate pension benefit be changed into a universal benefit financed by an earmarked consumption-based tax. The handling cost involved in social security for employers can be decreased by integrating social security administration offices with inland revenue offices. Both are currently separated due to bureaucratic sectionalism.

If these two reforms are made, employers will no more oppose to a reduction in the higher earnings limit for part-timers. In turn, they may begin to lower their demand price (rates of wages) for part-time workers, since the non-wage costs including their share of social security contributions will get fairly increased upon that reduction.



### ***Increasing Quasi-Employees in Number***

The Japanese economy is now in recession. Employers are currently trying to slim down the number of their core employees. There commonly happen outplacement, replacement of work by a contract job with man-power service companies outside, and increasing dependence on part-time, temporary, and seasonal workers.

The social security coverage of earnings-related pension benefits is currently decreasing, since the existing system only covers the core members of employees. Non-covered are temporary staffs with labor contracts of no more than two months, seasonal employees with no more than continuing four months or those engaged in contract jobs with no more than six months, in addition to part-timers as stated above. These labor contracts are often made fictitiously to evade paying social security contributions, in conspiracy with their employees who want to have a higher take-home pay on the spot. Critics say that the second-tier pension provision is beginning to become reduced to mere form.

There arises the essentially same problem as part-timers when we want to expand the coverage of earnings-related pension benefits to these non-core employees. The two drastic reforms as mentioned above will then be required.

In addition, extending the social security coverage to atypical employees including those engaged in multi-jobs, requires an integrated single social security number to each person, which has already been introduced in Japan.

### ***Short-term Foreign Employees***

The social security pension system covers both Japanese and non-Japanese employees in Japan. Short-term foreign employees can recoup their contributions in a lump sum, subject to a maximum of three years' contributions. For a repayment, at least six months' participation is required.

## **5 Containing the Increasing Cost of Social Security Pensions**

The officials of the Japanese government still believe that step-by-step increases in social security pension contributions have to be done in the future for the system to become sustainable. They have been ignoring the adverse effect of the payroll tax. As depicted in Figure 7, however, the social security pension contributions (payroll taxes) have become the No.1 income source for the central government. Employees and their employers will continue to strongly resist to any increases in payroll taxes.

This section will propose a set of policy options to freeze the contribution rate of social security pensions at the current 17.35 percentage point or below its level.

### **5.1 Partial Funding Shift from Wage-Based Contributions to an Ear-Marked Consumption-Based Tax**

The first-tier, flat-rate basic benefit is currently financed partly by general revenue. The share of general revenue is currently one third. The remaining two-thirds are financed by contributions.

For self-employed and jobless persons together with those of no-occupation, the flat-rate contributions are levied for basic pensions. They are virtually poll taxes. The current dropout rate is over 40 percent and a cherished dream for a universal pension is getting far- and far-reaching. For employed persons, 17.35 percentage

contributions are currently levied for basic and earnings-related pensions. They are virtually wage taxes, doing harms to employees as well as their employers.

A universal pension can be attained by financing basic pensions not through contributions but through taxes. One alternative is an earmarked consumption-based tax. Earmarking will be required for a majority of people to accept its introduction as plausible. A consumption-based tax is less harmful than a wage tax, with spreading pension burdens to entire life stages. In the short-term, the funding shift will enable the contribution rate to decrease. It could be pulled down by 4.0 percentage point in 1998, with an introduction of the earmarked consumption-based tax (its tax rate: 3.3 percentage point). The monthly flat-rate contributions (13,300 yen per person) for non-employees might be entirely replaced by the above consumption-based tax. Through this change, almost all enrollees would lessen their pension burdens in net terms, while pensioners would be forced to begin to bear some part of pension burdens.

The rate of consumption-based tax for basic pensions is estimated to be 5.9 percentage point in 2025. It substantially decreases the contributions.

## **5.2 Introducing an Earnings-Test for Those Aged 65-69**

Currently, the earnings-test is applied for those employees aged 60-64, but workers aged 65-69 enjoy full social security pension benefits even if they earn considerably high income. Another earnings-test is to be applied to these workers aged 65-69 from fiscal 2002.

## **5.3 Changing Benefit-Increases from Wage-Indexation to CPI-Indexation**

Social security pension benefits, once received, are currently wage-indexed in net terms in Japan. They can be CPI-indexed, however. Benefit indexation is quite crucial for public pensions, but if wage-indexation is found to be too expensive and harmful to actively working generations, CPI-indexation will be an alternative. The UK, the US, France and many other countries are currently adopting CPI-indexation. Germany and Japan are major countries with wage-indexation.

Changing benefit increases from wage-indexation to CPI-indexation will be estimated to decrease aggregate pension costs for social security by 11 percent by 2025. This change has been implemented by the 1999 pension reform.

## **5.4 Extending the Contribution Period for Full Benefits from 40 to 45 Years**

In the current legislation, the normal contribution period for full benefits is assumed to be 40 years. It can be extended to 45 years.

According to the latest population projections, the life expectancy at age 65 will get longer. In 1995, it was 16.48 years for men and 20.94 years for women. In 2025, it is estimated to be 18.21 years for men and 23.15 years for women. A little more than 10 percent increases will be expected. Consequently, the period for receiving pension benefits would get longer in the future.

One can say that the contribution period should be extended proportionately for the pension system to be sustainable. The idea is that the contribution period for full pensions has to be changed step by step from 40 to 45 years. Note that this change will virtually pull down the benefit level in real terms for late comers into the labor market, while preserving the normal pensionable age. This change can save the

aggregate pension costs by about 10 percent in 2025<sup>12)</sup>.

Combined with a funding shift to a consumption based-tax, together with other measures listed above, this can decrease the contribution rate of social security pensions to 17.35 percentage point in 2025. Through these measures, we can freeze any further increases in the contribution rate (see Figure 8).

## 6 Promoting Private Initiatives: A Proposal of 4 Percent PRA

Overly generous public pension benefits in Japan should be further reduced, while the contribution rate can be frozen forever at the current level or be reduced through a partial shift of funding to a consumption-based tax. At the same time, we should encourage private initiatives including a private, personal saving account for retirement, through the use of powerful tax-incentives. Recently, discussions on a Japanese version of the 401k are in fever. It will become effective very soon.

How about creating personal retirement accounts (PRA) in which each individual would deposit 4 percent of monthly earnings from 2000?<sup>13)</sup> In examining the PRA effect, we assume that the expected rate of return on investment is 4 percent per annum and that the increases in CPI and wages are 1.5 percent and 2.5 percent per annum, respectively. All these figures are in nominal terms. Administrative costs will be assumed to amount to 1 percent of the funded reserve each year, and consequently the net rate of return on investment will be just 3 percent annually. The PRA contributions are assumed to be tax-deductible and no tax is levied on the earned income during accumulation. The participation will be from age 25. The contribution to the PRA will continue to age 65. At age 65, the PRA is converted to buy a constant benefit of lifetime annuity. It is payable from age 65<sup>14)</sup>.

Then, the combined benefits with a slightly slimmed-down social security pensions which follow reforms just explained in Section V, will enable the standard of living after retirement to stabilize at or even increase from the current level (see Figure 9).

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12) Compare an extension of the contributing period with increasing the normal retirement age. The latter will damage those with shorter schooling experience, coming earlier to the labor market. They are likely to be burnt out or to have a sense of fulfillment after 40 or 45 years working experience. Most of them are weary and ready for retirement by the time of age 60.

Increasing the normal retirement age will considerably reduce the labor demand for those in their early sixties, since advance payments with the earnings-test (which virtually mean "wage subsidies") will be decreased, then. With combined effects of the increased labor supply, the market wage rate for them will eventually go down.

13) Why 4 percent? It is assumed that the partial funding shift to an earmarked consumption-based tax will be introduced at the same time. Then 4 percentage points decreases in public pension contributions will follow. The combined net burden for the current, actively working generations will not increase, since the PRA is expected to induce a massive substitution effect on private savings. The twice-burden problem can be avoided, then. The philosophy behind this proposal seems to be basically the same as that of Feldstein-Samwick (1998).

14) The assumptions of the PRA are of the present author's. They are slightly different from the government proposal of Japan's version of the 401(k). For more details, see Takayama (2000), which can be also available at <http://www.ier.hit-u.ac.jp/~takayama/index.html>.

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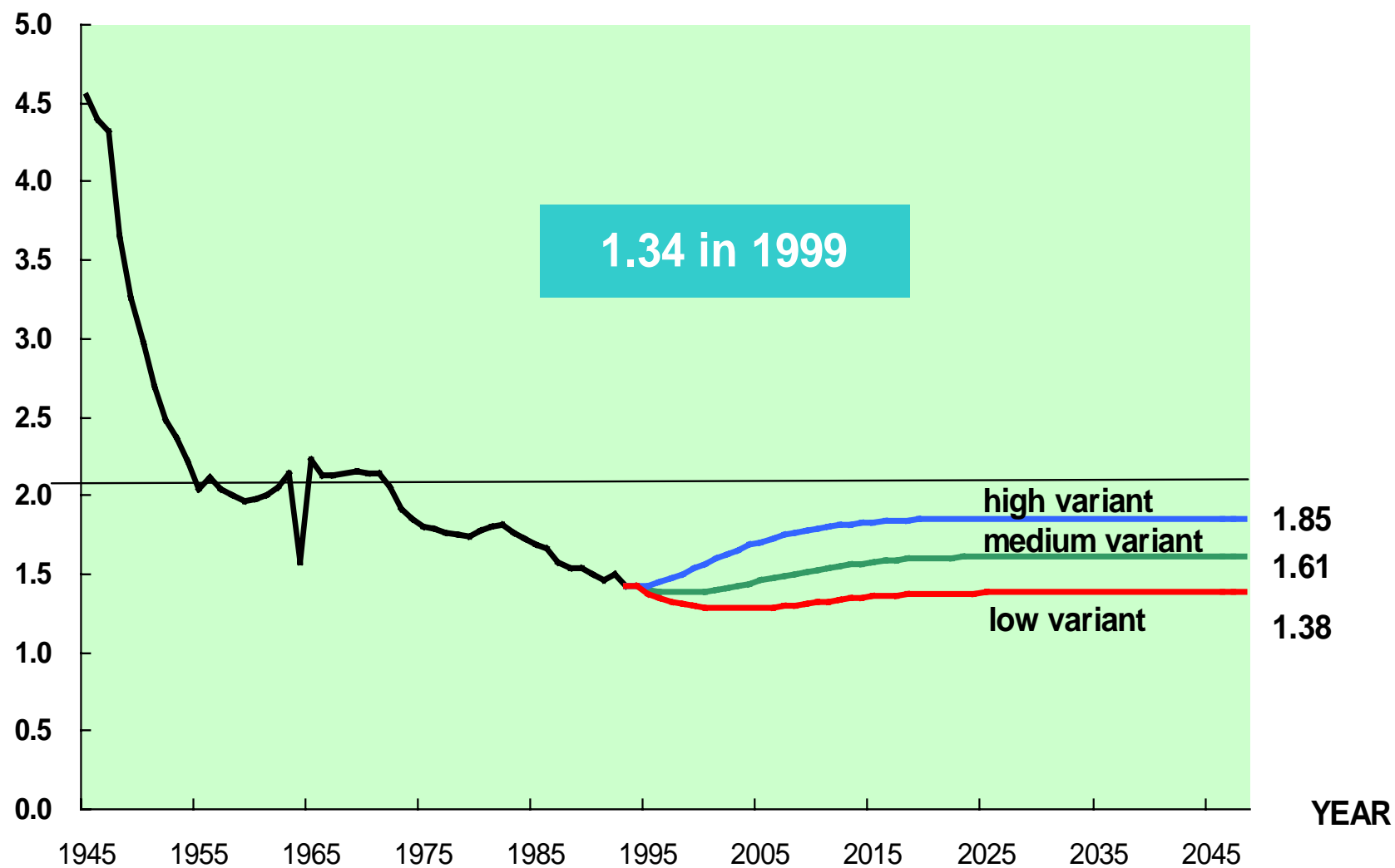
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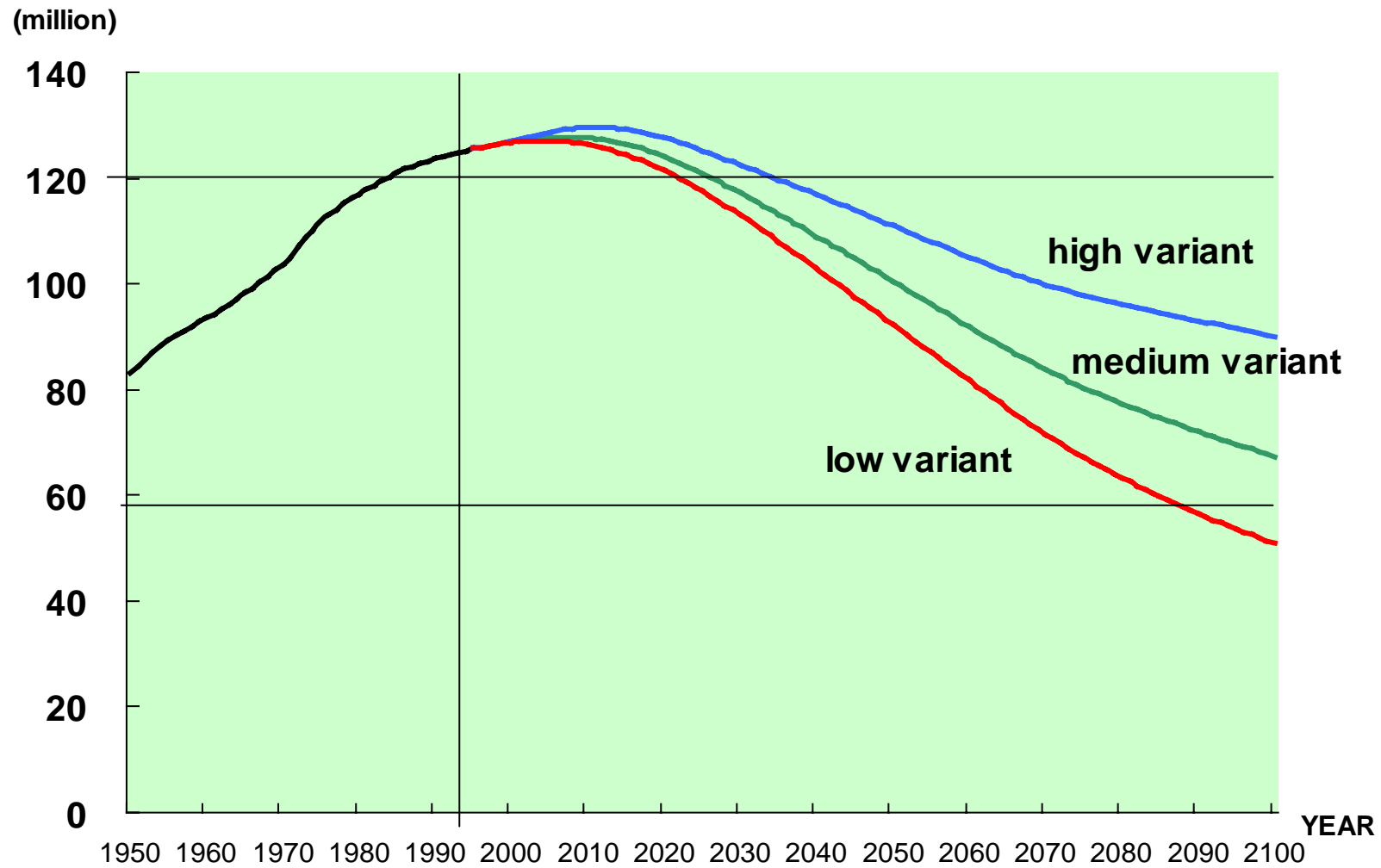
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**Figure 1**      **Trend in the Total Fertility Rate of Japan**



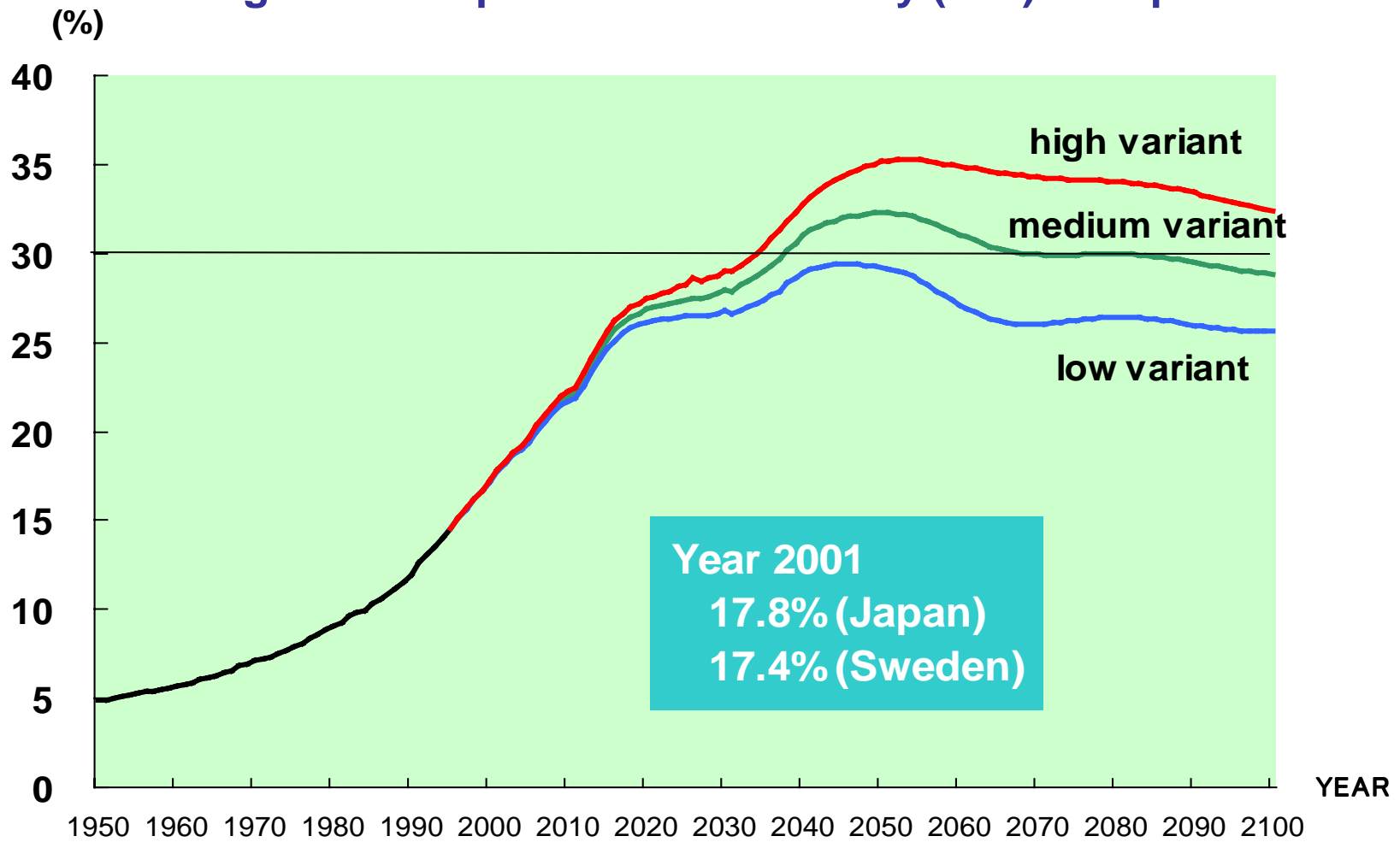
Source: National Institute of Population and Social Security Research (1997), *Population Projections for Japan: 1996-2100*.

## Figure 2 Actual and Projected Populations of Japan



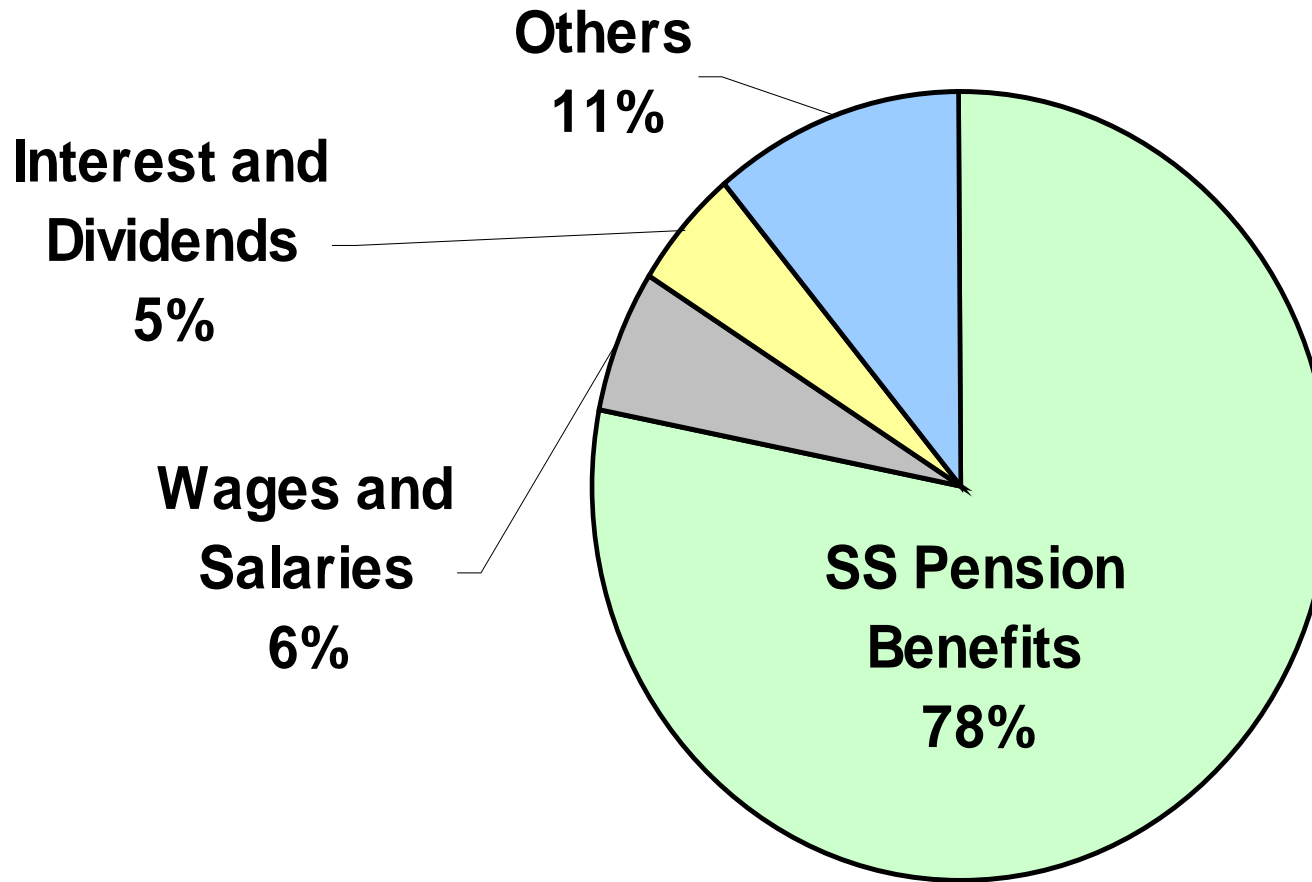
Source: National Institute of Population and Social Security Research (1997), *Population Projections for Japan: 1996-2100*

**Figure 3 Proportion of the Elderly (+65) in Japan**



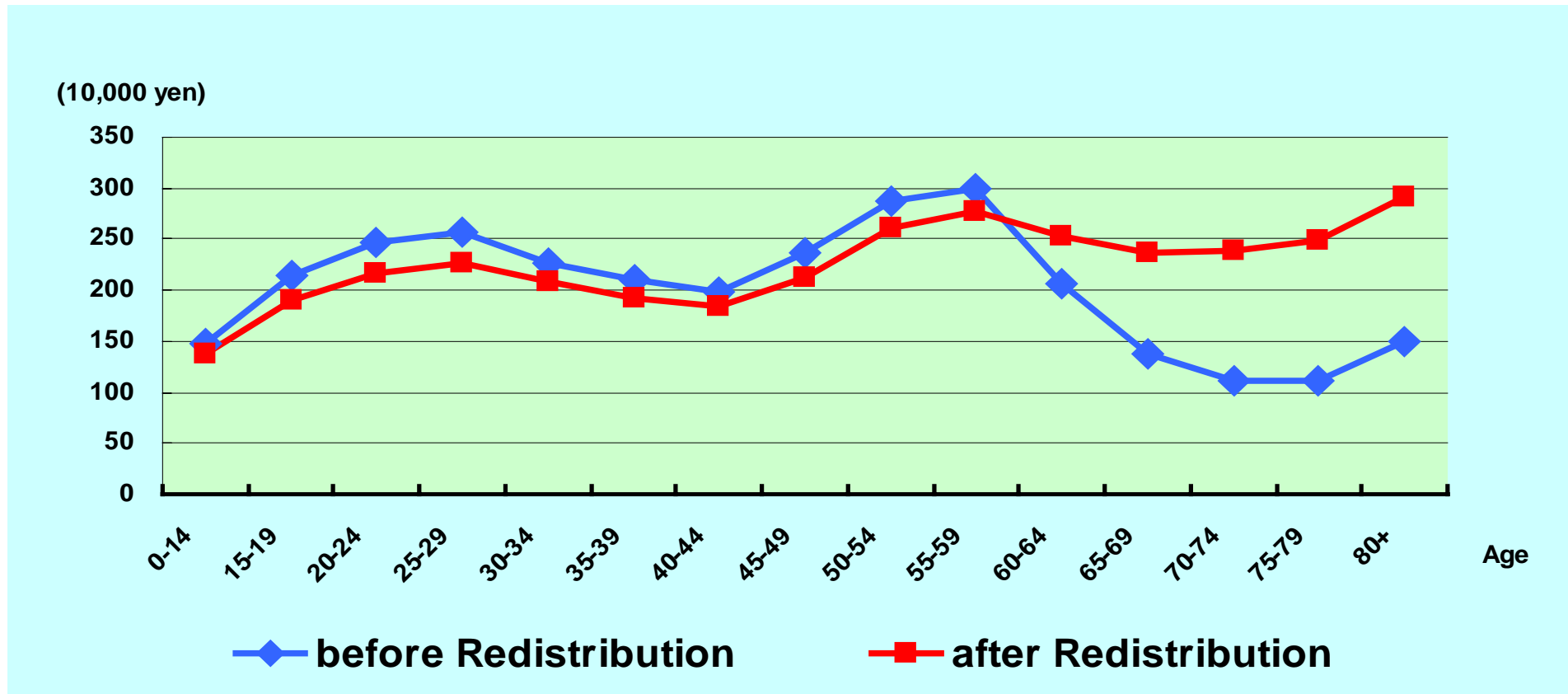
Source: National Institute of Population and Social Security Research (1997), *Population Projections for Japan: 1996-2100*

**Figure 4 SS pension benefits are the major source of retirement income**



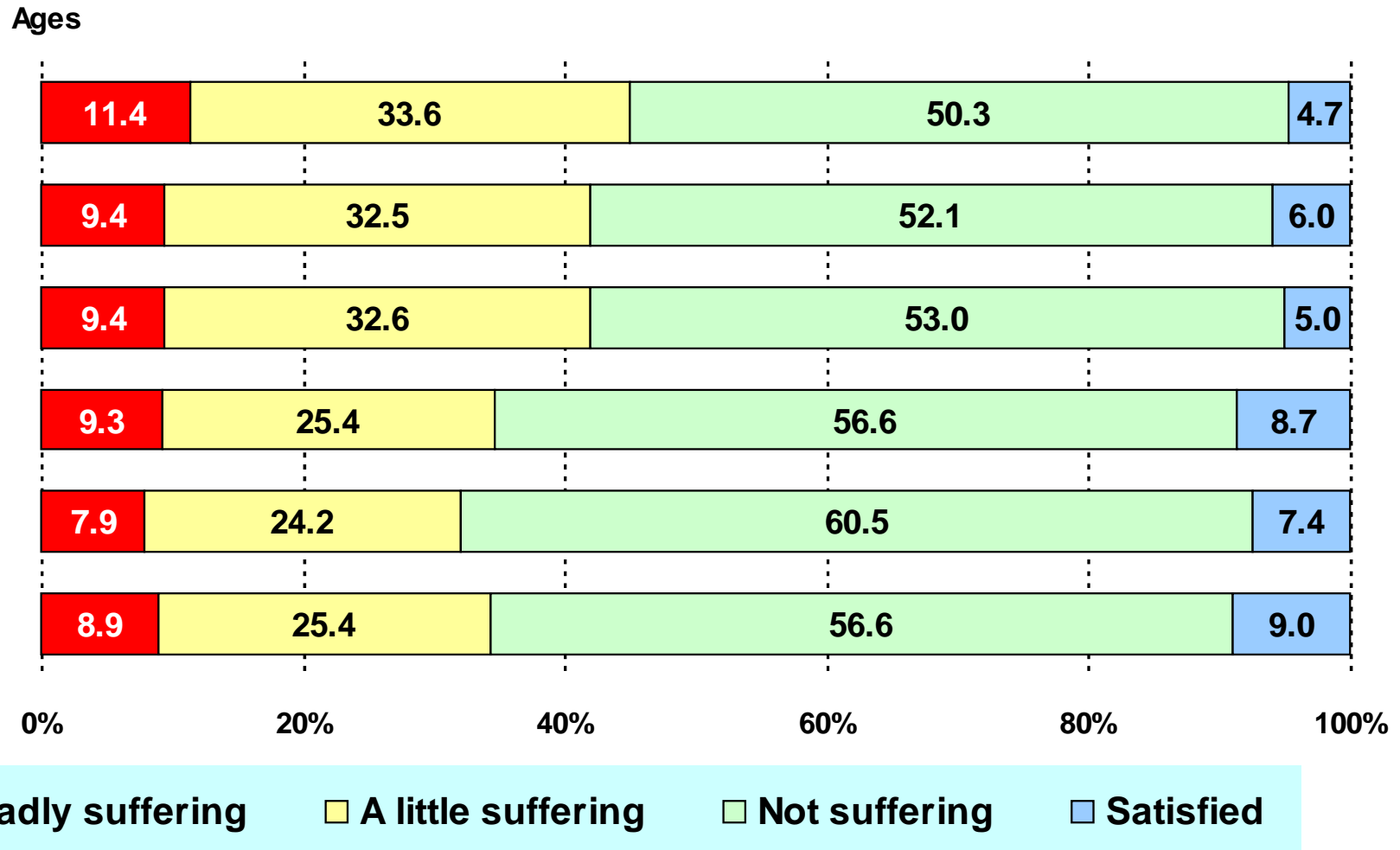


# Figure 5 Per-capita Income by Age in Japan



Source: Ministry of Health and Welfare, *The 1996 Income Redistribution Survey*

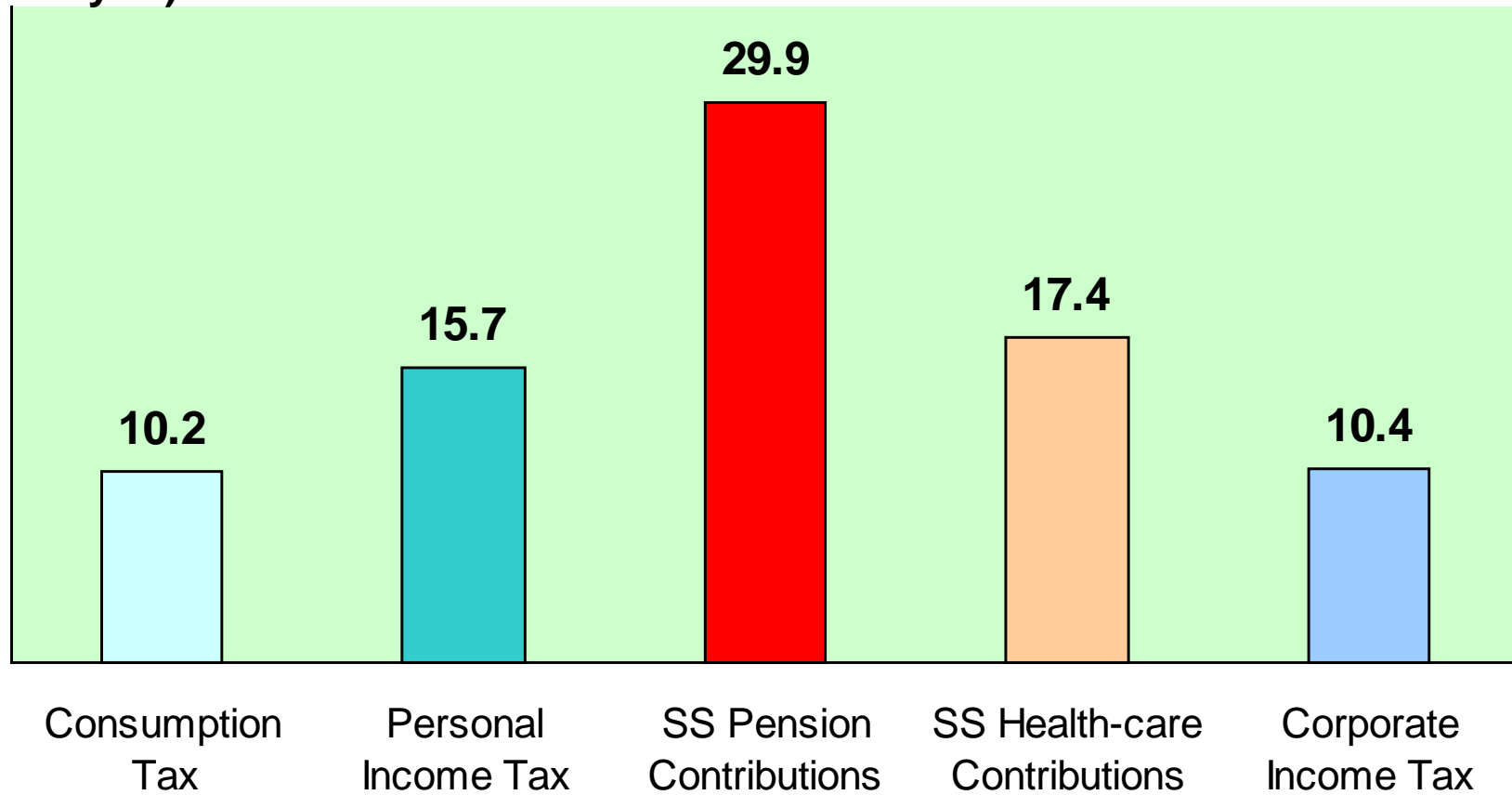
# Figure 6 The elderly of Japan feel better off than the young in living conditions



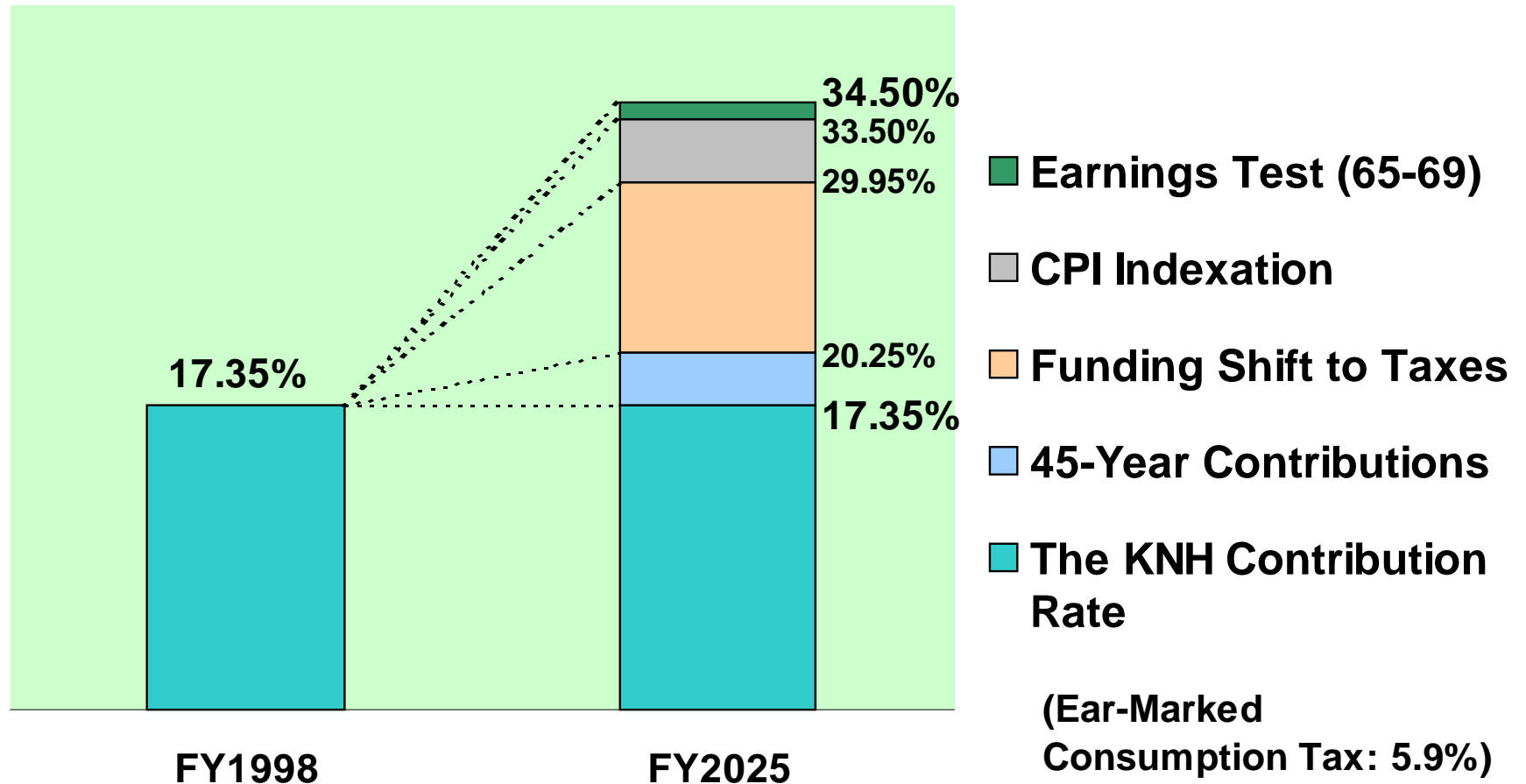
Source: Ministry of Health and Welfare, *The 1991 Basic Survey on Japanese Living Conditions*

**Figure 7 Main Income Sources of Japan's  
Central Government  
(Fiscal Year 1999)**

(trillion yen)



## Figure 8 Future Contribution Rates by Alternative Policy Options



**Figure 9 Replacement Rates Combined by Cohorts**

