Sustainability of the Pension Systems and the Role of Private Pensions*

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Abstract

In Japan, where the population is aging and the birthrate is declining, the pension replacement rate of public pension system is scheduled to be reduced by “macroeconomic slide.” Thus the role of the private pension system increases, and the sustainability of the private pension system itself becomes more important. Although defined contribution (DC) plans, a kind of private pension, have been steadily spreading since their introduction in 2001, they still have issues that need to be addressed. The DC contribution limit should be fundamentally revised in a way that allows individuals to enjoy equal opportunities to contribute regardless of their work style or workplace pension system. From the perspective of tax theory and finance, the transition of the private pension tax system to the “EET type” is also an important issue. In addition, it is important that more individuals participate in the DC plan and make effective use of it. Drastic measures such as an automatic enrollment system may be worth considering for further expansion. Moreover, it should be kept in mind that the management and administration of the DC plan are carried out by private sector companies and thus they must be sustainable as a business.

Keywords: defined contribution plan, private pension, pension tax system, sustainability of pension system, adequacy of pension system, DC plan administrator
JEL Classification: H24, J26, J32, K34

I. Introduction

Traditionally, the public pension, typically with a pay-as-you-go feature, has played the central role of a nation’s pension system, and the financing of the social security system including public pension, is generally discussed as part of the national government finance. In Japan, the public pension is basically financed by the social insurance premium, and thus pension benefits are calculated based on premiums paid. If the social insurance method is applied thoroughly, the funding issue of the special account for the public pension can be separated from that of the general account of the national government. But in reality, the social insurance premium alone cannot cover the public pension benefit payment and fund transfer from the general account is needed. Specifically, one-half of the national pension

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(basic pension) benefits are funded by the transfer from the general account[1]. Social security-related expenditures already have a significant presence in general account expenditures: in the 2021 budget, social security-related expenditures accounted for 35.8 trillion yen, or one-third of the 106.6 trillion yen expenditures. Of this, public pensions accounted for 12.7 trillion yen, 35% of social security benefit-related expenses, and 12% of general account expenditures.

Thus, the sustainability of national government finance and the sustainability of the public pension system are inseparable[2]. And it goes without saying that the sustainability of the public pension system is extremely important. In Japan, where the birthrate is falling and the population is aging, the 2004 public pension reform introduced a benefit control measure called "macroeconomic slide" in order to increase its sustainability. The aim, in short, was to increase the sustainability of the system by reducing the adequacy of pension benefits. However, the purpose of the pension system is to help people secure income in their old age. Even if the public pension system is successfully sustained by macroeconomic slide, the significance of the system may be undermined if the adequacy of pension benefits keeps receding. Therefore, the importance of private pensions, which complement public pensions and increase the adequacy, increases. As the role of private pensions goes beyond providing supplementary benefits and more people secure their retirement income through both public and private pensions, the sustainability of private pensions themselves becomes ever more important.

This paper assumes that the sustainability of public pensions is secured by the 2004 reform and focuses on the sustainability of private pensions. It discusses factors needed for their sustainability, challenges they face and possible revisions. Such discussion will enable us to consider the sustainability of the entire pension system including both public and private pensions.

II. Sustainability of Pension System

II-1. Evaluation Criteria and Sustainability of Pension Plans

Elements for the sustainability of the pension system are discussed below.

The concept of pension systems released by the World Bank in 1994[3] consisted of three

[1] A proposal to fully fund the national pension (basic pension) with the consumption tax and shift a portion of the public pension to a funded system was mentioned by candidate Taro Kono during the policy debate in the September 2021 Liberal Democratic Party presidential election. This idea was formerly included in a proposal made by bipartisan lawmakers including Mr. Kono himself in December 2008. See Aso (2013) for an economic analysis of the introduction of the funded system to public pensions. Aso (2013) also points out that social insurance premiums (taxes on wages) and taxes on consumption are a matter of the difference in the timing of payments and are equivalent in a lifetime (changing the source of funds to the consumption tax is not an essential solution to the problem).

[2] Domar condition is often applied as stabilization conditions for fiscal sustainability. However, Yoshino and Miyamoto (2021) pointed out that the Domar condition focuses only on the supply of government bonds and does not consider the demand side, and they derived a fiscal stabilization condition that replaced the Domar condition by constructing a model in which the interest rate and purchase amount of government bonds are determined from the supply and demand.

[3] World Bank Group (1994)

Table 1: Five Pillars of Pension Plans

Pillar 0	・ Non-contributory, universal coverage ・ Provide basic pension or social assistance
Pillar 1	・ Mandatory participation ・ Public pension plan, publicly managed (DB or notional DC)
Pillar 2	・ Mandatory participation ・ Occupational or personal pension plans ・ Fully funded DB or fully funded DC
Pillar 3	・ Voluntary participation ・ Occupational or personal pension plans ・ Fully funded DB or fully funded DC
Pillar 4	・ Access to informal support (family), other formal social programs (healthcare) ・ Other individual financial and nonfinancial assets (home ownership)

Source: Nomura Institute of Capital Markets Research, based on Holzmann and Hinz (2005), pp.80-83.

pillars in the form of public pension, occupational pension plans and personal savings plans. Later in 2005 and 2008, the World Bank released a concept that classified the pension system into five pillars from Pillar 0 to Pillar 4 (Table 1)[4]. A multi-pillar approach combining those pillars according to the situation of each country is considered desirable. Pillars 0 and 1 are often provided by government programs or public pensions and Pillars 2 and 3 can be provided through private pensions.

The appropriate combination varies from country to country, but the main evaluation criteria for pension systems are adequacy, affordability, sustainability, equity, predictability, and robustness (Table 2)[5]. Also, secondary evaluation criteria include contribution to growth, minimizing distortions in the labor market, and contribution to increased savings. Pillars 2 and 3 have a clear linkage between contributions, investment performance and benefits and could contribute to the development of the financial markets. It can also lead to the improvement of individual financial literacy.

The Mercer CFA Institute Global Pension Index is also helpful to see what information can be referenced in pension sustainability assessments[6]. The index can be used for comparing pension systems in countries around the world and has been available since 2009. It sets 3 sub-indices for adequacy, sustainability and integrity, and gives a weight of 40% for adequacy, 35% for sustainability and 25% for integrity to calculate the overall index. The indicators included in each sub-index is as follows.

- Adequacy: benefits, system design, savings, government support, home ownership,

[4] Holzmann and Hinz (2005)
[5] Holzmann et al. (2008)
[6] Mercer (2020). It is co-developed by Mercer and the Monash Centre for Financial Studies and sponsored by the CFA Institute since 2020. It covers pension systems in 37 countries and covers more than 64% of the world's population. The scores ranged from 40.8 in Thailand to 82.6 in the Netherlands. Japan had the index value of 48.5 and a grade of D. D is described as "a system that has some desirable features, but also has major weakness and/or omissions that need to be addressed. Without these improvements, its efficacy and sustainability are in doubt."

Table 2: Evaluation Criteria of Pension Plans

Adequacy	・ Provides benefits sufficient to prevent old age poverty at a country-specific absolute level to the full breadth of the population ・ Provide a reliable means to smooth lifetime consumption for the vast majority of the population
Affordability	・ System within the financing capacity of individuals and the society ・ System that does not unduly displace other social or economic imperatives or have untenable fiscal consequences
Sustainability	・ Financially sound and can be maintained over a foreseeable horizon under a broad set of reasonable assumptions
Equity	・ Provides the income redistribution from the lifetime rich to the lifetime poor consistent with the societal preferences in a way that does not tax the rest of the society external to the system ・ Provides the same benefit for the same contribution
Predictability	・ Benefit formula is specified by law and not subject to the discretion of policymakers or administrators ・ DB formula is designed to insulate individuals from inflation, DC investment policy can insulate the beneficiary from material effects from asset price adjustments ・ Benefit is automatically indexed during retirement
Robustness	・ System has the capacity to withstand major shocks coming from economic, demographic and political volatility

Source: Nomura Institute of Capital Markets Research, based on Holzmann, Hinz and Dorfman (2008), p.8.

growth assets
- Sustainability: pension coverage, total assets, demography, public expenditure, government debt, economic growth
- Integrity: regulation, governance, protection, communication, operating costs

The sustainability sub-index reflects various factors that affect the sustainability of pension plans. Although some elements such as the old age dependency ratio and population aging cannot be easily changed, such elements as the age at which pension benefit payments begins, opportunities for phased retirement, and the labor participation rate of the elderly can be influenced by government policy. In addition, the level of advanced funding is particularly important when the ratio of active workers is declining. The pension contribution rate, the level of pension assets and the coverage of private pension plans are reflected. Long-term real growth rates are also important because they affect long-term employment, savings rates and investment returns. Given the key role of public pensions in various countries, the level of government debt and public pension expenditure are also considered to be an important factor.

This paper discusses the sustainability (stable existence) of private pensions in Japan. Although examining the sustainability of the public pension system is an important subject of research, the official public pension funding review is conducted once every 5 years for that purpose. If the “macroeconomic slide” introduced by the 2004 public pension reform

ultimately succeeds, the public pension system is regarded as sustainable.

On the other hand, if the macroeconomic slide is successful, the real value of public pension benefits to individuals (households) will steadily decline over the adjustment period. Thus, from an individual's point of view, having the macroeconomic slide succeed and the public pension system sustainable is not sufficient. Even if the system is sustainable, the fundamental purpose of the pension system is not achieved unless the old age income of individuals is secured. Private pensions can complement public pensions. Therefore, only when private pensions are fully utilized by people and are sustainable can we say that the Japanese pension system is truly functioning.

II-2. Focus on Private Pensions and Defined Contribution (DC) Plans

There are two types of private pensions, defined benefit (DB) plans and defined contribution (DC) plans. This paper focuses on DC plans. A shift from DB to DC is observed worldwide with some differences in degree and features. OECD (2019) notes the following long-term trends in pension reform[7]:

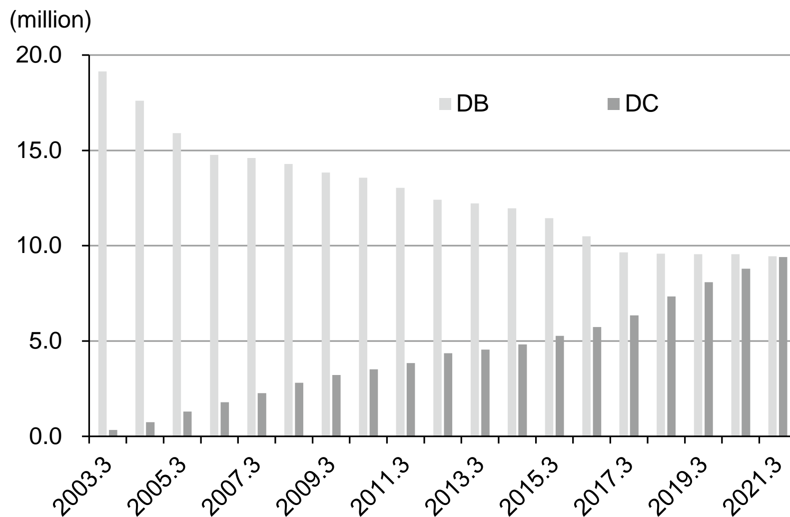
- OECD countries have implemented reforms over the past 50 years to improve the financial sustainability of pension systems in the face of an aging population. Some reforms changed the nature of the system, while others changed parameters. These include making pensions individual-based or strengthening the link with income. Generational differences in entitlements and benefit levels may occur.
- OECD countries established and expanded pay-as-you-go DB plans in the 20th century. The rapid population growth and rapid economic growth at that time enhanced the pay-as-you-go internal rate of return. The benefits were also attractive because they were available to seniors who did not contribute. At the same time, funded occupational DB pensions expanded in many countries. Since the 1980s, there has been a shift from the pay-as-you-go DB plans to private pensions, pre-funding and DC plans, with the population aging. Some countries have chosen to shift to a Notional DC (NDC).
- The mechanism to adjust pension system parameters automatically based on changes in relevant indicators (e.g., life expectancy, other demographic-related indicators, and reserve balance) has been introduced in many countries. Half of the OECD countries have automatic adjustment mechanisms. They include funded DC, NDC, benefit adjustments based on life expectancy, and benefit adjustments based on fiscal balance, demographics, and wage-related ratios.
- Reforms have resulted in lower average pension replacement rates. While there is a 1% drop for retirees today (born in 1956) compared to those born in 1940, individuals who begin working today (born in 1996) are affected significantly by the changes, with an average decline of 5.8% compared to those born in 1940 (OECD aver-

[7] OECD (2019), pp. 37-45

age).

In the Japanese private pension system, a shift from DB to DC has also been observed, especially in the number of participants. While the number of DB participants has been decreasing and leveling off, the number of DC participants has continued to increase since the introduction of the DC in 2001. Until the 1990s, there were 2 types of DB plans in Japan: Employees' Pension Funds and Tax Qualified Pension Plans. The Defined Contribution Pension Law of 2001 introduced the corporate DC plan and individual DC plan (now called iDeCo). The Defined Benefit Corporate Pension Law was also enacted[8]. As shown in Fig. 1, the number of DB participants decreased, and the number of DC participants increased in the 2000s. As of March 2021, there were 7.50 million corporate DC participants, 1.94 million iDeCo participants and 9.46 million DB participants[9].

Figure 1: Number of participants in private pensions



Note: Participants in more than one plans are not adjusted.
Source: Nomura Institute of Capital Markets Research, based on Ministry of Health, Labour and Welfare Pension Bureau, "Implementation Status of Defined Contribution Pensions as of March 31, 2021," and Trust Companies Association of Japan, "Overview of Corporate Pension (Defined Benefit Type) as of March 31, 2021."

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[8] Tax Qualified Pension Plans were abolished in 2012. Employees' Pension Funds were revised in 2013 to stop new establishment and promote transfer to other types of pension plans or termination.

[9] Ministry of Health, Labour and Welfare Pension Bureau, "Implementation Status of Defined Contribution Pensions as of March 31, 2021," and Trust Companies Association of Japan, "Overview of Corporate Pension (Defined Benefit Type) as of March 31, 2021."

II-3. Issues for the Sustainability of Private Pensions

II-3-1. Economic Analysis of the Transition to Funded DC Plans

Economic analyses of the shift of pension systems from pay-as-you-go DB to funded DC have been conducted by Feldstein and Liebman (2002), Campbell and Feldstein (2001), and others. From the late 1990s to the early 2000s, when these studies were compiled, there was active discussion in the United States on a system reform plan to shift part of the Social Security system to a funded DC system and privatize it in order to strengthen its finances. Feldstein and Liebman (2002) also discussed the transition from pay-as-you-go DB public pensions to funded DC private pensions and its implications in many countries[10]. In the first place, while it is difficult to identify external diseconomies that would justify government intervention in the old-age income security (i.e., providing public pension), typical arguments point out that (1) paternalism against individual myopia, (2) prevention of free riding on the welfare system, and (3) income redistribution based on lifetime income as the benefit of such intervention. Many countries have adopted a traditional pay-as-you-go DB, but have shifted to a system closer to funded private pensions and DC plans. The basic motivation is to provide a higher standard of living for both working and retired generations with a lower contribution rate with the help of the cumulative return on investment of national savings. When investment-based social security programs are considered from an economic point of view, they are similar to the private DC plans, except that the government mandates contributions. The impact on national savings is determined by household and government responses. The net effect will be zero if individuals are rational life-cycle savers, while national savings will rise in a world where some individuals are shortsighted and do not save. Even the critics of investment-based social security acknowledge that savings improvement may be possible. One of the advantages of the individual account system is that it reduces the potential risk of the assets being used to fund increases in government spending or tax cuts. Some argue that the individual account system brings innovation in products, management and services, and that it also fosters a sense of ownership over account assets.

In the 2000s, with the advance of longevity and the shift to DC, studies on income security after retirement became active. Clark and Mitchell ed. (2005) and its sequel, Mitchell and Shea ed. (2016), pointed out the need for a paradigm shift in the pension system in response to changes such as an aging population, an increase in life expectancy, a decline in labor force growth rate and changes in employment practices[11]. They pointed out that the following four factors will be important for the construction of the pension system paradigm in the next 30 years: (1) trust in pension regulations, (2) the importance of striking a moderate balance between policy objectives concerning the tax policy and labor policy, (3) the importance of recognizing that different constituencies have different expectations for pen-

[10] Feldstein and Liebman (2002)
[11] Clark and Mitchell (2005)

sions, and (4) the need for retirement policy champions and political leadership[12].

These elements can be applicable regardless of country or region. In addition, although there are two different paths, one being replacing a portion of the public pension with the pay-as-you-go DB feature with a private DC feature (privatization of the public pension), and the other being expanding the private DC plans as a supplementary system with reduction in the role of pay-as-you-go public DB pension, the final form of pension systems will likely have many features in common.

II-3-2. Economic Analysis of Taxation on Savings

Mirrlees Review, an analysis of the tax system in the open economy of the 21st century, covered how savings should be taxed. A private pension is a savings with the purpose of securing income in old age. Therefore, the theory of the private pension tax system can be regarded as part of the theory of the tax system for savings.

Based on Mirrlees et al. (2011), major issues can be summarized as follows[13].

The comprehensive income tax covers all income as the tax base, including labor income and income from savings such as interest and dividends, and they are equally treated as taxable. On the other hand, income from savings is not taxed until it is spent or consumed under the expenditure tax or consumption tax regime. A crucial difference between these two tax theories is the way in which savings are taxed. This is also an important point in ensuring fairness in taxation for individuals with different annual income patterns but the same lifetime income.

Based on the perspective of tax neutrality, the treatment of savings in the comprehensive income tax is problematic. Income from savings can be broken down into normal returns, which are the difference between current and future consumption, and excess returns arising from additional risk-taking, etc. Taxation on the former creates a situation in which current consumption is more favorable than future consumption. That is, it undermines the neutrality of taxes with respect to intertemporal consumption. For example, if a young person saves for the purpose of consumption in retirement rather than current consumption, a comprehensive tax on the normal returns of such savings could create significant differences (distortions) due to the effect of compounding over a long period of time.

On the other hand, the expenditure tax, which is levied only on income when spent, is neutral to consumption between different points in time. With E for Exempt and T for Tax, it is also called the EET method. There is also a TEE method that reverses the timing of T. EET and TEE have equal effects if all other conditions are equal and with regards to normal returns. However, this relationship breaks down when income tax rates are progressive. In addition, more complex tax operations are required if neutrality is sought with respect to the excess returns as well.

In this paper, we discuss the EET-type private pension tax system. In many countries in-

[12] Klein (2005).
[13] See Mirrlees et al. (2011), pp. 283-317.

cluding Japan, comprehensive income tax is the basic concept. And EET-type tax measures result in a decrease with no income taxation at the time of contribution and investment management, so it is necessary to secure financial resources to cover it. The government must ensure that financial resources for private pension tax measures can be sustainably supplied. In the case of Japan, the government debt to GDP ratio exceeds 200%. We must avoid a situation where at some point in the future our financial resources are depleted, forcing us to suspend or drastically reduce tax measures for private pensions[14]. While it is possible to take an approach that holistically evaluates the economic and social benefits of private pensions, it is also conceivable to offset the loss of tax revenue at the time of contribution and investment by the increase in tax revenue at the time of benefit payment. From the government's point of view, tax revenues are expected to decrease during people's working years, but increase after retirement. Tax revenues can be secured while supporting the rational life-cycle consumption of individuals.

II-4. Sustainability of Private Pensions and DC Plans in Japan

With the above in mind, we examine the sustainability of private pensions, especially DC types, from different angles.

First, the current status and issues of tax measures in DC plans are reviewed, and the need for a fundamental review is pointed out. While private pensions need not accompany an income redistribution function like the social security system, it is important to ensure fairness in access. We discuss reforming tax arrangements at the time of contribution, investment and benefit payment, and consider whether such tax measures are sustainable.

It is important that DC plans are available to the majority of people. Expansion of participants is a necessary condition for the sustainability of private pensions because a system with only a small number of users may lose the raison d'etre in the long run. The prevalence of a pension system can be observed by the participation rate. And the private pension participation rate including DC plans in Japan is not sufficiently high. Measures to expand participation are discussed and efforts in other countries are taken into consideration.

Furthermore, we refer to the issue of whether service providers of DC plans are sustainable. While public pensions are sponsored by the government, private pensions are sponsored by private entities such as employers for occupational pensions and financial institutions for individual pensions. Public pension contributions and benefits are administered by the Japan Pension Service and the investment management of reserve funds is conducted by the Government Pension Investment Fund (GPIF)[15]. In the case of private pensions, private entities such as financial institutions are in charge. Those private companies are for-profit organizations and need to be profitable and sustainable as a business. Securing the medium to long term profitability of those entities becomes a necessary condition for the sustainabil-

[14] Whether max-min principle or Hartwick rule can be conceptually applied to this issue of financial resources supporting pension system may be worth considering.
[15] Asset management is mostly outsourced to the private sector.

ity of the private pension system.

III. Tax treatment of DC Plans in Japan

III.-1. Framework of Tax Measures for DC Plans

DC plans in Japan are tax-free at the time of contribution, taxable in principle at the time of investment but the taxation is suspended, and are taxed at the time of benefit payment but with tax measures. The current tax measures are summarized below.

III-1-1. Taxation at the Time of Contribution

Ordinary savings come from after-tax income, but individual contributions to DC plans are deductible and not included in taxable income. Employer contributions for occupational pensions are deductible and then excluded from employees' current income. After-tax contributions are not allowed.

Table 3 shows the status of contribution limits (as of 2021) from the perspective of individuals. The contribution limit is determined according to the public pension insured category (Category 1, 2 and 3) and the availability and types of occupational pensions.

The 2011 amendments to DC plans introduced the participant contribution for corporate DC plans, often called matching contributions, which were subject to the following requirements: (1) the total amount of contributions is less than the statutory limit, and (2) matching contributions cannot exceed employer contributions. For example, a participant with the statutory contribution limit of 660,000 yen with employer contribution of 330,000 yen, the upper limit of matching contribution is 330,000 yen. However, with an employer contribution of 120,000 yen, the matching contribution limit remains at 120,000 yen.

Table 3: DC Contribution Limits (2021)

Public pension categories and workplace pension arrangements	Statutory Contribution Limits (annual)
Category 1 insured persons	iDeCo: 816,000 yen (together with contributions National Pension Fund)
Category 2 insured persons	
Only corporate DC at workplace	Corporate DC: 660,000 yen (matching contributions allowed), iDeCo: 240,000 yen (employer contributions up to 420,000 yen)
DC and DB at workplace	Corporate DC: 330,000 yen (matching contributions allowed), iDeCo: 144,000 yen (employer contributions up to 186,000 yen)
Only DB at workplace (including government employees)	iDeCo: 144,000 yen
No pension system in workplace	iDeCo: 276,000 yen (employer contributions can be made to iDeCo Plus)
Category 3 insured persons	iDeCo: 276,000 yen (no tax deduction)

Source: Nomura Institute of Capital Markets Research based on the website of Ministry of Health, Labour and Welfare Pension Bureau.

The 2016 revision of DC Law greatly expanded the eligibility of iDeCo, and corporate DC and DB participants were allowed to join iDeCo. The patterns of iDeCo contribution limits increased accordingly. The Small- and Medium-Sized Employers Contribution Payment System (iDeCo Plus) was also introduced. Small- and medium-sized employers were allowed to make additional contributions to employees' iDeCo accounts. When iDeCo Plus was first introduced, companies with 100 or fewer employees were eligible, but as of October 2020, it has been expanded to companies with 300 or fewer employees.

Based on the amendments in 2020, the amount of iDeCo contributions that can be made by corporate pension participants were refined. Currently, the iDeCo contribution limit for corporate pension plan participants is set at 240,000 yen for corporate DC participants and 144,000 yen for DB participants, and this does not reflect actual contributions to corporate DC and DB. For DB participants, the contribution limit for corporate DC plans is also set at 330,000 yen, half of the amount for corporate DC plans only, regardless of the actual level of DB. These were revised and the amount that can be contributed to iDeCo from October 2022 was set at "the statutory contribution limit for corporate DC plans less employer contributions." And from December 2024, the amount will be "660,000 yen per year less DB (if any) and employer contributions to corporate DC plans[16]". However, it is still within the limit of 240,000 yen per year.

Although it is complicated at first glance, the idea introduced by this amendment is to deduct the employer contribution to DB and DC from the statutory limit of 660,000 yen, and have remainder as the amount that can be contributed by individuals to iDeCo. It can be said that the government is trying to increase the availability of the 660,000 yen contribution from the perspective of individuals. The 240,000 yen limit on iDeCo contributions remains, which is confusing, but the direction is closer to giving individuals equal opportunities to contribute.

However, there are still a number of remaining issues regarding the contribution limits of private pensions, which are pointed out below.

(1) Consistency of Corporate DC and iDeCo Contribution Limits[17]

First, there is no consistency between corporate DC and iDeCo contribution limits. The corporate DC limits were established taking into account the "desirable benefit addition level" of Employees' Pension Fund. The desirable benefit addition level seeks to achieve the "desirable benefit level," which is equivalent to 60% of pre-retirement salary, by adding Employees' Pension Fund benefits to public pension benefits. The desirable benefit level relates to the special corporate tax, the taxation during investment management, and is discussed later in III-1-2.

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[16] DB contribution used here is the hypothetical amount calculated for each company, not for each participant, under certain assumptions.

[17] See Pension Bureau of the Ministry of Health, Labour and Welfare, "Mechanisms at the Time of Contribution and Benefit," Document 2 at the 4th meeting of Corporate and Individual Pensions Committee of Social Security Council, April 22, 2019, pp. 17-18; Pension Bureau of the Ministry of Health, Labour and Welfare, "Specific Issues of Corporate Pensions," Document at the 6th meeting of Corporate Pension Study Group, February 26, 2007, p. 30.

In 2001, the desirable benefit addition level was equivalent to 1.7 times the "substitutional portion" of the Employees' Pension Fund. Since this was a provision for pension benefits in the DB system, it had to be converted into a provision for contributions. Therefore, the salary level covering most of the private sector (650,000 yen) was multiplied by the Employees' Pension Fund's exempt premium rate (3.5%) and by 1.7[18].

iDeCo's contribution limit has basically been set by referring to the actual contributions to existing pension arrangements with similar characteristics. At the time of the introduction of corporate DC plans and iDeCo in 2001, only Category 1 insured persons and private employees without a corporate pension were eligible to join iDeCo, and the former was offered a limit of 816,000 yen shared with the contribution to the National Pension Fund. The latter was set by referring to the actual contributions to Employees' Pension Funds, based on the view that the actual support from employers should be taken into consideration, and it resulted in a level lower than the contribution limit to corporate DC. Currently, the contribution limit for employees with only corporate DC is 660,000 yen, while the contribution limit for employees with no corporate pension at work and only iDeCo is 276,000 yen. This inconsistency had already been pointed out in the review 5 years after the enactment of the DC Law[19], but no specific measures have been taken, and the situation continues to this day.

(2) Consistency of DB and DC Contributions

Second, despite DB and DC both being private pensions, the tax treatment of their contributions is inconsistent.

For DB plans, companies are required to calculate and contribute the premiums needed for benefit payments. There is no benefit limit and thus no contribution limit, while additional contributions are required if there is a funding shortfall. Since pension contributions are tax deductible, whether the absence of a cap is appropriate from the perspective of fairness may be one point of contention. Setting benefit limits and consequently a cap on the required contribution may be one approach[20].

Under the 2020 amendments, companies that provide both corporate DC plans and DB plans are required to adjust their contributions to them within the 660,000 yen limit as described above. Although the purpose of the amendment was not to reduce the amount of contributions available for DC plans, after a period with certain transitional measures, eventually the contribution room for corporate DC and iDeCo at companies with larger DB benefits will likely be reduced.

(3) Target Amount of Private Pensions

The statutory purpose of private pensions is to support self-help efforts in securing old

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[18] Employees' Pension Funds substitute part of public pension benefit and it is called the substitutional portion. If an employer offers the Employees' Pension Fund, part of the public pension premium is paid into the Employees' Pension Fund instead of public pension accordingly, which was called exempt premium. When the macroeconomic slide was introduced by the public pension reform in 2004, 1.7 was raised to 2.23.

[19] Corporate Pension Study Group (2007) pp. 19-20.

[20] In the United States, there are contribution limits for DC plans and benefit limits for DB plans.

age income in conjunction with public pensions[21]. The contribution limit is one way of quantifying the contribution needed to achieve this objective, but there has not always been a comprehensive discussion about whether the current contribution limit is sufficient. The social security system including not only the public pension but also medical and long term care is forced to make revisions one after another due to the declining birthrate and aging population.

As for the adequacy of pensions, the pension replacement rate, which is the ratio of pension benefit to income before retirement, is often used as a guide. As mentioned above, the Employees' Pension Fund target of 60% of pre-retirement income together with the public pension was referred to when setting contribution limits for corporate DC plans, but the rationale for 60% is not clear. Since the introduction of the DC system, there have been repeated calls for raising the contribution limit, but the reality is that no specific amount, contribution rate, or the underlying logic (including whether to use the pension replacement rate in the first place) has been discussed sufficiently.

III-1-2. Taxation during the Investment Period[22]

In principle, private pensions in Japan are subject to the "special corporate tax" during the investment period. Tax exemption during the investment period usually refers to exempting taxes on investment proceeds. However, the special corporate tax in Japan imposes a tax on reserve funds, not on investment proceeds. Deferring income taxation at the time of contribution creates a "tax-free pool" in which tax-free contributions yield tax-free investment proceeds. The idea of the special corporate tax is to tax the corporation that manages the pension funds (trust bank, etc.) and create the revenue equivalent to the benefit of this tax deferral.

The special corporate tax was started when the Tax Qualified Pension Plan was introduced in 1962. When the Employees' Pension Fund was established in 1966, the tax was imposed on the portion exceeding the level of pension benefits of the national government employees, and the idea of exempting pension benefits below a certain level from the tax was introduced. In 1988, the threshold was changed to "the desirable benefit level" and, as mentioned above, the guideline for the desirable level was "60% of pre-retirement salary together with public pension."

The special corporate tax was frozen in 1999 due to the economic downturn and investment difficulties, and the freeze has been repeatedly extended to this day. The tax rate imposed before the freeze was 1.173% per annum on pension fund reserves. This rate, equivalent to the benefit from tax deferral or late interest, is determined by applying an interest rate of 0.02 yen per day to the average tax rate on the employee's salary income (plus pension contributions) and the local government tax rate. Before the freeze, the average income tax rate was 12%, the local government tax rate was 5%, and the interest rate was 0.02 yen per

[21] See Article 1 of the Defined Contribution Pension Law and Article 1 of the Defined Benefit Corporate Pension Law.
[22] See the Ministry of Health, Labour and Welfare Pension Bureau, "Common Issues for Corporate Pensions," Document at the 5th Corporate Pension Study Group, February 16, 2007, pp. 20-24.

day or 7.3% per year.

Corporate DC, iDeCo and defined benefit corporate pensions were introduced by legislations in 2001 and thus have never been actually subject to the special corporate tax. Proposals for the abolition of the tax have been made repeatedly by both labor and management, as well as industry associations of financial institutions and other organizations related to private pensions. As a practical matter, the special corporate tax, which is a tax on pension fund reserves, is imposed even if the investment yield is negative, further reducing pension assets. It seems as if that the tax exemption on contributions to private pensions is treated as an undesirable act similar to deferred tax payment, and delinquent taxes are imposed. The treatment of the special corporate tax is an important policy decision that will define the future of Japan's private pension tax system.

III-1-3. Taxation at the Time of Benefit Payment

When a person receives a pension, a deduction for public pension, etc. and a deduction for retirement income is applied. Usually the form of receiving private pension benefits can be selected from lump sum payment, pension payment (fixed-term, lifetime annuities, etc.) or a combination of these as specified in the pension plan document. Benefit received in the form of pension is taxed as miscellaneous income and a certain amount is deducted from the amount of pension benefit income based on the age, the amount of pension and the amount of income other than pension. For example, if an individual at the age of 65 or older receives a pension of 3.3 million yen and his non-pension income is 10 million yen or lower, a deduction of 1.1 million yen for the public pension, etc., is applied.

Benefits received in the form of a lump-sum are taxed as retirement income. In calculating the taxable amount of retirement income, the amount corresponding to the number of years of service is deducted from the amount received and one-half of the remaining amount is taxable. For example, if a person receives a lump-sum retirement benefit of 20 million yen after 35 years of service, the taxable retirement income would be 750,000 yen.

The retirement benefit tax arrangement is also applied to lump-sum retirement allowances and retirement benefits for employees leaving or changing jobs while they are still working, resulting in a mixture of purposes other than securing income in old age. In addition, as mentioned above, it has the effect of greatly reducing the taxable amount. It has resulted in the criticism that the taxation on pension benefits is too limited, and thus the pension tax arrangement in total is not EET but close to EEE.

III-2. Revising the Private Pension Tax System

III-2-1. Need for a Radical Revision

The 2004 public pension reform introduced the public pension funding review once every 5 years, and the DC contribution limit has been revised in a way that is more or less linked to it, but this pattern of partial reforms seems to have reached its limit. If the government is to provide holistic support for securing retirement income via public and private

pensions, it is necessary to set a comprehensive target for support.

Although the pension replacement rate is a common indicator of pension adequacy, there is not a widely accepted method for setting target numbers. Therefore, in this paper, the discussion will proceed with accepting the figure of 60% of pre-retirement salary and the amount of 660,000 yen calculated based on this figure. The basis for the 60% threshold is unclear, but if we accept the idea that people generally spend less in retirement than they did in their working years, we may consider it as a reasonable level of support with tax measures.

With that in mind, I would like to focus on the fact that the way of life is becoming more diverse and difficult to standardize, and therefore a radical change of thinking is required to prevent unfairness in the availability of tax measures. One of the major changes in the Japanese labor market over the past 30 years has been the increase in non-regular employment. In February 1990, non-regular employees accounted for 20.2% of the total, and this gradually increased to 26.0% in February 2000, 33.7% in Jan. to March 2010, and 36.7% in Jan. to March 2021. Among those aged 35 to 44 and 45 to 54 in their prime as workers, 26.9% and 30.8%, respectively, were non-regular employees (Jan. to March 2021). The gap between men and women was also large, with 21.8% of men and 53.5% of women being non-regular employees (Jan. to March 2021)[23]. It is no longer necessarily appropriate to regard a life course of permanent or long-term employment as the standard.

It has also been pointed out that households with “model pensions” are no longer the norm for public pensions. Corporate DC plans rely on the idea of a model pension because of the way the contribution limit was set. The inconsistency with the iDeCo contribution limit is mentioned above. Revising tax measures that are hardly consistent for a wide range of individuals from a mid- to long-term perspective would enhance the sustainability as well as the adequacy of the pension system.

In the following section, we will consider “personalization” and “setting lifetime limit” of contribution, followed by “carryover of unused contribution allowances” and “additional contribution allowances for those over a certain age”. We will also consider abolishing the special corporate tax, the deductions for public pension, etc. and retirement income, and aiming for an EET pension tax system.

III-2-2. “Personalization” of Contribution Limits

Japan’s private pension tax system is set up separately for occupational and individual pensions, which is natural given the historical background that tax incentives have been granted to promote occupational pensions as part of employee benefit programs. However, the idea of separating the workplace and individuals in terms of tax arrangement is no longer consistent with the changing social and economic environment in Japan. Diversity in the labor market will continue to expand, as evidenced by the rise in non-regular employment.

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[23] Long term time series data of the Labor Force Survey Table 9 (quarterly average results, nationwide) (1) Number of employees by age group (10 years), number of employees by employment type (regular and non-regular employees) from 1984.

In addition, the government is pursuing policies to promote diversity, such as encouraging people to have side jobs and second jobs, and encouraging people to work in their old age. As we need to shift from the idea that people finish their school days in their early 20s, enter work life and retire in their mid 60s to accepting more diversified patterns. Recurrent education is emphasized, and having second or third school days and working in different jobs are beginning to be viewed positively.

Setting the level of tax benefits based on how and where they work can no longer be justified. In a society where the majority follow a similar life course, a certain level of satisfaction may be gained but the situation is changing drastically. In addition, if private pensions are supplementary and public pensions and other savings can satisfy the needs of life in retirement, they may not be much of a problem, but this too has changed significantly. The fact that the contribution limits of the private pensions differ on an individual basis has become a problem from the perspective of equal opportunity.

This problem can be solved by setting the contribution limits for private pensions equally for each individual rather than based on workplace. The idea is to grant an upper limit on the total amount to each individual, regardless of the types of pension (occupational or individual pension) or the contributor (employer or participant).

In the United Kingdom, an annual contribution limit is established on an individual basis for all types of private pensions to which the individual participates. The pension system was drastically restructured, including the simplification of the tax arrangements by revising the law in 2004, and the current system became effective in 2006. Employer and participant contributions to occupational pension plans (DB, DC) and participant contributions to individual pensions (such as stakeholder pensions) are subject to the contribution limit. The annual contribution limit is 40,000 pounds (tax year 2021-22), which is the sum of employer and participant contributions for DC schemes and the increase based on the benefit formula for DB schemes. The amount is considerably higher than that of Japan. As explained later, a lifetime contribution limit is also set.

In Canada, a system with a common contribution limit on an individual basis was also introduced through a 1990 amendment to the tax code[24]. A common annual contribution room is established regardless of whether a person participates in a DB, an occupational DC, or a Registered Retirement Savings Plan (RRSP) for individuals. In 2021 the limit was the smaller of 27,830 Canadian dollars or 18% of the previous year's income. Pension adjustment, which is a contribution for an occupational pension, is deducted from the annual contribution limit, and the balance becomes the RRSP contribution limit. If a person only participates in the RRSP, the full amount is for his/her contribution to the RRSP. While not as large as the UK, the size of the contribution limit is larger than that of Japan.

III-2-3. "Lifetime" Contribution Limits

Japan's tax system adheres to the single fiscal year principle. Because income tax rates

[24] See Fujisawa (2021).

are progressive, the amount of tax paid differs between individuals who have the same lifetime income but earn large amounts in a limited number of specific years and small amounts in others, and individuals who earn the same amount throughout their lives. Given that the purpose of the pension system is to encourage asset building over a long period of time, pension taxation neutral with respect to changes in income in a single year may be reasonable. This can be achieved by setting the contribution limit based on lifetime income. The maximum amount that can be contributed to private pension throughout the working period rather than a single year becomes the contribution limit. For example, an annual contribution of 660,000 yen for 40 years from the age of 20 to 60 is 26.4 million yen, and for 45 years to the age of 65 is 29.7 million yen.

If it is unrealistic to accept such large deductions at one time, we can set both a lifetime contribution limit and an annual limit. For example, if the annual limit is set at 2 to 2.5 million yen, the above lifetime contribution limit is equivalent of making intensive contributions for 10 to 15 years. Even individuals with fluctuating annual incomes will be able to make effective use of lifetime contribution allowances.

In addition to the aforementioned annual contribution limit, a lifetime contribution limit of 1,073,100 pounds (tax year 2021-22) is in place in the UK. This amount also applies to both DB and DC. For DC, it is the balance of assets in the personal account, and DB is stipulated to be 20 times the pension amount[25]. In the UK, the social security system, which was once regarded as “cradle to grave,” has been reduced since the 1980s, and the pension system was also transformed. The public pension provides the minimum income security and private pensions play a major role of providing additional income. The public pension system used to have two tiers similar to Japan’s, but was simplified to one. While these differences in pension systems as a whole need to be taken into account, the importance of private pensions is common to both countries.

III-2-4. Carryover of Unused Contribution Allowances and Introduction of Additional Contributions

When making a substantial change to the pension system, it is desirable to take a long time such as 10 or 20 years, because notice and gradual transition periods are needed before the new system is fully introduced. It is true that lifetime contribution limits are not easy to realize because they change the single fiscal year approach of the tax system.

Therefore, as a relatively simple measure, we will consider the carryover of unused contribution allowances and provision of additional pension contribution allowances for those above a certain age.

The carryover of unused contribution allowances is to allow the difference between the contribution limit and contribution actually made for a given year to be carried over to the following year. The existing tax system also allows certain types of deductions and losses to be carried over to the following year. Carryover of unused contributions is not as flexible as

[25] See Sano (2021).

lifetime contributions from an individual's perspective. That is, it is inconvenient for individuals who earn high incomes in their early years. In general, however, it seems that households in their 40s and 50s start to focus on preparing for retirement. Looking at the purpose of holding financial assets by age group[26], the highest for respondents in their 30s and 40s was "education cost for children" (78.8% and 66.4%, respectively), while for those in their 50s and 60s the highest was "living expenses for retirement" (70.0% and 80.3%, respectively). 61.6% in their 40s cited retirement which is close to education.

If the carryover of unused contribution can be made for an indefinite time period, it will have an effect similar to that of a lifetime contribution. However, in order to implement the carry-over system, it is necessary to maintain records of unused allowances throughout an individual's work years. This may require a considerably large system change and IT investments.

A simpler approach of increasing annual contribution for individuals in their late 40s or older may be worth considering. For example, the 45 years from the age of 20 to 65 is divided into the first half (age 20 to 45) and the second half (age 45 to 65), and a fixed amount is added to the contribution limit after age 45. For example, 330,000 yen, which is half of 660,000 yen, is added[27].

Catch-up contributions in the United States can be a good reference. In 2022, participants in DC plans have annual contribution limits of 61,000 dollars for corporate pensions and 6,000 dollars for individual retirement accounts (IRA). In addition, individuals 50 and older can make catch-up contributions up to 6,500 dollars in occupational DC plans and 1,000 dollars in IRAs. Although it is inherently desirable to build retirement assets over a long period of time, some individuals do not recognize the needed amount until retirement approaches. Some may not be able to build sufficient retirement assets because they had to leave their jobs for family reasons, or their saving capabilities may increase after reaching a certain age. Based on these views[28], the catch-up contribution was introduced by the tax reform in 2001.

As mentioned above, differences in savings objectives by age are also observed in Japan. In addition, Japan has a demographic characteristic of having a "baby boomer junior" generation. The term is used for the children generation of the baby boomers, who were born in 1971-74. The total fertility rate was over 2 at that time and more than 2 million children were born each year. It is well known that the total fertility rate has since fallen below 2 and has never recovered to 2 to this day. As a result, the baby boomer junior generation is in a situation where it is difficult to depend on the next generation after retirement like their parents' generation because the number of the working generation will be drastically smaller in their old age, while they are required to fund the social security system for the older genera-

[26] Percentage of respondents from households with financial assets according to the "Public Opinion Survey on Household Financial Behavior (Households with 2 or more members) in 2020," by the Central Council for Financial Services Information.
[27] If a person uses only half of the 660,000 yen in the first 25 years, this will have a similar effect of carrying over the unused contribution allowance to the remaining years.
[28] "Comprehensive Retirement Security and Pension Reform Act of 2001," House of Representatives Rept.107-51 Part 1, May 1, 2001, pp. 49-52, pp. 69-71.

tion. In addition, they entered the workforce in the 1990s and faced the so-called employment ice age. If they enter old age without adequate preparation, the social impact could be enormous. Baby boomer juniors are now in their late 40s and 50s. The reality is that they will be in the working age group for the next 20 years or so, and time left for providing them with support measures is limited. Thus, urgent action is needed.

III-2-5. Possibility of a Decrease in Tax Revenue

The degree of impact of the above comprehensive revisions on tax revenue depends on DC participation, the amount of contribution, and the income level of the individuals. Consider a hypothetical case in which 29.7 million yen is set as a lifetime contribution limit and the annual contribution limit is one tenth of that, 2.97 million yen. In reality, few individuals will be able to contribute 2.97 million yen annually. Contributing 660,000 yen per year from the beginning to end will also be a rare case. The point here is to switch the idea of an annual contribution limit from "a standard individual's reachable target" to "allowing even extreme cases."

This paper tries to have a very rough idea of tax revenue losses by using data on salary income and salaried workers from the Ministry of Finance and the National Tax Agency. Accurate analysis requires the use of comprehensive data on individual income and tax payments. What is discussed below is far from being comprehensive and quite limited. However, since the main users of DC plans are considered to be average workers, a simple analysis using data of salaried workers may be of some use.

According to the Ministry of Finance[29], the income tax amount of an individual (single household) with salary income of 5 million yen was 374,000 yen and thus 7.48% of salary income. Similarly, a person with a salary of 7 million yen paid 682,000 yen, 9.74% of salary income, and a person with 10 million yen paid 1,449,000 yen, 14.49% of salary income. According to data from the National Tax Agency[30], the number of salaried workers in the private sector at the end of 2019 was 59.9 million, and 52.25 million worked throughout the year, of which 44.6 million were taxpayers (84.9%). In the same year, the total salary was 229.3 trillion yen, an average of 4.36 million yen per person, while the total salary of taxpayers was 213.7 trillion yen, an average of 4.8 million yen per person. Since the tax payment for the same year was 10.8 trillion yen, it was 5.04% of the total salary (for taxpayers).

Under the lifetime contribution limit of 29.7 million yen and the annual contribution limit of 2.97 million yen, it is possible that a large number of people contribute more than 660,000 yen in a given year (up to 2.97 million yen). Here, for the sake of simplicity, annual contributions are assumed to average at 660,000 yen per person. As for the participation rate, in order to see the maximum possible decrease in tax revenue, it is assumed that all tax payers between the age of 20 and 64 participate (39.2 million taxpayers[31]). In this case the

[29] "International Comparison of Individual Income Tax Burden by Salary Income, January 2021," Ministry of Finance website "Materials on Tax Rates, Tax Burden, etc." (https://www.mof.go.jp/tax_policy/summary/income/b02.htm#a01)
[30] National Tax Agency Planning Division, "2019 Survey Results on the Actual Conditions of Private Salaries," September 2020.
[31] Given that 87.9% of employees in 2019 were between 20 and 64 years old, 87.9% of 44.6 million taxpayers.

annual contribution would be 25.9 trillion yen. In fiscal 2019, the DC contribution was 1.1 trillion yen for corporate DC and 240.7 billion yen for iDeCo, so if a contribution of 25.9 trillion yen is made annually, it would be an increase of 24.5 trillion yen over the actual amount. If the income level of participants is close to average, the above percentage of 5.04% can be used, and the tax revenue loss is 1.2 trillion yen, which is equivalent to 11.4% of tax payment in 2019 (10.8 trillion yen). Although it is only a rough image, this is not a small drop in tax revenue.

In the case of the granting additional contribution allowances, assuming that 18.3 million of the 44.6 million taxpayers mentioned above are 45-64 years of age[32], and that all taxpayers make an additional contribution of 330,000 yen, a similar calculation results in an additional contribution of 6.0 trillion yen, 5.04% of which is 304.7 billion yen. That was 2.8% of 2019 tax payments.

III-2-6. Taxation during Investment Period and Benefit Taxation

The special corporate tax, as mentioned above, is a tax on an untaxed pool of funds. It can be seen as a denial of granting tax treatment to pensions, and it is appropriate to abolish it altogether. Since the introduction of DC, the tax has never been levied. Its abolishment is maintaining the status quo, so we could say that no additional tax revenue loss occurs.

If we eliminate the public pension deduction and retirement income deduction for private pensions with sufficient transitional measures, the tax system will be EET-type. Participants can choose the benefit payment form from a pension, a lump sum or a combination of both (according to the pension plan document), but lump-sum payments will be subject to a higher marginal income tax rate so the choice of lump-sum payment is not reasonable from a tax perspective in the absence of retirement income deduction. The public pension benefit taxation is not the subject of this paper. Also, since the lump-sum retirement benefit payment when leaving or changing jobs is widely adopted and the impact of the tax measure change is enormous, careful and extensive discussions are needed. In any case, it is essential to provide sufficient transitional arrangements and periods.

In addition, the current limitation on the DC benefit receipt period is problematic from the perspective of longevity risk. Currently, installment payments are to be made over a period of 5 to 20 years. They can be made by purchasing insurance products or making regular withdrawals (fixed rate or fixed amount) with investments continued. If life annuity products are offered, lifetime income can be secured, but otherwise participants are limited to a maximum payout period of 20 years. For example, if you start receiving pension benefits at age 60, you can only receive pension benefits from your DC account until age 80. But at age 60, the average life expectancy is 24.21 years for men and 29.46 years for women[33], both exceeding 20 years. It is possible to delay the start of benefits, but people are required to start receiving benefits by age 75[34].

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[32] Given that 41.1% of employers in 2019 were between 45 and 64 years old, 41.1% of 44.6 million taxpayers.
[33] Ministry of Health, Labour and Welfare, "Summary of the 2020 Simplified Life Table," July 30, 2021.
[34] It used to be the age of 70 but was raised to 75 in April 2022.

Life courses continue to diversify beyond the age of 60. While it is possible for many individuals to spend their 60s in good health and continue working, differences in health and other conditions are greater than those in their younger or prime years, and not everyone can cope with the risk of longevity by delaying the start of benefits. Therefore, it would be appropriate to remove the 20-year restriction and allow the period for receiving payments to be freely set. However, if individuals who have been able to accumulate a large amount of assets by enjoying the tax treatment are allowed to keep their annual pension payments to a small amount, a large amount of DC assets may remain at the time of death and consequently be part of inheritance assets. This is a deviation from DC's original purpose of securing income in old age. One way of avoiding this is to require the benefit receipt above a certain percentage of pension assets every year.

In the United States, DC accounts are subject to Required Minimum Distribution (RMD), which sets a minimum amount of distribution (benefit payment). Contribution limits for DC plans in the United States are high under the EET pension tax regime, as noted above. In addition to ordinary income taxes at the time of distribution, upon reaching the age of 72, an individual is required to withdraw more than a certain amount per year from his/her DC account. RMD withdrawal amounts are calculated by dividing the DC account balance at the end of the previous year by the number of years published by the Internal Revenue Service (IRS). The number of years is set by age. For example, for a 72-year-old it is 25.6, for a 75-year-old 22.9, for an 80-year-old 18.7, and so on (for 2019 tax returns)[35]. Since the divisor is adjusted by age in relation to life expectancy, some consideration is given to longevity risk, while assets are not to remain in tax-free accounts forever. Although undeniably cumbersome, it is one way of allowing individuals to freely decide benefit periods and at the same time ensuring certain tax revenues.

The greater the balance of pension assets at the start of benefits, the greater the tax revenue from benefit taxation and thus the chance of recovering the previous tax losses becomes larger. Elderly people also pay premiums for medical and long-term care insurance, and the amount they pay is determined according to their income level. When their income reaches the equivalent of active workers, the premium they pay increases. While such increases in burdens should not become a disincentive to save for income in old age through private pensions, the reality is that medical and long-term care insurance financing is also under pressure in an aging society, and additional cost bearing by the elderly is needed. In any case, there is a need to shift from exempting all the elderly people from the burden of social security to the idea of having more individuals with sufficiently high retirement income and more capability to bear the burden of social security. It would be constructive to aim for a society where more individuals receive adequate private pensions and can bear the burden of the medical and long-term care system.

Furthermore, although each individual can decide when to actually consume the benefits

[35] Internal Revenue Service, "Publication 590-B, Distributions from Individual Retirement Arrangements (IRAs), for use in preparing 2019 Returns," February 19, 2020.

received, if an increase in private pensions reduces anxiety in the future and consequently leads to an increase in consumption by elderly households, the effect of an increase in consumption tax revenue can be expected to a certain extent.

IV. Expansion of Private Pension Participation

IV-1. Current Status of Private Pension Participation

As mentioned above, the number of DC participants is steadily increasing. As of March 2021, there were 7,497,000 corporate DC plans and 1,939,000 iDeCo participants. Although there are duplicate participations, we can see that approximately 9.4 million people participated in DC. The number of people insured by public pension in Japan was about 67.62 million as of March 2020, so the participation rate was about 14%. The number of insured private employees in Employees' Pension Insurance was 40.37 million then, so corporate DC had an 18.6% participation rate. With respect to iDeCo, if 66.49 million of the above 67.62 million potential participants were considered, excluding the 1.13 million corporate DC participants making employee contributions (matching contributions), the participation rate remained at about 3%. We can hardly say that a majority of the population have participated in DC.

In general, the system with tax measures is required to serve the public interest. In the case of private pensions, the purpose of securing income in old age is widely accepted as the public interest, but this purpose is achieved only when a large number of companies and individuals are using the system. In a situation where only a limited number of individuals with higher income use the system, it may be seen as a system with little social significance and the justification for granting tax measures may be lost.

However, private pensions in Japan are voluntary. Therefore, the incentive for companies to provide corporate DC plans and the incentive for individuals to join iDeCo is crucial. Since tax measures are central to this, we can expect a virtuous cycle in which raising the contribution limit will increase the number of participants, which in turn will enhance the raison d'etre. However, in reality we also need to devise other measures to increase the number of participants.

As for corporate pension plans, it is often pointed out that the larger the company, the higher the percentage of pension plan offering. According to the "Overview of the Survey of Working Conditions (2018)," 80.5% of companies had some type of retirement benefit plan (lump-sum retirement benefits and/or retirement pensions), and 21.5% had retirement pension plans (DB and/or DC). Table 4 shows that the smaller a company is, the more often it provides a lump-sum retirement benefit but not a retirement pension. It is necessary to take measures to expand participation in corporate pension plans and/or iDeCo. Measures for small- and medium-sized enterprises and enterprises having difficulty providing corporate pensions should take priority.

Table 4: Retirement Plan Offering by Company Size

	Survey in 2018
Total	21.5%
More than 1,000	66.8%
300-999	51.0%
100-299	31.1%
30-99	13.9%

Source: Nomura Institute of Capital Markets Research, based on "Overview of the Survey of Working Conditions in 2018."

IV-2. Measures to Increase Private Pension Participation

This section reviews the DC participation expansion measures so far.

First, as for the measures for SMEs, Simplified Corporate DC and iDeCo Plus were introduced by the revised DC Law in 2016. Both were for small companies with 100 or fewer employees with the aim of promoting DC enrollment. As of October 2020, the number of eligible companies has been expanded to 300 or fewer employees.

Simplified Corporate DC plans have simpler documentation requirements at the introduction and in an on-going basis. The flexibility of their plan design is limited compared to the full version corporate DC plans. iDeCo Plus is an arrangement that allows companies without a corporate pension to make additional contributions to employees' iDeCo accounts. The sum of individual and employer contributions must not exceed the iDeCo limit of 276,000 yen for employees without a corporate pension. Since it is not a corporate pension, companies are not held accountable for matters such as the selection of plan administrators and investment education, and can limit their role to financial support through contributions. According to the Ministry of Health, Labour and Welfare, as of March 2021, there were 2,687 small and medium enterprises implementing iDeCo Plus with 17,000 participants.

The eligibility of iDeCo was greatly expanded by the revised DC Law of 2016. Previously, the system was only available to Category 1 insured persons of public pension and employees without a corporate pension among Category 2 insured persons of public pension, but since January 2017, corporate pension participants (corporate DC or DB), government employees and Category 3 insured persons of public pension have also been able to join iDeCo. By this reform, iDeCo has been reborn as a system available to almost all working generations[36]. In order for corporate DC participants to join iDeCo, amendments to corporate DC plan documents were needed and the contribution limit for employers were lowered, but these conditions were amended in 2020 reform. Other revisions included allowing individuals to choose between joining iDeCo and making matching contributions to corpo-

[36] Individuals making contribution to corporate DC plans (matching contributions) are not allowed to join iDeCo at the same time.

rate DC plans.

The 2020 amendments also raised the upper age limit of participation in DC plans. For corporate DC plans, which were available to employees under the age of 60 (and can be extended to age 65 if certain requirements are met), the upper age limit was raised to 70 in May 2022. It was also decided that while Category 2 Insured of public pension still remained as National Pension members under the age of 65, they can participate in iDeCo. For Category 1 Insured and Category 3 Insured, they can participate in iDeCo while they remain as voluntary insured persons under the age of 65. The increase in the upper age limit of participation became uneven because the DC eligibility rules are linked to eligibility for public pension[37].

As the upper age limit for starting to receive public pension benefits will be raised from 70 to 75, the upper age limit for starting benefit receipt from DC plans will also be raised from 70 to 75.

IV-3. Drastic Measures to Increase Private Pension Participation

IV-3-1. Automatic Enrollment System

As described above, a number of measures to increase DC participation in Japan have been taken. As a more comprehensive measure, we can think of applying the knowledge of behavioral economics such as nudging and default arrangements.

In Japan, corporate DC plans basically enroll employees who are eligible automatically and the company makes contributions automatically[38]. Participants may also make additional contributions if they are allowed by plan design. For iDeCo, individuals make decisions about participation and contributions. In short, under the current system, the decision of corporate pension plan offering and iDeCo participation are opt-in. If we wish to enroll a wider range of people, an opt-out system, or automatic enrollment system, is an option.

The United Kingdom has actually introduced an automatic enrollment system in private pensions by a reform in 2008. The country's social security system was revised in the 1980s. The role of the public pension system was to provide a minimum level of income security, and the role of the private pension schemes was to provide retirement income beyond that. Therefore, it is extremely important in the United Kingdom that as many people as possible participate in private pensions.

The UK's automatic enrollment system requires employers to enroll their employees in a pension scheme. It is different from mandatory enrollment because employees can voluntarily opt out within one month of automatic enrollment. Individuals who opt out are re-enrolled every three years. It can be said that the design of the system focuses on the existence of individuals who do not actively join pension schemes but continue to join due to inertia.

[37] From the perspective of equal opportunity, it is difficult to rationally explain the difference between Category 2 insured persons and Category 1 and 3, and between corporate DC and iDeCo.

[38] In recent years, however, "elective corporate DC plans" have become popular. They allow employees to choose between receiving all their salary now and contributing part of it to corporate DC plans.

Based on the assumption of individual's irrationality, the initial setting was changed from "do not join if you do not act" to "join if you do not act."

At the same time, a defined contribution scheme called NEST (National Employment Savings Trust) was established. Because automatic enrollment does not require employers to provide their own pension schemes, it was necessary to provide a scheme for employees who do not have a pension plan in their workplace. One of the important features of the automatic enrollment system was to limit the obligation of employers only to "automatic enrollment" and minimize the burden so that even the smallest employers can fulfill the requirement.

The automatic enrollment system has been applied gradually since October 2012, starting with large companies, and in February 2018, all employers were covered. According to an evaluation report of the system released in February 2020[39], the opt-out rate among auto-enrollees in 2018/19 was 9%, similar to the level in 2016/17. After the introduction of the system, the pension participation rate in the private sector increased dramatically, from 42% in 2012 to 86% in 2019. Also, since NEST is DC, the introduction of an automatic enrollment system has resulted in an increase in DC participants. Although it will take some time to determine the success or failure of the automatic enrollment system, it is currently considered to be in good shape.

When the automatic enrollment system was introduced, the contribution rate was carefully devised. To reduce the burden of starting the mandate, the initial contribution rate was set at 2% (of which employers make more than 1%) but was gradually increased. It was raised to 5% (of which employers make more than 2%) in April 2018 and to 8% (of which employers make more than 3%) in April 2019.

In the United States, some state governments have started automatic enrollment systems. As increasing private pension coverage has been recognized as a challenge, the idea of an automatic IRA enrollment system was floated during the Barack Obama administration. Although the initiative was not promoted at the federal level, automatic enrollment systems have been introduced in such states as Oregon, Illinois and California, and are being considered in other states[40].

IV-3-2. Implications for Japan

The DC participation rate in Japan is around 20%, and it is worth considering the need for some drastic measures. We discuss implementing an automatic enrollment system to iDeCo in Japan. The aim is to increase the private pension participation rate for individuals who do not have a pension plan in their workplace and are not actively participating in iDeCo, but who can afford to continue to participate if they join automatically.

First, we consider that the basic structure in the United Kingdom, which requires employers that do not offer workplace pension plans to automatically enroll their employees, is

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[39] Department for Work & Pensions (2020)

[40] See Okada and Nakamura (2020), Chalmers et al. (2021)

more feasible and realistic than a system in which the government directly auto-enrolls individuals in Japan as well. Given that the corporate pension offering rate of small- and medium-sized enterprises is lower than that of large enterprises, the primary objective is to substantially increase the participation rate among small- and medium-sized enterprises, and thus it is important to make the requirements for employers as simple as possible and least burdensome.

In addition, it is important to set the contribution amount (rate) at the time of automatic enrollment carefully. Whether to require corporate contributions in addition to the existing social insurance premium obligation also needs to be considered carefully. If corporate contributions are to be mandated as they are in the UK, the possibility of salary offsetting also needs to be kept in mind. If corporate contributions are voluntary, it is sufficient to utilize the current iDeCo or iDeCo Plus.

Whether a new system equivalent to NEST should be established is also a point of contention. In the case of Japan, iDeCo is sponsored by a single organization, the National Pension Fund Association (NPFA). The fact that the participant information of iDeCo is consolidated in NPFA may be useful for the implementation of an automatic enrollment system. If the obligation to companies is limited to selecting an iDeCo provider and making a predetermined contribution by wage deduction to the iDeCo of employees, the burden may be considerably reduced. Unlike corporate DC plans, participants can change iDeCo providers later if they are dissatisfied.

V. Sustainability of DC Service Providers

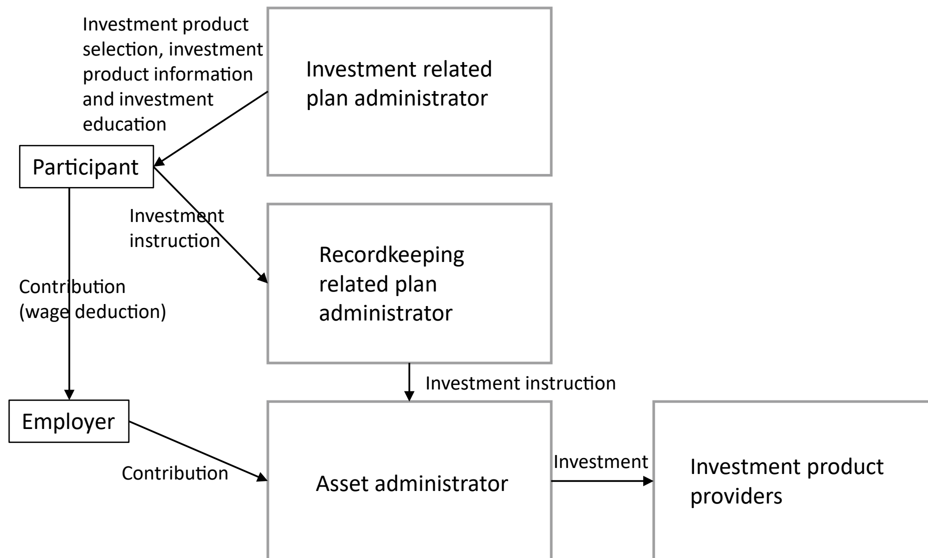
The DC plans are operated by private sector entities with the exception of the NPFA in iDeCo. They are for-profit entities and they deal with DC plans as a business. If sound competition works, the service provided to the participants and companies will improve by business innovation and it will lead to the development of the system as a whole. On the other hand, if the DC service providers do not earn sufficient profits, they may go bankrupt, or may exit from the business. The sustainability of the DC system thus also depends on the ability of the DC service providers to consistently find moderate profitability and business opportunities. They may undergo turnover and reorganization but must be sustainable as a whole.

V-1. DC Service Providers

In this section the entities involved in DC plan operations are reviewed. Although details differ between corporate DC plans and iDeCo, major functions are in common (see also Figures 2 and 3).

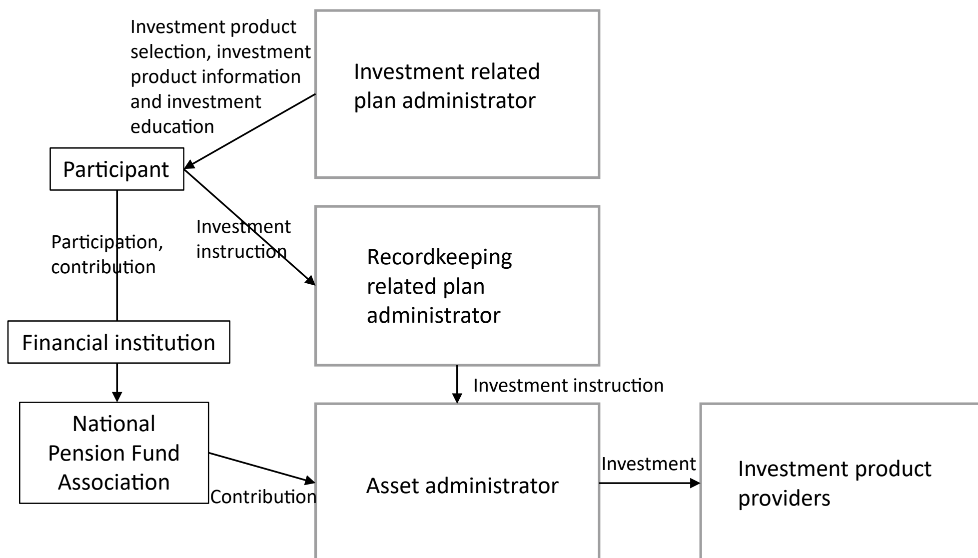
Employers decide whether to offer a corporate DC plan. They decide to sponsor DC plans as an employee benefit plan following an agreement with the labor union (employee representatives). As for iDeCo, the NPFA is the sponsoring entity.

Figure 2: Basic Structure of Corporate DC Plan Service Providers



Note: The figure is an abridged image and is not accurate.
Source: Nomura Institute of Capital Markets Research, based on Ministry of Health, Labour and Welfare Pension Bureau material

Figure 3: Basic Structure of iDeCo Service Providers



Note: The figure is an abridged image and is not accurate.
Source: Nomura Institute of Capital Markets Research, based on Ministry of Health, Labour and Welfare Pension Bureau material

The functions required for the operation of DC plans are roughly divided into plan administration, asset administration and investment management. The entities responsible for each of these are referred to as plan administrators, asset administrators, and investment product providers. There are provisions on plan administrators and asset administrators in the DC Law.

Asset administration can be performed by trust banks and insurance companies. The investment products include investment trusts, deposits and insurance products. Asset administration and investment management are also provided to DB plans and are common functions of pension plans. On the other hand, plan administration is a function unique to DC. In the case of corporate DC plans, the employer can play that role, but it is usually entrusted to an outside entity with expertise. The NPFA also outsources its services. There are two types of plan administrations: recordkeeping-related and investment-related.

In DC plans, it is necessary to keep records of contribution, investment and benefit for each individual, and recordkeeping-related administrators are responsible for this. For example, when a participant gives investment instructions, the information is transmitted from the recordkeeping-related administrator to the asset administrator, which in turn purchases or sells investment products based on the instructions.

Investment-related administrators select and present investment products and provide information to participants. Since participants can only choose from among the investment products selected for the plan, it is required by law that investment-related administrators select and present appropriate products based only on the interests of participants and based on their expert knowledge. Often various services for participants such as investment education and support via call centers and websites are also provided by plan administrators. Participant support is important and can be a differentiating factor for the plan administrators because the participants themselves give investment instructions and the results have a significant impact on future pension benefits. From the standpoint of neutrality and objectivity required for plan administration, it is prohibited by law for the plan administrator to give specific advice regarding investment instructions.

In theory, these functions could be concurrently provided by the same entity, but in reality, investment-related administrations are provided mainly by financial institutions such as banks, insurance companies and securities companies and recordkeeping-related administrations are dominated by two companies, Japan Investor Solution & Technology (JIS&T) and Japan Record Keeping Network (NRK). As will be discussed later, JIS&T and NRK were co-founded by financial institutions engaged in DC investment-related administration. Each investment-related administrator is connected to the recordkeeping-related administrator it founded. In that sense recordkeeping-related administrators can be regarded as a business infrastructure for DC plans. As a result of the consolidation of the financial groups to which the plan administrators belong, some investment-related administrators are connected to both JIS&T and NRK. In addition, SBI Benefit Systems and Sompo Japan DC Securities have their own recordkeeping-related administrating functions.

Generally speaking, when a financial institution refers to DC business it means to en-

gage in investment-related plan administration. As of May 6, 2022, there were 220 registered plan administrators. Four of them were the recordkeeping-related administrators mentioned above.

V-2. Revenue Structure of DC Business

The revenue structure of DC business mainly from the view of investment-related administrators are discussed below.

V-2-1. Plan Administration of Corporate DC

The main revenue source of investment-related administrators of corporate DC plans is the fees they receive from employers sponsoring the DC plan. Such fees are usually determined on a case-by-case basis by negotiation between the employer and are not disclosed to the public. It is difficult to grasp the actual situation regarding the plan administration fees paid by employers.

In corporate DC plans, employers select an investment-related administrator usually through a competition among multiple candidates. Such selection process, while appropriate for hiring a good administrator, have created a severely competitive environment and have led to aggressive fee reductions.

Investment-related administrators except for SBI Securities and Sompo Japan are connected with either or both JIS&T and NRK, and when an employer selects an investment-related administrator, the recordkeeping-related administrator is also determined. When the DC system was introduced to Japan in 2001, it was presumed that the recordkeeping business in itself will not be profitable with little room for differentiation, and thus financial institutions decided to establish a common infrastructure for the industry[41]. However, they failed to establish a single recordkeeping platform and ended up being divided into two camps. Recordkeeping-related administration requires significant IT investment. Financial institutions that funded recordkeeping administrators need to recover the initial investment over several years while making additional investments in response to regulatory changes. As founding investors, financial institutions with investment-related administration businesses need to have recordkeeping-related administrators make profits and eliminate accumulated losses. Thus they cannot simply ask for a reduction in recordkeeping fees. As a result, the reduction of fees due to increased competition mainly affected investment-related administrators and may have led to a serious reduction in their revenues.

V-2-2. Plan Administration of iDeCo

The main source of revenue for iDeCo's administrators is fees received from partici-

[41] 401(k) plans in the United States also have recordkeeping services, but the function is not necessarily separated from investment-related services like in Japan, and there is no oligopolistic record keeper established jointly like JIS&T and NRK. However, with regard to the IT-related part of the recordkeeping operation, partnerships with outside parties have been expanding, and the trend of outsourcing is becoming more prevalent.

pants[42]. iDeCo differs from corporate-type DC plans in that NPFA, a sponsoring organization, also charges fees. Fees are published and are readily available to participants and individuals considering joining iDeCo. Small fee differences can have an important effect on long-term asset building. A website to help individuals compare iDeCo is operated by the Defined Contribution Pension Education Association, and Table 5 is the service provider list

Table 5: iDeCo Plan Administration Fees

Financial Institution	Upfront participation fee	Ongoing administration fee (monthly)	
		With Contribution	No Contribution
AEON Bank	2,829 yen	171 yen	66 yen
Daiwa Securities	2,829 yen	171 yen	66 yen
Nomura Securities	2,829 yen	171 yen	66 yen
Matsui Securities	2,829 yen	171 yen	66 yen
Monex	2,829 yen	171 yen	66 yen
Sumitomo Mitsui Banking Corporation (Mirai Project)	2,829 yen	171 yen	66 yen
Rakuten Securities	2,829 yen	171 yen	66 yen
au Asset Management	2,829 yen	171 yen	66 yen
au Kabucom Securities	2,829 yen	171 yen	66 yen
SBI Securities (Select Plan)	2,829 yen	171 yen	66 yen
Sony Bank (assets of 500,000 yen or more)	2,829 yen	171 yen	66 yen
Mizuho Bank (assets of 500,000 yen or more)	2,829 yen	171 yen	66 yen
The Dai-ichi Life Insurance (assets of 1.5 million yen or more)	2,829 yen	171 yen	66 yen
Sompo Asset Management (assets of 2 million yen or more)	2,829 yen	171 yen	66 yen
Resona Bank (iDeCo Plus Discount)	2,829 yen	171 yen	388 yen
Sompo Asset Management (assets 1 million to 2 million yen)	2,829 yen	314 yen or less	209 yen
Okasan Securities	2,829 yen	380 yen	440 yen
Japan Post Bank	2,829 yen	430 yen	325 yen
The Gibraltar Life Insurance	2,829 yen	431 yen	326 yen
Chuo Labour Bank	2,829 yen	431 yen	326 yen

Note: Accessed August 14, 2021
Source: iDeCo Navi (operated by the Defined Contribution Pension Education Association) website (https://www.dcnenkin.jp/search/commission.php)

[42] While iDeCo participants apply for membership at financial institutions such as banks, securities companies and insurance companies, there are cases in which such financial institutions do not handle the work themselves and entrust it to their partner. For the sake of simplicity, this paper focuses on the pattern of financial institutions themselves conduct plan administration.

with the lowest fees as of August 2021.

From Table 5, we can see that the upfront participation fee is a flat 2,829 yen, and that the ongoing monthly fee of 14 companies is a flat 171 yen (with contributions) and a flat 66 yen (without contributions) as of August 14, 2021. NPFA charges 2,829 yen when an individual enrolls or transfers assets. And 171 yen is the sum of 105 yen collected by the NPFA each time a contribution is made, and 66 yen collected by the asset administrator. Thus in the case of no contribution, only 66 yen is incurred. In short, investment-related plan administrators in Table 5 do not collect fees for themselves, and offer their services virtually free of charge. We can see that there is intense competition and fee reduction pressure among plan administrators in the iDeCo business as well.

V-2-3. Revenue from Investment Products

Financial institutions that offer investment products to DC plans can earn fees for offering those products. In both corporate DC and iDeCo, the costs of investment products are generally borne by individual participants who choose the product.

Although fees are not explicitly disclosed to depositors, bank deposits are not free of charge. That is, the deposit interest rate is the interest rate after fee deduction. The same is true for insurance products offered in DC plans. Insurance companies offer guaranteed investment rates after deducting the fee for providing the product. The fees for investment trusts are disclosed explicitly. Management fees are deducted from the assets of investment trust and become the income of the management company, etc[43]. Information on management fees is provided to the participants by the investment-related administrator. It is also included in the prospectus of the investment trust.

A publicly offered investment trust with a defined contribution pension or DC in its name is an investment trust provided via DC plans and is called a DC-only fund. Information on such investment trusts can be extracted from the website of the Investment Trusts Association, Japan (JITA). Based on the data available on August 13, 2021, there were 17 funds with net assets of 100 billion yen or more.

The asset-weighted average of the management fee of those17 funds was 0.21%. For funds with net assets of 50 billion yen or more (39 funds), the asset-weighted average of fees was 0.31%. Passive investment is dominant among funds in DC plans, and all 17 funds extracted above were passive funds. Passive funds generally have lower fees than active funds. The total assets as of March 2021 were 16.3 trillion yen for corporate DC plans and 2.1 trillion yen for iDeCo as of March 2020, and the investment trusts accounted for 47.8% of DC assets as of March 2020. Assuming that investment trust assets held in DC plans were approximately 8.84 trillion yen and the management fee was 0.31%, the amount of fees was approximately 27 billion yen. This is only a rough estimate, but it indicates the level of revenue for investment trust companies conducting DC businesses[44].

[43] Management fees are distributed among the investment manager, distributor and trustee bank. In general, investment trust investors often pay sales commissions to distributors (such as securities companies or banks) at the time of product sales, but sales commissions are typically not charged for DC-only investment trusts.

Compared to similar products publicly offered by the same asset management company, the fee for DC-only funds seems to be set lower. A corporate DC plan is an occupational business, and all participants of a corporate DC plan become potential investors once the fund is adopted in the DC product lineup. It can be reasonable from a business point of view to keep fees low as the cost of marketing is lower. Also, DC investments are long-term in nature and the frequency of switching investment products is generally low. It is expected that capital inflows and outflows will be stable and less affected by market fluctuations than investments in taxable accounts. For asset management companies, the diversification of investor attributes can be considered as a business advantage.

An investment-related administrator and a product provider for DC plans may belong to the same financial group. However, the plan administrators are required to make objective and neutral product selection based on its expert knowledge, and products of affiliated companies cannot be favored in the product selection process. Whether this governance is functioning adequately or not is crucial for securing the best interest of corporate DC participants who can only choose from the products selected by the plan administrator. As for iDeCo, since individuals can freely choose where to join after looking at the investment product lineup, iDeCo with less attractive products will not be able to grow participation in the long term, and are not likely to be able to put itself on a growth trajectory as a business.

V-2-4. DC Business Profitability

Summarizing the profit-making environment of the DC business, it can be said that making profits in the investment-related plan administration business alone is difficult at present. Recordkeeping-related administration is in effect the industry's infrastructure and may not be an appropriate area of aggressive revenue seeking. The same goes for the asset administration of DC plans. In investment management, passive investments with lower fee levels are mainly selected and management fees tend to be set lower than those for taxable accounts. The profitability of deposits and insurance products are in a difficult situation with the low interest rate environment.

It is widely recognized that the profitability of the DC business is not high to begin with and needs to be addressed from a long-term perspective. Although 20 years have passed since the inception of the DC system, it can be interpreted that each entity is still seeking to keep its business on track. The following points can be made as arguments for justifying business continuity.

As mentioned above, investment-related administration is mainly provided by financial institutions, and the profit and loss of the DC business alone may not necessarily be meaningful. Expecting synergies, management decisions may be made in conjunction with other businesses operated by the financial institution rather than the DC business alone. We can expect corporate DC plan businesses to help strengthen ties with corporate clients and to use this as an opportunity to acquire other occupational businesses. Large financial groups with

[44] It should be noted that in general investment trusts with smaller assets tend to have higher fees than those with larger assets.

both plan administration and investment management functions can compete in both business areas, and even if the plan administrator is not adopted or unprofitable, investment products may be selected and have significance as an asset management business. It is possible to evaluate them collectively as a DC business.

A ripple effect on the retail business as a whole may also be expected. In the United States, the workplace DC plan is the first place for ordinary individuals to experience mutual fund investments[45]. According to a 2020 survey by the Investment Company Institute, the country's mutual fund industry association, 45.7% of U.S. households (58.7 million households) owned mutual funds, and 63% of households with mutual fund ownership said that their first investment experience was in the occupational DC plan. On the other hand, 37% of households currently hold mutual funds only in their occupational DC plans, 46% in both non-occupational DC (including IRA) and occupational DC, and 17% in non-occupational DC only. These findings suggest that many households in the United States first experience holding mutual funds via occupational DC plans and then hold them elsewhere as well. In corporate DC plans in Japan, as of March 2021, 32.1% of participants put their contributions only in deposits and insurance, and 67.9%, or about two-thirds, used investment trusts[46]. On the other hand, according to a survey by JITA[47], the percentage of investment trust ownership was 23.4%. This suggests that at least the utilization of investment trusts among DC participants is more advanced than households at large. However, the participation rate of corporate DC plans and iDeCo among investment trust holders is still limited today. How the relationship between DC participation and investment trust ownership develops would be interesting to observe.

Rather than seeking profitability through the DC business by itself, financial institutions may place importance on the possibility of expanding contacts with individuals and raising their awareness to the extent not possible in other businesses. Alternatively, there may be a view that DC business contributes to solving social problems. This perspective may become more important in the future as expectations for solving social issues through business increase[48].

VI. Conclusion

In Japan, where the declining birthrate and aging population are progressing, public pension benefit control is inevitable in order to sustain the public pension system, and the resulting shortfall needs to be met by individuals converting current consumption to future consumption. If individuals can achieve this by themselves, there is no need for government intervention, but in reality this seems to be difficult due to myopia, etc., and thus incentives are granted through private pension schemes. As the role of private pensions increases more

[45] Investment Company Institute (2021)
[46] DC Plan Administrator Association, "Defined Contribution Pension Statistics (March 2021)"
[47] The Investment Trusts Association, Japan, "Survey Report on Investment Trusts," March 2021.
[48] See, for example, Shiozawa and Takeshita (2020).

than before, it is necessary to ensure the sustainability of private pensions.

Private pensions involve tax measures, but the current private pension tax system in Japan has its shortfalls. We believe that the stability and sustainability of the private pension tax system will ultimately be enhanced if the DC contribution limit is revised to arrangements with equal opportunity regardless of the individual's circumstances. The special corporate tax should be abolished and benefits should be taxed as an EET-type tax system ultimately. However, it is essential to establish sufficient transitional measures and set a well-devised transition period. Further research is required here.

As private pensions are positioned to complement social security, their usage should not be limited to highly literate individuals. Achieving a high participation rate is important from the standpoint of the legitimacy of tax measures. When measures for the largest possible participation rate are considered, the opt-out method by the automatic enrollment system seems to be appropriate because the circumstances of how much current consumption can be sacrificed vary from person to person.

Given that DC service providers are private sector companies, it is important that they can find moderate profitability and pursue business opportunities to be sustainable. This is an area that will require more detailed analysis in the future.

References

<Reference materials in Japanese> Provisional translation by the author.

Kazumi Asako, Katsuaki Ochiai and Yukiko Ochiai (2015), *Environmental Economics in Graphics*, Shinseisha

Yoshifumi Aso (2013), "Economic Effects of Public Pensions," *Financial Review*, 25, No. 4 (Vol. 115), pp. 4-22.

Kota Okada and Biena Nakamura (2020), "Challenges of Automated Defined Contribution Plan Systems in U.S. State Governments - OregonSaves as a Case Study -" *Nomura Capital Markets Quarterly*, Autumn issue, pp. 92-105.

Kota Okada and Biena Nakamura (2021), "Private Pension Tax System in the United States", *Securities Analysts Journal*, No. 59, Vol. 10 pp. 17-25.

Corporate Pension Study Group (2007), "Results of the examination of the Implementation Status of the Corporate Pensions", July.

Kuniaki Sano (2021), "Private Pension System and Tax System in UK," *Securities Analysts Journal*, Volume 59, No. 10, pp. 26-38

Shuhei Shiozawa and Satoshi Takeshita (2020), *Social Problems are Solved by Business*, Ashi Shobo

Yoichi Taniuchi (2021), "Issues in the Private Pension Tax System," *Securities Analysts Journal*, Vol. 59, No. 10, pp. 6-16.

Akiko Nomura (2017), *Evolving Defined Contribution Pensions*, Kinzai Institute for Financial Affairs.

Akiko Nomura (2019), "2019 Public Pension Funding Review and Expansion of Private

Pensions," *Nomura Capital Markets Quarterly*, Autumn Issue, pp. 154-166.
Akiko Nomura (2021), "Challenges and Prospects of Japan's Pension System in Comparison with Overseas," *Securities Analysts Journal*, Vol. 59, No. 7, pp. 16-24.
Akiko Nomura (2022), "Sustainability of the Pension Systems and the Role of Private Pensions," *Financial Review*, No. 150, pp. 46-75
Yosuke Fujisawa (2021), "Private Pensions and Fairness in Canada," *Securities Analysts Journal*, Vol. 59, No. 10, pp. 39-48.
Hideyuki Morito (2003), *Corporate Pension Law and Policy*, Yuhikaku
Hideyuki Morito, Kinuko Watanabe, Nobuhiko Yamazaki (2010), "Research on the Evaluation of Corporate Pensions from the Perspective of Retirement Security," *Health and Labor Sciences Research Grants (Policy Science Promotion Research Project) Comprehensive Research Report*, research period: 2009 to 2010

< Reference materials in English>
Peter J. Brady (2016), *How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits*, Investment Company Institute
John Y. Campbell and Martin Feldstein (ed.) (2001), *Risk Aspect of Investment-Based Social Security Reform*, University of Chicago Press
John Chalmers, Olivia S. Mitchell, Jonathan Reuter and Mingli Zhong (2021), "Auto-Enrollment Retirement Plans for the People: Choices and Outcomes in OregonSaves," NBER Working Paper 28469, February.
Robert L. Clark and Olivia S. Mitchell (2005), "The Changing Retirement Paradigm," in Robert L. Clark and Olivia S. Mitchell (ed.), *Reinventing the Retirement Paradigm*, Oxford University Press, pp. 3-13
Department for Work & Pensions (2020), "UK Automatic Enrolment evaluation report," February.
Martin Feldstein (2009), "Reducing the Risk of Investment-Based Social Security Reform," *Social Security Policy in a Changing Environment*, University of Chicago Press, pp. 201-218.
Martin Feldstein and Jeffrey B. Liebman (2002), "Chapter 32: Social Security," in Alan J. Auerbach and Martin Feldstein ed., *Handbook of Public Economics* Volume 4, pp. 2246-2324.
Robert Holzmann, Richard Paul Hinz and Mark Dorfman (2008), "Pension Systems and Reform Conceptual Framework," Social Protection Discussion Paper Series No. 0824, The World Bank
Robert Holzmann and Hinz, Richard (2005), Old Age Income Support in the 21st century: An International Perspective on Pension Systems and Reform, Washington, DC: World Bank <https://openknowledge.worldbank.org/handle/10986/7336>
Investment Company Institute (2021), *2021 Investment Company Fact Book*, Washington D.C.
James A. Klein (2005), "Looking Backward, Looking Forward: Where is Pension Policy

Headed?" in Robert L. Clark and Olivia S. Mitchell (ed.), *Reinventing the Retirement Paradigm*, Oxford University Press, pp. 14-24.

David McCarthy (2005), "The Future of Pension Plan Design," in Robert L. Clark and Olivia S. Mitchell (ed.), *Reinventing the Retirement Paradigm*, Oxford University Press, pp. 92-110.

Mercer (2019), "Mercer Global Pension Index," Monash Center for Financial Studies, Melbourne

Mercer (2020), "Mercer CFA Institute Global Pension Index," Melbourne.

James Mirrlees, Stuart Adam, Tim Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles and James M. Poterba (2011), *Tax by Design*, Oxford University Press.

Olivia S. Mitchell and Richard C. Shea (ed.) (2016), *Reimagining Pensions: The Next 40 Years*, Oxford University Press

OECD (2019), Pensions at a Glance 2019: OECD and G 20 Indicators, OECD Publishing, Paris
<https://doi.org/10.1787/b6d3dcfc-en>

Richard H. Thaler, and Shlomo Benartzi (2004), "Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving," *Journal of Political Economy*, Vol. 112. No. 1 Pt 2.

World Bank Group (1994), Averting the old age crisis: policies to protect the old and promote growth (English), Washington, D.C.
<http://documents.worldbank.org/curated/en/973571468174557899/Avertingthe-old-age-crisis-policies-to-protect-the-old-and-promote-growth>