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Japan's Pension System: Challenges and **Implications**

Diversity of Pension Systems

¶ he fundamental purpose of the pension system is to help people secure income during retirement and their senior years. There are many ways to achieve that goal. For example, the World Bank has provided the concept of multi-pillar pension systems (Table 1). How to combine these pillars is up to each country, and there will therefore be a variety of patterns based on historical and indigenous circumstances.

While one should not look for "one size fits all" answers, there are always some things to learn from developments in other countries. As described in the next section, Japan's pension system consists of multi-pillars, as recommended by the World Bank. Nonetheless, Japan has encountered a number of problems. Some have been resolved, some not, and Japan is now facing new challenges, related to demographic, economic and societal changes. Asian countries, in some way or another, will face many of the same challenges as their populations age and their economies mature.

Japan's Pension System

The Japan pension system consists of the public pension system and private-sector pension plans (Figure 1). The public pension system is part of Japan's social security system and consists of the National Pension Insurance (NPI) and Employees' Pension Insurance (EPI). Participation in the public pension system is mandatory. NPI is the basic income portion that covers everybody. EPI is the income replacement portion that covers public and private sector employees.

Private pension plans consist of two types. One is the defined benefit (DB) type and the other is the defined contribution (DC) type. Private pension plans are voluntary in nature, and employers are not required to offer these pension plans. Public employees are covered by DB plans.

National Pension Funds (NPFs) and individual DC plans are individual pension plans. NPFs are for the self-employed and individual DC plans are for most of the working-age population, including non-working spouses. Eligible individuals can join at their discretion.

Applying the World Bank multi-pillar concept, the Japanese pension system incorporates the elements of Pillar 0 (part of National Pension Insurance), Pillar 1 (part of NPI and EPI) and Pillar 3 (DB and DC plans).

Challenges for the **Public Pension System: How to Enhance** Sustainability

Achieving universal coverage

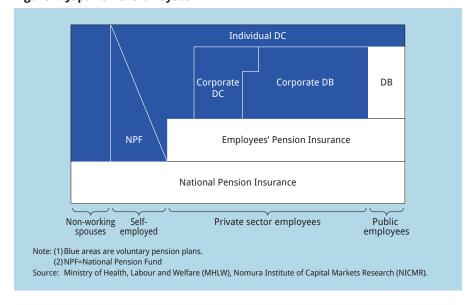
The public pension system should aim at covering everybody. In Japan that goal was achieved in 1985.

Often, pension plans based on the workplace are introduced first. In Japan's case, a mandatory pension plan for private company workers was introduced in 1942. This later became today's EPI, and the pension plan for government employees and private school teachers was established in the 1950s. In 1961, the NPI for self-employed people was introduced. All workers were now covered, realising universal coverage. However, those pension plans were separate from each other and the pension system as a whole was not well integrated. Thus, the Basic Pension was introduced in 1985. The NPI became

Table 1: Multi-Pillar Pension Concept

	Characteristics	Funding
Pillar 0	Basic or social pension, at least social assistance, universal or means-tested Participation: Universal or residual Major target: Lifetime poor	Budget/general revenues
Pillar 1	Public pension plan, DB or notional DC Participation: Mandatory Major target: Formal sector	Contributions, per- haps with financial reserves
Pillar 2	Occupational or personal pension plans Fully funded DB or fully funded DC Participation: Mandatory Major target: Formal sector	Financial assets
Pillar 3	Occupational or personal pension plans Partially or fully funded DB or funded DC Participation: Voluntary Major target: Formal and informal sector	Financial assets
Pillar 4	Access to informal (e.g. family support), other social program (e.g. health) and other individual financial and nonfinancial assets (e.g. home ownership) Participation: Voluntary Major target: Informal sector and lifetime poor	Financial and non-fi- nancial assets

Figure 1: Japan's Pension System



the Basic Pension and part of EPI and the government employee pension also were included in the Basic Pension. The participation of non-working spouses also became compulsory. In theory, everybody regardless of working status now was covered by a common system, the Basic Pension. In 2015, the salary-related portion of the government employee pension was integrated into the EPI.

Rapid ageing and sustainability of the public pension system

The ageing of the Japanese population has been more rapid than projected. To strengthen public pension funding, the public pension premium has had to be raised repeatedly. However, this has

meant increasing the burden on the working generation, which cannot be continued forever. Sustainability thus became the biggest challenge for the Japan's public pension system.

Besides raising the premium, policy measures to improve funding prospects and enhance the sustainability of the public pension system include raising the retirement age, reducing the benefit level, and finding other sources of funding. Raising the retirement age has been adopted by a number of developed countries. To give people sufficient time to prepare for such changes to the public pension scheme, the changes must be introduced gradually over a long period of time. In Japan's case, the seriousness of the nation's low fertility rate was recognised in the early 1990s, and the decision to gradually raise the retirement age from 60 to 65 years old was made. Japan is still in the midst of raising the minimum retirement age, which is now scheduled to reach 65 in 2025 for men and 2030 for women.

In 2004, Japan implemented a comprehensive public pension reform. This reform included (1) gradually raising the premium from 13.58% to 18.3% between 2005 and 2017, after which it would remain fixed at the higher level, (2) introducing an automatic benefit control mechanism called the "macroeconomic slide" when the mechanism was ready for use. (3) keeping the income replacement ratio (percent of average public pension benefit to average worker's income) above 50%, (4) financing half of basic pension income from general government revenues, and (5) conducting funding reviews every five years to secure the sustainability of the public pension system for the next 100 years.

In 2012, Japan also decided to raise its consumption tax from 5% to 8% and eventually to 10% and to use the additional revenue for strengthening its social security system. The consumption tax rate was raised to 8% in April 2014, and the increase to 10% is now scheduled for October 2019.

Automatic benefit control mechanism

The automatic control mechanism (the macroeconomic slide) is a fairly complex method of reducing the purchasing power of the public pension benefit over a long period of time. Basically, public pension benefits are increased based on the wage increase for new benefit recipients and on the consumer price increase for retirees. When the automatic control is applied, benefit increases will be diminished

by the "slide adjustment rate," which is calculated by the Ministry of Health, Labour and Welfare (MHLW) based on the life expectancy and fertility rate. For example, if the consumer prices rise 2.0% and the slide adjustment rate is 0.9%, the pension benefit will be increase by only 1.1% instead of 2.0% for that year. The same exercise will be repeated until the demographic imbalance between the working generation and retirees is resolved.

To date, the macroeconomic slide has been fully applied only once, in fiscal 2015. It was decided that the nominal benefit amount should not be decreased unless wages or consumer prices decrease. Accordingly, for example, if the consumer price increase is only 0.5% and the slide adjustment rate is 0.9%, the benefit will be kept at the same level (0% increase/decrease) instead of reducing it by the 0.4% difference between the rise in consumer prices and the slide adjustment rate. The law was revised in 2016 to record the forgone adjustments and apply them when possible.

It is never easy to decrease the public pension benefit level. One could say that the macroeconomic slide was devised to implement the decrease without consuming unnecessary political capital by making the decrease automatic. No one could foresee that the Japanese economy would suffer from low growth and deflation after the 2004 reform. It remains to be seen whether the benefit adjustment mechanism will be able to resolve the public pension stability issue over the long run.

A more urgent issue, however, is how individuals and households should make up for the scheduled decrease in the public pension benefit. In short, people should prepare more for old-age financial independence by utilizing private pension plans.

Challenges for the **Private Pension System: How to Expand** Coverage

Historical development of private pension plans

In Japan, DB plans were once the only type of private pension plans available. During the 1990s, however, the prolonged economic downturn and slumping domestic stock market made it increasingly difficult for employers to keep providing DB plans. Companies could no longer bear the cost of underfunded current and future pension obligations. In 2001, the DC Law was enacted, and corporate DC plans and individual DC plans were introduced. At the same time, DB plan reform was implemented to strengthen participants' rights to receive benefits.

Since their introduction, the number of DC plans and participants has been growing steadily. As of September 2018, more than 32,000 companies have adopted DC plans, which have 6.85 million participants. However, this growth in DC plan participants has not been sufficient to offset the concurrent decline in participants in DB plans. As a result, the overall number of corporate pension plan participants has not grown (Figure 2).

Features of DC plans

Employers do not have to worry about pension underfunding with DC plans. Employees can clearly see their own assets in DC individual accounts, and their account assets are portable when they change employers. Although future pension benefits are no longer guaranteed, the other features of DC plans are valuable for employees. Also, in the extreme situation of a corporate bankruptcy, DC individual account assets are unaffected, and participants need not worry about the pension benefit reduction that could occur with DB plans. Basic features of Japanese corporate DC plans are as shown in Table 2.

Japan's DC plans are in many ways similar to 401(k) plans in the United States. One big difference, however, is the contri-

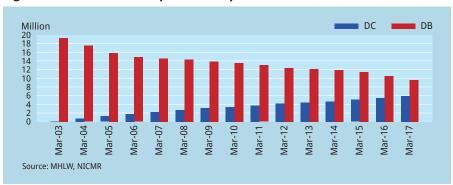


Figure 2: Number of Participants in Corporate Pension Plans

Table 2: Basic Features of DC Plans

Employer and employees must agree to adopt DC plans. A DC plan o ten replaces part of existing retirement benefits, which could be a D plan and/or retirement lump sum arrangement.
Basically, all eligible employees become participants. Recently, hov ever, plan features closer to elective deferral are gaining popularity.
Employer contributes to the accounts. Employees can contribute a well up to the contribution limit prescribed by DC Law.
Employers are required to provide investment education to participant They typically hire a plan administrator. The plan administrator als selects the investment products for the plan, which are typically ban deposits, insurance products (GICs) and various types of mutual funds
Participants can choose from the plan's pre-selected products whe investing their account assets.
When participants change jobs or leave the job market, they can rol over their DC account assets to corporate or individual DC accounts.
There are strict restrictions on withdrawals before 60 years of ago Once participants reach 60, they can withdraw assets in lump sum and or in installments.

bution limit. In short, it is guite low. The annual contribution limit for corporate DC plan is 660,000 yen per participant at most (around USD 6,000). In the case of US 401(k) plan, it is USD 56,000 per participant. This low contribution limit makes it difficult for many Japanese companies to set an optimal contribution rate, knowing that they will not be able to actually contribute the full amount for participants with relatively high salaries. It is often pointed out that the contribution limits need to be raised in order to further expand the adoption of corporate DC plans.

Expanding the eligibility of individual DC plans

As mentioned above, individual DC plans were introduced at the same time as corporate DC plans. Individual DC plans were targeted at self-employed people and company employees without corporate pension plans. However, the share of non-regular employment had risen from 15% in 1984 to 37% in 2017. Employers generally offer neither DB plans nor DC plans to non-regular workers. To make private pension plans available to all private-sector workers, it became increasingly important to expand the eligibility of individual DC plans.

In 2016, the DC Law was revised to expand eligibility for individual DC plans to virtually the entire working population. As of January 2017, company employees with corporate pension plans, government employees, and even non-working spouses have been eligible to join DC plans at their discretion. The number of participants in individual DC plans has more than tripled in the 20 months from 306,000 at the end of 2016 to more than 1 million in August 2018. However, considering the fact that the number of potential participants is more than 60 million, there remains tremendous room for growth in the total number of individual DC plan participants.

Pension Funds and the **Capital Markets**

Investment management of GPIF

Pension plans are major players in

the capital markets. They make long-term diversified investments, which can contribute substantially to the growth of the asset management industry.

Public pension funds tend to be larger than private pension funds in asset size. Japan's Government Pension Investment Fund (GPIF) is the largest pension fund in the world. Its assets under management totaled JPY 161 trillion (around USD 1.5 trillion) at the end of June 2018. Public pension funds in such Asian countries as South Korea, China, Singapore and Malaysia are among the world's top 20 pension funds according to Pensions & Investments.

GPIF's policy asset mix used to be quite conservative, with 67% of assets invested in domestic bonds. However, the rate of return used as the assumption for the public pension funding reviews was as high as 3-4%. An expert committee recommended GPIF enhance portfolio diversification, and in 2014 the policy asset mix was changed to 35% in domestic bonds, 15% in foreign bonds, 25% in domestic stocks, and 25% in foreign stocks. The actual allocation was shifted accordingly (Figure 3). Due to GPIF's size, 76% of its assets are invested passively, but the indexes it employs have become more diverse. It now can also allocate as much as 5% of its assets to investments in alternative assets. such as private equity, real estate and infrastructure.

GPIF became a signatory of UN PRI (Principles of Responsible Investment) in September 2015. Being a longterm and mainly passive investor, commitment to ESG investments also makes sense for the GPIF, which describes itself as a "super long-term investor" and "universal owner." Strengthening its governance structure was another important change necessitated by the GPIF's investment portfolio becoming more sophisticated. A governing body with a collegial structure was introduced in October 2017.

DB plan management

Pension fund asset allocation used to be subject to a numerical regulation known as the 5:3:3:2 rule, which required more than 50% of a fund's assets be invested in domestic bonds while limiting allocations to stocks and overseas assets to under 30% each and property investments to under 20%. In addition, pension fund management was restricted to trust banks and insurance companies. In the early 1990s, investment advisory companies were gradually allowed to enter Japan's pension fund management business. The 5:3:3:2 was gradually relaxed and eventually abolished alto-

Such deregulatory measures led to the diversification of asset managers and investments in Japan. Investment management companies' share of the DB pension fund market has risen from zero to 27%, with insurance companies holding on to a 25% market share and trust banks 48% as of March 2017. In addition, the share of general accounts (insurance products) in pension fund portfolios fell sharply in the late 1990s. DB assets under management totaled 78.7 trillion at the end of March 2018. They are invested in various assets including

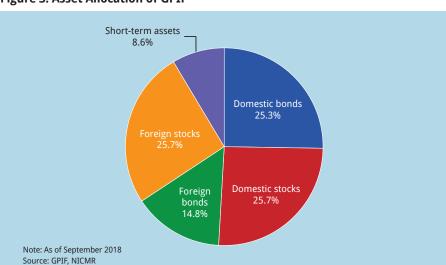


Figure 3: Asset Allocation of GPIF

both traditional and alternative assets (Figure 4).

DC plan investments and the introduction of the DC default fund arrangement

As shown in Table 2, DC plan participants direct their own individual account asset management. They are offered investment education and opportunities to achieve long-term asset formation consisting of a diversified portfolio of mutual funds.

However, the data shows that cash deposits and insurance products account for more than half of the outstanding balance of corporate DC plans, unlike other pension funds (Figure 5). In other words, DC plan participants are heavily weighted toward low-risk, low-return assets.

Measures have been taken to adjust such investment behavior, including enhanced financial education programs, but they have yet to produce any significant change in the aggregate DC asset allocation. Therefore, an amendment to the DC Law in 2016 introduced the "Japanese version of a DC default investment fund." In DC plans, if participants do not specify their investment choice, contributions are allocated to the predesignated default fund, depending on the plan's administrative arrangements. If the default fund is subject to price fluctuations, plan sponsors could take the blame when the value of the default fund falls below the initial invested amount. As a result, such contributions usually were placed in time deposits. The introduction of the default investment product addressed this problem by regarding the plan participants as having instructed the administrator to make the investment as long as certain procedures were followed and conditions were met. Participants can opt out at any time.

One could say that applying the findings from behavioral finance is a global trend in DC plan design. Automatic enrollment is one feature and to default participant investments in such broadly diversified products as balanced mutual funds or target date funds is another. In Japan's case, while investment education and experience in long-term investment via DC plans could play an important role in enhancing the financial literacy of people, it may not be powerful enough to make participants actually take action and additional nudging may be needed.

The shift from DB to DC may affect the nature of pension funds as institutional investors to some extent because, in many DC plans, the final investment decision is made by participants rather than investment professionals. However, if the main trend is for DC contributions to be placed in default funds, the bulk of DC assets will end up being managed by default fund managers, who should be as sophisticated and professional as DB plan managers.

Figure 4: Aggregate Asset Allocation of DB Plans

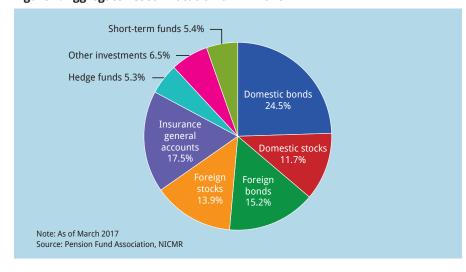
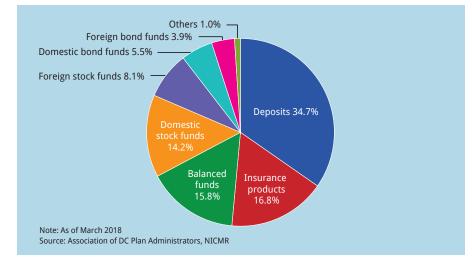


Figure 5: Aggregate Asset Allocation of DC Plans



Concluding Remarks

The role of the public pension system is to provide a broad, if not universal, coverage. This goal has generally been achieved in Japan. However, Japan is ageing rapidly and it will be increasingly important to clarify the role of public pension system—will it be to provide basic income after retirement or to provide some sort of income replacement. Japanese EPI contains both elements, which could cause confusion about what should be prioritised in discussions about the reform agenda for enhancing system sustainability.

The importance of strengthening private pension plans is shared by many countries. And DC plans rather than DB plans will play a major role. Trickier issues for DC plans include how to enhance coverage and provide support for participants' investment decisions. It seems that defaulting

people into participation in broadly diversified investments is becoming the globally accepted arrangement for resolving these issues.

Pension systems are based on longterm commitments, and system stability is therefore very important. However, when changes are needed, early action is crucial to enabling more people to become better prepared for the changes affecting their old-age pension income. In addition, while pension systems are unique to each country, many common issues exist, such as ageing populations. It is therefore beneficial to monitor pension system-related developments in other countries and learn from other countries' experiences.

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