Funded Pensions:

The Japanese Experience and Its Lessons

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Japan at a Glance

Population (in 2015)	126.9 million
Population 65 ＋	33.4 million (26.3%)
TFR (in 2015)	1.46
GDP per capita (in 2014)	USD 38,644
SS Pension Benefits (in 2014)	10.9% of GDP
No. of SS Pension Enrollees	65.8 million (53%)
No. of SS Pension Beneficiaries	39.9 million (31%)
The Normal Pensionable Age	65

Japan: Some Characteristics (1)

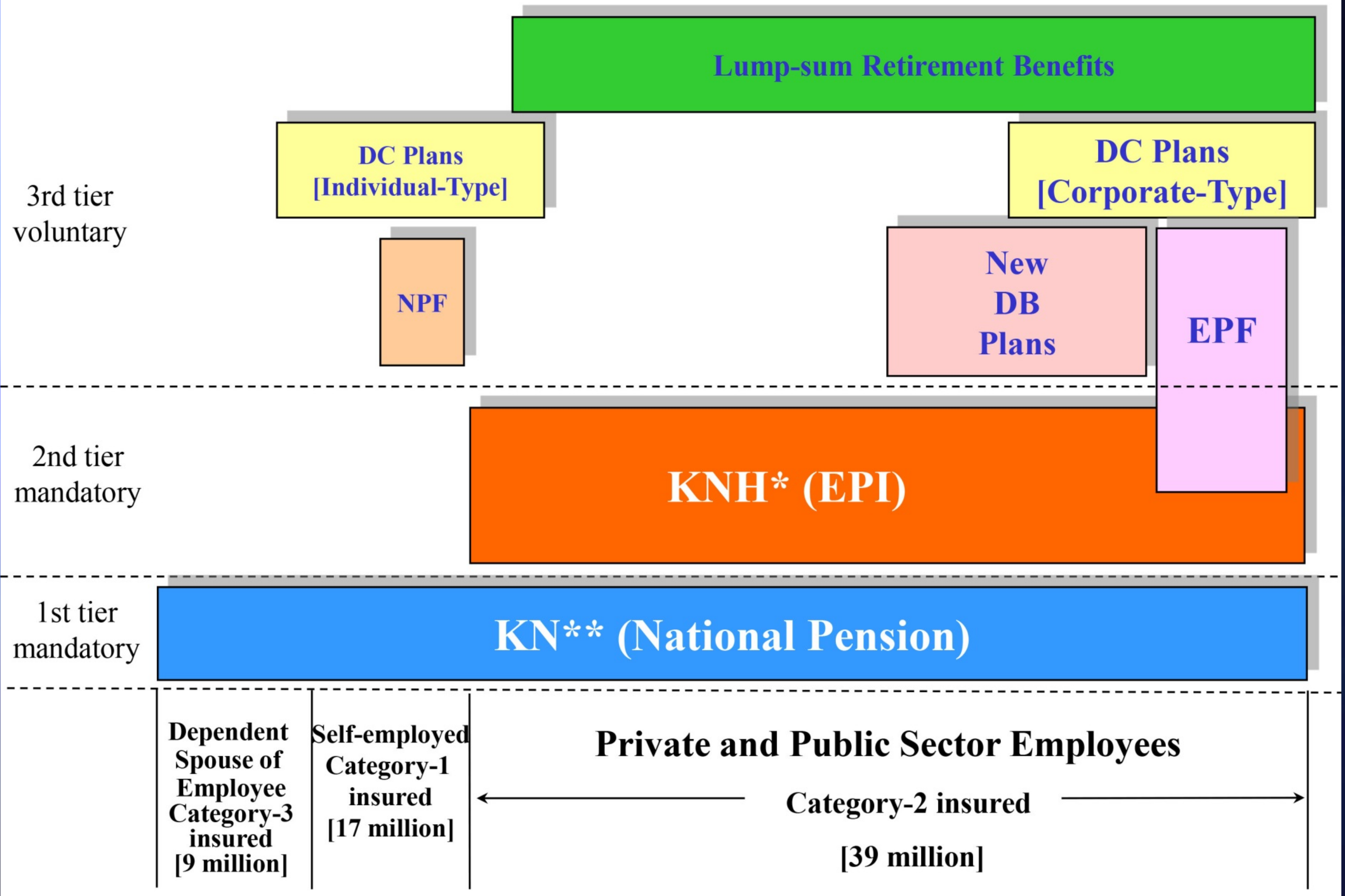
Pensions reflect the history, culture and philosophies of people living in respective countries.

- The Yamato Japanese ethnic group comprises 98.5% of the total population, which makes people there quite homogeneous.
- Japan is largely mountainous and forested, with only 11.6% of its area arable land. The population density is virtually quite high.
- Natural disasters (earthquakes, typhoons, tsunamis, flooding, and volcanic eruptions) often hit Japan even today.

Japan: Some Characteristics (2)

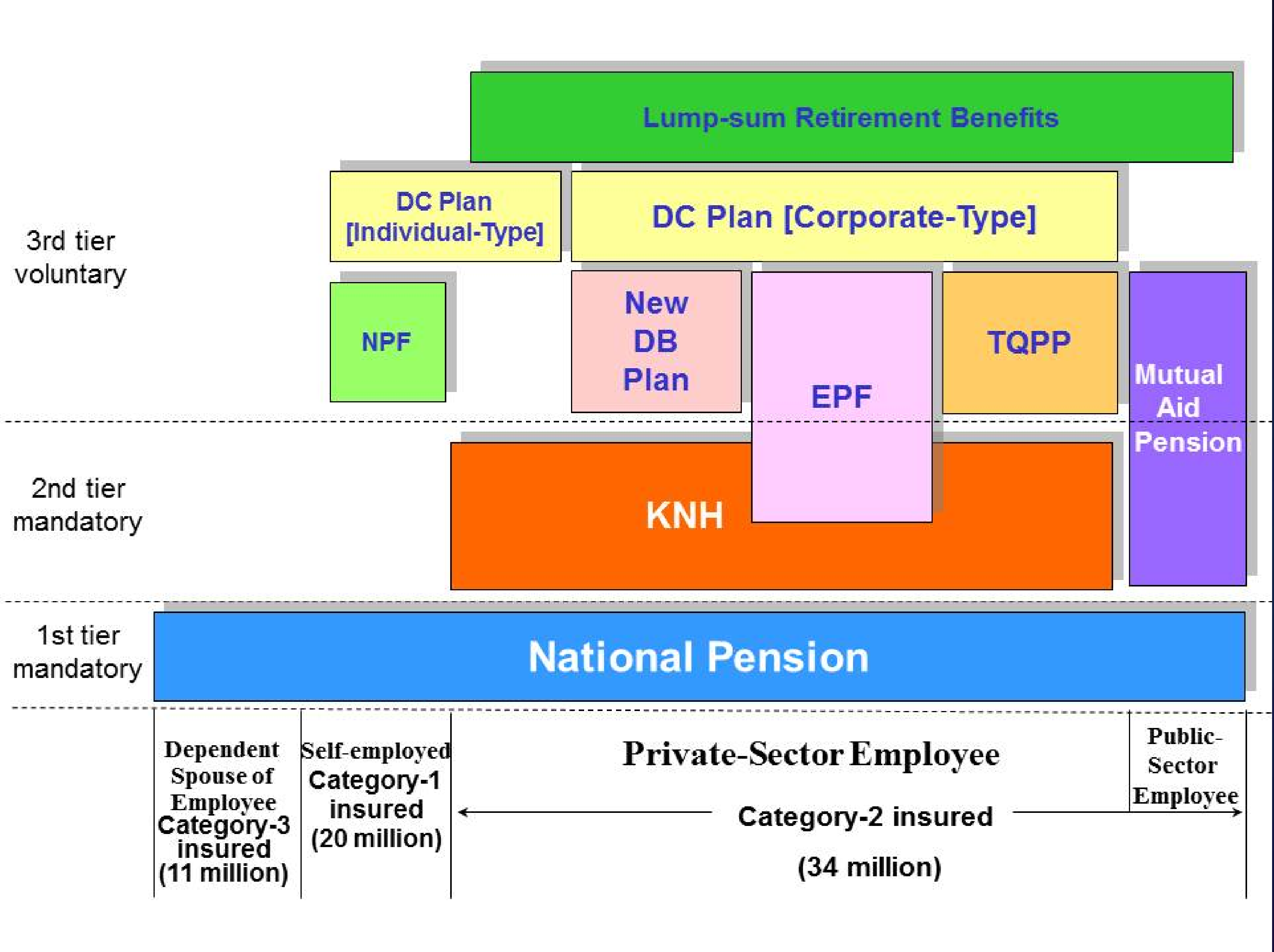
- Japanese have island-nation mentality and their way of thinking dates back from the one formed in an old rice-producing society.
- Japanese are ordinarily good at making materials lighter and more compact. They specially stick to comfort, convenience and details, searching for continuous improvement.
- Japanese people take it for granted that political power, wealth and authority should be held separately by different persons, and that any person should not monopolize all the three (or two).
- As far as pension policy-making in Japan is concerned, the most important person is Director-General of the pension bureau of the Ministry of Health, Labour and Welfare.

Retirement Benefits in Japan (as at September 2016)



* KNH: Kosei-Nenkin-Hoken (Employee Pension), ** KN: Kokumin-Nenkin

Retirement Benefits in Japan (as at March 2011)



The KNH: Its Start-up Phase (1)

- Kosei Nenkin Hoken (KNH) has been the principal SS pension program for private sector employees (and for civil servants since October 2015). It was established during wartime days in 1942.
  - Its initial design was based on a funded DB scheme that would build up reserves by not paying benefits in the early years.
- One of the main reasons for its set-up was to reduce the purchasing power of the Japanese people during World War Ⅱ through mandatory reduction of contributions from their salary, thereby helping reduce the rate of inflation. The funded reserve was converted to partly finance the war expenses.

The KNH: Its Start-up Phase (2)

- The contribution rate (for employees and their employers combined) was initially set at 6.4% in 1942 and was hiked to 11% in 1944.
- Just after World War Ⅱ, a hyperinflation occurred in Japan. Namely, the CPI increased 100 times between October 1945 and April 1949.
- The hyperinflation turned the KNH funded reserve into heaps of worthless paper, and the earned pension entitlements of employees became a nil, since they are a contract in nominal terms.
- Almost all Japanese were forced to manage to survive near a starvation level. The government reduced the KNH contribution rate to 3% in 1948.

The KNH: Its Start-up Phase (3)

- The KNH was rebuilt in 1954. In order to encourage employees to contribute, the government promised to pay a socially adequate level of pension benefits, regardless of the amount of contributions they have made. Thus, the KNH gradually shifted from a funded scheme to a pay-as-you-go one.
- Lesson 1: The funded pension program is very fragile under inflation (hyperinflation). Inflation does serious damages to the earned entitlements of funded pensions.

The KNH: No Return to a Funded Scheme

- There have been some proponents, though quite minor in number, who advocate a switch of the KNH from a pay-as-you-go scheme to a funded one.
- Its switch turns to be politically difficult, since it inevitably incurs a “double-burden” problem.
- The only thing Japan can do in the future will be that the generous KNH benefits be reduced gradually, while participation in funded pensions on a private basis has to be more encouraged, instead.

Non-mandatory Occupational and Individual Pensions

- Lump-sum Retirement Benefit (DB)
  financed through a book-reserve system
- Employee Pension Fund (EPF, DB)
- Tax Qualified Pension Plan (TQPP, DB)
- National Pension Fund (NPF, DB)
- New Defined Benefit Plan (DB)
- Defined Contribution Plan (DC)

Latest Amounts of Funded Reserves

(JPY as at the end of March 2015)

EPF	28 trillion
New DB	58 trillion
DC	10 trillion
NPF	4 trillion
Sub Total	100 trillion
SS Pensions	200 trillion
Total	300 trillion

Lump-sum Retirement Benefit

The major non-mandatory pension provision in Japan has been a lump-sum retirement benefit. In 2013, 76% of employers provided this benefit. Especially for long-term regular employees it is a significant part of retirement income. For example, in 2011, the average private sector employee with service of 20 years or more received JPY25 million (USD250,000) from his or her employer. This amount was equivalent to 10-12 times the employee's *annual* pension benefit from the KNH.

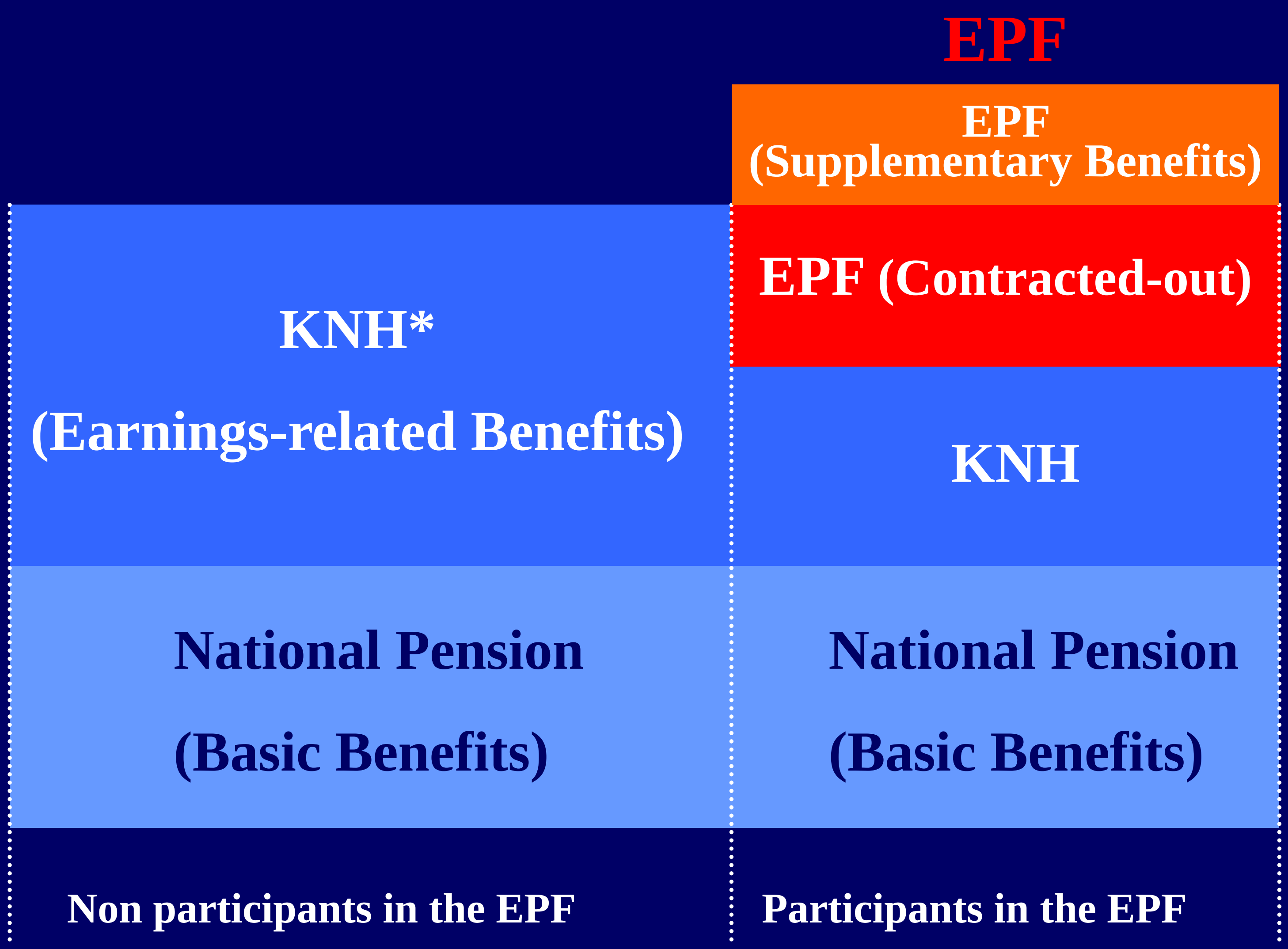
It is financed through a book-reserve system in which employers estimated the liability but do not set aside dedicated funds to pay the benefit. It is virtually managed on a pay-as-you-go basis within each employer.

Rise and Fall of the EPF (1)

The unique contracted-out plan of Japan was established in 1966. It is called the Employee Pension Fund (EPF). The benefits of the EPF consist of two components: the equivalent benefit of the earnings-related portion of the KNH (excluding the benefit resulting from indexing), and the supplementary benefit.

In return for paying the earnings-related old-age pension on behalf of the government, an EPF receives a contribution rebate. The contribution rebate (the payroll tax rebate) is between 2.4 and 5.0 percent from social security pensions, depending on each EPF's average age of their participants. The entire system under an EPF is called the *Daiko* system.

Rise and Fall of the EPF (2)



*KNH is the principal social security program for the private sector employees (the *Kosei Nenkin Hoken*).

Rise and Fall of the EPF (3)

Why the EPF was set up? The reason is as follows:

Namely, in the early 1960s, the pension bureau of Japanese government wanted to increase the level of KNH benefits, and accordingly its contribution rate, while employers were quite reluctant to accept this change, since they additionally had contributed a great deal to their own retirement programs on a private basis.

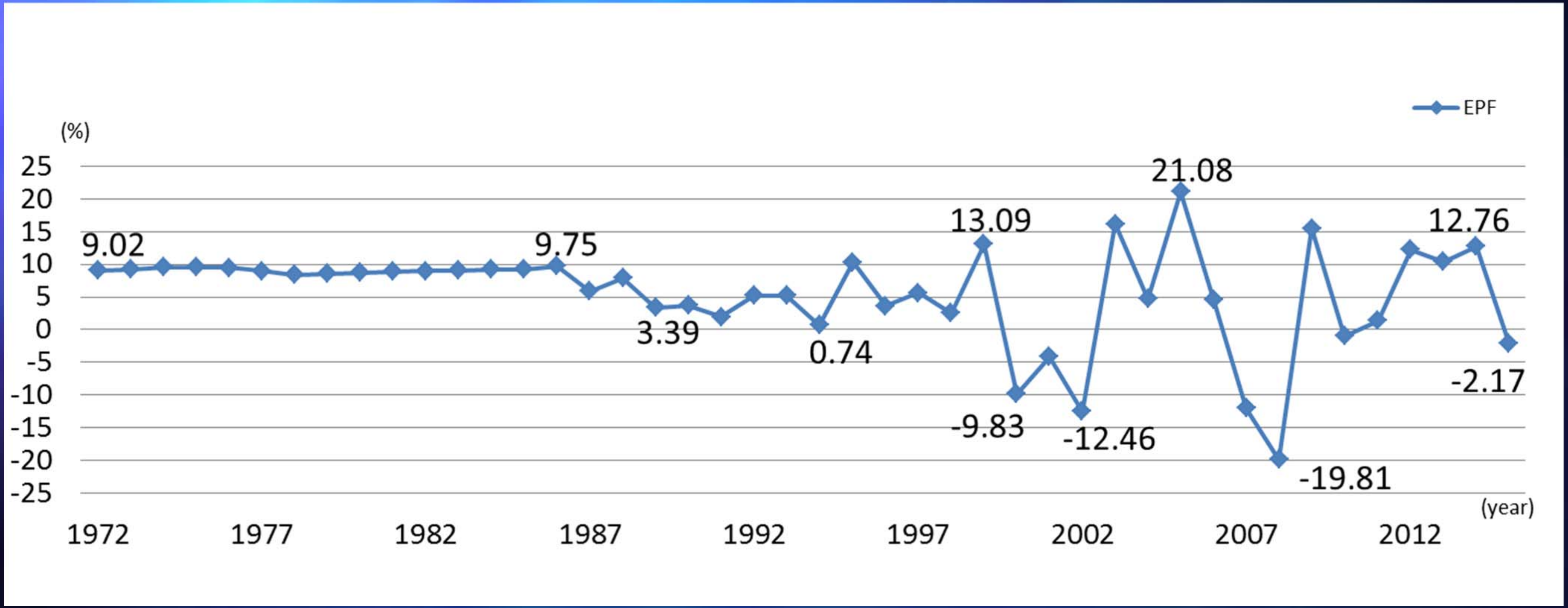
Rise and Fall of the EPF (4)

After long negotiations between the pension bureau and employers' group, there came a compromise. The hikes in both the level of benefits and the contribution rate were alright, but at the same time it was allowed for some employers to promise to pay the increased KNH benefits by adjusting their ongoing retirement programs to the new scheme.

The pension business industry welcomed this compromise, and the pension bureau were able to secure many plum jobs (such as the executive directors and the office managers in the EPF) for retiring officials.

Rise and Fall of the EPF (5)

Rate of Return from Investment in the EPF (in nominal terms)



Rise and Fall of the EPF (6)

The contracted-out portion used to bring in extra profits to EPFs. Once the investment environment turned adverse, however, the contracted-out portion began to hurt EPF operation.

Employers must compensate for the investment loss derived from the contracted-out portion and recognize the projected value of benefits for the contracted-out portion on their books.

Many employers and trade unions lobbied for legislation that relaxes the requirements for EPFs to return the contracted-out portion to the original social security regime. Since April 2002, it has been possible for EPFs to do so (*daiko henjo*).

Rise and Fall of the EPF (7)

The number of the EPF was 142 at the outset. It had once steadily increased up to 1,883 in 1996, but for the past 20 years it has been decreasing to 199 in August 2016, covering 2.1 million employees. The proportion of the participants in the EPFs over total number of the private sector employees was near 37% in 1996, but it fell down sharply to around 16%in 2004, falling further to 8.3% in 2015. The *daiko henjo* amounted to 1239 by August 2016.

The total amount of EPF asset holdings had steadily increased up to JPY 63 trillion (USD 630 billion) in March 2002. It fell down sharply to JPY 26.6 trillion (USD 266 billion) in March 2015.

Rise and Fall of the EPF (8)
The Number of the EPF

Fiscal Year	Number	Fiscal Year	Number
1966	142	2000	1,801
1986	1,134	2004	799
1996	1,883	2016	199

Source: Pension Fund Association, Japan

- **Lesson 2: Success and failure of funded pensions crucially depend on their investment performance. Funded pensions will be promising under high economic growth periods, while they face difficulties in an economic downturn. This is also true for a pay-as-you-go pension.**

Rise and Fall of the EPF (9)

There have been several factors governing the EPF dissolution during the past 20 years. Among others, the market rate of return from investment turned quite miserable, falling below the nominal rate of 5.5% per year. The annual rate of 5.5% return in nominal terms has been one of the basic assumptions for the EPFs. The assumption has been crucial in determining the contribution rebate. In the 1990s in Japan the 5.5% assumption seemed to force the EPFs to “walk on water”. Consequently the majority of EPFs began to suffer from huge amounts of unfunded liabilities, giving a serious impact on the mother company’s rating in the capital market.

Rise and Fall of the EPF (10)

Many mother companies were forced to pay considerable additional money to compensate for the under-funded portion for the social security equivalent benefit, which in turn induced a considerable downsizing of their employment and curtailed new investments.

A downward change of the 5.5% assumption into, say, 3.0% will mitigate the future funding problem for EPFs, while their net pension liabilities accrued from contributions made in the past automatically jump up fairly.

Rise and Fall of the EPF (11)

In 2012, the scandal of AIJ Investment Advisors Co., Ltd. was brought to light. It was very similar to the Madoff case in the US. Its fairly good investment performance which was previously reported to 84 EPFs (AIJ customers) turned to be a fraud. The aggregate loss of their funds amounted to near JPY 200 billion (USD 2.0 billion).

In April 2013, the government submitted a pension reform bill in order to virtually abolish the EPF system in five years. The parliament passed the bill in June 2013. The EPF existing pensioners and its active contributors were forced at once not to receive the supplementary benefits any more upon its contracted-in to social security pension.

Rise and Fall of the EPF (12)

- **Lesson 3:** Even professionals of investment management can be cheated in funded pensions. There is no sweet deal in pension asset accumulation.
- **Lesson 4:** Thorough disclosure of information and full accountability are crucial to avoid cheating in funded pensions. They are required to insure the credible operation, as well.
- **Lesson 5:** Once some pension scheme was established, it is very hard in Japan for the scheme to be abolished, even if it no longer has due reasons to survive. Usually there are some stakeholders who have been benefited from the scheme. They strongly oppose to its abolition.

Rise and Fall of the EPF (13)

A proposal of the contracted-out plan is like saying that one of three sons who have been sending money to support their parents would begin to save for his own, by partly stopping sending money to his parents. The two remaining sons will be adversely affected or the income level of their parents will be reduced accordingly.

Rise and Fall of the EPF (14)

The PAYG supporting is based on a principle of mutual help, but the funded schemes for a specific group are essentially for the participants’ own interest. Their underlying philosophies are totally different, and thus the contracted-out does not seem simple when it comes to technical matters. Indeed, the current contracted-out plans in Japan are very much complicated and consequently very hard for most people to understand. Moreover their handling costs are quite expensive.

Rise and Fall of the EPF (15)

- **Lesson 6: No contracted-out plan is promising at all. Rather, an add-on pension plan is advisable to be implemented.**
- **Lesson 7: If the handling cost is quite expensive, then any pension scheme is hard to be maintained.**

Tax-Qualified Pension Plans (1)

The TQPP which was introduced in 1962, used to be one of the two major occupational pension schemes in Japan. It was an externally funded, tax-favored retirement benefit plan. It had to be approved by the tax agency. Because there was no minimum participation requirement, TQPPs were popular among small to medium-size companies.

The TQPP had 10.6 million participants (32% of the KNH enrollees) in March 1997. Its asset holdings amounted to JPY 22.7 trillion (USD 227 billion) in March 2002.

Tax-Qualified Pension Plans (2)

Policy makers eventually recognized that TQPP regulations were inadequate to protect employees' rights to receive benefits. As a result, employers were required to convert TQPPs to other types of pension plans by March 2012. Some TQPP sponsors switched to other types of pension plans; most simply terminated their TQPPs, leaving employees without any occupational pension plan.

- **Lesson 8**: The tax agency will not be a relevant entity in charge of pensions, since its most significant job is to collect taxes, and not to handle pension schemes properly.

New Defined Benefit Plans

Two kinds of New Defined Benefit Plans—the fund type and the agreement type—were introduced in April 2002, in order to unify regulations and enhance protection of vested benefits for participants. Yet, employers are quite reluctant to expand DB plans, since it is not financially easy for them to make up for the existing or possible excess liabilities.

In March 2015, there were 601 fund-type and 13,282 agreement-type defined benefit plans in Japan, together covering 7.8 million employees. The aggregate amount of accumulated assets was about JPY 58 trillion (USD 580 billion) for new defined benefit plans.

National Pension Fund (1)

The National Pension Fund (NPF) was established in 1991. It is a voluntary DB pension for non-employed persons (self-employed, medical doctors, dentists, lawyers, licensed accountants, tax accountants, etc.) as a top-up on their social security pension.

The qualified persons can participate in the NPF from age 20 to 60, and they have to receive pension benefit from age 65.

Its participants can contribute up to JPY68,000 (USD 680) *per month* per person. Their contribution is qualified to be tax-exempt.

National Pension Fund (2)

In March 2015, there were 47 prefecture-based NPFs and 25 NPFs for different professional groups. Its contributors were 450,000 in number, and its beneficiaries were 478,000, while the amount of the NPF funded reserve were JPY 4.19 trillion (USD 419 billion).

The assumed annual rate of return from investment which is required to fix the amount of contributions was initially set at 5.5% in nominal terms. It was reduced step by step to 1.5% in 2014, referring to the actual market rate of return. The assumed rate of return at the time of each new entrance has been maintained for participants, however. The NPF is basically a contract on a private base.

National Pension Fund (3)

The NPF has long been faced to a problem of unfunded liabilities, since the actual rate of return from investment was often lower than the assumed rate of return in the past. For example, the percentage of funding shortage in the NPF for medical doctors was around 30% as at the end of March 2016. Yet, the NPF has no sponsors like employers in the EPF.

The current pensioners enjoy much more amounts of the benefit than those they have contributed, partly eating the funded reserve which have been accumulated by current younger and middle-aged generations. This will incur a probable conflict between generations.

National Pension Fund (4)
Assumed Rate of Return (A) vs Actual Rate of Return (M)

Fiscal Year	A (%)	M (%)	M–A	Fiscal Year	A (%)	M (%)	M–A
1991	5.50	4.41	-1.09	2004	1.75	5.51	3.76
1992	5.50	5.58	0.08	2005	1.75	21.99	20.24
1993	5.50	4.05	-1.45	2006	1.75	4.27	2.52
1994	5.50	0.93	-4.57	2007	1.75	-11.65	-13.40
1995	4.75	10.00	5.25	2008	1.75	-23.38	-25.13
1996	4.75	2.22	-2.53	2009	1.75	22.52	20.77
1997	4.75	5.59	0.84	2010	1.75	-1.32	-3.07
1998	4.75	1.82	-2.93	2011	1.75	2.99	1.24
1999	4.75	12.98	8.23	2012	1.75	12.19	10.44
2000	4.00	-11.23	-15.23	2013	1.75	9.26	7.51
2001	4.00	-4.75	-8.75	2014	1.50	13.70	12.20
2002	3.00	-13.35	-16.35	2015	1.50	-2.98	-4.48
2003	3.00	17.63	14.63	Average	3.21	3.56	0.35

Source: The Annual Report of the NPF for Medical Doctors

National Pension Fund (5)

A reasonable solution will be to reduce the amount of benefits for current pensioners and the amount of earned entitlements of persons who entered in the NPF before 2000, as well. This is a very hard task, however, since it will be quite unpopular in a political sense.

The pension bureau in Japanese government has long been active in encouraging the self-employed to participate in the NPF, while it decided in June 2016 to integrate almost all NPFs into a single NPF by March 2019. This is a temporal remedy, delaying the inevitable.

National Pension Fund (6)

- **Lesson 9: Government should not do any business where the private sector can do better. In turn, Government can encourage people to enroll in privately-managed personal pension plans by giving tax advantages and/or subsidies, while monitoring them with inspection.**

Defined Contribution Plans (1)

The number of defined contribution plan documents approved by the government has constantly increased since the plans were first introduced in Japan in October 2001. Still, as of the end of May 2016, only 5,014 plans had been approved, covering about 23,000 employers. The numbers of participants were 5.8 million in corporate-type defined contribution plans and around 265,000 in individual-type defined contribution plans, amounting only to 8.8% of social security enrollees.

In March 2015, the aggregate amount of accumulated assets was only about JPY 10 trillion (USD 100 billion) for defined contribution plans.

Defined Contribution Plans (2)

Public officials have not been allowed to participate in any *individual-type* DC plan. It is because they are regarded as possible insiders in the equity market.

Insider trading in the stock market is severely prohibited in Japan, with ceaseless monitoring by authorities.

Defined Contribution Plans (3)

15 years have passed since defined contribution plans were introduced in Japan.

Why has the growth of defined contribution plans been so slow? One factor is the restriction of cash-out only after age 60. Most small and medium-size companies used to pay lump-sum retirement benefits to early leavers or employees reaching the mandatory retirement age from their occupational pension plans. The fact that defined contribution plans are not able to do so makes them far less attractive to workers and employers than the existing defined benefit plans, which have no such restrictions.

Defined Contribution Plans (4)

Another factor is the very low maximum imposed on contributions to defined contribution plans (existing defined benefit plans have no maximums). This limit has led potential service providers who might promote the arrangements to believe that defined contribution plans are not a profitable business.

A third factor is that reducing benefits of a defined benefit plan requires the consent of two-thirds of plan participants. When employers want to introduce a defined contribution plan by replacing part of their existing defined benefit plan, this requirement becomes a bottleneck, thereby discouraging them from switching.

Defined Contribution Plans (5)

A fourth and the most decisive factor is very low (or negative) returns observed in the domestic capital markets for the past 25 years. The rate of return from investment were quite volatile, as well.

A fifth factor is expensive handling costs for smaller-amount DC asset holders; handling costs include a fixed flat-rate portion for all participants and there are economies of scale in handling DC plans.

As of October 2011, about 60% of plan participants in Japan had incurred a loss of principal on their accumulated defined contribution assets. This is mainly due to the last two factors stated above.

Defined Contribution Plans (6)

- **Lesson 10:** Development of funded DC plans will likely depend on whether the design limitation evolve to get smaller or be deleted.
- **Lesson 11:** Owing to volatility in investment returns, some cohorts can be lucky in funded pensions, whereas others not.
- **Lesson 12:** One of bottlenecks in funded pensions is a possible expensive handling charge.

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