

Key theme

3. Corporate (private) post employment benefits

Title

Trends in post-employment benefits in Japan and considering the way for more sustainable schemes

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Abstract² (296 word)

Post-employment benefits generally depend on economy and employment situation of its country, region or area. Recently, many problems caused by the change of environments surrounding post-employment benefits have become more difficult to solve in Japan as well as in other developed countries.

Therefore, this paper discusses the way for sustainable post-employment benefit systems from long-term perspectives. In those serious environments, it is critical to manage both corporate pension plan and lump-sum reserve system stably, because they are supposed to play an important role in complementing public pension benefits and in achieving secure and adequate income at old age.

In this paper, using statistical data on corporate pension benefits and lump-sum reserve, overall trends and practical approaches of employers were analyzed with explanations of characteristics, schemes or regulations of post-employment benefits in Japan.

Those analyses show moderate shift of typical plan design toward the combined benefit type consisting of mainly lump-sum reserve generally being reflected no earning increase in its calculation, and of other benefit type such as cash balance pension plan and/or DC plan. It is also concluded that exploring the ways to share any risk of post-employment benefits between employers and employees has led this shift to address drastic changes of external environment, especially fluctuation in stock market, prolonged low interest rate and deflation.

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Submit in English

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Define unfamiliar abbreviations and acronyms in full with first use



Considering future prospects of post-employment benefits in Japan, following issues should be solved to establish more sustainable schemes.

- Further expansion of risk sharing benefit schemes between employers and employees
- Requirements for DB plan to retain adequate risk buffer for funding.
- Providing guideline and monitoring for employers regarding periodical investment educations to employees for DC plan.
- Fairness of taxation between lump-sum benefits and pension benefits.
- Establishing lump-sum benefit scheme maintaining appropriate benefit level under inflated economy, in preparation for it to come.



<background>

1. Background of economic environment in Japan and change in population balance

Post-employment benefits usually depend on economy and employment situation of its country, region or area. In Japan, deep recession caused by the collapse of the bubble economy continued intermittently since early 1990's, and also Japan has been suffered from prolonged historically low interest rate. Economic recovery started from the year 2003. However, it did not last long and recently, Japanese financial market has been confused due to the economic crisis or the sudden deterioration in stock market triggered from subprime mortgage loan problem and the bankruptcy of Lehman Brothers in US.

Japan has one of the longest longevity in the world. And as the total fertility rate has greatly fallen below 2.0 (About 1.3), the ratio of elderly people more than 65 years of age to the working people will increase to over 40% in 2005. Aging speed of Japanese society is faster than any other countries in the world. Therefore, It is obvious that changes in these economical situation and population demographics will have significant influences on Japanese post employment benefit systems.

Fig.1

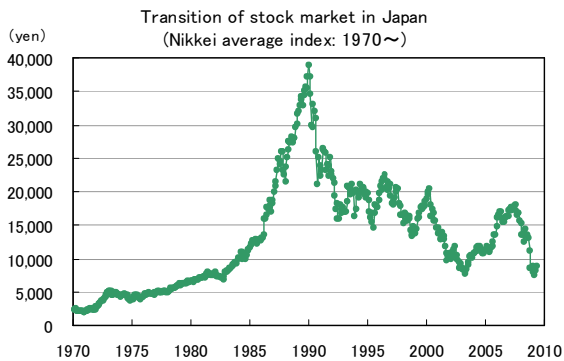
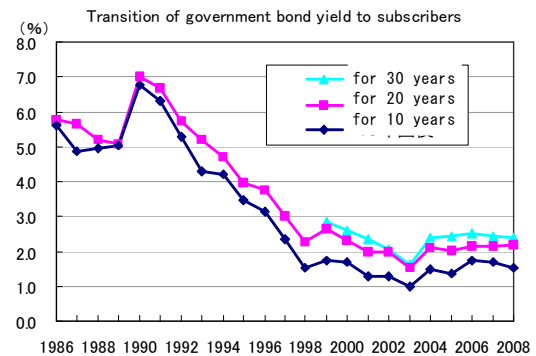


Fig.2

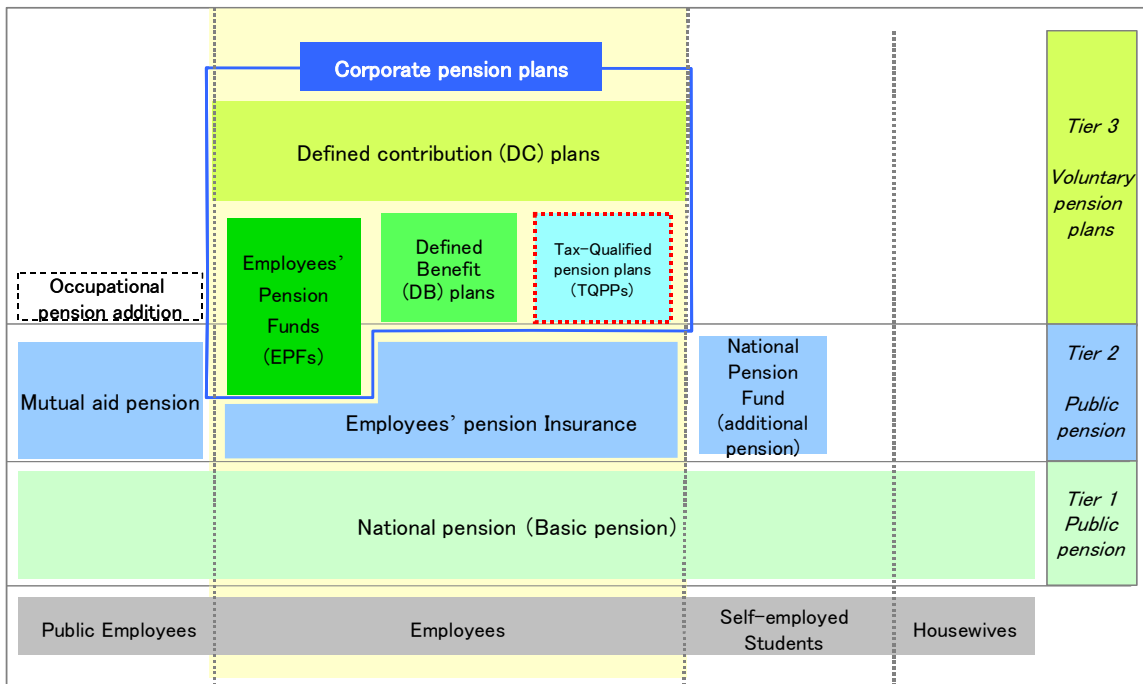


2. Outline of pension system in Japan

Japanese public and private pension system consist of 3 tier benefit systems. First tier (flat benefit to all Japanese) and second tier (earnings-related benefit to salaried employees) are both public pension systems. And third tier is private corporate pension plans. For public pension benefits, funding scheme, "Pay as you go" is basically adopted; a premium that an active participants pay is used for the present retirees pension benefits. To adapt to the problems currently occurred in economic environment, declining birthrate and aging society, slimming down of the public pension benefit is in execution. In concrete, delaying pensionable age gradually from 60 years old to 65 years old, reducing Income substitution rate by the adjustment of pension benefit in the method called "Macroeconomics slide" are adopted.

Fig 3

Public and private pension systems in Japan

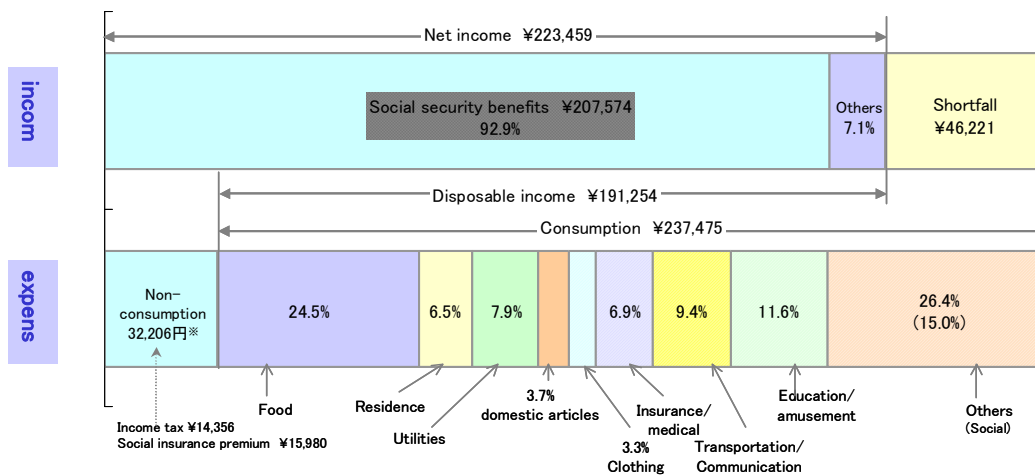


3. Life design at old age and the role of corporate pension plans.

Generally, many elderly Japanese earn their living by only social security pension benefit. However, average income at old age is insufficient for their expenditure about 46,000 yen . To make up this shortfall, they may be forced to withdraw their nest eggs. Considering ongoing slimming down of public pension benefit, corporate pension plans will be expected to have a great importance in the role that they are supposed to provide supplemental benefit and secure enough income at old age. It is known that elderly Japanese usually intend to have any job for their lives. Moreover, recently, there has been a growing tendency to obtain some incomes up to 65 years old, due to the enactment of “the senior employment stability law”. This law is executed for the purpose of providing workplace for those who are in early 60s to work up to 65 years old.

Fig. 4

<Income and expense at old age>



[source] “Family Budget Survey in 2006” Statistics Bureau, Ministry of Internal Affairs, Posts and Telecommunications

▪ **Minimum cost of living at old age**

Average minimum cost of living for married couple at old age is 232,000 yen/month.

▪ **Additional amount of money for a leisurely life**

The average amount of money thought to be necessary as to live a leisurely life at old age besides the minimum cost of living is 151,000 yen /month.

▪ **Total amount of money for a leisurely life**

'Total amount of money for a leisurely life at old age' is 383,000 yen / month.

[source] 'Investigation concerning life security in FY 2007', Life insurance cultural center

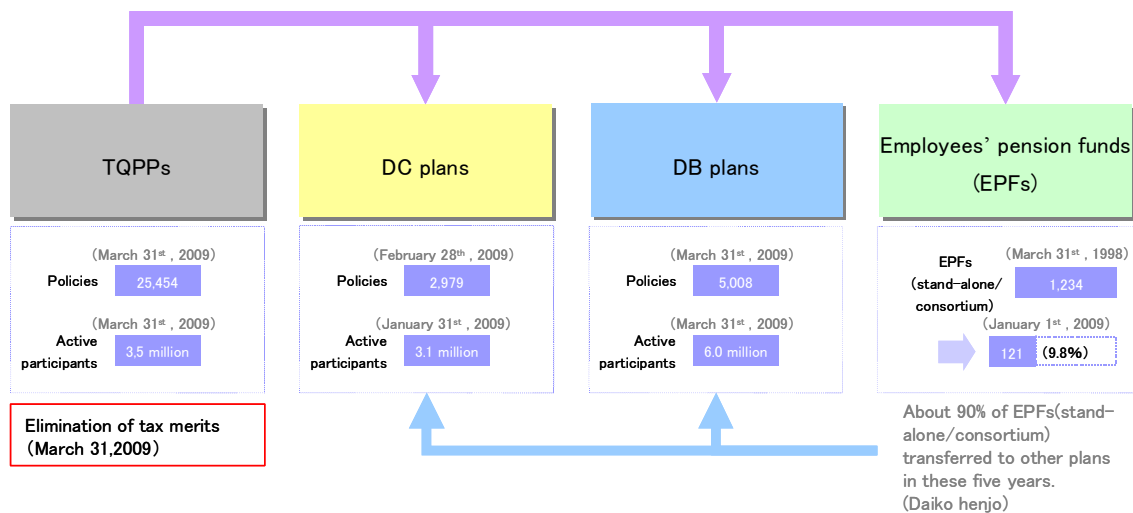


4. Corporate pension benefits in Japan

In Japan, corporate pension benefits are composed of Tax Qualified Pension Plans (TQPPs), Employee's Pension Funds (EPFs) and Defined Benefit Corporate pension plans (DB) as defined benefit pension plan type, and Defined contribution plan (DC) as defined contribution pension plan type. Corporate pension benefits have developed around TQPPs (enacted in 1962) and EPFs (enacted in 1965). To correspond historical changes in the economic environment, industrial structure and aging society surrounding pension plans, stable and reliable pension systems which can secure vested post-employment benefits were needed. Establishment of related laws on DB plans (in 2002) and DC plans (in 2001) achieved improvement in corporate pension plan schemes, and expansion in choices of pension plan by plansponsors.

TQPPs are scheduled to be abolished at the end of March in 2012 for lack of protection for vested pension benefits. Currently, plansponsors are shifting to DB plans and/or other type of pension plans, often coincidentally reviewing and amending its post-employment benefits..

Fig.5 Transition in number between pension plans



[source] Created by Mizuho based on the data, "Status of Corporate Pensions as of April 1, 2009", Pension Fund Association

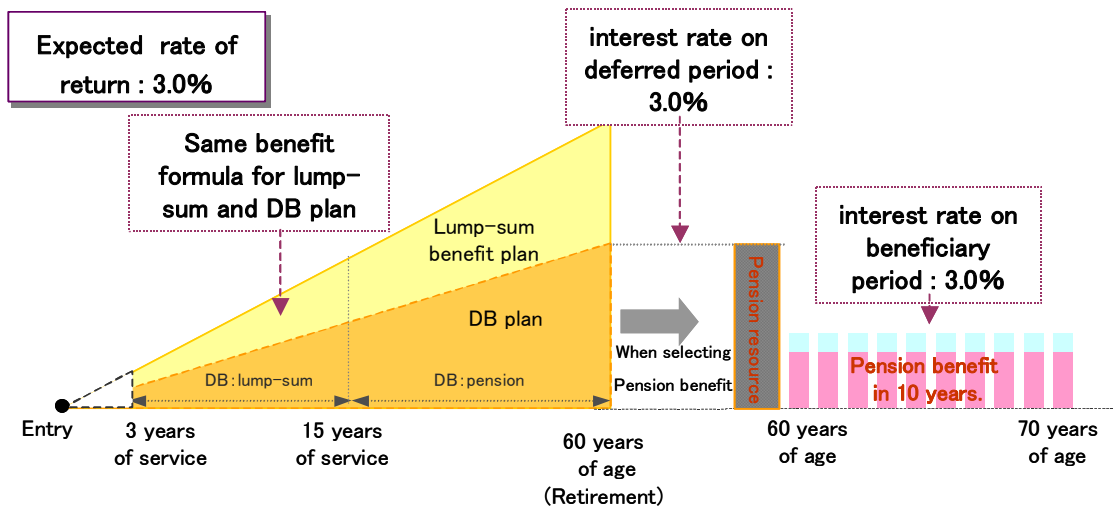
5. Features of post-employment benefits in Japan

In Japan, generally post-employment benefits are combined benefit type consisting of mainly lump-sum reserve and of pension plan, because lump-sum reserve is an origin of all the post-employment benefits. In fact, it is usual that when an employee chooses annuity, the amount of pension benefits are generally calculated as a fixed-term annuity terminable in a defined period, equivalent to the lump-sum benefit in present value, and sometimes may continue over the employee's lifetime, even after the defined period has ended. In a word, the amount of the lump-sum is guaranteed.

As shown in the example of fig. 6, any benefit of DB plan is designed as a part of lump-sum benefits. Therefore, when an employee retiring, the entire amount of post-employment benefit is supposed to be divided into lump-sum and the pension benefit of DB plan. As for pension benefit of DB plan, the amount of it is usually calculated by converting the amount of the origin lump-sum benefit applying some interest rate (ie,3% in Fig6) from the employee's severance to the pension eligibility age.

Fig.6

An example of whole images of post-employment benefits in Japan



< approach & results >

Fig.7 to shows the result of the survey about DB plans and DC plans conducted by Mizuho Financial group.

6. Trends on designs of DB plans.

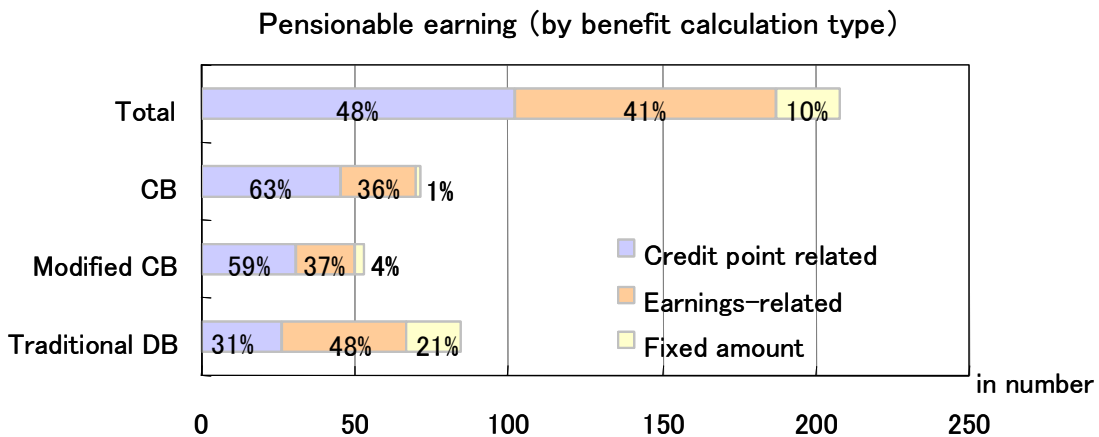
In Japan, DB plans is often a part of lump-sum benefit. Therefore, the basic design of DB plans is as follows.

- (1) Benefit calculation type (Whole image of benefits related with lump-sum benefit)
- (2) Benefit level set decided by an interest rate on lump sum during deferred period and/or payment period in annuity
- (3) Design of pension benefit (ie; payment period)

- (1) Benefit calculation type (Whole image of benefits related with lump-sum benefit)

As shown in Fig.7, the result of the survey of Mizuho Trust & Banking Co., Ltd. shows that various benefit calculation types are adopted for DB plans. Concretely, plansponsors are adopting CB plans, modified-CB plans, and traditional DB plans at almost the same rate (about 1/3).

Fig.7



CB plans and modified CB plans are both comparatively new benefit type in Japan, because in Japan, the legislation or the amendment of pension law admitting them was enacted only a few years ago (CB plans in 2002 and modified CB plans in 2003). And the numbers of pension plan adopting them has been increasing greatly in the this few years. Here, pension plans other than CB and modified CB are classified as traditional DB plans.

CB plans are cash balance pension plans the benefit of which are set as so-called notional individual account. On the other hand, modified CB plans are the pension plans



the benefit of which are set as the same formula as traditional pension plan during employee's period of service and as the same formula as CB plans during deferred period and/or beneficiary period in annuity. Therefore it is much more easy for plansponsors to shift from traditional DB plans to modified CB plans, and to explain the effect of amendment of pension plans to the employee. Recently, the number of modified CB plans has been steadily increasing.

Fig.8 Whole image of CB plan

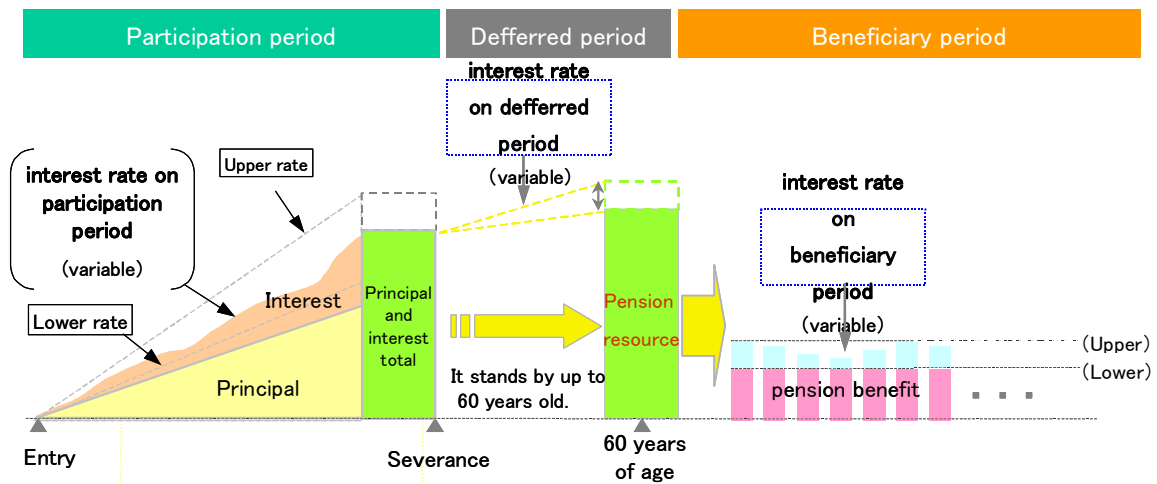


Fig.9 Whole image of modified CB plan

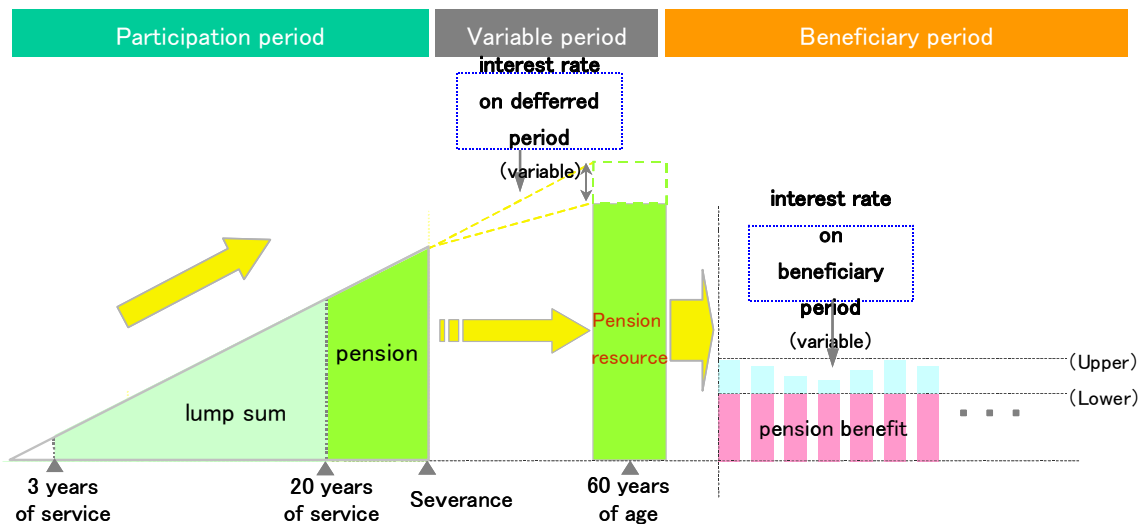


Fig.10 Comparison of setting of individual notional account

| | Active | Deferred | Beneficiary |
|----------------------|-----------------------------|-----------------------------|-----------------------------|
| CB plans | Individual notional account | Individual notional account | Individual notional account |
| modified CB plans | — | Individual notional account | Individual notional account |
| Traditional DB plans | — | — | — |

Fig. 7 shows the distribution of three kinds of pensionable earnings as a breakdown of each plan (CB plan, modified CB plan, traditional DB plan). Of all the plan, the most are the credit point related, earnings-related, and fixed-amount plan to the least.

Most importantly, the credit point related plans are some promises in which the benefit amount is calculated by multiplying the accumulation of credit points awarded annually based on ability evaluation by unit price at severance. Characteristically, the awarded point at each period can easily represent occupational ability, classification, grade, responsibility, performances, and/or evaluation of a certain period (one year) of each employee grade.

Basically, as the mechanism of benefit accumulation using annually awarded point is similar to the notional individual account of CB plans and modified CB plans, the adoption of the combined design of credit point related plan and CB plans (or modified CB plans) has been increasing. According to Fig.7 combined plans' share is more than half of new DB plans.

Secondly, as for the earnings-related plans, they have historically key feature.

In Japan, generally, pensionable earnings is not always the monthly nor yearly remuneration itself, but a part of it or completely different one. This difference between pensionable earnings and total remunerations is to acquire a flexibility of management of post-employment benefits and to separate an increase in retirement benefit from an inflation in remuneration payment.

Next, Figure 11 shows the results of trends in plan designs by establishment form. As noted above, of all the plan, modified CB plans are adopted in 40% or more plans when shifting from TQPPs to DB plans in recent years. Especially in FY 2008, the ratio reached more than 50%. It is fair to say that modified CB plans are the one of the most popular designs, when shifting form TQPPs to DB plans..

Fig.11

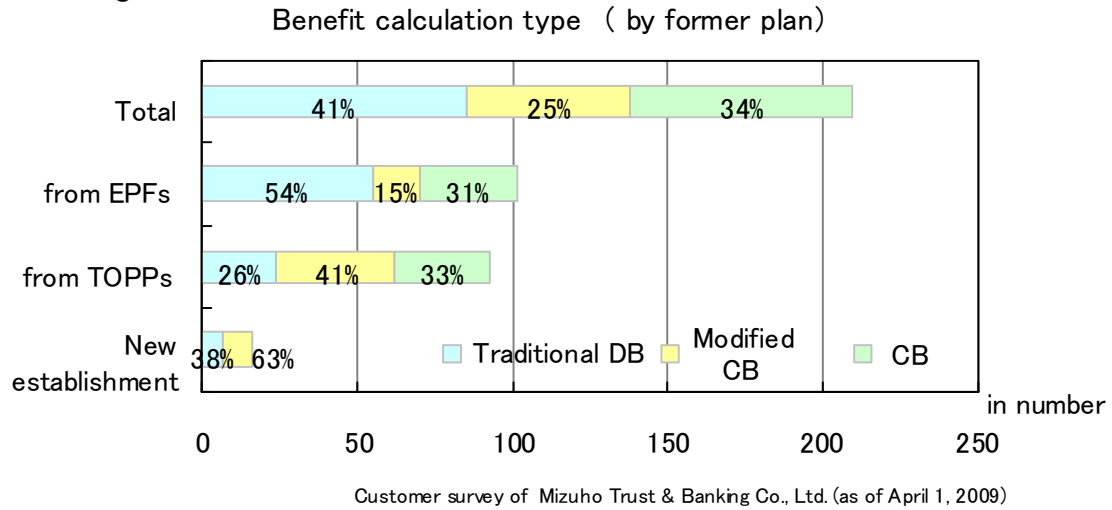


Fig.12 Transition in numbers of each benefit calculation types

| Transferred from Benefit type Establishment years | Total | | | | EPFs | | | | TOPPs | | | | New | | | |
|---------------------------------------------------------|-----------------------|----------------|----|-------|-----------------------|----------------|----|-------|-----------------------|----------------|----|-------|-----------------------|----------------|----|-------|
| | Tradi Tional DB | Modified CB | CB | Total | Tradi Tional DB | Modified CB | CB | Total | Tradi Tional DB | Modified CB | CB | Total | Tradi Tional DB | Modified CB | CB | Total |
| FY 2003 | 12 | 4 | 14 | 30 | 10 | 4 | 8 | 22 | 1 | 0 | 4 | 5 | 1 | 0 | 2 | 3 |
| FY 2004 | 29 | 12 | 18 | 59 | 26 | 11 | 16 | 53 | 3 | 1 | 1 | 5 | 0 | 0 | 1 | 1 |
| FY 2005 | 16 | 2 | 12 | 30 | 14 | 0 | 5 | 19 | 1 | 2 | 7 | 10 | 1 | 0 | 0 | 1 |
| FY 2006 | 5 | 7 | 7 | 19 | 1 | 0 | 1 | 2 | 4 | 7 | 4 | 15 | 0 | 0 | 2 | 2 |
| FY 2007 | 10 | 10 | 10 | 30 | 1 | 0 | 0 | 1 | 5 | 10 | 8 | 23 | 4 | 0 | 2 | 6 |
| FY 2008 | 13 | 18 | 10 | 41 | 3 | 0 | 1 | 4 | 10 | 18 | 6 | 34 | 0 | 0 | 3 | 3 |
| Total | 85 | 53 | 71 | 209 | 55 | 15 | 31 | 101 | 24 | 38 | 30 | 92 | 6 | 0 | 10 | 16 |

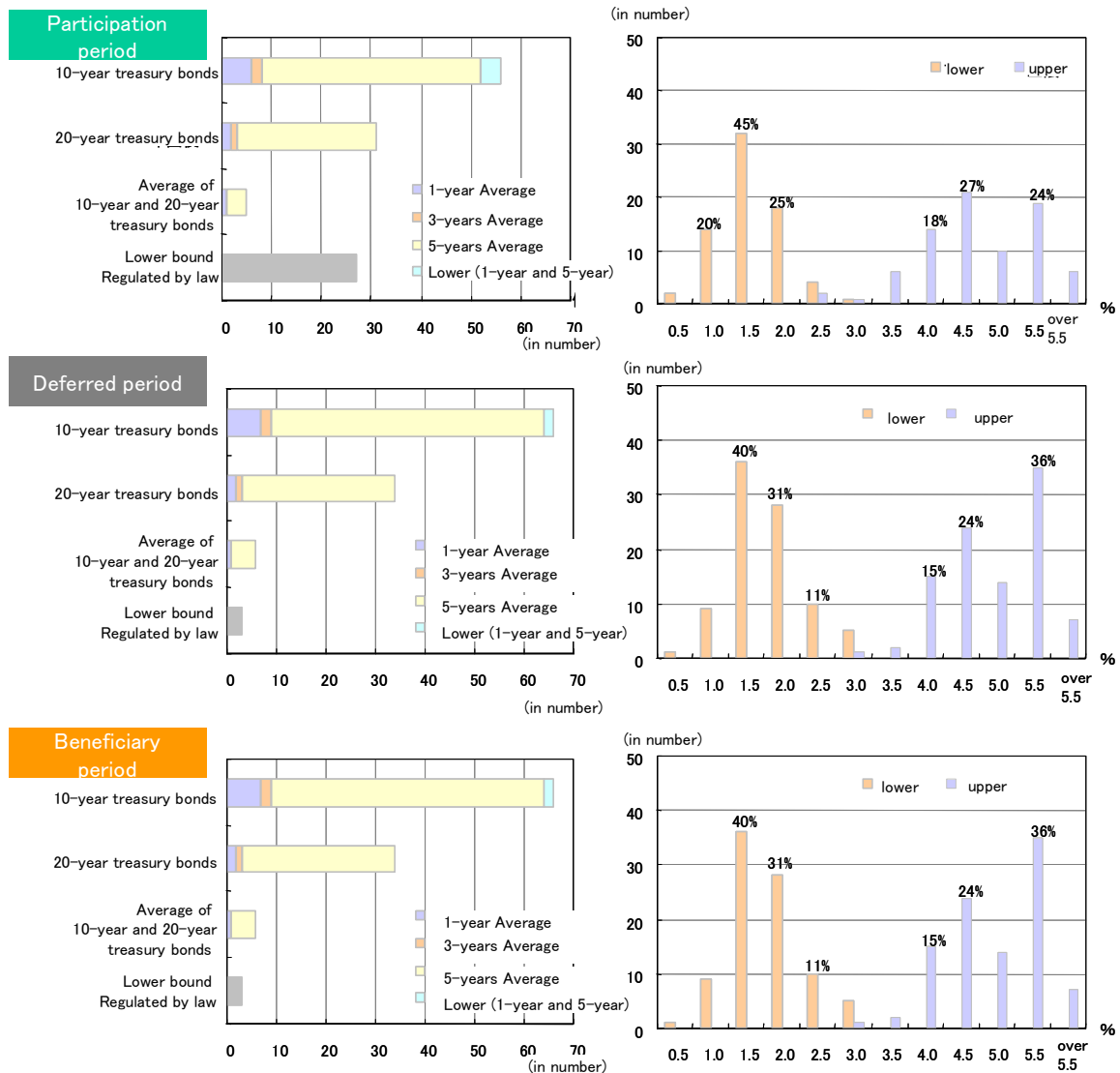
Customer survey of Mizuho Trust & Banking Co., Ltd. (as of April 1st2009)



(2) Benefit level set decided by an interest rate on lump sum during deferred period and/or payment period in annuity

Fig 13 shows the result of distribution of interest rate in CB plans. For CB plans, interest rate is set for active participation period, deferred period, and beneficiary period. And for modified CB plans, for deferred period and beneficiary period.

Figure 13 Distribution of index used for CB plan and modified CB plan



Most plans have been adopting "Average five years of 10-year treasury bond yield to subscribers" for the interest rate of each period. Generally, the interest rate for deferred and beneficiary period are set with lower limit (and often with upper limit), because the interest rates for both of period are not supposed to fall below the rate regulated by Defined Benefit Corporate Pension Law.

The main reasons for the setting "Average five years of 10-year treasury bond yield to subscribers" is as follows.

1. 10-year treasury bond is issued in sufficient quantities and its rate is reliable as a reference index that represents the long-term market rate.
2. It is possible to smooth the sudden drastic change of market interest rate by taking the average for five years.

As for the major bound pair of the interest rate is set with 1.5% and 4.5% (5.5% for beneficiary period). These setting is based on the following ideas. '3.0%' is put as an average assumption of a mid/long-term interest rate for beneficiary period in consideration of the consistency with the expected rate of return on pension funding rule. And then, '1.5%' is set as a lower bound comparing present market interest rate (in Japan historically low level). '4.5%' for upper bound is set for equal distance. It is true that these benefit conditions are made worse from past conditions of 5.5% interest rate that is regulated as a lower limit for benefit by law. However, it is widely understood not only for employers but for employees or labor union that they have to accept these deteriorated conditions such as the recession for a long term depression and the low market level of interest rate. Some plans adopting 5.5% upper bound interest rate for beneficiary period, considering former rate setting.

Many employers seek reduction of interest rate for beneficiary period due to depression of the market interest rate. For instance, in the case of 15-years fixed-term annuities for pension resource 10 million yen, the total benefit as present value decreases for about 2.7 million yen according to the shift from 5.5% to 2.5% .

Fig.14

(in 10 thousand yen)

Comparison of monthly pension benefit for benefit terms [Pension resource:10 million yen]

| Benefit period interest rate on lump sum paid in annuity | | 5 years | 10 years | 15 years | 20 years |
|----------------------------------------------------------------|--------------------------------------|---------------|--------------------------------------|--------------|--------------|
| | | 1.5% | Amount: 17.3 Total benefit: 1,038 | 9.0 1,080 | 6.2 1,116 |
| 2.5% | Amount: 17.7 Total benefit: 1,062 | 9.4 1,128 | 6.6 1,188 | 5.3 1,272 | |
| 3.5% | Amount: 18.1 Total benefit: 1,086 | 9.8 1,176 | 7.1 1,278 | 5.8 1,392 | |
| 4.5% | Amount: 18.6 Total benefit: 1,116 | 10.3 1,236 | 7.6 1,368 | 6.3 1,512 | |
| 5.5% | Amount: 19.0 Total benefit: 1,140 | 10.8 1,296 | 8.1 1,458 | 6.8 1,632 | |

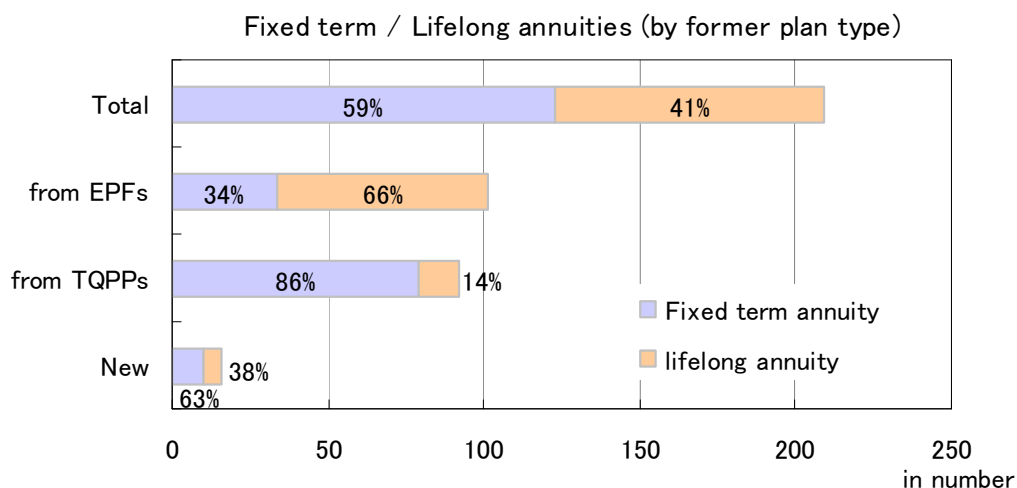


(3) Settings of pension benefit term

Pension plans need to provide annuities regularly once or more every year for all one's life or the period of five years or more. They usually provide guaranteed benefit for all or a part of the beneficiary term. If they provide guaranteed benefit, it has to be within 20 years in compliance with laws and regulations.

Fig 15 shows the results of settings of the pension benefit by former plan type. Most of DB plans shifted from EPFs provide lifelong annuity, because EPFs have to do so for more than 50% annuities as a part of public pension system in accordance with laws. On the other hand, most of DB plans shifted from TQPPs only provide fixed term annuities terminable, because the setting of lifelong annuity is not obligated in DB plans.

Fig.15



7. Funding rules of DB plans

(1) Setting of expected rate of return on pension funds

With regard to pension funding rules, settings of expected rate of return on pension funds is of great importance. Just like the term implies, it has to be decided in reference to the long-term forecast of the performances of pension assets. Previously, in Japan the expected rate of return on pension funds are regulated to uniform 5.5%. Nevertheless, in consideration of long deterioration of the market or historically low interest rate after collapse of bubble economy, flexible rate setting are introduced in 1997. Therefore recently, accompanied with the change of asset allocation or portfolio management, the reduction of this rate is prevailing, especially for the timing to shift to DB plans from the TQPPs.

Fig. 17 distribution of expected return

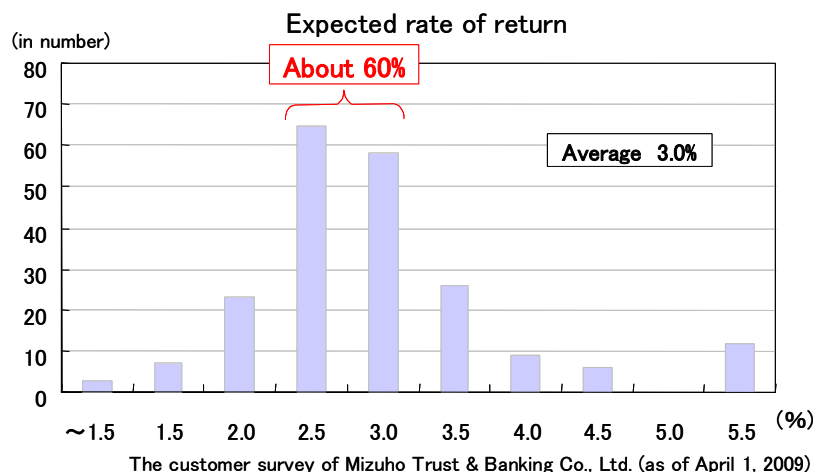


Fig.18 Basic data on expected rate of return

(Unit:%)

| | | Stocks ratio | Expectation return | Risk | Property composition ratio | | | | | | | |
|------------------------|------------------------|--------------|--------------------|------|----------------------------|----------------|---------------|---------------|------|-----|------------|--------|
| | | | | | Domestic bonds | Domestic stock | Foreign bonds | Foreign stock | cash | GIC | Hedge fund | others |
| Mizuho TB's assumption | Middle risk | 53 | 3.7 | 8.6 | 34 | 33 | 10 | 20 | 3 | - | - | - |
| | Semi-middle risk | 45 | 3.4 | 7.4 | 42 | 28 | 10 | 17 | 3 | - | - | - |
| | Low risk | 38 | 3.0 | 6.3 | 47 | 23 | 10 | 15 | 5 | - | - | - |
| | Risk limitation Type 1 | 30 | 2.7 | 5.1 | 55 | 19 | 10 | 11 | 5 | | | |
| | Risk limitation Type 2 | 20 | 2.2 | 3.8 | 65 | 13 | 10 | 7 | 5 | | | |
| DB plans | | 35 | - | - | 27 | 20 | 13 | 15 | 4 | 13 | 5 | 3 |

※1 using "Mid-term expectation return risk and correlation coefficient model in fiscal year 2009" of Mizuho TB

※2 The property composition ratio "Outline of the corporate pension asset management investigation of asset allocation result in fiscal year 2007" (pension fund association).

Concretely, expected return of managed fund is 3.0% adopting Mizuho Trust & Banking's low-risk asset portfolio models. The most popular setting of expected rate of return on pension funds transferred from TQPPs is within the range from 2.5% to 3.0% in accordance with fund management. .

Now, looking at the economic environment of asset management, the stock market's volatility has been increasing. Especially in 2007 and in 2008, sudden turmoil of the investment market seriously damaged the pension funds. For ten years actual performance is only 1.49% per year for low-risk model asset portfolios. It can be fair to say that discussing the setting of expected rate of return in reference to the past investment results would become a controversial topic.



Fig.19 transition on market performance on investment

(Unit: %)

| | | Fiscal year | | | | | | | | | | 3 years | | |
|------------------------|------------------------|----------------|--------|--------|--------|-------|-------|-------|-------|--------|--------|---------|-------|-------|
| | | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Av. | Av. | Av. |
| Mizuho TB's assumption | Middle risk | 11.31 | -5.15 | -3.40 | -11.66 | 21.24 | 5.45 | 21.79 | 5.43 | -11.42 | -20.40 | -8.80 | 0.17 | 1.32 |
| | Semi-middle risk | 9.60 | -3.36 | -2.63 | -9.11 | 17.80 | 5.08 | 18.43 | 5.05 | -9.25 | -17.26 | -7.15 | 0.41 | 1.44 |
| | Low risk | 7.86 | -1.77 | -1.85 | -7.01 | 14.66 | 4.80 | 15.40 | 4.79 | -7.34 | -14.59 | -5.71 | 0.61 | 1.49 |
| | Risk limitation Type 1 | 6.47 | -0.16 | -1.28 | -4.38 | 11.49 | 4.28 | 12.23 | 4.24 | -5.28 | -11.35 | -4.13 | 0.82 | 1.63 |
| | Risk limitation Type 2 | 4.41 | 2.04 | -0.37 | -1.17 | 7.26 | 3.77 | 8.08 | 3.72 | -2.59 | -7.40 | -2.09 | 1.12 | 1.78 |
| | Asset type | Domestic bonds | 2.08 | 4.69 | 0.95 | 4.26 | -1.74 | 2.09 | -1.40 | 2.17 | 3.36 | 1.34 | 2.29 | 1.51 |
| | Domestic stock | 35.48 | -24.55 | -16.22 | -24.81 | 51.13 | 1.42 | 47.85 | 0.29 | -28.05 | -34.78 | -20.85 | -2.65 | 0.78 |
| | Foreign bonds | -17.88 | 26.28 | 8.44 | 15.47 | 0.15 | 11.32 | 7.73 | 10.24 | 0.52 | -7.18 | 1.19 | 4.53 | 5.51 |
| | Foreign stock | 3.40 | -6.38 | 3.94 | -32.35 | 24.70 | 15.70 | 28.52 | 17.85 | -16.80 | -43.32 | -14.09 | 0.39 | -0.47 |

※1 The above-mentioned profit margin is a value of the following index.

- Domestic bonds :NOMURA bond performance index synthesis
- Domestic stock :TOPIX (including distribution)
- Foreign bonds :Citigroup world government bond index (excluding Japan converted to yen)
- Foreign stock :MSCI (KOKUSAI,yen dividend reinvestment basis, converted to and GROSS)

※2 The value shows the weighted average rate in each fiscal year.

※3 The profit margin of cash is assumed to be 0%.

(2) Funding valuation

DB plans need to evaluate funded status every year. The purposes for evaluation is to check the difference between estimation and actual record for assets and liability and to decide whether the plan needs to revise the premium for funding. In concrete, there are two valuation method for funding; "On-going basis" and "Discontinued basis". If the plan's funded status fall below either of funding standard, it has to pay additional premium in the future. For on going basis, as is well-known, it is verified whether a total of fair value of pension fund and estimated present value of normal contribution (normal cost) goes over the actuarial liability. If the funding shortage excesses certain allowance permitted by regulations, actuarial revaluation are needed.

On the other hand for Discontinued standards, it is verified whether a fair value of pension fund goes over the necessary vesting amount (minimum funding reserve). Minimum funding reserves are calculated, excluding future estimation for benefit or pensionable earnings. Its liability are characterized as the amount necessary for the past portion of vested benefit. If the plan has shortage for minimum funding, it has to set up rehabilitation plan to improve funded status over 90% in ten years.

About less 10% of pension plan falls below the allowance and need to revise the premium in FY 2008 evaluation for on-going basis. And about 60% of pension plan falls below the 90% standard in FY 2008 and need to set up or review its rehabilitation plan in FY 2008.



Fig.20

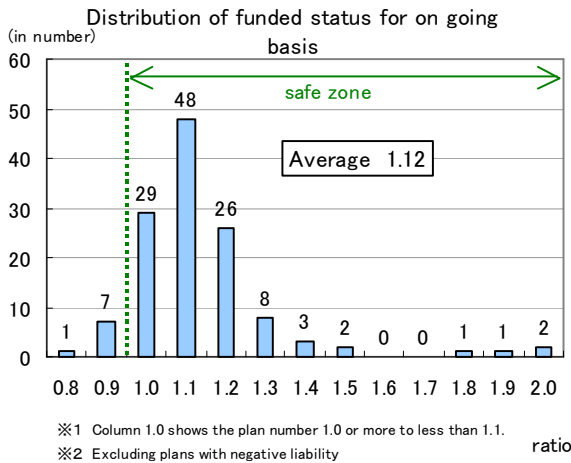
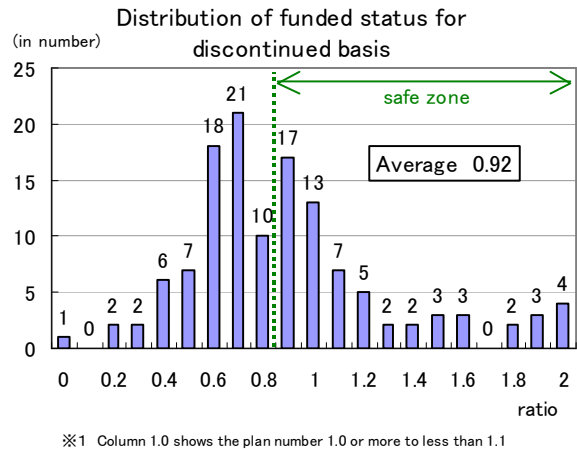


Fig.21



8. Funded status of post employment benefits on accounting

In Japan, accounting standards for post employment benefits were adopted in FY 2001 for the purpose of harmonizing with international accounting standards. Fig 24 shows that average funded status(pension assets / pension obligation (projected benefit obligation:PBO)) of Japanese public corporations was about 55% at the time of introduction in FY 2001. Therefore, plansponsors are usually required to recognize a large amount of additional liability for post employment benefits due to the transition from the former less reserve regulated basically by related tax laws and regulations., which was a significant impact on its balance sheet.

Fig.22

| | Average discount rate | | |
|----------------------------|-----------------------|---------|---------|
| | FY 2006 | FY 2007 | FY 2008 |
| Discount rate | 2.3% | 2.3% | 2.3% |
| Expectation rate of return | 2.4% | 2.6% | 2.7% |

[source] The survey of customer of Mizuho Trust & Banking Co., Ltd.

Fig.23

| | Average discount rate | | |
|------------------------------------|-----------------------|---------|---------|
| | FY 2006 | FY 2007 | FY 2008 |
| Unrecognized liability /net assets | 2% | 2% | 4% |
| PBO /net assets | 32% | 29% | 28% |
| Pension assets /net assets | 20% | 19% | 17% |
| Pension assets /PBO | 63% | 66% | 61% |

[source] The survey of customer of Mizuho Trust & Banking Co., Ltd.



Fig.24

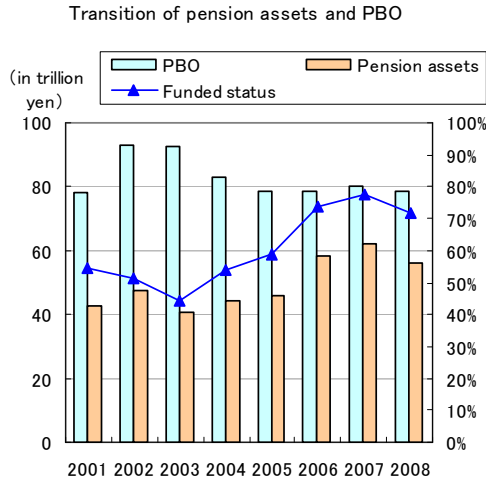
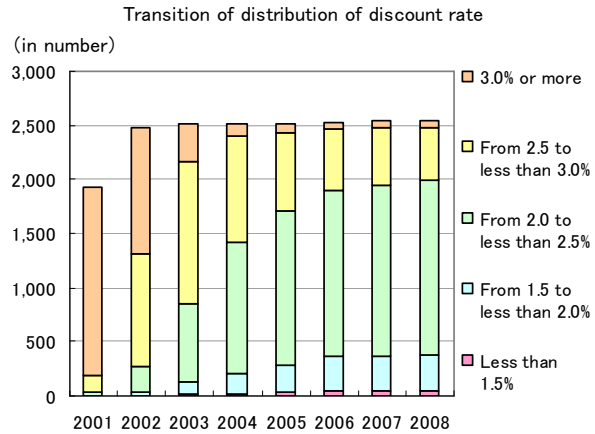


Fig.25



【source】“Basic data concerning corporate pension” Pension fund associat

The reason for just around 55% of funded status was that internal lump-sum benefit has a presence in post-employment benefits in Japan, as mentioned before. From the point of view of accounting, reserve for the internal lump-sum benefit would supposed to be recognized as liability. Consequently, as shown in Fig 25, it is not a problem that the funding status has been falling below 60% level, considering the average percentage of the portion of lump sum benefit in the entire post employment benefits is more than 50%.

Fig.25

Proportion of corporate pension benefit in total post-employment benefits (FY 2005) (Unit: %)

| | | total | 1,000 people or more | From 500 to less than 1,000 people | From 100 to less than 500 people | From 50 to less than 100 people |
|--------------------------------------------------------------------|-----------|-------|----------------------|------------------------------------|----------------------------------|---------------------------------|
| using together with corporate pension benefit and lump-sum benefit | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Proportion of corporate pension benefit | 1~19% | 5.1 | 4.3 | 4.6 | 5.7 | 4.5 |
| | 20~39% | 12.5 | 16.7 | 16.3 | 11.9 | 11.0 |
| | 40~59% | 17.6 | 32.3 | 21.9 | 15.1 | 15.6 |
| | 60~79% | 18.3 | 21.7 | 19.1 | 20.0 | 13.7 |
| | 80~99% | 8.8 | 8.5 | 13.0 | 8.5 | 8.0 |
| | Uncertain | 37.7 | 16.5 | 25.1 | 38.9 | 47.2 |
| Average ratio | | 51.4 | | | | |

【source】The National Personnel Authority “Result of private company post-employment benefits investigation” (2006)

Following up average funded status since the first adoption of post employment benefit in FY 2001, it showed a remarkable decrease to about 40% level in 2003 affected



by both of the deterioration of stock market 3 years in a row and large increase of total 90 trillion yen of PBO due to the decreasing discount rate. This reason is that pension assets greatly decrease due to the deterioration of the operational environment like minus operation etc. 3 years in a row, and PBO exceeded 90 trillion due to decreasing a discount rate. How discount rates that plansponsors adopted decreased can be read from the transition of setting a discount rate in Fig 23.

The mode value shifts to "2.0%~2.5%" and "2.5%~3.0%" in 2003, and it found that most of plansponsors reduced their discount rate from "3.0% or more" discount rate in 2001. Afterwards, funded status for accounting was greatly improved and recovered up to about 70% in 2007. One reason is that stock market turned dramatic increase in 2003, and pension assets showed remarkable recovery enjoying strong growth of whole economy. On the other hand, as plansponsors conducted restructuring, the total amount of PBO maintained around 80 trillion yen level, under the continuing diminishment of historically low discount rate.

As for the plansponsors' restructuring, plansponsors made a great effort introducing CB plan, modified CB plan, and/or DC plan. Considering the impact of PBO diminishment, "Daiko henjo", or returning of EPFs substitutional public pension benefit portion to the government prevailed widely. Although recent market turmoil would have grown up to be a troublesome problem, since almost 10 years has passed from the first adoption of accounting standards in post employment benefit in Japan, it could be fair to say that an accounting problem of funding shortage has relatively diminished these days.

Fig 22 shows the ratio of an unrecognized obligation compared with fair value of pension. It has reduced to less than 5% in FY 2008. Therefore, it could also be fair to say that post-employment benefits in Japan have come to be managed stably under the situation that the mean value of a discount rate and an expected return rate decreases to average 2% level respectively.

Now, the topic of the convergence to and/or the adoption of IFRSs receives a fair amount of attention in Japan. It could be thought that there would be generally small influences on presenting unrecognized obligations to stockholder's equity in accordance with Financial Accounting Standards No.158 (FAS158) excluding particular plansponsors. However, recognition of all the changes of PBO and fair value of pension asset in the period in which they occurred in the statement of comprehensive income would have a critical impact on the management of pension fund.

Fig.26

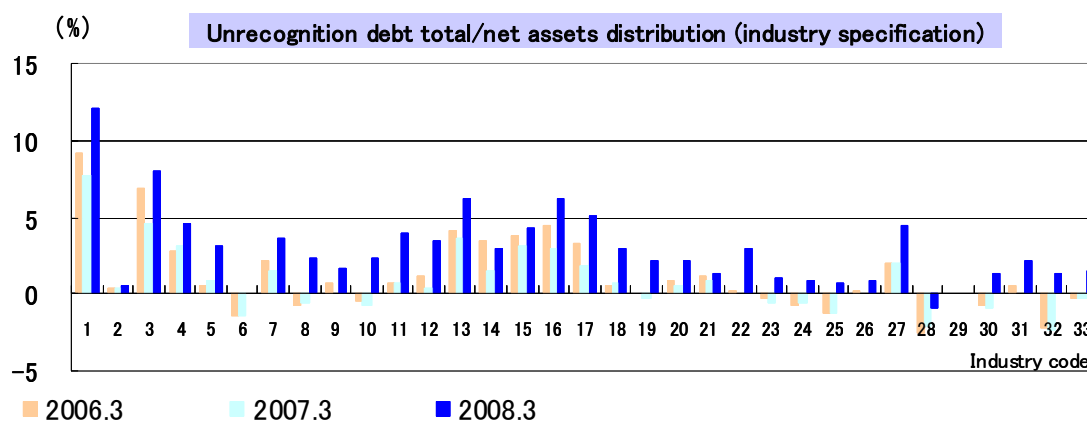


Fig.27

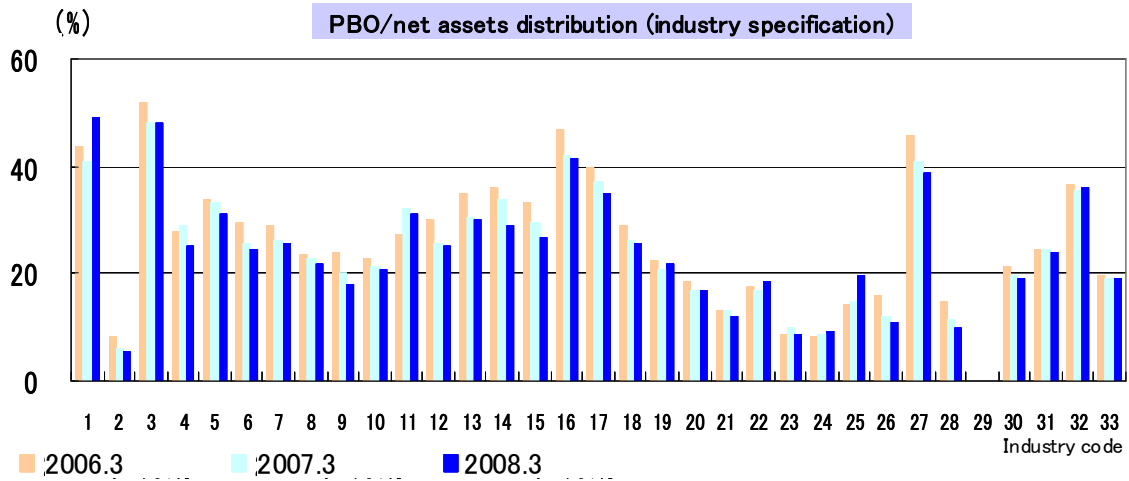


Fig.28 Funded status index by industry on accounting

| code | compa nies | Type of business | Unrecognized liability /net assets | | | PBO /net assets | | | Pension assets /net assets | | |
|-------|---------------|------------------------------|---------------------------------------|------|------|--------------------|------|------|-------------------------------|------|------|
| | | | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 |
| 1 | 4 | Fishery , agriculture | 9% | 8% | 12% | 44% | 41% | 49% | 24% | 24% | 23% |
| 2 | 2 | Mining | 0% | 0% | 1% | 8% | 6% | 5% | 2% | 2% | 2% |
| 3 | 83 | Construction | 7% | 5% | 8% | 52% | 48% | 48% | 27% | 28% | 25% |
| 4 | 42 | Food | 3% | 3% | 5% | 28% | 29% | 25% | 18% | 20% | 16% |
| 5 | 20 | Fiber product | 0% | 1% | 3% | 34% | 33% | 31% | 22% | 22% | 19% |
| 6 | 9 | pulp and paper | -1% | -1% | 0% | 29% | 25% | 25% | 19% | 18% | 17% |
| 7 | 90 | chemistry | 2% | 2% | 4% | 29% | 26% | 26% | 19% | 18% | 16% |
| 8 | 21 | Medicine | -1% | -1% | 2% | 24% | 23% | 22% | 21% | 21% | 18% |
| 9 | 7 | Oil and coal product | 1% | 0% | 2% | 24% | 20% | 18% | 14% | 13% | 10% |
| 10 | 7 | Rubber product | -1% | -1% | 2% | 23% | 21% | 21% | 17% | 17% | 14% |
| 11 | 17 | glass and earthen | 1% | 1% | 4% | 27% | 32% | 31% | 19% | 24% | 20% |
| 12 | 27 | Steel | 1% | 0% | 3% | 30% | 26% | 25% | 20% | 20% | 16% |
| 13 | 22 | Nonferrous metals | 4% | 4% | 6% | 35% | 30% | 30% | 21% | 18% | 16% |
| 14 | 23 | Metal | 3% | 1% | 3% | 36% | 34% | 29% | 21% | 21% | 17% |
| 15 | 85 | Machine | 4% | 3% | 4% | 33% | 30% | 27% | 18% | 17% | 14% |
| 16 | 104 | Electric equipment | 4% | 3% | 6% | 47% | 42% | 41% | 28% | 27% | 25% |
| 17 | 56 | Equipment for transportation | 3% | 2% | 5% | 40% | 37% | 35% | 24% | 25% | 21% |
| 18 | 19 | Precision instrument | 1% | 1% | 3% | 29% | 26% | 26% | 20% | 18% | 16% |
| 19 | 27 | Other product | 0% | 0% | 2% | 22% | 21% | 22% | 14% | 14% | 13% |
| 20 | 66 | Wholesale trade | 1% | 1% | 2% | 19% | 17% | 17% | 13% | 13% | 11% |
| 21 | 24 | Retail trade | 1% | 1% | 1% | 13% | 13% | 12% | 8% | 8% | 7% |
| 22 | 75 | Banking | 0% | 0% | 3% | 18% | 17% | 18% | 14% | 14% | 14% |
| 23 | 17 | Other finance | 0% | -1% | 1% | 9% | 10% | 9% | 8% | 10% | 8% |
| 24 | 9 | Bond | -1% | -1% | 1% | 8% | 9% | 9% | 6% | 7% | 6% |
| 25 | 6 | Insurance | -1% | -1% | 1% | 14% | 15% | 20% | 11% | 12% | 15% |
| 26 | 14 | Real estate | 0% | 0% | 1% | 16% | 12% | 11% | 9% | 7% | 6% |
| 27 | 28 | Transportation by land | 2% | 2% | 4% | 46% | 41% | 39% | 23% | 20% | 17% |
| 28 | 4 | Shipping business | -2% | -2% | -1% | 15% | 12% | 10% | 15% | 12% | 10% |
| 29 | 3 | Transportation by air | 64% | 30% | 29% | 248% | 136% | 102% | 138% | 80% | 55% |
| 30 | 14 | Warehouse | -1% | -1% | 1% | 21% | 20% | 19% | 13% | 13% | 10% |
| 31 | 32 | Information , communication | 0% | 0% | 2% | 25% | 24% | 24% | 17% | 17% | 15% |
| 32 | 15 | Electricity and gas | -2% | -2% | 1% | 37% | 35% | 36% | 27% | 27% | 25% |
| 33 | 26 | Service | 0% | 0% | 1% | 19% | 19% | 19% | 14% | 14% | 13% |
| total | 998 | Average | 2% | 2% | 4% | 32% | 29% | 28% | 20% | 19% | 17% |



9. DC plan

DC plan was enacted in 2001 in Japan as defined-contribution type of pension plans. As is well known, this kind of pension plan basically assumes self-responsibility for each participant. It was introduced as a new plan choice for plansponsors in addition to TQPPs and EPFs, defined-benefit pension plan type. As for dc plan establishment form, the law classifies two forms, such as "Individual pension plan" and "Corporate pension plan". The explanation of "Corporate pension plan" is as follows.

In Japan, unlike US 401(k) plan, only an employer's contribution is paid to the individual account, and each employee is prohibited from contributing any amount of money in it. He/she just instructs his/her investment options of individual pension assets. These regulation for employees' contribution had been recently discussed for the amendment of abolishment, but not has been executed until now., Employee's contribution has upper limit (for 612 thousand yen for employers with other DB type pension plan, 306 thousand yen without other DB type pension plan each year). Upper limit has been revised for a few times until now (the amount mentioned above will be effective at January 1, 2010).

As for vesting, plansponsors must achieve 100% vesting for 3 years of service. And withdrawing from individual account before reaching 60 years old is prohibited unless absolutely necessity such as death or advanced disability. Fig 29 shows the former plan type for transition to DC plan

Fig,29 Transition trends to DC plans

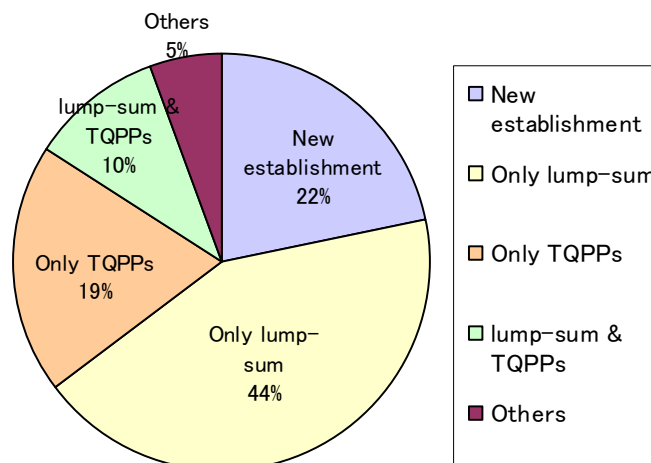
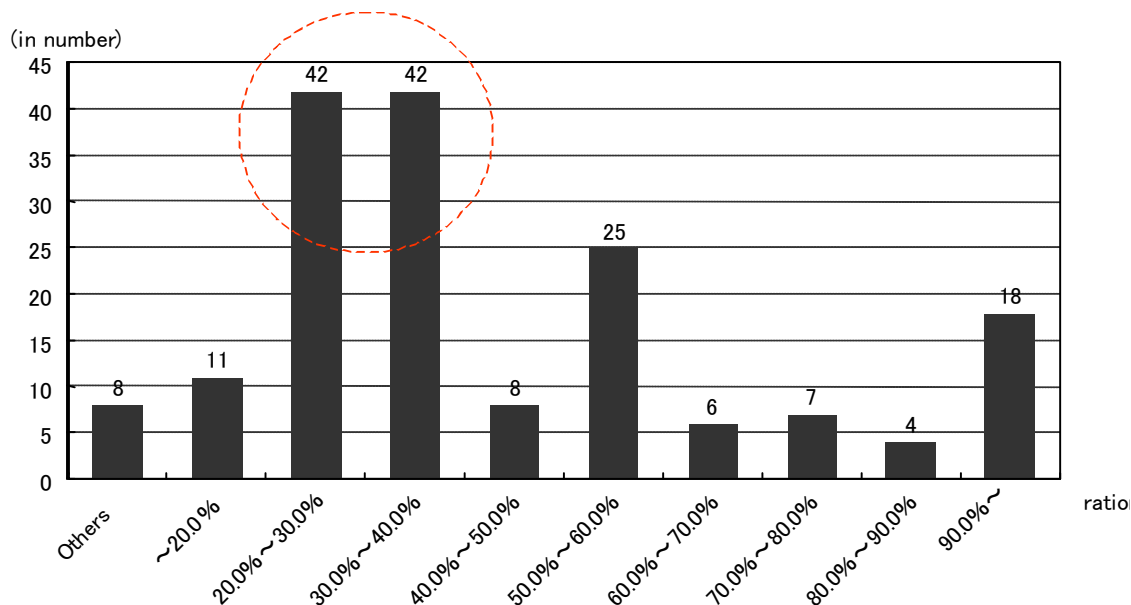


Fig.30 The ratio to DC plan benefit to the total post employment benefit



【source】 Created by Mizuho corporate bank from public information

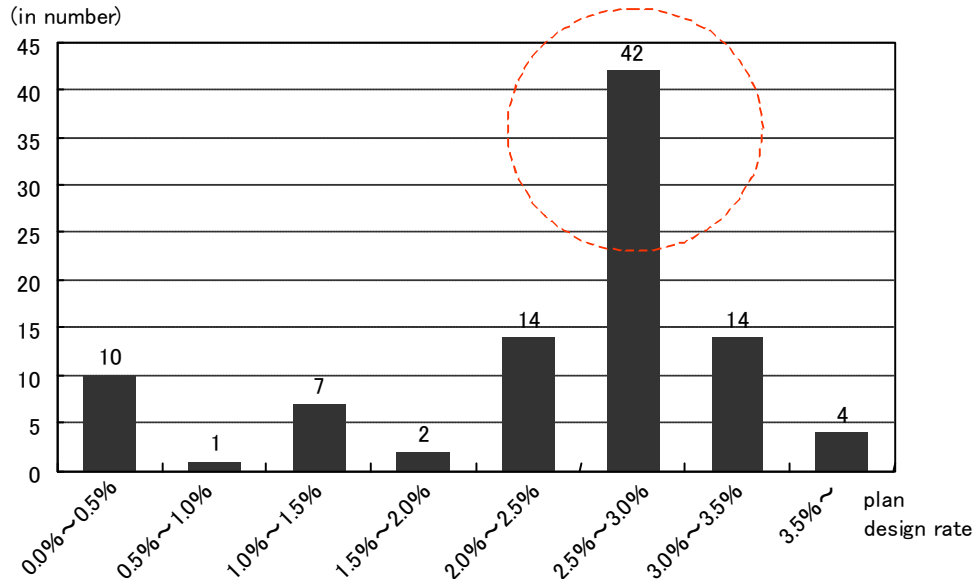
According to the results new DC plan establishment shares about 22%, the transition from lump-sum and TQPP shares about 73%. And also it is found that the ratio of portion of DC benefit compared with entire post employment benefit is between 20% to 40%.

Thus, most of the DC plan are transferred from DB pension plan and lump-sum benefit. At the transition, the rollover from the past service liability of DB pension plans or lump sum benefit to individual pension account in DC plans is permitted by laws if the DB plan satisfies certain funding requirement. That is many plansponsors adopted this methods.

Concretely, Fig 29 shows that the number of plans rollovered from other plans has gone up to 147 plans (94%) of all 158 investigated plans (44 new establishment plans are excluded). Therefore, it is generally understood that when transferring to DC plans plansponsors have to decide the benefit level considering related portion of former DB plan benefit and to set a contribution rate based on its benefit level from the point of view of converting stock benefit to cash flows.

Then, an assumption of an expected rate on investment of each employee plays a critical role for the contribution rate setting. In this paper, it is named as “ plan design rate”. With regard to the relation between plan design rate setting and contribution rate, the higher the plan design rate, the lower the contribution rate and vice versa.. Fig 31 shows that the most popular plan design rate setting is 2.5%~3.0%.

Fig.31 distribution of plan design rate



【source】 Created by Mizuho corporate bank from public information

Fig.32

| Number of people scale | Less than 300 people | 300 people or more | Total |
|--------------------------------|----------------------|--------------------|------------|
| Average amount of contribution | 170,920yen | 169,650yen | 170,280yen |

Main law requirements for the employee’s investment are as follows.

- Investment products must include at least three options with different characteristics. And at least one of them must include guaranteed principal investment product.
- Employees can switch their asset allocations at least once for every three months.
- Regulations of DC pension plan Law encourages providing investment education to employees.

Fig 33. shows that half or more of contributions is allocated to the guaranteed principal investment product. These type of product yield at most 1.0%~1.5% in a year, while as mentioned above, the most common plan design rate is about 2.5%~3.0%. Therefore, there would be a lot of participants who have selected the investment product



that does never reach the target benefit level.

Thus, considering that DC plans in Japan is different from a general defined contribution pension plans in various foreign countries and have the transition scheme to rollover the original capital of defined-benefit plans to DC plans, it is and should be especially important to provide the investment education of DC plans to reach an former benefit level.

When looking at the current status of investment, employees does not fully make use of WEB and a call center according to the attitude survey to the investment in Fig 34. Moreover, employees hardly pay attention to switch their asset allocation. As mentioned above, although DC pension plan Law encourages employers for providing investment education to employees, the consciousness toward investment has been left low.

Fig.33 investment option for blue collar(above) and white collar(below)

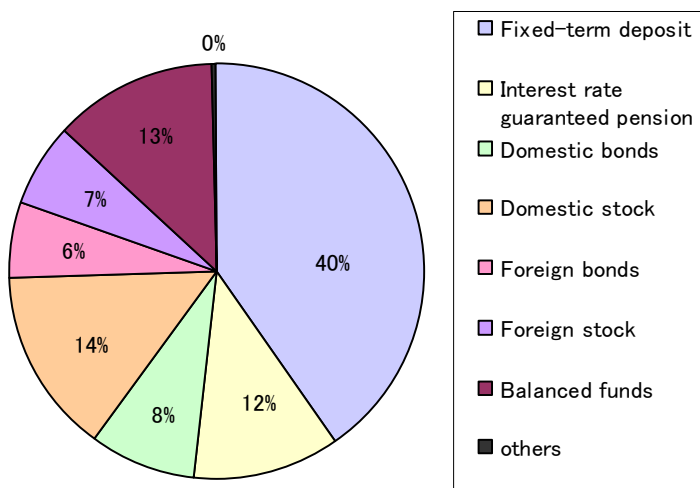
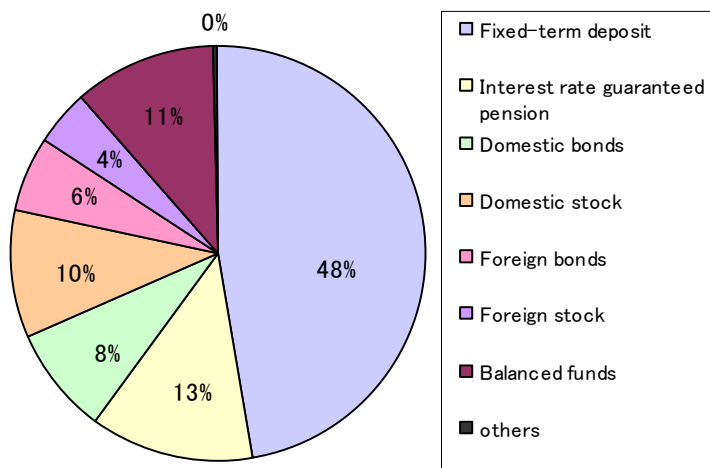


Fig.34 Employees' consciousness for investment

| Employees consciousness of improving their investment (usage of services) | | |
|------------------------------------------------------------------------------|------------------|-----------------|
| Web | 4,527 Times/plan | 1.82 Times/head |
| Call center | 115 Times/plan | 0.05 Times/head |
| Switching (asset allocation) | 172 Times/plan | 0.07 Times/head |

10. Analysis of post employment benefit, and the ideas for risk sharing between employers and employees in Japan

As mentioned before, DB and DC pension plan type are widely provided in Japan. And also a number of plansponsors tend to adopt the mixed combination of each lump-sum /DB pension plan /DC pension plan.

The reason for adopting mixed combination of lump-sum /DB pension plan /DC pension plan is that employers seek risk sharing with employees under the environment in which the stock market become more volatile than before, market interest rate are remained historically low level, and deflation are still in progress. Consequently, both of employers and aemployees agree to shift moderately to the plan design toward a combined benefit type consisting of mainly lump-sum reserve generally being reflected no earning increase in its calculation, and of other benefit type such as CB plans and/or DC plans.

In US and UK, employers have been adopting drastic changes of terminating DB plan and introducing DC plan for future benefit. However, in Japan, such a drastic change as distribution or settlement of DB plan is not as popular as in US and UK.. It could be fair to say that in Japan post employment benefit has been maturing to moderate shift to the plan with relatively stable design, although securing certain amount of benefit, under the changing environment surrounding post-employment benefits.

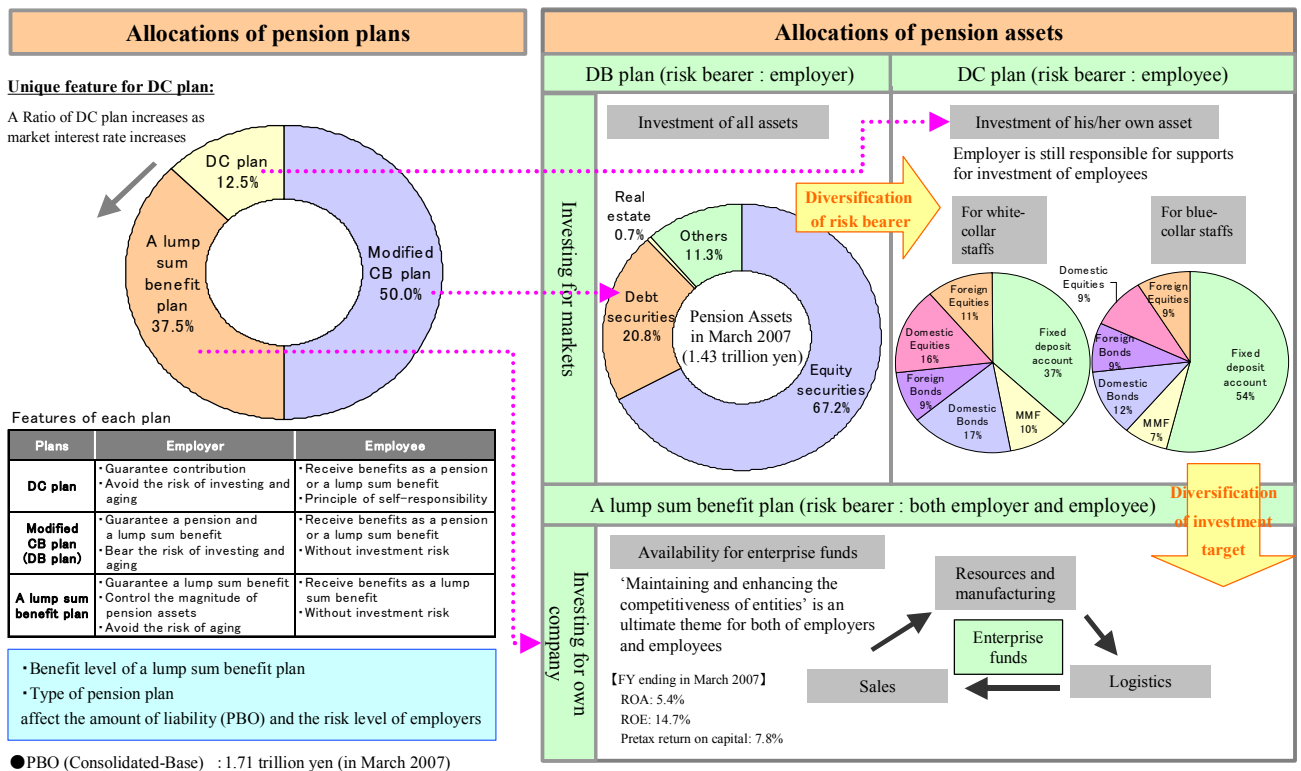
Fig 35 is an example of the plan design. It consists of modified CB plan with lifelong annuities by 50%, lump-sum benefit by 37.5% and DC plan by remaining 12.5%. Moreover, it has a unique mechanism that if the more the market interest rate increases, the more the ratio of DC plan increases. This plan achieves following risk sharing between employers and employees. As for an investment risk, it is borne mainly by employers and somewhat by employees; in concrete, employers bear 87.5% of total post employment benefit in modified CB plan and lump-sum benefit, and employees bear remaining 12.5% in DC plan.

On the other hand, as for an longevity risk, it is borne mainly by employees and somewhat by employers; in concrete, employees bear 62.5% risk of total post employment benefit in DC pension plan and lump-sum benefit, and employees bear remaining 37.5% in DB pension plan. And also as for default risk, employees bear the risk for lump sum benefit though, they do not for other pension plan. Thus, a diversification of the risk of an entire post-employment benefit is attempted by combining an internal lump-sum benefitand external pension plan (CB plan and DC plan).



With regard to the asset management strategy, modified CB pension plan has 67.2% of stock and 20.8% of bonds. Meanwhile, in DC plan, an average white-collar employee has 47% of guaranteed principal investment product, 26% of bonds, and 27% of stocks. An average blue-collar employee has 61% of guaranteed principal investment product, 21% of bonds, and 18% of stocks.

Fig.35 an example of the plan design (risk sharing between employers and employees)



Additionally, in Japan, there are the unique procedures for amendment of benefit diminishment in pension plan. At first, procedures for amendment of benefit diminishment in pension plan are different between active participants and beneficiaries. As for beneficiaries, diminishment of their benefits is recognized as a violation of rights to receive pension benefit that was already fixed.

The authorization of diminishment of pension benefits for beneficiaries for Ministry of Health, Labour and Welfare is very strict and moreover, there is a requirement by laws that pension plan have to pay lump sum benefit corresponding to the diminishment in present value, if they need. Because there are considerable possibility for lawsuit against the diminishment of beneficiaries, as a matter of fact it is not applied excluding the case where employers are facing substantial bankruptcy.

In contrast, as for the amendment of benefit diminishment for active participants,

it could be admitted by government, if certain agreement is achieved between employers and employees as a part revision of working conditions. Here, in order to decide if the amendment corresponds to diminishment, pension plan has to check whether the actuarial liability (total present value of benefit; both of past and future benefit) is maintained. Therefore, when deciding diminishment, there are certain consideration about not only the rights for the past benefit but also for the future. In concrete, same calculation premise is used for the comparison of present value between former and current plan designs.

As mentioned before, it is often the case that pension plan is based on a lump-sum benefit in Japan. Therefore, following techniques are used for the diminishment of active participants' pension benefit for.

- Reduction of an interest (during future deferred period, beneficiary period) / including transition to a cash balance plan
- Reduction of the amount of pension benefit by the extension of guaranteed terms for lifelong annuities. (as pension benefit is equivalent with lump sum benefit in present value, benefit is decreased by deciding to divide for longer guaranteed terms)
- Reduction of lump-sum benefit which is the base of pension benefit

As mentioned before, many employers have decided the benefit diminishment for employees under the depression, the deterioration of stock market and market turmoil.

It is true that the most important thing is to take deliberate measures for keeping the rights for the past benefit and future expectation of all the participants from the point of view of securing the lives of old age,, but it could be fair to say that after seeking sustainability in pension plan management, flexibly adapting the benefit condition of participants to the drastically changing environment must have contributed to the stability of Japan post employment benefits in these days.

11. Taxation for pension benefit and lump sum benefit

Like in any other countries, there are preferential tax systems for post employment benefits in Japan. From a point of view of playing an important role of securing social welfare, post employment benefits are thought to have low taxpaying capacity. The deductions from taxable post employment income are as follows.



Fig.36 Comparison between taxation for lump-sum benefit and pension benefit

| | Lump sum benefit income | Pension benefit income |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The amount of a tax | [(The amount of lump sum benefit) - (deduction for retirement income)] *1/2* tax rates | [(The amount of pension benefit) - (deduction for public pension benefit)] * tax rates |
| Deductions from income | (deduction for retirement income) up to 20 years of service 400,000 yen per calendar year over 20 years of service 700,000 yen per calendar year | (deduction for public pension benefit) under 65 years upto 700,000 yen all the amount over 700,000 yen under 1,300,000 yen (the amount of benefit) *100% - 700,000 yen no fewer than 1,300,000 yen under 4,100,000 yen (the amount of benefit) *75% - 375,000 yen no fewer than 4,100,000 yen under 7,700,000 yen (the amount of benefit) *85% - 785,000 yen no fewer than 7,700,000 yen (the amount of benefit) *95% - 1,555,000 yen over 65 years upto 1,200,000 yen all the amount over 1,200,000 yen under 3,300,000 yen (the amount of benefit) *100% - 700,000 yen no fewer than 3,300,000 yen under 4,100,000 yen (the amount of benefit) *75% - 375,000 yen no fewer than 4,100,000 yen under 7,700,000 yen (the amount of benefit) *85% - 785,000 yen no fewer than 7,700,000 yen (the amount of benefit) *95% - 1,555,000 yen |
| A taxation method | Separate taxation : the amount of tax is calculated only for lump sum benefit | Aggregate taxation : Including other incomes, and graduated tax rate is applied for all the taxable income |

As shown in Fig.36, at the time of receiving lump sum benefit, 22,000,000 yen would be tax exempted for 40 years of services. As the average total lump sum benefit (including a pension portion) of the university graduates are about 25,000,000 yen, it is obvious that most of the lump sum benefit is within tax deductible income. On the other hand, when receiving them by the form of pension benefits, they are often taxed, in consideration of the other income such as aggregated public pension benefits or other labor incomes. There fore, it is generally understood that the lump sum benefit has much more preferential tax system than pension benefits. Such a point may leads to the large portion of lump sum benefit of all the post employment benefit in Japan.

< conclusions >

12. Conclusions

Considering future additional prospects of slimming down of public pension benefits as lifelong annuities due to the declining birthrate and growing proportion of elderly people, providing any option for lifelong annuities in the corporate pension plan



plays a critical role for securing employees' stable old age lives.

Current regulations on designs for guaranteed terms for pension benefit by Defined Benefit Corporate Pension Law only permit for pension designs that employers incur additional cost for providing lifelong annuities by converting lump sum benefit to pension benefit. It is necessary for the government that lifelong annuities equivalent to the lump sum benefit is admitted, and this design will lead to provide the people for stable and inexpensive lifelong annuities.

As for DB pension plan, further expansion of risk sharing benefit schemes between employers and employees are needed to secure well-balanced pension schemes such as admitting flexible interest rate of cash balance pension plan index, which is already reported in the paper of JSCPA, "expansion of hybrid corporate pension benefit in Japan"

Current funding regulations make allowance for fewer than 100% funded status of pension plan. In these recent extreme market situations, it is true that political flexibilities are needed, but essentially, adequate funding for pension plan is the only way to secure the benefits of all the participants. Governments should require for DB plan to retain adequate risk buffer for funding at an appropriate time.

As for DC pension plan, investment educations are only encouraged in the law regulations. Providing guideline and monitoring for employers regarding periodical investment educations to employees for DC plan from the point of view of protecting them.

As mentioned above, when receiving benefit, it is often the case that the form of lump sum benefit is tax preferable compared to the form of pension benefit in Japan. For encouraging receiving pension benefit, government should review the fairness of taxation between lump-sum benefits and pension benefits.

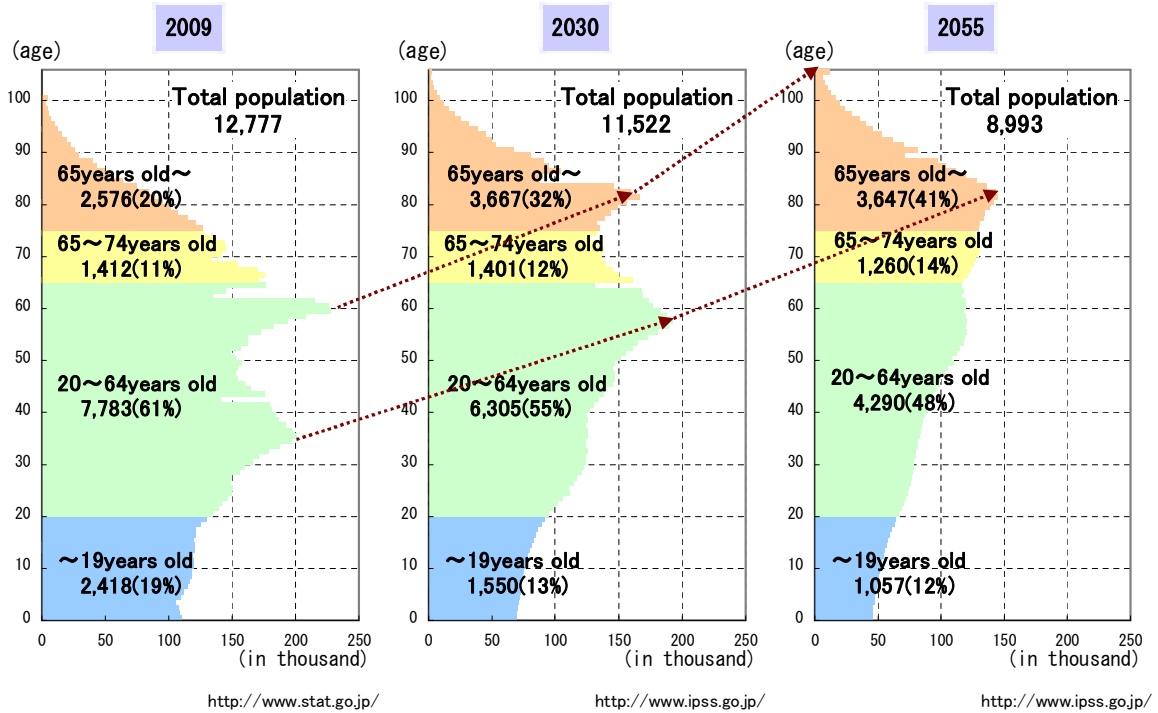
Previously, many employers intentionally shut down the inflation effect from the lump sum benefit to adjust the benefit level. Of course, now Japan is suffering from deflation. However, maintaining benefit level under the inflated economy has to be paid much more attention in preparation for it to come. Establishing the scheme to secure lump-sum benefit maintaining appropriate benefit level in real value under inflated economy is an essential topic. Deciding requirement of revision of benefit between employers and employees, adopting inflation related plan designs such as CB plan and/or modified CB plan, and the reference to the benefit model for public pension benefit must be the good examples of the way of thinking.



<reference>

According Fig.37, the ratio of people more than 65 years of age is around 20%, it will reach 32% in 2030 and 41% in 2055. In 2005, the support ratio of those of working age (20 years and older up to 65 years) that of non-working age (65 years and older) was almost 3.0 though, it will reach 1.7 in 2030, 1.2 in 2055 in Japan. As is well-known, public pension plan adopts “Pay as you go” funding scheme which beneficiaries benefit are covered by the current active participants’ premiums, many people suspects whether pension benefits could be secured.

Fig.37 Transition and prospects of the ratio of people



Currently, pensionable age is being delayed to 65 years of age. Model pension benefit is as follows.

Fig.38

Delay of pensionable age

(in thousand yen)

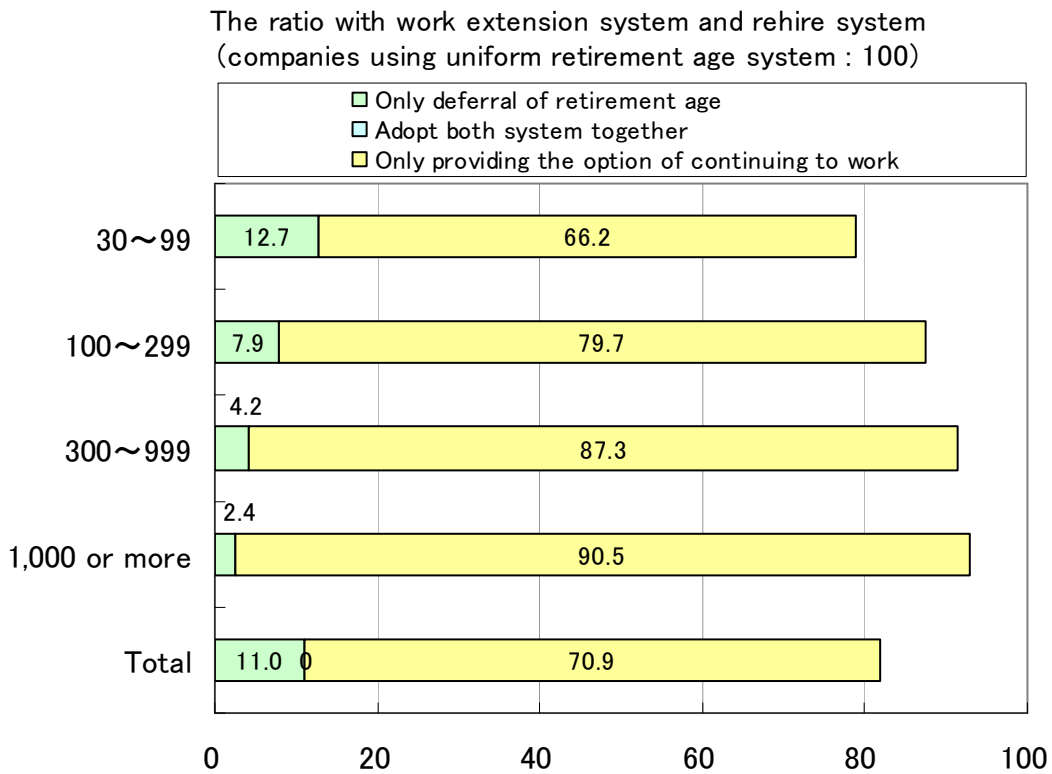
| Age at the time of April 1, 2009 | Date of birth | 60years old | 61years old | 62years old | 63years old | 64years old | 65years old~ | Amount of reduction in comparison |
|-------------------------------------|--------------------------------------------|----------------------------------------------|----------------|----------------|----------------|----------------|-----------------|-----------------------------------------|
| upper : Men / lower : Women | | | | | | | | |
| 68 ~ 63 ~ | ~ 1941/4/1 ~ 1946/4/1 | Employees Pension Insurance Basic Pension | | | | | | 0 |
| 66 ~ 67 61 ~ 62 | 1941/4/2 ~ 1943/4/1 1946/4/2 ~ 1948/4/1 | 61 | | | | | | 790 |
| 64 ~ 65 59 ~ 60 | 1943/4/2 ~ 1945/4/1 1948/4/2 ~ 1950/4/1 | 62 | | | | | | 1,580 |
| 62 ~ 63 57 ~ 58 | 1945/4/2 ~ 1947/4/1 1950/4/2 ~ 1952/4/1 | 63 | | | | | | 2,370 |
| 60 ~ 61 55 ~ 56 | 1947/4/2 ~ 1949/4/1 1952/4/2 ~ 1954/4/1 | 64 | | | | | | 3,160 |
| 56 ~ 59 51 ~ 54 | 1949/4/2 ~ 1953/4/1 1954/4/2 ~ 1958/4/1 | 65 | | | | | | 3,960 |
| 54 ~ 55 49 ~ 50 | 1953/4/2 ~ 1955/4/1 1958/4/2 ~ 1960/4/1 | 61 | | | | | | 5,170 |
| 52 ~ 53 47 ~ 48 | 1955/4/2 ~ 1957/4/1 1960/4/2 ~ 1962/4/1 | 62 | | | | | | 6,380 |
| 50 ~ 51 45 ~ 46 | 1957/4/2 ~ 1959/4/1 1962/4/2 ~ 1964/4/1 | 63 | | | | | | 760 |
| 48 ~ 49 43 ~ 44 | 1959/4/2 ~ 1961/4/1 1964/4/2 ~ 1966/4/1 | 64 | | | | | | 8,810 |
| ~ 47 ~ 42 | 1961/4/2 ~ 1966/4/2 ~ | 65 | | | | | | 10,020 |



Phased retirement

Recently, government regulated the law to enforce employers to secure workplace for retirees, if they hope to do so. Most of employers adopting uniform retirement age chose the system only to provide the option of continuing to work, changing the form of employment.

Fig.39



【source】The Ministry of Health, Labour and Welfare "Outline of working condition comprehensive investigation results in 2008"

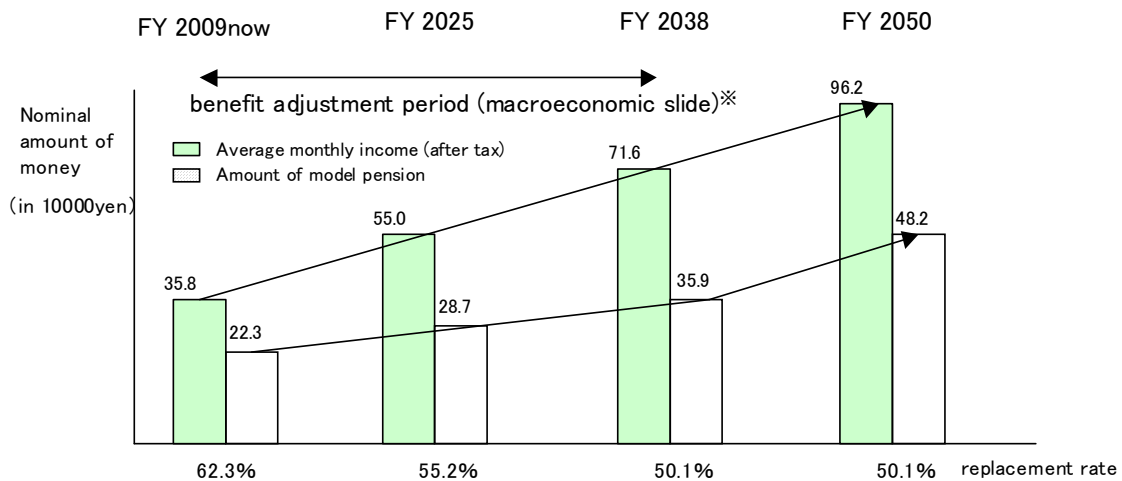
Macroeconomic slide

Macroeconomic slide is the mechanism to revise pension benefit automatically corresponding to the total number of working age people in Japan and the average duration of life.

Gross replacement rates index

Gross replacement rates index is calculated by the ratio of model pension benefit of those who are beneficiaries to the average earnings for active workers. Model pension benefit is assumed the family consists of covered person and full-time housewife at the age of 65 years.

Fig.40 macroeconomic slide and replacement rate



※ The adjustment period of the earnings-related component is expected to end in 2019.

【source】 14th meeting material (Social Security Council)