

Change of Japanese Regulation of Corporate Pension and its Impact

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Abstract

Japanese regulatory constraints concerning asset management of Employees' Pension Fund is being changed significantly. The portion of pension assets by which an investment advisory company can invest was changed from 1/3 to 1/2 in April 1996, and will be increased to 100 % in April 1999. Asset allocation restrictions were also relaxed in April this year.

Pension fund asset valuation for premium calculation will be changed from book value to market related value.

The change of regulation will increase the need for consulting business such as asset and liabilities management, and manager selection.

Résumé

Au Japon, la réglementation concernant la gestion des fonds de pension a été fondamentalement révisée. La part relative d'un fonds de pension dont la gestion peut être confiée à un établissement extérieur a été élevée de 1/3 à 1/2 en avril 1996, et sera portée à 100 % en avril 1999. Les restrictions quant à la ventilation des actifs ont été assouplies en avril de cette année.

La méthode d'évaluation des actifs des fonds de pension pour l'établissement de la prime, changera également, passant de la notion de valeur comptable à celle de valeur du marché. Ce changement du cadre réglementaire aura pour conséquence une plus grande demande pur des consultants dans le domaine de la gestion patrimoniale.

Keywords

Japan, regulation, pension, Employees' Pension Fund, tax qualified pension.

1 Preface

There are two typical types of Japanese corporate pension plans -- the Employee's Pension Fund (EPF) and the Tax Qualified Pension Plan (TQP). The most important difference between EPF and TQP is the fact that EPFs substitute for a portion of the old age pensions of the Government-run Employee's Pension Insurance (EPI), excluding amounts corresponding to increases caused by revaluation of previous wages and cost-of-living indexation. TQPs do not have such substitution function (For more details of Japanese corporate pension, refer to [1]). Growth of the accumulated reserve for each scheme is shown below.

| | EPI in million yen | TQP in million yen |
|------------|-----------------------|-----------------------|
| March 1990 | 22,683,808 | 11,855,959 |
| March 1991 | 25,853,067 | 13,026,877 |
| March 1992 | 29,032,345 | 14,105,460 |
| March 1993 | 32,053,363 | 15,035,400 |
| March 1994 | 35,416,438 | 16,071,535 |

Source:

Surveys by trust banks, life insurance companies, NMIFAC and Pension Fund Association.

Note:

The accumulated reserve of EPI includes reserves of Pension Fund Association.

Recently EPF experienced considerable changes in regulations concerning asset allocation and pension fund actuarial valuation. I explain the content and the impact of the change below by considering the discussion of the AFIR committee of the Institute of Actuaries of Japan.

2 Relaxation of Regulatory Constraints on Asset Management

(1) Two types of investment and regulation

There are two types of investment for EPFs, -- regular type and expanded type. Expanded type was introduced in April 1990. EPFs can use expanded type with the approval of the Ministry of Health and Welfare upon the following conditions:

- a. 3 years have past since the EPF obtained the approval of the Ministry.
- b. The EPF has an asset management director.

- c. The financial management of the EPF is and is assumed to continue to be good and sound.

Investment advisory companies only manage assets of the expanded type. Trust banks and life insurance companies can manage both type of asset. Regulation for asset management is in terms of book value and is different for each type.

(2) Regulation for regular type of investment

The regulatory constraints are prescribed for trust banks and life insurance companies respectively.

a. Trust banks

Allocation of trust assets must conform to the following proportions:

- (a) Safe assets with a guaranteed principal: 50% or more
- (b) Domestic equities: 30% or less
- (c) Foreign currency denominated assets: 30% or less
- (d) Real estate : 20% or less

(These restrictions are called "5-3-3-2 regulation".)

b. Life insurance companies

Allocation of the general accounts and the first special accounts must conform to the following proportions:

- (b) Domestic equities: 30% or less
- (c) Foreign currency denominated assets: 30% or less
- (d) Real estate : 20% or less

(3) Regulation on expanded type of investment

There are two kinds of restrictions on investment of expanded type assets. One concerns EPFs, and the other relates to asset managers.

a. Regulatory constraints concerning EPFs

An EPF is required to satisfy the following requirements:

- (a) Safe assets such as government bonds: 50% or more
- (b) Domestic equities: 30% or less
- (c) Foreign currency denominated assets: 30% or less
- (d) Real estate : 20% or less

b. Regulatory constraints concerning Asset Managers

- (a) For domestic managers

Safe assets such as government bonds: 50% or more

(b) For overseas managers

Safe assets such as government bonds: 30% or more

(4) Deregulation on Asset Management

Considerable progress has been made in relaxing regulatory constraints on asset management, and an important change was made in April 1996.

a. The portion of expanded type in the plan asset by which an investment advisory company can invest was changed from 1/3 to 1/2 in April 1996, and will be increased to 100% in April 1999.

b. The 5-3-3-2 regulation is applied to the whole of the asset excluding the general accounts and the first special accounts of insurance companies. The 5-3-3-2 regulation for each trust account and for expanded type was abolished.

c. No regulation is imposed on EPFs which satisfy the following conditions:

(a) The EPF has an asset management director.

(b) The EPF determines correctly the asset allocation from the long term viewpoint.

(c) The EPF has a person who has professional knowledge and experience in determining the asset allocation.

(d) The financial management of the EPF is and is assumed to be continue to be good and sound.

3 The change of actuarial standards

The method of actuarial asset valuation stipulated in the regulation was changed.

(1) Asset valuation so far

The funding method of EPFs aims at full funding based on the premium calculated using the book value amount of an asset.

(2) Introduction of market related value for actuarial asset valuation

The market related value must be used for asset valuation to calculate premiums from 1998 at the latest.

EPFs can select the valuation method, considering the advice of a certified pension actuary, among the 7 methods including market value and smoothed market value.

The present value method is not used for asset valuation. This method is similar to the method of calculating the present value of pension benefit and discounting the cash flow from each asset, commonly used in the United Kingdom. It is generally accepted in Japanese actuaries that this method is not suitable for domestic assets, because no government console is issued and because dividends of Japanese stocks are small.

(3) Further discussion about actuarial standards and plan design of EPFs

Besides asset valuation, various problems are currently discussed. These discussions are beyond the scope of this paper, but I shall briefly mention them below. The general direction is toward an increase in the flexibility of EPFs.

- a. Run-off basis standards must be strengthened besides the current going-concern basis standards. An effective checking system is necessary to verify the funding level in order to prepare the benefit for the members of EPFs by considering past service, even in the case of plan termination.
- b. The fixed assumed rate of interest may be flexibly determined, instead of the current stipulation of 5.5%.
- c. Reduction of benefit may be approved under specified conditions, such as the agreement between a plan sponsor and the labor union.
- d. A defined contribution plan may be introduced to add or to replace some part of the current defined benefit EPF plans.

4 The effect of the change of regulation

(1) The effect of deregulation of asset management

a. Freedom of asset allocation is improved

The deregulation gives EPFs more freedom to choose asset allocation. EPFs can determine asset allocation according to their specific situation. For example, multi-employer plans tend to avoid the increase of premiums; on the other hand single employer plans issuing corporate bonds tend to increase the funding level regardless of the premium amount in order to maintain or to improve their rating. Allowance of premium volatility also depends on the financial situation of plan sponsors, which varies from time to time.

EPFs can reflect their philosophy about the stock market more easily in their asset allocation. Some EPFs may want to invest more in stocks to cope

with inflation risk, other EPFs may evade stocks based on the theory of Bodie[2], who advanced a bigger hedging cost for stocks in the longer time horizon.

b. Specified investment is easier to perform

The relaxation of regulation for financial institutions makes it easy to perform specified investment, such as in emerging markets or the US treasury only. Financial institutions are preparing funds for such specified investment.

c. Increase of Investment in Stocks

Kathy Matsui, Vice president and chief strategist of Goldman Sachs Japan, predicts [3] an increase of stock investment by EPFs owing to deregulation. Mr. Tsuno in Frank Russel Japan asserts the importance to invest in stocks to cope with inflation risks and to earn greater gains[4]. Many other people have the same philosophy. Some EPFs may buy more stocks to meet the 5.5% assumed interest rate in the current low interest rate Japanese economy.

On the other hand Mr. Body claims that stock is not suitable for long term investment[2]. Mr. Asano thinks that Japanese stocks are too expensive to buy due to the low ROE[5].

Therefore the attitude of EPFs and institutional investors toward stocks will show more variety after deregulation.

d. Freedom of investment activities is improved

The variety of investment activities will be larger. An example is shown below.

The averaging technique will be easier thanks to the relaxation of book value based regulation. Before the relaxation, averaging was difficult when the stock price fell if stock was invested up to the upper limit of regulation 30%, no matter how far the price was decreasing, because the stock position of 30% was still on a book value basis. If the manager was eager to buy stocks, he had to buy immediately after the stocks were sold in order to decrease the book value of the stock position. Such trading was useful for averaging but was harmful to the fund due to the transaction cost. Moreover, realized losses caused a rise in the premiums under the previous regulation.

Some people claim that asset management regulation must be changed from a book value basis to a market value basis. But this changed regulation might increase transaction costs in the pension fund through forced selling in the case of a bull market if the stock position is 30% on a market value basis.

- (2) The effect of change of actuarial asset valuation
 - a. Improvement of solvency

Nowadays the major portion of pension assets are invested in securities, which may experience a wider difference between the book value and the market value compared with investment in loans. The premium calculated based on the book value of the assets is said to be insufficient to secure solvency when the book value is less than the market value for a considerable time .

Upon the termination of EPFs, the market value is used to evaluate the final asset; a difference between the book value and the market value will appear. If the market value of the asset is less than the amount necessary for the substitution of EPI, the shortage is not only the problem of the EPF.

The advent of the market related value solves such problems.

- b. No need for realized gain

Before the change of actuarial standards, EPFs tended to make realized gains through trading to attain the 5.5% assumed rate of interest, when the income gain was small and the capital gain was large. The transaction cost harmed pension assets.

- c. Increased liquidity of the capital market[4]

In the book value world, the manager wants to secure realized gains through selling in a bull market, and the manager refrains from selling to evade realized loss. Therefore liquidity tends to be large in bull markets and small in bear markets. The revision of valuation standards will increase the liquidity of the capital market in the bear market, at least for EPF money.

- (3) The effect of deregulation of asset management combined with the change of actuarial asset valuation

- a. Volatility of Premium

The volatility of premium may increase for the funds where a portion

of risky asset was added due to the deregulation. The volatility will also be higher because of the larger fluctuation of the market related value compared with the book value.

b. Increased Competition of managers

The competition among managers such as trust banks, insurance companies, and investment advisory companies will be greater due to the deregulation because the portion of pension assets by which the investment advisory companies manage is increased, and because the change of money manager is easier than before owing to market related valuation, since EPFs no longer worry about the effect of realized losses on premiums.

It must be noted that greater competition may not automatically bring better investment performance, because if EPFs increase the number of managers, transaction costs may increase through buying and selling the specific securities at the same time by different managers, and also because a frequent change of managers causes the managers to seek short term, rather than long term gains through taking long term risks.

I hear that some plan sponsors decreased the number of managers by considering the long term performance of pension assets in the United States, where the number of managers had previously increased. In Japan, EPFs will use more managers for the time being, but after 5 or 10 years a similar reduction may occur.

c. ALM consulting business spreads among EPFs

Since fiscal 1994, it has become possible to pay expenses relating to pension consulting services directly from pension accounts. This has made it easier for EPFs to receive professional advisory services on funding and asset management, including ALM placed by trust banks, insurance companies, designated firms, and consulting companies. The deregulation this year will encourage EPFs to use ALM consultation.

I will explain one example of pension ALM for defined benefit pension using the Monte Carlo simulation among various ALMs in Japan. Random numbers are generated according to a multidimensional normal distribution based on a return vector and covariance matrix for asset classes. Each path made with random numbers shows a hypothetical future trajectory of the growth of pension funds. Cyclical revisions of premiums are performed based on the actuarial standards. The probability of premium rise is calculated by summing

up the results for all paths. Before 1994 the risk of investment and the effect of the risks to premiums and actuarial reserves were seldom considered.

5 The Strategies of Managers

The strategy of managers based on the forecasted effect of deregulation are as follows.

(1) Improvement of Consulting Service

The deregulation of asset management and the change of valuational standards will give more choice to EPFs, and the necessity for consultation will be increased. Every manager will provide EPFs with consultation services for both assets and liabilities more extensively than before, to say nothing of their asset management services. One of the indications of this strategy is setting 'Pension ALM Section' in the companies.

(2) Improvement of Disclosure

As a result of deregulation, EPFs tend to increase the number of managers for the time being. Therefore EPFs will want to examine the list of the performance of all managers based on the same accounting standards. To meet this need of the EPFs, Trust banks will provide 'Integrated Report' services to EPFs in April 1997, which will include various information about the assets and performance of all trust banks having dealings with the EPFs. Insurance companies and Investment advisory companies may join these services and may provide financial data about EPFs in the report.

(3) Special Account for Benefit

Under the current system, each manager must have some cash for benefit purposes in their funds to allocate to each fund proportional to the respective amount of the assets. If there is no cash in the fund, the manager must sell some securities in the market and make money whenever the benefit must be paid. The specified investment is difficult under such a system, and the small cash position in each fund may harm the total performance of the pension asset. To overcome the defect of the current system, trust banks declared to start a 'Fund for Benefit only' in April 1997, which comprises some amount of money invested in call money or a short term deposit, and provides all the cash for benefit. This means that the cash for benefit purpose does not have to be included in the specified funds.

(4) New Products from Insurance Companies

Insurance companies research the new investment products. At the same time they use their subsidiary investment advisory companies to acquire money from pension funds.

6 Conclusion

Deregulation of asset management will increase the responsibility and risk of EPFs. The change of actuarial asset valuation may enlarge the volatility of premiums. The added variety of EPFs both in investment and in actuarial valuation may increase the necessity of consulting services. The needs of consultation will continue to be strong for the time being.

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