The New Investment Management Scheme for Japan's Public Pension Fund[1]

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Abstract

Japan's public pension system, which operates under a pay-as-you-go financing method, has some 140 trillion yen in reserve assets. These assets had been primarily managed by the Fiscal Investment and Loan Program and invested in public agencies. However, from April 2001, the fund has come to be invested in marketable securities under the management of the Minister of Health, Labor and Welfare and the Government Pension Investment Fund (GPIF).

The fund's collective investment scheme has its merits, especially in alleviating the disadvantages that individual investors face in Japan's securities markets. Also, laws have stipulated several arrangements to optimize the risk-return profile of portfolios as well as to prevent political intervention. They include: (a) the Minister of Health, Labor and Welfare's obligation to consult with a committee of experts, (b) establishment of an independent management organization, and (c) assessment of fiduciary responsibilities on those engaged in the investment process.

However, there is room for improvement in attaining more efficient management and securing political neutrality. One of the measures I would recommend is the complete separation of the investment management process from the political process regarding decisions on the level of reserve and allocation between non-marketable and marketable securities. GPIF—the investment management organization—should have an independent board. In addition, executives and management staff should have a background and experience in investment management, and be given proper monetary and non-monetary incentives.

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1. Overview—The Three Decisions of Public Pension Finance

Not only in Japan but in many other countries, the method of public pension finance has been the focus of heated discussion. For example, a controversy has developed over privatization of the U.S. social security system, with privatization usually meaning the introduction of individual investment accounts similar to 401k plans. Indeed, several OECD countries have already decided to adopt mandatory or tax-preferred individual accounts. However, in discussing the privatization of public pensions, we must be careful not to confuse three types of decisions, as Geanakoplos et al. (1998) point out.

The first decision is how to finance pension liabilities—i.e., pay-as-you-go or prefunding. The second decision regards the unit of management and administration—whether to manage assets in a collective account or in individual accounts.

The third decision involves fund investment. This can be divided into two parts. First is the target area of investment. In some countries, funds are invested to serve public purposes in such instruments as government bonds and infrastructure projects. An alternative is to invest in a diversified portfolio containing riskier marketable securities including stocks. The second part of fund investment concerns governance in the investment management process—in other words, how to organize the investment management process, and how to prepare proper disciplinary measures and incentives for those who formulate and execute investment policy. An important question is who should be delegated with decision-making authority for asset allocation and risk budgeting. One option is an investment board consisting of politicians and/or representatives of interest groups, and another option is a board consisting of investment professionals.

This paper contains five sections. Section 2 discusses the financing method of the public pension system in Japan—the first decision. Section 3 explains changes in asset management schemes in Japan. Since April 2001, pension fund management has undergone a thorough overhaul. I compare the old and new systems, and address the second decision of the desirable investment management unit.

In the following sections, I take a more critical view in explaining the current system, and assess the new system from the viewpoint of promoting economic efficiency as well as social welfare. Section 4 deals with the first part of the third decision—investment policy and asset allocation in the new system. Section 5 concerns governance—authority and responsibility in investment decision-making and incentive mechanisms in the executive organization. I also

explain the exercise of shareholders' rights. Finally, Section 6 presents a summary and offers suggestions for improvement.

As will be explained in the Appendix, although only one year has elapsed since the new fund management system took effect, an alternate proposal for the pension fund management system is already under consideration by the Koizumi cabinet. A strong rationale for this proposal is that the government cannot manage market investments efficiently or effectively.

However, investment of the public pension reserve in marketable securities through a collective scheme is not uncommon in other countries. There are four AP Funds in Sweden to manage buffer fund in pay-as-you-go portion of public pension system[2]. Canada, Ireland and Norway have proceeded to invest pension funds in marketable securities.[3] The merits and demerits of these schemes depend not only on the plan design but also on the economic conditions and social structure of each country.

For example, a market investment scheme has the potential to increase indirect exposure to risky securities for the household sector. Japanese household financial assets are largely composed of less risky assets such as deposits and bonds (Table 1). One reason is that compared to institutional investors, households are at a disadvantage because financial intermediaries (securities brokers, investment trusts and others) have not been keen on providing them a high quality of services. Households have especially great difficulty gathering and analyzing information, and executing transactions at reasonable prices.

Table 1 Composition of Household Financial Assets

(at end of 2000)

	Japan	U.S.	U.K.
Cash & ordinary deposit	12.0 %	1.3 %	15.0 %
Time deposit	42.9 %	10.0 %	7.1 %
MMF	NA	3.0 %	NA
Bonds	1.9 %	5.6 %	1.5 %
Investment trust	2.4 %	8.9 %	5.9 %
Stocks	4.8 %	22.9 %	17.4 %
Pension	9.7 % *	29.6 %	49.6 %
Insurance	18.2 %	2.2 %	
Trust bank account	2.2 %	3.2 %	NA
Other		15.5 %	
Total amount	¥ 1,390.2 tril.	$ 33,352 bil.	£ 2892.5 bil.

Notes: For Japan, public pension reserve is not included. For U.S., households include nonprofit organizations. For U.K., households include nonprofit household servicers.
Sources: BOJ, *Flow of Funds Account*; FRB, *Flow of Funds Account*; U.K. Office for National Statistics.

[2] After the reform of 2001, the new AP7 fund was established as the default fund for the defined contribution portion of public pension.
[3] The petroleum fund in Norway is not formally a pension fund, but it can be used to cope with future deficits in social security caused by aging of the population.

For defined benefit plans in Japan, investment performance is not directly reflected in the amount of benefits, unlike the case of investments through individual accounts. However, investment performance does lead to changes either in the amount of benefits or social security premiums. In that sense, public pension fund investment in diversified markets can increase households' exposure to the stock market indirectly but efficiently. This would also enhance the supply of "risk capital," whose scarcity has been cited as contributing to the stagnation of business activity in Japan.

In my opinion, the success of the new scheme depends on the satisfaction of two conditions. The first condition is consistency in policy decisions concerning the level of reserve and allocation between marketable and non-marketable securities. The second is assuring good governance in the investment management process, which requires both the separation of the pure investment management process from politics, and a disciplinary scheme for the investment management organization. Proper incentives are indispensable to this.

2. Financing of the Public Pension System

2.1 Japan's Public Pension System

2.1.1 Two-tiered benefits

Japan's public pension consists of two tiers of benefits. The first (bottom) tier is a flat rate pension applicable to everyone called National Pension (NP). This portion covers all adults over the age of 20. To qualify for benefits, a person must pay premiums (currently 13,300 yen per month) for at least 300 months between the ages of 20 and 60. The amount of benefits is in proportion to the number of years of membership. A person with continuous membership for the full 40 years can receive an annuity of 804,200 yen. Eligibility for old-age benefits is attained at age 65 for self-employed persons, and age 61 for employees.[4]

With regard to the funding source for benefits, two-thirds of benefits are funded by collected premiums, and one-third by subsidies from the government's general budget.

The second (top) tier of benefits is earnings-related and payable to retired employees. With regard to private-sector employees, the combination of the two tiers is called Employees' Pension Insurance (EPI). Currently the premium rate for EPI is 17.35% of the monthly salary, half of which is borne by the employer and half by the employee.

Model old-age benefits are designed such that beneficiaries with an average salary and 40-

[4] The benefit eligibility age for employees is in the process of being raised to 65, and will become effective for men by 2013 and women by 2018.

year membership receive 59% of the average net salary after tax and social security premium of current workers. There are currently 38 million employees with EPI membership, and 8 million pensioners. NPI and EPI together have 71 million members and 19 million pensioners.[5] In addition to old-age benefits, members and dependent spouses are entitled to disability benefits and survivor benefits respectively.

2.1.2 Method of finance

When EPI was established in 1942 as Japan's first public pension system, rules required the preparation of an actuarially fair amount of reserve necessary to pay defined benefits. However, doing so became increasingly difficult as benefits rose repeatedly from the late 1950s through the 1970s.

Especially in 1966, the nominal model benefit was raised almost threefold to 36% of the average wage. This model replacement ratio was raised to 68% in 1980, while benefits were indexed to inflation in 1973. These improvement measures made it almost impossible to secure a sufficient level of premiums to maintain fully funded pension plans. As a result of persistent funding shortages, the public pension scheme gradually acquired the characteristic of a pay-as-you-go system.

In NPI and EPI, it is a rule to check financial conditions and adjust benefits and premiums every five years. This revision process is called "actuarial recalculation," and is based on the latest actuarial numbers such as birth and mortality rates for coming years.

At the end of March 2000, the amount of assets under management in NPI was 10 trillion yen and 135 trillion yen in EPI. If we include the contracted-out portion of EPI, the amount was approximately 168 trillion yen for EPI, which exceeded 30% of GDP and was equivalent to five years worth of benefits. However, actuarial liabilities for past service benefits alone exceeded 700 trillion yen[6] at that point.

It can be said that the current financing method of public pensions is a pay-as-you-go system with a substantial asset provision. Some call it "adjusted prefunding" and others call it an "adjusted pay-as-you-go" method.

As for the need for funds, there are two opposing views. One is that we should increase funding because a funding deficiency exacerbates intergenerational inequity by decreasing future benefit levels and/or increasing premiums. Thus we should raise premiums so that

[5] Public employees (national, municipal, and teachers) are entitled to receive pension benefits from mutual aid associations. Benefits also include both fixed-amount and earnings-related portions.
[6] This calculation was made in 1999 by the Advisory Council on Social Security. The basic assumptions were: 5% annual wage increase , 1.5% annual CPI increase, and 4.0% discount rate.

they can actuarially cover marginally accruing benefits.[7]

Of course, a premium hike would face political resistance. Opponents want to use a large amount of reserve to defray the current benefit costs without a premium hike. They say that the current reserve amount is too large.

Another countermeasure for this funding shortage is to pay the NPI portion wholly with tax revenue from the general account or tax earmarked for NPI benefits. One candidate for earmarking is the consumption tax (Takayama 2001). However, even if this plan is realized, accrued liabilities for past service, of which 500 trillion yen is for EPI, will remain unfunded.

In sum, the government has adopted a policy of maintaining a level of reserve sufficient to pay at least three years of benefits when benefits and premiums are revised in future actuarial recalculations. (Table 2)

Table 2 Expected Assets of the Two Public Pension Accounts

(nominal value, ¥ trillion)

FY end	NPI			EPI			Total of two accounts		
	Annual benefits	Surplus	Assets	Annual benefits	Surplus	Assets	Total benefits	Total assets	Assets / benefits
2000	3.5	0.4	12.1	28.1	5.0	177.2	31.6	189.3	6.0
2010	5.3	0.2	13.3	47.7	3.1	209.2	53.0	222.5	4.2
2020	7.5	1.1	18.4	65.0	6.9	234.2	72.5	252.6	3.5
2025	8.5	1.2	23.8	71.2	9.5	275.1	79.7	298.9	3.8
2030	9.7	1.3	29.7	78.5	10.2	327.1	88.2	356.8	4.0
2040	12.7	0.5	38.3	101.7	1.9	396.9	114.4	435.2	3.8
2050	15.1	0.2	39.8	121.8	3.2	383.7	136.9	423.5	3.1
2060	17.0	0.7	42.6	134.9	3.0	382.3	151.9	424.9	2.8

Notes: MHLW has made this forecast assuming CPI and wage growth rates of 1.5% and 2.5% respectively. Assets of EPI and two-account total include the substitutional (contracted-out) portion in EPF (occupational pension).
Source: MHLW

Clearly, the equivalent of three to five years of benefits is greater than the liquidity reserve. The government, especially the Ministry of Health, Labor and Welfare (MHLW, formerly the Ministry of Health and Welfare), explains that to alleviate intergenerational inequity, it is desirable to have a certain amount of reserve.

The government's decision on funding has been that while we cannot maintain full funding of liabilities, we should have more assets than are in the liquidity reserve. This policy has

[7] As is often asserted in discussions of public pension funding methods, shifting from pay-as-you-go to prefunding raises the double-burden problem of those belonging to pre-retirement and working generations.

been consistently maintained and has worked as a constraint in setting premiums and benefits.

3. Fund Management Scheme

As explained in Section 1, the second decision regards the asset management scheme, which underwent a radical change in April 2001.

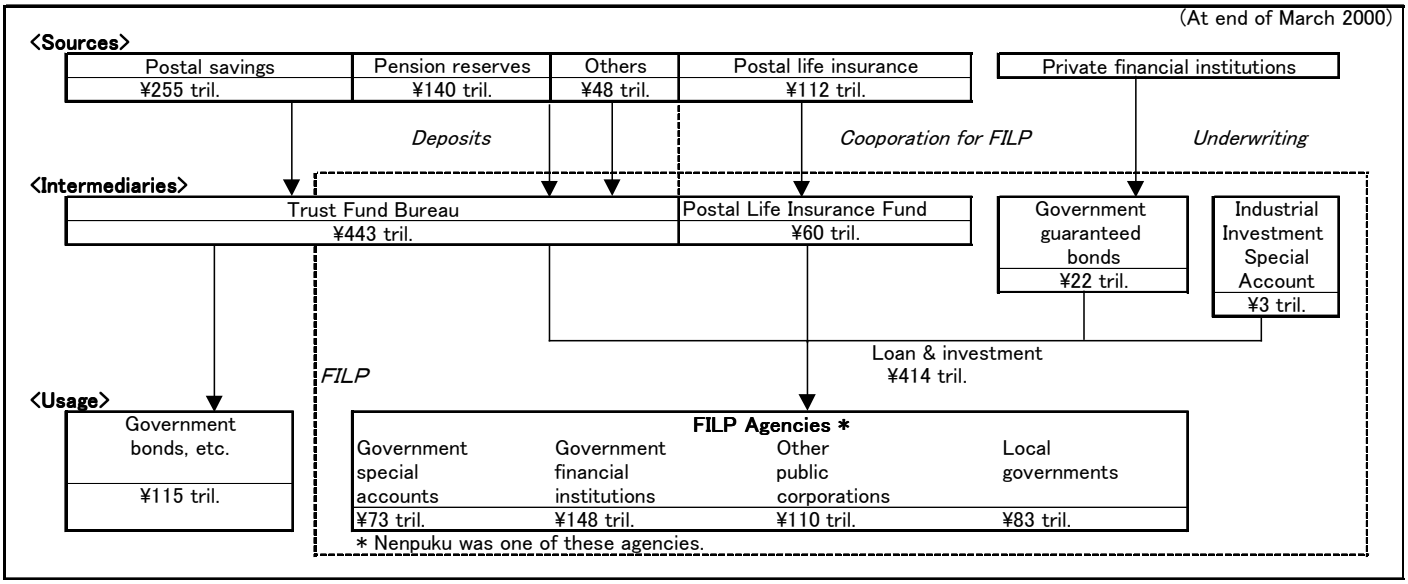
3.1 The Former Fund Management Scheme

3.1.1 Management by FILP

Ever since EPI was established in 1942, the funds gathered had been managed under the Fiscal Investment and Loan Program (FILP). Until April 2001, EPI and NPI funds had to be deposited at and managed by the Trust Fund Bureau (TFB) in the Ministry of Finance (MOF). These funds were combined with funds from postal savings and managed by TFB in accordance with the annual FILP budget. Being part of the central government's budget, FILP is authorized by the Diet every year.

Funds under management by TFB, together with the Postal Life Insurance Fund, were the primary sources of FILP funds. The total funds under management by FILP and funds for investment in government bonds amounted to 529 trillion yen (414 trillion yen plus 115 trillion yen at the end of March 2000), of which EPI and NPI funds comprised 140 trillion yen (Chart 1).

Chart 1 Former FILP Scheme and Fund Balances



In terms of asset allocation, 80% of FILP funds were invested in or lent to government financial agencies (FILP agencies) and local governments, and 20% used for underwriting central government bonds. FILP agencies extended loans to infrastructure projects or corporations involved in such projects, which the government considered useful for economic development.

FILP agencies and the central and local governments paid interest on loans and investments made to them. The Trust Fund Bureau received these interest payments and in turn paid the same rate of interest to NPI and EPI funds as well as to postal savings.

Funds were usually deposited at the TFB with a maturity of seven years. Interest rates were set in reference to the coupon rate on 10-year government bonds issued at that time.

In sum, under the FILP program, pension funds were invested/loaned in accordance with the budget, and there was very little discretion on the part of MHLW. Thus funds were managed unilaterally by the central government for investment in non-marketable loans and securities.

3.1.2 Investment management by the Pension Welfare Service Public Corp. (Nenpuku)

However, there was an exception to this investment management. Since 1986, a certain portion of FILP funds was loaned to a special account managed by the Pension Welfare Service Public Corporation (Nenpuku)—a public agency under the supervision of the Minister of Health, Labor and Welfare. Assets under management at Nenpuku gradually increased, reaching approximately 20% of pension funds, or 26 trillion yen at the end of March 2001.

Nenpuku and MHLW have been responsible for the management and investment of this fund in marketable securities. One of the few binding rules was that Nenpuku had to pay interest on money borrowed from TFB. The power to decide such items as asset allocation and selection, and to evaluate outside investment managers lay in the hands of Nenpuku and MHLW.

For example, Nenpuku's investment policy was formulated in 1995 under the guidance and instruction of the Minister, who consulted with a body of investment experts. The asset allocation in that investment policy is shown in Table 3.

Table 3 Policy Asset Allocation of Nenpuku

	Allocation		Balance as of March 2001	
		(range)	(¥ tril.)	(allocation)
Domestic bond	57%	51–63%	14.4	55.3%
Convertible bond	5%	0–15%	0.3	1.3%
Domestic stock	23%	17–29%	6.3	24.2%
Foreign stock	12%	6–18%	3.3	12.8%
Foreign bond *		0–10%	1.1	4.1%
Money	3%	0–6%	0.6	2.3%
Total	100%		26.0	100.0%

Note: Foreign bonds can be used as alternative to domestic bonds for up to 10% of total assets.
Source: MHLW

The targeted rate of return and risk index (measured by standard deviation) were 6.7% and 6.0% respectively.

Pursuant to that policy, some domestic bonds were managed in-house, while other assets such as domestic stocks, foreign bonds and stocks were entrusted to outside investment managers. Investment managers included investment advisory firms, trust banks and insurance companies.

For the 15-year period since Nenpuku began fund management in FY 1986, the mean annual rate of return on assets was 4.12% on an average investment amount of approximately 16.3 trillion yen. Since the average rate of interest rate on borrowed money from TFB was 4.87% (Table 4), Nenpuku recorded an accumulated net deficit of 2.3 trillion yen as of March 2001.

Table 4 Investment Performance of Nenpuku

Comparison with interest rate of borrowed money (%)

	FY 95	96	97	98	99	2000	Average	Average 1986-2000
Return on assets *	11.03	3.98	7.06	2.71	11.1	-5.72	4.82	4.12
Avg interest rate of borrowed money	5.44	5.28	5.03	4.39	3.82	3.3	4.5	4.87
Margin	5.59	-1.3	2.03	-1.68	7.28	-9.02	0.32	-0.75

Comparison with average market index return weighted by policy asset allocation (%)

	FY 95	96	97	98	99	2000	Average (6-year geometric)
Time-weighted retur	15.18	4.95	7.14	3.09	11.39	-4.99	5.93
Return of IPS index	15.11	4.74	6.67	3.08	10.02	-4.08	5.76
Excess return	0.07	0.21	0.47	0.01	1.37	-0.91	0.18

Note: For return on assets, both realized and unrealized gains (losses) are combined and divided by average of invested fund at start and end of period
Source: MHLW and GPIF

There are two opposing assessments of these results. Critics point out that the time-weighted return of 5.93% since FY 1995 is below the original return objective of 6.7%, and the average return on assets is also below the interest rate of borrowing.

However, from the viewpoint of experts in pension fund management, performance should not be evaluated based on the absolute rate of return but on the process yielding that return. If the investment decision-making process was carried out with sufficient diligence and care expected of professionals with expertise, it cannot be criticized. The fact that the time-weighted return of 5.93% is higher than the market index of 5.76% (Table 4) can be construed as proof that diligence and care were exercised.

Also, the investment process of the Nenpuku managed fund has been improved by leaps and bounds, especially since 1995 (Table 5).

Table 5 Measures Taken Since 1995 to Improve Investment Process

1. Formulation of investment policy statement
2. Management by market value instead of original book value
3. Abolishment of legal list (5.3.3.2)
4. Adoption of investment advosiry firms as one of investment managers
5. Sophistcated management of investment risks
6. Broader information disclosure of investment record and policies

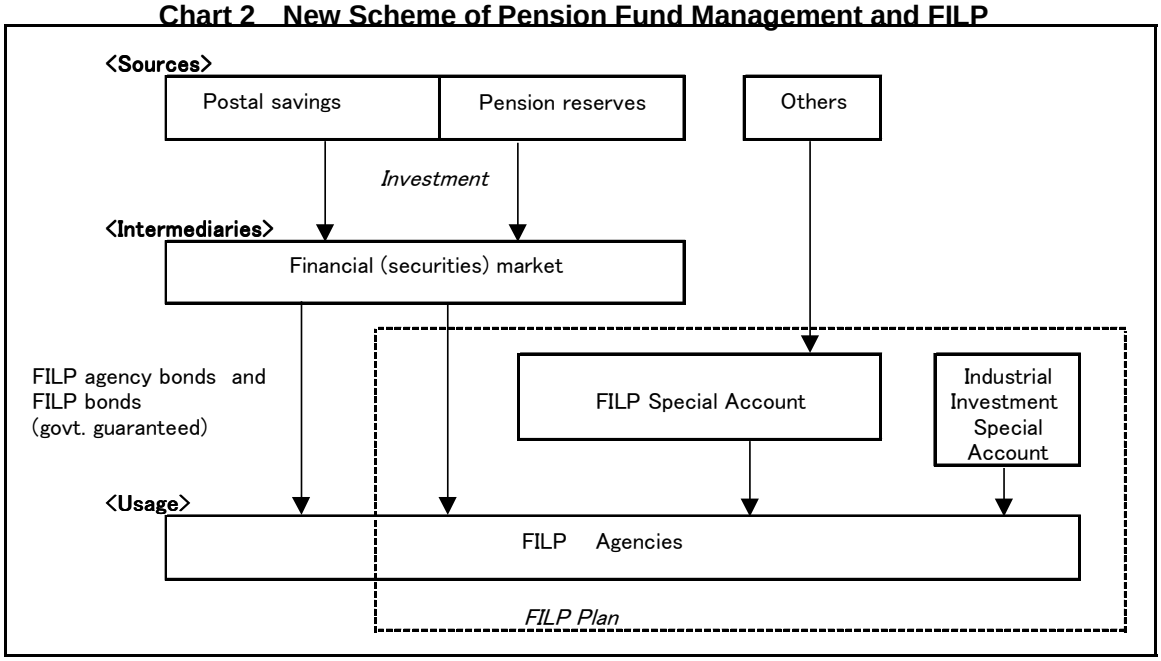
In addition to the investment policy formulation mentioned above, several improvement measures were taken including a change from book to market value accounting, and the entry by investment advisory companies in the fund management business, which was formerly limited to insurance companies and trust banks.

3.2 The New Fund Management Scheme

3.2.1 The new FILP and pension fund

Since April 2001, funds of public pension and postal savings no longer have to be deposited at the Trust Fund Bureau. Funds for the NPI and EPI programs have come to be entrusted to and managed exclusively by the Government Pension Investment Fund (GPIF)—an agency under the authorization and supervision of MHLW (Chart 2).

Chart 2 New Scheme of Pension Fund Management and FILP



Initially, however, of the 140 trillion yen of NPI and EPI funds managed by Nenpuku, only 26 trillion yen was transferred to GPIF. The rest of the funds will be gradually transferred to GPIF over a seven to eight-year transition period.

In addition, most rules and practices of management under Nenpuku are also applicable to GPIF. For example, most managers and officers of Nenpuku have come to work with GPIF. Some domestic bonds are managed inside GPIF, and the management of the remaining portfolio is delegated to outside private fund managers.

What has changed from Nenpuku is that GPIF no longer needs to pay interest since it does not borrow funds from the FILP. Therefore, the actual amount of earnings and losses from investment, rather than earnings net of interest paid, are recorded on the EPI and NPI account.

On the other hand, there is no budget that would force pension and postal savings funds to be loaned to public agencies via the TFB. Public agencies that used to receive loans from TFB now have to raise funds for themselves. Agencies have two options to raise funds. The first is the issuance of bonds on their own behalf (agency bonds). The second option is the issuance of government guaranteed bonds in cooperation with other agencies under the name of the total program (FILP bonds).

According to the FILP budget for FY 2001, the amount of FILP agency bonds issued in that year was 1.106 trillion yen, while the total amount raised for the program was 32.2 trillion yen. This means that only 3% was financed by the issuance of agency bonds, and the other 97% by the issuance of FILP Bonds.

3.2.2 Transition period

At the end of FY 2000, deposits from the public pension account to the Trust Fund Bureau amounted to over 147 trillion yen (estimated in the FY 2001 budget).

However, except for the funds already transferred from Nenpuku to GPIF, it will take seven to eight years for those funds to be completely redeemed and returned to the public pension insurance account. In other words, until FY 2008 the amount of funds under management at GPIF will increase only gradually.

During that period, two ministers (Ministry of Health, Labor and Welfare and Ministry of Public Management, Home Affairs, Posts and Telecommunications) are required by law to provide sufficient liquidity to the FILP program. For that purpose, the public pension program together with postal savings has been called on to underwrite an agreed portion of newly issued FILP bonds.

In the FY 2001 budget, 11.9 trillion yen in pension funds, along with 17.9 trillion yen in postal savings and 3.6 trillion yen in the postal insurance fund, were earmarked for underwriting FILP bonds. The total planned issuance of FILP bonds was 43.9 trillion yen. The ministries have agreed that these funds are indispensable to maintain outstanding loans from the FILP and to extend new loans as planned.

3.3 Rationale for Collective Management in Japan

Returning to the first decision regarding public pensions, we finance benefits in the pay-as-you-go system with a large amount of reserve. Regarding the second decision—the unit of management—the fund has been managed as one collective unit, while EPI and NPI take the form of an insurance scheme.

In the Japanese environment, a collective management system has several advantages compared with management by individual accounts. The first advantage is economy of scale. In countries where individual accounts have been introduced, administrative costs and expenses have eroded investment returns and retirement savings. According to calculations by Whitehead (2000), in six Latin American countries, administrative costs and expenses deducted 0.65% to 1.39% from annual contributions, and 13.5% to 26.0% from assets at the time of retirement.

A survey of 262 North American pension funds by Ambachtsheer et al.(1998) found that a 10-fold increase in asset size decreases management costs by 20 basis points. Similarly, analysis of 1,920 Australian superannuation plans by Bateman et al. (2001) showed that the ratio of expenses to plan assets decreases approximately to one third, as the value of plan assets and the number of participants increases 1,000 times. Also, they made it clear that the expense ratio in employer sponsored plans is a half of that in individual based retail plans.

Thus when fund management is performed as a collective unit, the economy of scale can significantly reduce management cost per unit. In fact, fees for public pension fund management paid by the Pension Welfare Service Public Corporation (Nenpuku) have been kept much lower compared to private pension plans (Table 6).

For example, the average investment management fee in FY 2000 for Nenpuku's entire portfolio, of which 29% is passively managed and 71% actively managed, was 16 basis points of assets—lower than the average rate generally available in the market. In that sense, Nenpuku took advantage of economies of scale, and passed that merit on to GPIF.

In the case of GPIF, the core equity investment will be managed in a passive index fund since the large fund size makes it difficult to take advantage of market inefficiency and earn an excess return alpha. Considering this, we expect that cost efficiency will be pursued as vigorously as before.[8]

[8] In 2001, ETF (exchange traded fund, or publicly traded index fund) was first introduced on the Tokyo Stock Exchange. Also, the Master Trust service commenced in 2000. GPIF can take advantage of these services to reduce operating costs.

Table 6 Nenpuku Investment Management Fee Rate

		86	87	88	89	90	91	92	93
Assets	(¥ bil.)	182	1,381	3,625	6,125	8,808	11,609	15,143	18,143
Management fee	(¥ bil.)	0.4	2.9	8.7	14.7	22.9	26.7	31.8	38.1
Fee rate	(%)	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2

		94	95	96	97	98	99	2000
Assets	(¥ bil.)	20,684	21,632	22,438	22,250	22,941	24,125	25,250
Management fee	(¥ bil.)	39.3	41.1	35.9	35.6	39.0	38.6	40.4
Fee rate	(%)	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Source: MHLW and GPIF

Second, particularly in Japan, collective management efficiently adds exposure to the stock market for households. In the discussion of the privatization of social security and introduction of individual accounts, some argue that it is useless for the government to invest social security funds in the stock market (Aaron 1999). They contend that people would have already optimized their portfolios if stock markets are efficient and individual investors face an entry barrier no larger than that of institutional investors. In this case, if the social security fund begins to invest in stocks, individual investors would adjust their portfolios accordingly by reducing their own exposure to the stock market. In short, individual investors are deprived of stock investment opportunities by the social security fund's investment in the stock market.

However, it is evident that if households face some institutional impediments in participating in stock market investment, then an increased equity exposure through the public pension fund can improve social welfare.

Such is the case in Japan. Individual investors are not accustomed to investment in risky securities such as stocks. Traditionally, Japanese households have invested most of their financial assets in bank deposits and postal savings. They are very sensitive to erosion of principal, which also explains the large allocation of savings to life insurance. In addition to hedging mortality risk, life insurance has the function of repaying a fixed amount at the time of maturity.

It has bees said this risk-averting attitude can be attributed to traditional values. However, the truth is that Japanese people also love gambling and the lottery. A strong argument could thus be made that if they could understand the mechanism of risk and price movements of financial products, they would be willing to invest in riskier assets and seek a higher return.

This means that the small exposure of households to riskier assets is more the result of

institutional impediments than of traditional values (Nakagawa et al. 2000). Institutional factors include: (a) lack of information that is easy to understand,[9] (b) constraints in investment such as excessively large minimum transaction units,[10] (c) brokers' behavior in seeking higher commissions,[11] and (d) difficulty of households in using short-selling or derivatives. As a result, only 20% of all households have owned stocks over the past 40 years, including periods when the stock market was very bullish. This proportion is below 10% for householders under the age of 35, and below 20% even for householders under the age of 55.

If there are institutional constraints to stock investment by households or disadvantages to individual investors compared with institutional investors, the new scheme of pension fund management as a collective unit has the potential to circumvent such obstacles and provide opportunities for individual investors to participate in the securities market.

Of course, with Japan's defined benefit public pensions, investment results have a different effect compared to defined contribution individual plans. Since they are "defined", benefit levels do not automatically change in correspondence with investment results. Accordingly, household cannot be certain whether they should adjust their personal investment portfolio.

However, unlike corporate DB plans, with public pension plans, households play the role of a plan-sponsor to pay contributions as well as the role of beneficiary. The better the investment performance, the lower the social security premiums paid by the households, even if benefits are "defined." In that sense, diversification of public pension plan investment will be beneficial for households as a residual claimant in the public pension plan.

Even so, collective management also has a few disadvantages. The sheer asset size of 140 trillion yen makes it difficult to control the market impact, and that impact can also be abused to prop up stock market prices.

Also, it is almost impossible to reflect the interests and preferences of all insured persons accurately, even if governance through the political process does work well. The risk tolerance or aversion characteristics of the 71 million members vary considerably. Nobody can integrate these preferences and formulate an investment policy consistent with all participants' preferences.[12] It is difficult to integrate the interests of the insured and make them correspond with the minister's decision.

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[9] According to an opinion survey of the Members Association of the Tokyo Stock Exchange, one of the primary reasons (48% of persons under age 50, and 52% of those over 50) for individual investors to refrain from stock market participation is the lack of sufficient knowledge and information on investment.
[10] Generally, the minimum transaction unit in Japan is a 1,000 share unit with an average value of 400,000 to 600,000 yen.
[11] Brokerage commission rates were deregulated in November1999, but commission rates for small transactions are 20 to100 times that of large volume transactions.
[12] As Arrow explained in 1963, it is impossible to both achieve Pareto optimality and to prioritize different risk tolerance by majority voting in a democracy.

In the future, we should pay serious attention to a proposal to introduce individual accounts while gradually reducing the amount under collective management to the level necessary to preserve liquidity. Considering the foregoing, however, the present inequality between individual and institutional investors in Japan's capital markets justifies the use of collective fund management rather than an individual account scheme.

4. Asset Allocation in the New Pension Fund Management Scheme

4.1 Marketable vs. Non-Marketable Securities

Now we come to the third decision for pensions—how to invest pension assets. The first part of this decision is to select which asset categories to invest in. One alternative is non-marketable public bonds and projects, which we see very often in developing countries. The other alternative is in a portfolio of marketable securities including stocks and foreign securities.

As Iglesias et al. (2000) point out, public pension funds very commonly must observe several mandates and ordinances. One such rule is the legal list, which stipulates maximum/minimum investment allocations. We often see restrictions that require investment in domestic public bonds or limit investment in foreign securities and sometimes in equity. This type of rule is often prescribed for provident funds but is not limited to them.

Other examples include investment for the purpose of economic development and economically targeted investment (ETI)—the latter being investment in public development projects or in securities used to finance these projects. Housing is a particularly popular field for ETI. In Japan, FILP, is an example of using public pension funds and postal savings for investment in economic development programs.

However, these mandates and restrictions are often cited for reducing the rate of return on the pension fund. In Japan, a rule stipulated that the interest rate paid to the pension fund be the same rate as for government bonds. Nonetheless, fund management under FILP has not been very successful or efficient. While large losses on loans and investments have not been recorded, the market value of investments is said to have depreciated significantly.[13]

Under the new fund management system, as much amount as possible should be invested in both domestic and foreign markets. However, the size of funds entails that considerable care be given to minimizing the market impact.

[13] Assets of the FILP program are booked at original value instead of market value. Reportedly, a significant amount of loans for infrastructure programs such as housing, forestry and transportation are non-performing.

4.2 Asset Allocation Among Marketable Securities

When funds are invested in market securities, the most important factor explaining investment performance and risk level is asset allocation, as Brinson et al. (1991) have pointed out.[14] In the new pension fund management system, the Investment Policy Statement (IPS), which stipulates asset allocation, is formulated in the following way.

4.2.1 Formulation process of IPS

Under the new scheme, the formulation of investment policy is the responsibility of the Minister. The Minister formulates the IPS and supervises fund management activities by the GPIF pursuant to such policy. Among the points elaborated in the IPS are: (a) long-term asset allocation, and (b) rate of return objective.

In formulating the IPS, the Minister must consult with the Subcommittee for Fund Management in the Council for Social Security. This consists of 11 members representing interested parties such as insured persons, labor, and management, as well as experts in finance and economics. However, few have practical experience in fund management.

As far as the content of IPS is concerned, there is no legal restriction on the scope of investment. In other words, all marketable assets are eligible for investment.

4.2.2 Long-term asset allocation policy

The first IPS was completed in early 2001. In addition to asset allocation, it stipulates basic principles of fund management, rules for performance evaluation, and so forth (Table 7).

[14] Brinson et al (1991) insist that 91.5% of the performance differential can be explained by asset allocation. However, this percentage would be much lower if the pension fund could short-sell any security at reasonable cost and take neutral positions in certain asset class categories.

Table 7　Items Included in the Investment Policy Statement

Ⅰ	Basic principles in fund management	① Objectives ② Relationship with pension budget ③ Constraints ④ Fiduciary responsibility ⑤ Disclosure
Ⅱ	Policy asset allocation	①Characteristics and roles of each asset class ②Process and methodology of formulation ③ Policy asset allocation ④ Transitional portfolio
Ⅲ	Effect of changes in FILP	① Underwriting and management of FILPbonds ② Evaluation of FILP bonds management
Ⅳ	Considerations in investment process	① Risk management ② Style and composition of fund managers ③ Market impact ④ Stock selection and proxy voting ⑤ Restriction in conccentration
Ⅴ	Performance evaluation	① Check in pension budget, ② Check of GPIF by the Minister, ③ Check of outside fund managers, ④ Evaluation in transitional period,
Ⅵ	Organizational scheme and utilization of expertise	① Clear responsibility and mutual checking ② Nurturing and securing experts
Ⅶ	Revision of IPS and policy asset allocation	Periodical (annual)/timely revision process

Source: MHLW and GPIF

Pursuant to long-term asset allocation indicated in the IPS (Table 8), the allocation shares are 68% to domestic bonds, 12% to domestic stocks, 7% to foreign bonds, 8% to foreign stocks, and 5% to cash.

Table 8　IPS Asset Allocation

	Allocation	(range)
Domestic bond	68%	60–76%
Convertible bond	0%	0
Domestic stock	12%	6–18%
Foreign bond (no hedge)	7%	2–12%
Foreign stock (no hedge)	8%	3–13%
Money	5%	NA%
Total	100%	

Source: MHLW and GPIF

Applying this asset allocation to the forecast of total assets in FY 2008, when all funds are

scheduled for complete repayment to NPI and EPI from the Trust Fund Bureau, we can compare the resulting portfolio with the initial one GPIF inherited from Nenpuku. The comparison shows that in eight years, the nominal exposure to domestic stocks will grow by 11 trillion yen, while exposure to domestic bonds (fixed income securities) will increase by 86 trillion yen (Table 9).[15]

Table 9 Change in Portfolio Value and Composition

	March 2001 (start)		Dec 2001		FY2008		Change from start
	(¥ tril.)	(%)	(¥ tril.)	(%)	(¥ tril.)	(%)	(¥ tril.)
Domestic bond	15.4 *	59.4	14.4 **	54.9	102.0	68.0	86.3
Convertible bond	0.3	1.3	NA	NA		0.0	NA
Domestic stock	6.3	24.2	6.2	23.6	18.0	12.0	11.7
Foreign bond (no hedge)	NA	0.0	1.3	5.0	10.5	7.0	NA
Foreign stock (no hedge)	3.3	12.8	3.8	14.6	12.0	8.0	8.7
Money	0.6	2.3	0.5	2.0	7.5	5.0	6.9
Total	26.0	100.0	26.3	100.0	150.0	100.0	124.0
FILP bond	0.0		8.9		0.0		

Notes: * Amount includes foreign bonds. ** Amount includes convertible bonds.
Source: MHLW and GPIF

4.2.3 Methodology of IPS formulation

The IPS asset allocation was formulated using a risk-return optimization method wherein investment risk measured by several indices is minimized for a certain rate of return. For the calculation of expected return of each asset class, the building block method was used. First, the real economic growth rate was forecasted at 1.0%, and the expected inflation rate was set at 1.5%. Adding these two gives us the expected return for cash (risk-free rate) of 2.5%. Then the expected rate of return for each asset class was calculated by adding a risk premium to the risk-free rate (Table 10).

Also, historical data was used for the standard deviation of rate of returns and co-variance among different asset class returns (Table 11).

The effect of foreign exchange rates on returns was considered to be offset by changes in the expected inflation rate differential. Hence, it was assumed that risk premiums for the real rates of return of foreign securities are constant regardless of the foreign exchange rate.

[15] If we include deposits to the Trust Fund Bureau in the former bond portfolio under the old system, exposure to bonds will decrease by 30 to 40 trillion yen.

Table 10 Expected Risk and Return of Each Asset Class in IPS

	Risk free rate	Risk premium	Expected return	Standard deviation
Money	2.5 *	0	2.5	3.38
Domestic bond		1.5	4	5.45
Domestic stock		4	6.5	21.62
Foreign bond		2	4.5	14.67
Foreign stock		4.5	7	20

Note: * 1.0% real growth rate + 1.5% CPI inflation rate.
Source: MHLW and GPIF

Table 11 Correlation Matrix of Asset Class Returns

	Money	Domestic bond	Domestic stock	Foreign bond	Foreign stock
Money	1				
Domestic bond	0.273	1			
Domestic stock	−0.103	0.188	1		
Foreign bond	0.065	0.005	−0.227	1	
Foreign stock	−0.229	−0.058	0.144	0.668	1

Source: MHLW and GPIF

Based on this data and the following three investment constraints, a Monte Carlo simulation was conducted for the period from 2001 through 2024. From the resulting portfolios on the efficient frontier, an asset allocation with an expected return of 4.5% was chosen for the IPS portfolio. They also checked the share of GPIF investment in domestic markets in order to avoid excessive market distortions. It is expected that in the period from 2010 through 2015 GPIF's s investment in domestic stocks and bonds will occupy 3 to 4% and 11 to 13% of respective markets.[16]

In the portfolio selection process, several risk indices were checked to compare characteristics of portfolios on the efficient frontier. These indices included: distributions of expected asset amounts in 2024,[17] premium rates to make up for any shortfall in the mean expected asset value; and the Sharpe Ratio.

[16] Also, GPIF's each investment manager's share in one corporation can not exceed 5% and no company's stock can occupy more than 5% of each manager's domestic stock portfolio.
[17] Every five years, the financial status of the public pension fund is checked and forecasted. In the most recent recalculation conducted in 2000, a forecast was made to 2024.
[18] The Sharpe ratio is the ratio of excess return over the risk-free rate divided by the standard deviation of the return distribution.

4.3 Questions About Asset Allocation

4.3.1 68% share of domestic bonds

As shown in Table 8, the IPS asset allocation for domestic bonds is 68%. However, a few doubts are raised here. The first one is about the criteria of portfolio selection. The IPS portfolio was selected from a group of ten portfolios, all of whose expected return (target return) ranges between 4.0% and 4.5%. This may be because the discount rate used in the last actuarial recalculation in 1998 was 4.0%.

A second question is related to the expected return of 4.0% on domestic bond investment with a 1.5% risk premium vis-à-vis the cash rate. In the last decade, the nominal ten-year bond yield has declined from 7% to between 1.3% to 1.7%, resulting in a consistently high return on bond investment (Table 12).

It is not very realistic to presume that a high return and risk premium can be sustained especially in the coming decade, which has started with a current yield below 2.0%. Such doubts about the expected return on bonds are increased when we consider that the IPS expected income yield on domestic bonds is 4.0%—the same rate as the expected return.

The third doubt is about constraints adopted in the IPS formulation process. Two of them are: (a) exposure to domestic bonds should be higher than to foreign bonds, and (b) foreign stock exposure should be less than two-thirds that of domestic stocks. (Another constraint is that the share of foreign stocks should be more than that of foreign bonds.)

Table 12 Historical Rate of Return by Asset Class

(%)

FY	Money	Domestic bond	Domestic stock	Convertible bond	Foreign bond	Foreign stock
	Call rate	Nomura bond perfomarnce index	TOPIX with dividends	Nikko CB performance index	Sal. Smith Barney govt. bond index (excl. Japan)	MSCI stock market index (excl. Japan)
71–75	8.29	8.14	15.05	12.38	4.13	1.90
76–80	6.83	8.09	9.23	6.95	0.21	5.51
81–85	6.55	9.83	18.47	14.45	9.11	13.99
86–90	4.91	4.10	12.04	5.82	4.96	9.78
91–95	3.28	8.26	−0.78	5.62	4.40	8.48
96–2000	0.26	4.19	−2.58	5.30	7.41	16.19
Average	5.02	7.10	8.57	8.42	5.04	9.31

Note: Figures for convertible bonds and foreign bonds until 1984 are estimated by NLI Research Institute.

As a rationale for these constraints, they cite invisible costs and risks embedded in overseas

investment such as custodian fees and political and settlement risks. However, it is not evident why and to what extent we should take into account this home-country bias. In particular, we cannot help doubting why the foreign exposure should be smaller than 100% of the domestic exposure in the case of bonds, while the foreign exposure must be below two-thirds of the domestic exposure in the case of stocks. Our doubts are magnified if we take their assumptions that foreign exchange rates will converge to purchasing power parity in the long run, and that all that matters is not the volatility in currency rate but the real expected return of foreign securities.

4.3.2 Explanation—The strong risk aversion of the insured

All of the foregoing questions—the target return, higher expected return of domestic bonds, and adoption of a home-country bias—may have two explanations.

To examine the background, I constructed an optimized portfolio using a mean-variance methodology and the same assumptions for expected return, risk (standard deviation) and correlation, but changing the target return (return objective) and one or all of the constraints (Table 13).

First, relaxing the home country bias will increase the share of foreign securities compared to domestic ones. For example, without any investment constraints, the allocation to foreign stock will be 13.1%, while domestic stock will decline from a 12% allocation in the IPS to 6.7% (Portfolio A).

We cannot help having doubts that this domestic bias has been adopted to increase the share of domestic bonds while sacrificing the merit of international diversification.

Table 13 Optimized Portfolio Using Mean-Variance Method

Port-folio	Return objective	Constraints	Money	Domestic bond (D.B.)	Domestic stock (D.S.)	Foreign bond (F.B.)	Foreign stock (F.S.)
A	4.50%	None	5.0%	72.1%	6.7%	3.2%	13.1%
B	4.50%	F.S ≧ F.B.	5.0%	72.1%	6.7%	3.2%	13.1%
C	4.50%	2/3×D.S. ≧F.S.&D.B.≧F.B.	5.0%	65.5%	11.7%	10.1%	7.8%
D	4.50%	All of the above	5.0%	67.2%	11.9%	7.9%	7.9%
E	4.00%	All of the above	5.0%	91.4%	1.6%	1.0%	1.0%
F	5.00%	All of the above	5.0%	47.3%	22.8%	9.7%	15.2%
G	4.50%	All of the above, and expected return of D.B. = 3.0%	5.0%	45.3%	21.3%	14.2%	14.2%

Note: Allocation to money is preset at 5%.

Second and more importantly, if the target rate of return is set at 5.0%, the allocation to

domestic bonds will be lowered to 47.8% from 68%, while the allocation to domestic stock will be raised to 22.8% from 12% (Portfolio F). Also, if we lower the expected return for domestic bonds to 3.0% from 4.0%, the allocation to domestic bonds will be 45.3%, while the allocation to domestic stock will be raised to 21.3% (Portfolio G).

However, a lower allocation to domestic bonds (fixed-income securities) in the portfolio would be inconsistent with the preferences of both insured persons in general and representatives in the Diet. It is still very common to think that the risk of bond investment is much lower than that of investment in "volatile" assets such as stocks and foreign securities.

We can recognize this "common sense" view in the repeatedly cited financial asset allocation of households (Table 1). Combined with this bias, there is a prevalent anxiety against loss in the Diet. The concept of risk diversification has not yet been accepted.

Therefore, if the portfolio suffers losses in any one year, the Minister and GPIF will be severely criticized for that fact, as we have seen in the past experiences of Nenpuku. In the 146th and 147th sessions of the Diet in 1999 and 2000, the negative margin between the return on investment and borrowing rate of Nenpuku was heavily criticized. It was in these sessions that the Diet discussed the drafting of a new fund management scheme law. According to one proposal, the Minister at that time said that approximately 80% of funds would be invested "safely" in fixed-income securities. Also, Prime Minister Obuchi declared that funds would be invested chiefly in bonds.

This consideration is suspected to have played an important role in determining the IPS asset allocation wherein domestic bonds comprise a 68% share.

4.4 Recommendation—Open and Complete Discussion of Risks

However, bond investment is not always safe. First, the volatility of interest rates makes bond prices fluctuate. Second, bond investment has credit risks. Japanese long-term government bonds are currently rated AA- by S&P and Aa3 by Moody's, which are the worst among the G7 countries. Further downgrading will increase the risk premium and lower prices. Japan has even defaulted once on its government debt in 1947.[19] If we use the analogy of corporate pensions, investment in government debt can be likened to investment by corporate pension funds in employers' securities with not-too-strong credit ratings.

Also, if the pension fund underwrites public bonds, there is a possibility of being forced to accept much worse conditions than those prevailing in the market. Because of that apprehension, the Irish pension fund investment program which started in 2001 has made it

[19] The government partially defaulted on debt owed to the private sector during the war.

a rule never to invest in securities issued by public entities. On the other hand, investment risks in stocks and foreign securities can be alleviated by diversification.

In sum, the perception of risk among Japanese people is very naïve. To formulate an IPS and asset allocation policy consistent with the modern portfolio theory, an open and complete discussion is needed on: (a) the level of assets to be held in collective pension investment accounts, (b) the allocation between market and non-market instruments, and (c) the extent of market securities investment risk to be tolerated. As a precondition for active and fruitful discussion, the MHLW should disclose more information on pension plans.

5. Responsibilities of Respective Parties

Questions about asset allocation raise another problem in investment management. What role should each party have in the new pension fund management scheme, especially in making decisions on asset allocation and the risk management process?

5.1 Functions of Each Party

Following are the functions and responsibilities of concerned parties under the new fund management scheme—offering a clue as to how this problem is treated.

5.1.1 Responsibilities of the Minister

The Minister performs the role of the insurer who implements the public pension insurance plan.

As an insurer, in addition to the traditional roles of insurance premium collection and benefit payment, the Minister stipulates an Investment Policy Statement (IPS) and supervises GPIF. As mentioned earlier, in the process of formulating an IPS, the Minister must consult with the Subcommittee for Fund Management in the Council for Social Security.

5.1.2 Functions of the Government Pension Investment Fund (GPIF)

GPIF is entrusted by the Minister with the tasks of operation and administration of fund management. The board of GPIF consists of three members. The chairman of the board as well as an auditor of GPIF are appointed by the Minister. The chairman selects the other two board members, whose nomination must be reported to and acknowledged by the Minister.

To secure efficiency and fairness of operation, in addition to bylaws, GPIF has formulated and disclosed the Guideline for Investment Management and Administration (called the

Guideline below) to implement IPS. The Guideline elaborates on: (a) securities to be invested in including derivatives, (b) standards for investment and risk management activities by outside investment managers, and (c) criteria for selection and evaluation of outside investment managers and custodians.

GPIF also organizes a special committee consisting of experts in the field of finance, economics and law. In the process of executing IPS and the formulation, implementation and alteration of the Guideline, the board of GPIF can consult with that committee if necessary.

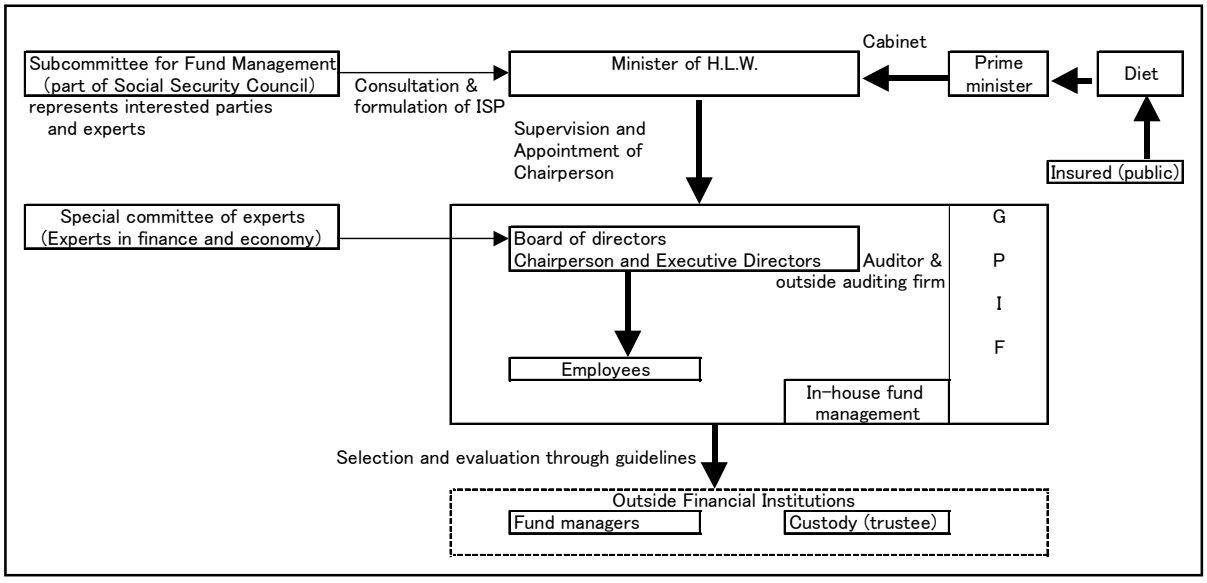
Most of the funds are to be managed by outside fund managers appointed by GPIF, except for a certain portion of domestic bonds being managed in-house.

5.2 Governance Scheme

The power and authority given to MHLW and GPIF must be exercised for the benefit of the insured. To achieve that goal we need to prepare a proper monitoring and disciplinary mechanism—the governance scheme.

Seen as a whole in Chart 3, the chain of governance originates with the insured (the general public). The public exercises political discipline on the Minister through representatives in the Diet. The Minister supervises and disciplines the GPIF operation, while GPIF evaluates investment management companies.

Chart 3 Chain of Governance in the New Fund Management Scheme



To ensure that operations are performed for the benefit of the insured and to strengthen the governance scheme, several arrangements have been devised by law for the new fund

management system.

5.2.1 Governance of the Minister

In the decision-making process of the new fund management scheme, it is important to ensure that the Minister makes proper decisions for the benefit of the insured. In addition to the Minister's responsibility to the Diet as a member of the Cabinet, several responsibilities are stipulated by law.

First, in the formulation and revision of the IPS, the Minister must consult with both the Subcommittee for Fund Management and Council for Social Security.

Second, the Minister must report annual operating and financial results of the GPIF and pension (NPI and EPI) accounts to these entities. Also, the Minister is required to disclose all of these operating and financial reports as well as the IPS to the general public. It goes without saying that the Minister is obligated to turn in a detailed report to the Diet if requested to do so.

Third, the rationale for and results of these decisions, as well as the minutes of the Council for Social Security are to be disclosed. This disclosure will help to prevent biased decisions by the Minister.

5.2.2 Governance of GPIF

The Minister governs and supervises GPIF activities. For example, GPIF must report to the Minister its annual operating and financial results of the preceding period as well as budget and business plan for the following year, both of which must be approved by the Minister. Also, these operating results must be audited by an outside accounting firm as well as by an inside auditor.

Also, the nomination of GPIF's chairman is the responsibility of the Minister, and the minister must authorize the other two board members' nomination.

5.2.3 Governance of outside fund managers

Another aspect of governance involves outside fund managers—investment advisory firms, trust banks and insurance companies. To make these managers work effectively, we need a good contractual arrangement between investment managers and GPIF. Learning from the experience of Nenpuku, the government and GPIF have prepared several schemes. Included in such arrangements are carefully designed criteria for the selection and evaluation of outside fund managers and custodians, and the disclosure of these criteria to the public. These are expected to alleviate inefficiencies between principal and agents.

Specific criteria for outside contractors have clearly been shown in the Guideline. For example, fund managers must meet all of the following three conditions: (a) minimum size of other assets under management, (b) absence of inappropriate conduct in the last five years, and (c) one credit rating no worse than BBB and all credit ratings no worse than BB in the case of a custodian and insurance company.

Also, GPIF evaluates fund managers both by qualitative and quantitative standards. The former includes investment policy, investment process, professional personnel, risk management and order execution process, and reporting. Quantitative criteria mainly consist of tracking error for passive fund managers and excess return over index per tracking error (information ratio) for active managers. The selection process pursuant to these criteria has already started.

Contracts are scrutinized for renewal at least every five years, and the amount of entrusted funds is reduced at financial institutions whose evaluation is inferior based on peer comparisons. As in private pensions, although these criteria are not perfect, they can be useful in preventing agency problems related with investment managers and custodians.

5.2.4 Fiduciary duties

In addition to these arrangements, laws have explicitly imposed fiduciary duties on those engaged in the investment process. The law concerning GPIF stipulates that executives and officers of GPIF are under the duty of care. GPIF board members are required to exert the prudent care of experts. They are also under the duty of loyalty. In another clause, it is prohibited for board members to become intentionally engaged in activities that may cause conflicts of interest. Prohibited activities include transactions between board members and GPIF.

Other laws concerning NPI and EPI also obligate MHLW officials engaged in investment management to make their best effort and exercise prudent care in their assignments. In addition, a ministerial rule indicates that the law requires the same duties of members in the Subcommittee for Fund Management.

These legal provisions may have their own limits in setting proper discipline and incentives. First, it is possible for GPIF to make claims against board members and executives of GPIF for damages suffered as a result of their negligence or misconduct. Even in such cases, however, damage to the 143 trillion yen fund can go far beyond what these individuals can afford to compensate.

In addition, under Japanese civil law, MHLW officials cannot be sued for damages caused by

simple negligence of duties.[20] The defendant is usually the government itself instead of individual bureaucrats. Thus it is difficult to prevent the violation of fiduciary duties by individual bureaucrats and members of the Subcommittee based on the threat of litigation. The only (partly) effective measures are by ministerial reprimand and disciplinary action.

5.3 Evaluation of the Governance Structure

Although quite a few arrangements have been established for good governance in the investment management process, we must also point out several drawbacks.

5.3.1 Three characteristics

When Useem and Hass (2001) analyzed governance system in U.S. public pension funds, they pointed out several key variables—investment restriction, asset allocation, board responsibility, independent performance evaluation, and board composition. Using this framework, the governance system for the new fund management explained above can be summed up as in Table 14.

Table 14 Characteristics of Governance Scheme for Public Pension Fund Management

Investment restriction (legal list)	・Asset category restrictions are stipulated by law but there is very little restriction in practice.
Asset allocation	・The Minister stipulates policy asset allocation after consulutation with the Subcommittee for Fund Management. ・Short-term tactical allocation is decided by the GPIF Board.
Responsibility for investment	・The Minister is responsible for investment policy including asset allocation, superivision and evaluation of GPIF. ・The GPIF board is responsible only for GPIF management activities.
Performance evaluation	・Outside fund managers are evaluated by GPIF. ・Performance of GPIF is evaluated by the Minister in consultation with the Subcommittee for Fund Management. ・There is no formal process of independent peformance evaluation.
Board composition	
Subcommittee of Council for Social Security	・The total number is 11. Members have expertise in fields not limited to investment management and finance.
GPIF Board	・The chairperson is nominated by the Minister. ・The other two are selected by chairperson with approval of the Minister.

Note: Minister refers to the Minister of Health, Labor and Welfare.

In this table, three characteristics of the scheme need to be emphasized. First, while GPIF (the manager) has an executive board to make important decisions, the Minister supervises GPIF activities, and the power of the GPIF board is limited to tactical decisions and routine operations including manager evaluation and selection.

[20] Under Japanese law, for the recovery of damages, the public can sue the government but not individual officials, unless the damages are caused on purpose or by gross negligence.

Second, the Minister must, and the GPIF board may consult with experts and knowledgeable persons in the field. However, these experts do not have any authority to make a final decision but can only submit their opinions to the Minister and GPIF board. In that sense, expertise may not always be fully utilized.

Third, the ultimate responsibility for investment results rests with the Minister, who is usually a politician. The Minister's responsibilities include: (a) formulating a strategy of investment management including asset allocation, (b) nominating members of the Council for Social Security, including those in the Subcommittee for Fund Management, and (c) appointing the chairperson of GPIF, approving other directors' nominations by the chairperson, and supervising and evaluating GPIF achievements.

At least in theory, the Minister can do anything as long as political responsibilities are satisfied. In other words, we do not have a truly independent board or organization responsible for investment.

As a member of the Cabinet, the Minister is accountable to the insured and must answer to the Diet. The Minister is also subject to political pressure from representatives, who are not investment experts at all. In fact, their interest is more in avoiding losses than in risk diversification, and more in promoting public welfare than in improving the risk-return profile of the portfolio. In that sense, a political consensus or majority vote does not always guarantee Pareto optimality.

Thus, if the Diet and Cabinet fail to establish good governance of the Minister, it in turn becomes more difficult to expect the Minister to concentrate on good investment management.

From these considerations, what we can say is that: (a) politicians potentially have strong influence in the process, and (b) full utilization of investment expertise can be restricted.

5.3.2 Excluding political and other considerations from the fund management process

Given the need for improvement, I recommend the following measures. First, we need to make a clear distinction between politics and the investment management process.

Under current practice, the MHLW staff prepares policy drafts for the Minister, and is obligated to make their best effort and to exercise care. However, that fact does not insulate fund management from politics. For example, majority members of the Diet may demand to increase stock investment in order to prop up stock prices, and the Minister may be willing to comply if he or she considers that such action coincides with "the best interests of the insured."

The Minister must consult with the Subcommittee for Fund Management and the Council for Social Security beforehand and the results must be disclosed. This rule may be useful to secure political neutrality. However, the Council includes representatives of employers and employee unions and other neutral parties—well-informed persons from academic and other organizations. This board is not completely a "tripartite" board that Iglesias et al. (2000) suggest avoiding to promote efficiency in fund management. However, the fact is that there are very few experts with experience in investment or corporate management on the Subcommittee or Council. Moreover, the interests of members may displace the aim of improving the risk-return profile of the portfolio.

All in all, the following measures can be taken to separate politics from investment management:

1. Financing policies—including (a) the level of reserve assets, (b) allocation between marketable and non-marketable securities, and (c) risk tolerance in the total portfolio investment—have to be decided in the political arena, and should be separated from the investment management process.

2. After these policies have been formulated, the task of investment management including asset (risk) allocation among marketable securities must be delegated to GPIF or any other organization specialized in investment. This organization must be isolated from and independent of the Minister and other political appointees.

5.3.3 Full utilization of expertise in GPIF

The second recommendation concerns the governance of GPIF—the fund management organization. In public as well as in private sectors, a proper organizational arrangement is needed to promote efficiency in fund management. That arrangement includes the decision-making process, recruiting and staffing, and compensation.

For example, in Canada, where the national pension fund has started investing in market instruments, a crown corporation named Canadian Pension Plan Investment Board (CPPIB) was established for the sole purpose of managing funds.

CPPIB has a board composed of 12 directors and a separate team of executives. All directors have a background in investment and/or corporate management. None represents the interests of concerned parties. To supervise management, directors organize committees on investment, auditing, human resources and compensation, and governance. Executive managers are recruited from the private sector. None of the executives are board members,

and the level of compensation is not much lower than in the private sector.

However, the organizational arrangements in GPIF are different. First, board directors are also executive managers, and two of the three members have a background in public service. The reason those with a public service background are nominated as directors may be that experience in dealing with politicians is required in the management of GPIF. If so, this means that GPIF operations are not completely independent or separate of politics. They may consult with expert committee members in the decision-making process, but this is not obligatory.

Second, the way directors and staff are treated is different from that in the private sector. Most of the staff has been transferred from Nenpuku. The compensation arrangement is not completely disclosed but is thought to be similar to other public entities. As a public entity with most expenditures set by the annual budget, it has little discretionary latitude to set a remuneration scheme comparable to that of private pensions. Thus a substantial part of compensation is not likely to be linked to qualitative and quantitative performance evaluation.

Some might argue that since directors and officers of GPIF are under the duty of care and loyalty, their self-indulgent behavior can be controlled because putting their own interests ahead of the insured would in some cases constitute a breach of fiduciary duty.

However, fiduciary duties are the minimum conditions for efficient management.[21] A breach of fiduciary duty can be recognized in very limited cases when it is evident that a fiduciary pursues his/her own interests at the expense of plan sponsors' interests. However, within those legal boundaries, it is possible for managers and executives not to do their best for beneficiaries.

The duty of loyalty is not perfectly effective in setting proper discipline and incentives. To forestall serious problems arising from these agency problems, several countermeasures are usually taken in private sector. As Jensen et al. (1992) suggest, rules for measuring performance, rewarding and punishing functions good incentives, even if decision rights are inalienable and exercised jointly. Among them, the following are examples of recommended measures:

1. Most, if not all, of the executives and important staff should have experience in investment and corporate management fields in the private sector.

2. To reduce inefficiency caused by agency problems, an executive and staff

[21] In the context of corporate governance, fiduciary duties have the effect of both alleviating agency problems and reducing

compensation arrangement should be introduced where observable, if not verifiable, performance can be rewarded or penalized in monetary terms. Performance should be evaluated both quantitatively and qualitatively, and evaluations must be disclosed. Quantitative indices should include the rate of return of a whole portfolio adjusted for investment risk—the Sharpe ratio and/or information ratio compared with a benchmark and peer group.

3. The authority to supervise and evaluate GPIF activities as a management fiduciary should be shifted from the Minister to an independent board of GPIF. If GPIF's board continues to be an executive one, the Subcommittee, if given more independent authority and investment expertise than at present, can also play the role of governing fiduciary. Most members of an independent board should be experts in finance and/or have experience in practical fund management.

5.3.4 Avoidance of social considerations in the exercise of voting rights

The third area of improvement for the current system is the ambiguous objective in exercising shareholders' voting rights.

When public pension funds hold equity shares of private companies, they often dispute how to execute voting rights to promote economic efficiency. To fend off criticism of public or political intervention in private enterprise management, the rule for GPIF is to refrain from the evaluation and selection of stocks. Also, the exercise of shareholders' voting rights is delegated to outside investment managers.

Investment managers are under obligation to execute voting rights for the sole benefit of GPIF. GPIF asks them to submit their standards in the exercise and the results of their voting activities.

However, the Subcommittee for Fund Management has recommended that GPIF make an inquiry as to how managers will react and have reacted in the past if a company they hold shares in commits anti-social activities. In fact, GPIF has started to review each manager's action as well as their submitted standard.

The definition of anti-social activity in this statement is ambiguous. It is also possible that voting rights are being executed to promote certain "pro-social" values, even if such values are not consistent with the investment performance of GPIF or with the financial interests of the insured.

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efficiency by impeding free negotiation (Schleifer et al 1996).

As Munnell and Sundén (2001) point out, economically targeted investment (ETI) by U.S. state and local employee pension plans have not always reduced the return on investment. However, we have yet to see whether GPIF's monitoring of "anti-social" activity will have any negative effect on the investment return.[22]

6. Conclusion

As long as we maintain a huge amount of reserve under the current "adjusted pay-as-you-go" method of pension finance, the new fund management system has its merits. Collective investing in marketable assets alleviates institutional constraints on household investment. It also has the potential to utilize economies of scale in investment, increase the risk exposure of households at a significantly lower cost, and reduce the risk of misconduct and abuse by financial intermediaries.

However, to fulfill that expectation, there is some room for improvement. First we should form a national consensus reached by a comprehensive debate as to the following: (a) the level of reserve asset, (b) allocation between marketable and non-marketable investments, and (c) risk tolerance in marketable investment. It is especially important to keep the amount of investment in non-marketable public bonds at a minimum, because they are not only inefficient but entail some risk. FILP bonds are such an example.

Second, a good and consistent governance system must be established in the whole investment management scheme. An important condition for good governance is to avoid political intervention in investment management. If the investment process is influenced politically, as Tirole (1994) suggests, those involved in investment management will have an ambiguous mission and are likely to sacrifice efficiency.

What is decided in the political arena should be limited to (a), (b) and (c) above. Other decisions including the exercise of shareholders' rights should be delegated to an organization consisting of investment experts.

Even under the current system, the Minister can take steps to prevent political considerations from affecting investment management. For example, in appointing members of the Subcommittee for Fund Management, the Minister should name investment and corporate management experts instead of representatives of concerned parties. Also, the Minister must secure the independence of the Subcommittee's decisions and give it the sole authority to supervise and monitor the management activities of GPIF.

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[22] ETIs supposedly do not always reduce the return of the total portfolio because they comprise a small (2%) portion of total assets, and because increasingly sophisticated investment methods have been used recently.

Next, the Minister should describe the responsibility of Committee members more explicitly than as the duty of best effort and prudence so that members can evaluate each other with reference to that description. In exchange for more responsibility, the Subcommittee would have more power and independence.

Third, as another step to build a good governance scheme, the Minister should try to have board members and executives of GPIF composed of experts in finance and investment. Also, he must separate the supervising and governing fiduciary from the executive and management fiduciary. The Subcommittee or GPIF board can undertake the former role, while assignment of GPIF as a managing fiduciary should be limited to optimizing the risk-return profile of investment.

Also, GPIF must hire experts not only as outside fund managers but also as inside administrators/managers. All of these executives and officers must be compensated based on their achievement and contribution in improving the portfolio's risk-return profile. Both monetary remuneration and professional reputation should be used as leverage to make them fully exert their potential. Combined with fiduciary duties, such rewards and penalties will provide the proper incentives and discipline for implementing an effective governance mechanism.

The new pension fund management system is unique, and on-going improvements in management and administration are needed to build on the lessons inherited from the period of Nenpuku management. However, to build a good model for pension fund management and investment in the market, it is also important to continue improvement efforts based on lessons from similar experiences in other countries.

APPENDIX: Dispute in Late 2001

In the summer of 2001, the Koizumi cabinet announced that it would review all public agencies for possible privatization and/or abolishment. GPIF was one of the targets of that review process.

After several discussions, the Secretariat for the Promotion of Administrative Reform proposed the privatization of GPIF in August 2001. According to the proposal, GPIF would be dissolved and its fund management function replaced by the government itself. Investment in risky assets would be suspended in favor of safe assets. Further, if the government deems investment in risky assets to be desirable, such management would be entrusted to specialists in the private sector.

At best, this proposal is immature and incomplete. First, the definition of risky or safe investment is not clear. The Secretariat for the Promotion of Administrative Reform may think that public bonds are safe instruments. However, bond prices are volatile because of interest rate and credit risks.

Second, it is unclear who will decide the need for risky asset investment or what criteria will be used. Giving politicians the authority to make these decisions will increase fears of political intervention. Thus we see no clear way to avoid political intervention while tapping the best talent available in the private sector. The proposal is based on the idea that GPIF's role is not strictly necessary, and leaves several important points for restructuring unresolved.

Above all, it was decided on December 18 that the final decision on the organization of fund management would be postponed until 2004. One reason for the postponement is that in 2004, periodical revision (actuarial recalculation) of the whole public pension structure is planned. This postponement would prove to be a very wise decision if some of the improvement measures suggested here are taken into consideration before 2004.

References

Aaron, A. 1999. "Social Security: Tune It Up, Don't Trade It In." In Henry A. Aaron and John B. Shoven, (eds.), *Should the United States Privatize Social Security?* MIT Press.

Ambachtsheer, Keith P. and Don D. Ezra. 1998. *Pension Fund Excellence.* John Wiley & Sons, Inc.

Arrow, Kenneth J. 1963. *Social Choice and Individual Values*. Yale University Press.

Bateman , Hazel and Olivia S. Mitchell, 2001. "New Evidence on Pension Plan Design and Administrative Expenses" , Working paper on the Economics of Aging, NBER

Brinson, Gary L., Brian Singer, and Gilbert L. Beebower. 1991. "Determinants of Portfolio Performance Ⅱ." *Financial Analyst Journal,* July-August.

Geanakoplos, John, Olivia S. Mitchell, and Stephen P. Zeldes. 1998. "Would a Privatized Social Security System Really Pay A Higher Rate of Return?" Working paper, Columbia Business School.

Hsin, Ping-Lung, and Olivia S. Mitchell. 1997. "Public Plan Efficiency." In S. Michael Gordon,

Olivia S. Mitchell and M. Marc Twinney (eds.), *Positioning Pensions for the Twenty-First Century,* University of Pennsylvania Press.

Iglesias, Augusuto and Robert J. Palacios. 2000. "Managing Public Pension Reserves Part I: Evidence from the International Experience." *Social Protection Discussion Paper No.0003,* World Bank.

Jensen, Michael C. and William H.Meckling. 1992. "Specific and General Knowledge and Organizational Structure." in Lars Werin and Hans Wijikander (eds.), *Contract Economics*, Blackwell.

Leibowitz, Martin L. 1992. "Pension Fund Management Under FAS 87." In *Investing*, Probus Publishing Company.

Muralidhar, Arun S. 2001. *Innovations* in *Pensions Fund Management*. Stanford University Press.

Munnell, Alicia and Annika Sundén. 2001. "Investment Practices of State and Local Pensions." in Olivia S. Mitchell and Edwin C. Hustead (eds.), *Pensions in the Public Sector*, University of Pennsylvania Press.

Nakagawa, Shinobu and Tomoko Shimizu. 2000. "Portfolio Selection of Financial Assets by Japan's Households—Why Are Japan's Households Reluctant to Invest in Risky Assets?" Working paper, Bank of Japan.

Peskin, Michael. 2001. "Asset/Liability Management in the Public Center." In Olivia S. Mitchell and Edwin C. Hustead (eds.), *Pensions in the Public Sector,* University of Pennsylvania Press.

Piggott, John, Hazel Bateman, Suzanne Doyle, and Sachi Purcal. 2002. "How Much is Enough for Retirement?" Paper presented at the 4th International Forum of Collaboration Studies into Aging Populations, held by Economic and Social Research Institute, Cabinet Office, Government of Japan.

Schleifer, Andrei and Vishney, Robert W. 1996. "A Survey of Corporate Governance." *Journal of Finance*, Vol.52, No.2.

Shoven, John B. 1999. "Social Security Reform: Two Tiers Are Better Than One." In Henry A. Aaron and John B.Shoven (eds.), *Should the United States Privatize Social Security?* MIT Press.

Takayama, 2000. "Reform of Public and Private Pension in Japan" the keynote address, The

Ninth Annual Colloquium of Superannuation Researchers on Super Annuation and Pensions, The University of New South Wales, http://www.ier.hit-u.ac.jp/~takayama/index-j.html

Tirole, Jean. 1994. “The Internal Organization of Government.” *Oxford Economic Papers 46,* p. 1-29.

Useem, Michael and David Hass. 2001. “Governance and Investments of Public Pensions.” In Olivia S. Mitchell and Edwin C. Hustead (eds.), *Pensions in the Public Sector,* University of Pennsylvania Press.

Whitehead, Edward. 2000. “Administrative Charges for Funded Pensions: An International Comparison and Assessment.” *Social Protection Discussion Paper No. 0016,* World Bank.

Yonezawa, Yasuhiro. 2001. “Zaito kaikaku to koteki nenkin no jishu unyo” (Reform of Government Financial Intermediaries and the Public Pension Reserve). *Security Analyst Journal,* Vol. 39, No.8, Security Analyst Association.

Yonezawa, Yasuhiro. 2001. “Nenkin shikin unyo no kadai” (Tasks in Public Pension Fund Management). *Nenkin to Keizai (Pension and Economy),* Vol. 20, No. 4, Research Institute for Policies on Aging.