Old Age Security in Japan: The Implications of Recent Public and Occupational Pension Reforms

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1. Introduction

As several other articles in this volume have mentioned, Japan is the industrialized country with the largest and most quickly growing concentration of people aged 65 and older. As a result of this demographic shift, the population is likely to decrease from currently 126.9 million to 100.5 million in the year 2050, and possibly to 67.4 million in the year 2100 (Sōmuchō Tōkeikyoku 2001: 33). This has important consequences for the predominantly "pay-as-you-go" public pension system.[1] Since the decline in growth rate of the future working population (n) cannot easily be compensated for by a rise in wage rates (w), there are few options left if the financing mode of the public pension system is not fundamentally changed. Benefit levels (p) will have to be curtailed, contribution rates (b) will have to be raised or declining contributions will have to be counterbalanced by an increase in tax-financed subsidies.

This article analyzes how Japanese pension policy has reacted to the demographic challenge and what kind of long-lasting effects these changes are likely to have. Section 2 describes the Japanese system of public, occupational, and personal pension provisions and discusses recent public and occupational pension reforms. Section 3 analyzes the implications of these reforms, focusing especially on following issues:

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[1] There are basically two financing methods for public pension schemes: In a *capital-funded system* people save during their working life in order to finance their own future pension benefits. The pension benefit per capita (p) is a function of the contributions paid during the working life [contribution rate (b) · wage rate (w)] and the interest (r) earned on these contributions: $p_t = (1+r_{t-1}) \cdot w_{t-1} \cdot b_{t-1}$.
In a *pay-as-you-go system* pensions are financed by the contributions of the working population. The pension benefit per capita (p) depends on the growth rate of the working population (n), their wage rate (w), and their contribution rate (b): $p_t = (1+n_t) \cdot w_t \cdot b_t$ (Homburg 1988: 16–29).

- How do the reforms influence the financial sustainability of public pension finances?
- What kind of distributional effects do these reforms cause?
- What impact do the reforms have on the minimum income function of the basic pension?
- What are the shortcomings of the occupational pension reforms?
- How will the reforms influence the public-private mix in pensions and how should this shift be judged from a social policy perspective?

2. THE JAPANESE PENSION SYSTEM AND AN OVERVIEW OF RECENT REFORMS

2.1 The public pension system

The Japanese system of old-age income security consists of public, occupational, and personal pension provisions. The first public tier is the Basic (*kiso nenkin*) or National Pension Insurance (*kokumin nenkin*).[2] In principle, all residents in Japan between the ages of 20 and 59 are eligible, and are required to become subscribers to this scheme. Currently, this system has 70.1 million members (see Figure 1). There are three types of insured persons:

"Type 1 insured persons" includes all residents in Japan between ages 20 and 59 regardless of their nationality. These are mainly the self-employed, farmers, and non-employees. In principle, they are required to pay a fixed contribution of ¥ 13,300 per month (2002). However, low-income earners (about 17% of all Type 1 insured persons) are currently exempt from paying premiums (KŌSEISHŌ NENKINKYOKU 1998: 32).

"Type 2 insured persons" are all employees in private industrial or commercial enterprises that regularly employ one or more workers.[3]

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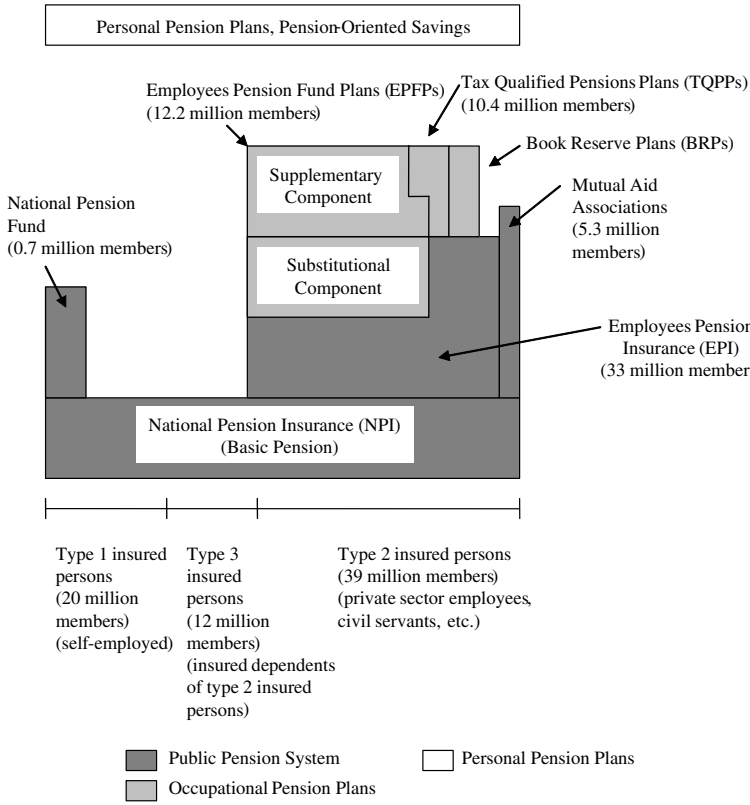
[2] National Pension Insurance (*kokumin nenkin*) is the institutional name, whereas Basic Pension Insurance (*kiso nenkin*) refers to its function. The confusion about the wording results from the fact that until 1985 the National Pension Insurance was the sole pension system for the self-employed. In 1985 this system was reformed to create a non-income-related basic pension system for all residents. In this way, the National Pension Insurance became the Basic Pension Insurance. However, for the self-employed the National Pension Insurance is still the only regular public pension, so that for this group the usage of the term "Basic Pension" does not seem to be suitable. For this reason, this paper refers to this pension mostly by its institutional name, "National Pension Insurance" (NPI).

[3] If the enterprise is owned by an individual, as opposed to a corporate body (a judicial person in Japanese legal parlance), coverage is only compulsory if the firm regularly hires five or more workers.

Figure 1: **The structure of the Japanese pension system**



Source: Based on KŌSEISHŌ NENKINKYOKU (1998: 23).

In contrast to Type 1 insured persons, Type 2 insured persons enroll automatically in this scheme when they become a member of the Employees Pension Insurance (EPI) (*kōsei nenkin*) or a mutual aid association

(*kyōsai nenkin*),[4] which both provide second tier earnings-related benefits. The premiums for these second-tier insurance systems include the premium to the NPI.

Currently, the EPI premium is 17.35% of the employee's monthly gross earnings (including overtime earnings, travel and family allowances, excluding bonuses) divided equally between employee and employer.

At the time of pension payout, the EPI or the mutual aid associations transfer parts of their collected premiums to the NPI to cover the basic pension benefits. Whereas the benefits of the NPI are non-income-related and depend solely on length of participation, the benefits of the EPI and the mutual aid associations are earnings-related.

"Type 3 insured persons", according to the NPI, are non-working spouses of Type 2 insured persons. They are automatically insured through their working spouses and are not required to pay their own premiums.[5]

Current NPI benefits are paid out of currently collected premiums, but one third of the benefit expenditure is subsidized out of the general budget of the government. According to the 1999 reform, the government's share is projected to rise to one-half of expenditure by the year 2004. EPI and mutual aid association benefits are 100% financed by contributions.

The monthly "model pension" of a couple (employed husband, full-time housewife) is currently ¥ 238,125, after 40 years of contributions.[6] This amount provides a replacement rate – in relation to the average net income (including bonuses) of male employees – of 59%. This model pension consists of ¥ 104,092 EPI pension and ¥ 67,017 NPI pension each for both husband and wife. The self-employed, as "Type 1 insured persons", are only entitled to the NPI pension, which has a maximum amount of ¥ 67,017.

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[4] This article deals mainly with the National and Employees Pension Insurance. The regulations of the mutual aid associations are, in principal, similar to the Employees Pension Insurance, although the former tend to pay higher earnings-related benefits.

[5] In case of divorce the non-working spouse is only entitled to basic pension provisions. However, in contrast with Germany's *Versorgungsausgleich*, the non-working spouse is not entitled to the income-related benefits of the EPI or the mutual aid associations.

[6] The concept of the "model pension" assumes that the employee has paid 40 years of contributions, based on an income which equals the average employees' income during this entire period.

As Table 1 shows, the Japanese public pension systems still control enormous capital funds of ¥ 170 trillion (= 33.4% of GDP). However, as will be shown later, this does not mean that these systems are for the most part still capital-funded, because there are already high entitlements which will be paid out over the coming years. Accordingly, the capital funds will slowly melt down in future.

Table 1: **The Japanese pension market (1997)**

Main Segments	Capital in Trillion ¥	Number of Insured in Millions
Public Pension Systems	170.0	70.3
National Pension Insurance (NPI)	8.5	70.3
Employees Pension Insurance (EPI)	125.7	33.4
Occupational Pension Systems	94.0	–
Book Reserve Plans (BRPs)*	13.6	n.a.
Employees Pension Fund Plans (EPFPs)	44.9	12.1
Tax Qualified Pension Plans (TQPPs)	18.5	10.3
Personal Pension Plans	45.0	–
Private insurers	15.3	13.4
Gojo nenkin	10.0	–
Kanpo	10.0	4.5
Others	12.6	–
Total	321.6	–

Notes: 1. The figures indicate capital-funded entitlements only. They do not indicate the total amount of all pension entitlements. 2. The available data allow meaningful comparisons for the year 1997 only. * 1996 estimate.

Sources: Curuby & Company (1998: 13–27); Watanabe (1998: 8); Life Design Kenkyūjo (2000: 17, 23).

2.2 The occupational pension plans

As for the number of participants and the amount of assets, three kinds of defined benefit schemes[7] dominate the occupational pension market in Japan; namely, the Book Reserve Plans (BRPs), the Employees Pension Fund Plans (EPFPs), and the Tax Qualified Pension Plans (TQPPs). De-

[7] Defined benefit plans are retirement income plans set up by a corporation to pay a specified sum to qualified employees, based on number of years in service (Fitch 1993: 185).

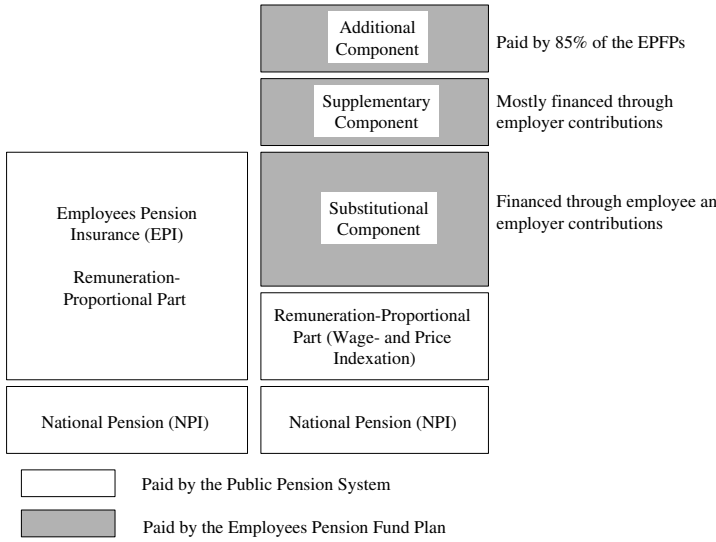
fined contribution schemes[8] have attracted only a small number of participants and control only a comparatively small amount of assets.[9] Several reasons for the limited importance of these types of plans can be identified. There has been a broad consensus in the past on the part of Japanese employers that pension benefits were a "reward for effort"; employees considered pension benefits a form of deferred wages. Because of these perceptions it was natural to set up employer sponsored plans that would pay a specified sum to qualified employees. The other important reason for these plans' limited success is that the authorities encouraged the founding of defined benefit plans by creating a comparatively favorable tax framework.

The perception of occupational pensions, as a reward or as deferred wages, explains why BRPs for severance lump-sum benefits have always played a comparatively large role in the Japanese retirement context. These severance payments, given to employees for faithful service, existed well before the introduction of corporate-type business entities in the Meiji period. The lump-sum benefits paid by BRPs depend on a number of variables such as the size of the company, the total length of employment, sex, level of education, and the reason for leaving the company. Benefits increase progressively with the length of continuous employment; an early company withdrawal results in higher rebates (YAMAGUCHI 1999: 73–75). BRPs receive preferential tax treatment under corporate tax law, which allows employers tax deductions for an amount equal to 40% of the accrued voluntary retirement lump sum benefits (WATANABE 1996: 127). From a taxing perspective, BRPs are not as attractive as the other two important defined benefit schemes to which both employers and employees can contribute.

[8] Defined contribution plans are savings plans allowing employers, and also employees, to make periodic contributions on a tax-deferred basis, for retirement income. In contrast to defined benefit plans, the benefits paid by defined contribution plans are not specified in advance, but depend on the return of investment.

[9] See CONRAD (2001b: 37) for the smaller defined contribution plans.

Figure 2: **The structure of the Employees Pension Fund Plans (EPFPs)**



Source: Based on SHIMADA (1995: 184) and KIGYŌ NENKIN KENKYŪJO (1998: 27).

EPFPs (Employees Pension Fund Plans) were first introduced in 1966. To establish an EPFP, a firm must have 500 or more employees for a single-employer plan or 3000 or more employees for a multi-employer plan. Company unions and the Ministry of Health, Labor and Welfare must approve the establishment of a plan. EPFPs are used to contract-out the earnings-related part of the public EPI in return for lower social security contributions with the rebate rate (see Figure 1 and Figure 2). The benefits of an EPFP consist of two components. The *substitutional component* (*daikō bubun*) is directly linked to the remuneration-proportional part of the public EPI. In exchange for lower social security contributions, the EPFP assumes responsibility for paying this part of the EPI. Meanwhile, the EPI bears the costs for price and wage indexation. The difference between the regular social security contribution rate and the rate for participants in EPFP goes to finance the earnings-related, contracted-out benefits, which are now paid by the EPFP. Contributions to the *substitutional component* are shared equally by the worker and the firm. Employer contributions are treated as business expenses and are deductible from corporate income tax. Employees' contributions to the EPFP are completely exempt

from income tax in the same manner as contributions for public social insurance programs. EPFP benefits are usually paid as annuities.

In addition to the *substitutional component*, the EPFPs are required to pay a *supplementary component* (*fuka bubun* or *purasu arufa*), which must not be less than 30% of the *substitutional* EPI benefits accrued while working for a firm. The *supplementary component* is a tool for incentive used by employers to attract employees, and therefore the main reason for an employer to set up such a plan. Accordingly, most companies pay 100% of the contributions to finance this component. Figure 2 illustrates how the EPFPs function. There are three types of EPFPs, which differ according to how they calculate their benefits.[10] The most common type (85% of all plans) pays a so-called *additional component* (*kasan bubun*) on top of the *substitutional* and *supplementary component* (KIGYŌ NENKIN KENKYŪJO 1998: 27).

TQPPs (Tax Qualified Pension Plans) were first introduced 1962. Until then employees who reached retirement age would only receive lump-sum benefits paid by BRPs. TQPPs have been adopted mainly by medium-sized or smaller employers with 15 or more workers. The establishment of TQPPs requires approval from the Ministry of Finance, which also oversees these plans. Theoretically, contributions have to be borne equally by employers and employees; however, 96.8% of the companies actually pay the full amount of the contributions (MURAKAMI 1997: 111–112). Employer contributions are treated as business expenses and, therefore, a deductible expense in calculations of corporate income tax liability. The funds are invested with life insurance companies, trust banks, and/or investment management companies. The benefits are treated as retirement income and taxed in the miscellaneous income category of the personal income tax. Benefits can either be drawn as lump-sum payments or as annuities. However, most workers choose payment as a lump-sum benefit, because this results in preferential tax treatment.

Whereas the investment regulations for TQPPs and EPFPs had been fairly restrictive, since around 1997 these plans have been relatively free to invest their funds with life insurance companies, trust banks, and/or investment management companies.

Unfortunately, the available statistics do not allow a comprehensive assessment on who gets how much out of occupational pension plans in Japan, since the data are based on surveys limited to firms with at least 30 workers. However, about 54% of the workforce is engaged in establishments with fewer than 30 persons (SŌMUCHŌ TŌKEIKYOKU 1999: 180–181). In addition, there are big differences with regard to industry sector,

[10] See CONRAD (2000b: 256–257) for details.

company size, and sex, so that the averages need to be interpreted with care. According to the available data, 89% of companies with more than 30 employees pay some sort of occupational pension provisions. 47.5% of these companies pay lump-sum benefits only; 52.5% also have some other sort of occupational pension plan. Within the last group of companies, 32.2% pay lump-sum benefits as well as annuities (Life Design Kenkyūjo 2000: 135). Statistically, it would appear that 58% of the 38.7 million employees of the public pension schemes are covered either by EPFPs or TQPPs. However, since some companies offer both kinds of plans, the actual coverage rate is lower, around 50% (Watanabe 1996: 129). There are no accurate statistics on the total number of BRPs. Watanabe estimates that about 5% of companies have BRPs; the total value of the plans equals 18% of the value of these companies (1996: 127).

In 1999 the model severance lump-sum payment at retirement to a typical 60-year-old male employee with a university degree and 38 years of continuous employment was ¥ 26.6 million (Life Design Kenkyūjo 2000: 135). Male employees with a high-school degree receive, on average, around 12% less; middle-school graduates receive payments about 32% lower (Sueki 2001: 49). Female employees with similar levels of education receive on average about 70–85% of the benefits of their male colleagues (Life Design Kenkyūjo 2000: 136; Watanabe 1996: 130).

A very simple calculation illustrates the importance of the lump-sum benefits for retirement: If one considers that the average life expectancy of a 60-year-old male is 21 years beyond retirement,[11] a lump-sum severance payment of ¥ 26.6 million allows for a monthly payment of ¥ 105,500 (even without taking interest payments on the leftover principal into account). This is roughly as much as the model EPI pension! On the other hand, one needs to consider that only male employees with uninterrupted working records can actually hope for such big lump-sum benefits.

In 1998 the average monthly benefit paid out by TQPPs was ¥ 58,499. 40% of the beneficiaries received a TQPP pension between ¥ 50,000 and ¥ 100,000. In the same year, the average monthly pension from EPFPs was ¥ 57,000 (Life Design Kenkyūjo 2000: 22, 27). These numbers indicate that TQPPs and EPFPs also play a major role in terms of income security for the elderly, even though lump-sum benefits might in some cases be more important.

[11] Since April 1998, the legally required minimum age for company retirement has been 60 years (Rōdōshō 1997: 286–287).

2.3 The personal pension plans

As Table 1 indicates, personal pension-oriented savings are also an important source of income for Japan's elderly. However, a problem of definition arises because it is not entirely clear which forms of personal assets should be considered as earmarked for old-age provision. If one follows the official "Family Savings Survey" (*Chochiku dōkō chōsa*), only 4% of personal savings are personal pension-oriented assets. In 1997, these amounted to ¥ 45 trillion. The pension adviser CURUBY & COMPANY (1998: 23) estimates, however, that personal plans could soon total 10% of a projected US$ 18,000 billion of personal savings.

The issue of definition is of paramount importance, because the considerable capital funds in public and occupational pension schemes are tiny in comparison with the *entire* private financial assets of Japanese households, which reached ¥ 1,385 trillion in March 2001 (*The Nikkei Weekly* 02.07.2001: 2). If one did not consider distributional and property issues, which are in fact vital, one might arrive at the mistaken conclusion that the current financial problems relating to public and occupational pension schemes could easily be overcome.

If one follows a narrow definition of personal pension-oriented assets, private insurers with 13.4 million pension insurance policies have a market share of roughly 30%. About 22% of all personal pension-oriented assets are invested with an association, called *gojo nenkin*, formed to manage the post-retirement assets of public employees. Many retirees who opt for lump-sum payment of their pension benefits roll them over into *gojo nenkin*, which invest them mainly in loan trusts with trust banks. Another 22% of the pension-oriented assets are invested with the postal insurance (*kanpo*), as well as regional agricultural co-operative insurance organizations which offer personal pension products.

2.4 The background behind the recent reforms

As has been pointed out already, demographic change poses the single most important challenge to the country's public pension system. Yet, this problem was not widely recognized until the late 1970s and pension policy in those years was characterized by frequent generous benefit hikes. The 1973 reform marked, for example, a milestone in Japanese pension policy because it introduced, for the first time, a system of price and wage indexation for both pension entitlements and pensions after commencement of payment. This had an immense effect on the benefit levels of both EPI and NPI. The replacement rate of the model EPI pension increased rapidly from 45% in 1969 to 62% in 1973 (KŌSEISHŌ

Nenkinkyoku 1998: 42). However, at the same time, contribution hikes were much lower than what would have been prudent from an actuarial point of view, which soon led to financial problems, especially in the old NPI. Because of the financial deterioration of the pension finances, the 1985 and 1994 reforms intended the eventual shift from an expansive policy to one that has been seeking to curtail future expenses in order to deal with the rapid aging of society. The last public pension reform, which was enacted in April 2000, saw another round of reform measures which reduced benefits in aggregate by approximately 20% until fiscal year 2025. The next paragraphs evaluate the implications of these measures in closer detail.

Naturally, the aging process of society also influences occupational pension plans. However, the current crisis in many occupational schemes is more closely related to factors such as the ailing Japanese stock market and obsolescent accounting and calculation practices. Until 1997, the government's actuarially mandated deferral interest rate for EPFPs and TQPPs (i.e., the expected rate of return) was set at 5.5%. However, the yield from fund reserves has been substantially lower than this deferral interest rate for several years because of an ailing stock market and continued monetary policy of low interest rates. As a result of rigid actuarial assumptions and a number of investment restrictions, many EPFPs and TQPPs have carried unrealized losses (*fukumi-son*). Yet, recent low interest rates alone cannot explain the worsening financial situation of many funds. In fact, it can be shown that the 20-year return on investment of a mixed portfolio in Japan was on average higher than 5.5%. In other words, older funds, at least, should not have ended up facing such large financial troubles. However, in reality, older funds seem to be especially vulnerable. Asano and Kaneko (1998: 73–75) state four reasons for this phenomenon: 1. Because of an increasing life expectancy and wage increases and a decline in the number of fund members, the financial situation of funds has worsened over time. 2. Older funds have frequently used yearly surpluses for benefit hikes. 3. If the surpluses surpassed a designated limit, funds used these revenues to finance the construction of leisure facilities for their members. 4. Until recently, most funds have accounted for their financial holdings through purchasing prices. However, the market value of these holdings has declined considerably since the burst of the bubble economy sent the stock and real estate markets falling. Most funds have not parted with their holdings because that would have made the underfunding problem obvious. For many years, a reluctance to sell unprofitable holdings has prevented a management of investments that is oriented toward earning returns. Even after the "deferral" interest rate was lowered for the first time in 1997, many

funds kept using the old rate of 5.5% because switching to a lower rate would have made the underfunding problem visible (WATANABE 1998: 10). So far, the magnitude of the funding problem has been impossible to quantify because plan sponsors have not revealed enough financial data. New accounting rules, which will gradually come into effect in March 2002, will require all such liabilities to be disclosed in the future (OECD 2000: 129). If one considers the fate of the 27 leading Japanese companies that do reveal most of their pension finance data in the U.S. under the Generally Accepted Accounting Rules, one can already catch a glimpse of the problem's magnitude. At the end of fiscal year 1996, these companies had, on average, an underfunding problem of ¥ 140.8 billion, which was equivalent to 15.5% of their combined shareholders' equity. Since these companies are among the best Japanese companies, one can rightfully assume that the situation in the rest of the market is much worse (ASIA AGENDA INTERNATIONAL 1998: 15). High pension expenses arising from underfunding will negatively affect net income, price/earnings ratios, debt/equity ratios, and cash flow. Since many companies fear these unpleasant revelations, they have gone ahead and recognized their pension fund deficits, shoring up their funds. In fiscal year 1998, ending in March 1999, 230 defined benefit plans received contributions from sponsoring companies to cover shortfalls (SHIBATA 1999: 30). In fiscal 1999, companies paid ¥ 1.01 trillion to 1800 EPFPs. Nearly every EPFP received additional funds to cover pension shortfalls (*Nihon Keizai Shinbun* 18.08.2000: 3). About a third of Japan's major companies contributed to their pension plans through specially designed trusts to offset unfunded liabilities. This allows them to remove contributed portfolio shares from their balance sheets, which in turn shrinks their asset base and opens the way for more efficient use of assets (*The Nikkei Weekly* 31.07.2000: 17).

Regulations concerning EPFPs provide fairly strict protection for the vested rights of employees. This obliges the EPFPs to shore up their funding, which is not so much the case with TQPPs. Nevertheless, around 10% of all EPFPs had to lower their payouts during fiscal 2000 (*Nihon Kin'yū Shinbun* 19.10.2001: 10). Small- and medium-sized companies, which constitute the largest share of the sponsors of TQPPs, often lack the financial resources to eliminate pension shortfalls. An increasing number of companies are therefore allowed to dissolve pension plans. In recent years, an average of 3000 to 4000 plans per year ceased their operations (*Nihon Keizai Shinbun* 18.08.2000: 3).

Several of these problems with occupational pension plans were addressed by the occupational pension reforms of June 2001, which altered plan design choices and aspects of existing plans. The next paragraph

describes these changes in closer detail, while paragraph 3.4 analyzes their implications.

2.5 An overview of recent reforms

The 1999 public pension reform, which was enacted in April 2000, consists of several parametric reform measures in the sense that they seek to curtail pension payments by an adjustment of parameters such as entitlement age, benefit level, or financing mode. In this respect, the measures are similar to the ones taken up in other industrialized countries in recent years. Three measures are especially noteworthy (SHAKAI HOKEN KENKYŪJO 1999):[12]

1. The complete gradual increase in the entitlement age for regular pension benefits to 65,
2. a 5% cut of benefits to newly awarded pensions (a grace period worked into the bill will delay the actual reduction until fiscal 2004) and
3. the abolition of wage indexation after commencement of pension payment of people 65 and over.

Combined, these measures will slash aggregate pension benefits by about 20% by 2025 (*Nihon Keizai Shinbun* 22.03.2000: 1). The replacement rate in the model pension (which does not reflect the influence of the entitlement age increase and the change in the indexation mode) will sink from 62% of net working income, including bonuses, to 59% (SHAKAI HOKEN KENKYŪJO 1999: 23). This replacement rate is slightly lower than the new replacement rate in Germany's model pension,[13] which the latest reform, in May 2001, set at 64%.[14]

Besides the reform measures on the benefit side, the 1999 reform also introduced four important measures on the financing side.

First, since April 2002, pensioners between the ages 65 and 69 who have additional working income are subject to an earnings test. The first-tier basic benefits are fully paid regardless of salary and wage earnings,

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[12] For details see CONRAD (2001b: 41–49), SHAKAI HOKEN KENKYŪJO 2000 and SHAKAI HOKEN KŌHŌSHA 2000.

[13] The German concept of the model pension is similar to the Japanese, except that contributions over 45 years are required to reach this pension in Germany.

[14] The official replacement rate in Germany is 68% (BUNDESMINISTERIUM FÜR ARBEIT UND SOZIALORDNUNG 2001: 6). However, this number reflects purely a cosmetic change in the calculation method of the underlying net wage (SCHNABEL 2001: 6).

but if the total amount of pension benefits and additional earnings exceeds ¥ 370,000, the earnings-related pension benefits are reduced by ¥ 10,000 for each ¥ 20,000 increment in wages. TAKAYAMA (2001b: 3) reckons that this earnings test may induce earlier retirement for those still working in their late 60s.

Second, starting in April 2003, the calculation base for social security contributions will change. The 1994 pension reform introduced a contribution rate of 1% on bonuses. If one considers that the average bonus is 20% of an industrial worker's salary of one year (RŌDŌSHŌ SEISAKU CHŌSABU 1994: 30), then this was an important measure to increase pension revenues. However, this system is also highly unfair, because these contributions are not taken into account when calculating the remuneration-proportional benefits; in this sense the contributions become similar to a 100% tax. From April 2003, the contribution base will shift from current monthly standard earnings to annual earnings, including half-yearly bonuses. This widening of the calculation base means that a lower overall contribution rate will suffice to raise the same amount of contribution revenues. Therefore, there is a plan to lower the contribution rate from the current 17.35% to about 13.5% in 2003 (TAKAYAMA 2001b: 7). However, thereafter the rate will have to be raised again, because of increasing benefit expenditures over the coming years.

The third important aspect of the 1999 reform is that it alters future revenue streams. In 2004, general revenues flowing into the NPI are to be boosted, with the state subsidy rising from one-third to one-half of the NPI's annual cost. Yet, as of the time of this publication it is still unclear where the necessary tax revenues will come from.

The fourth area that will attract attention in the future is the shift in the management of the pension reserve fund, which started in April 2001. Up until then, the Trust Fund Bureau of the Ministry of Finance managed the pension fund reserves on behalf of the Social Security Agency. The Trust Fund Bureau used this money as part of the Fiscal Investment and Loan Program (FILP). In overall terms, this program is a huge public financial institution whose main purpose is to provide long-term loans to public finance corporations, public corporations and agencies, local authorities, and private companies. Now the pension fund reserves are to be managed independently by the Ministry of Health, Labor and Welfare. Over a period of seven years, funds amounting to ¥ 150 trillion, currently invested in the FILP program, will be transferred to the Ministry of Health, Labor and Welfare (*Nihon Keizai Shinbun* 29.03.2000: 3).[15]

[15] See CONRAD 2000b and CONRAD (2001b: 77–82) for a more detailed analysis of this issue.

New legislation in the occupational pension arena, which passed the Diet in June 2001, is likely to have an immense impact because it alters plan design choices and aspects of existing plans. The first law, effective since October 2001, concerns the introduction of defined contribution plans modeled on the U.S.'s so-called 401(k) plans.[16] The other law, effective since April 2002, concerns the regulations of defined benefit plans. It is also a widespread belief that cash-balance or hybrid schemes will be allowed, although the method for establishing such plans was still unclear at the time of this article.[17] The key elements of the occupational pension reform are (TAKAYAMA 2001a, 2001b; MERCER 2001):

- Companies are given greater choices in terms of plan design. As Figure 3 below indicates, companies can transfer their current schemes to a number of new plans.
- Employers offering EPFPs will be permitted to divest themselves of the contracted-out substitutional component of their plan. This will permit plan sponsors to gain relief from paying that portion of the government earnings-related pension by transferring a lump sum of assets to the government. However, participants in these newly constituted defined benefit plans, called "Fund Type" (*kikinkei*), will no longer be granted an exemption from the asset tax of 1.173% that had been imposed only on TQPPs. The specific rules governing this restructuring of old EPFPs remain to be clarified. The Pension Fund

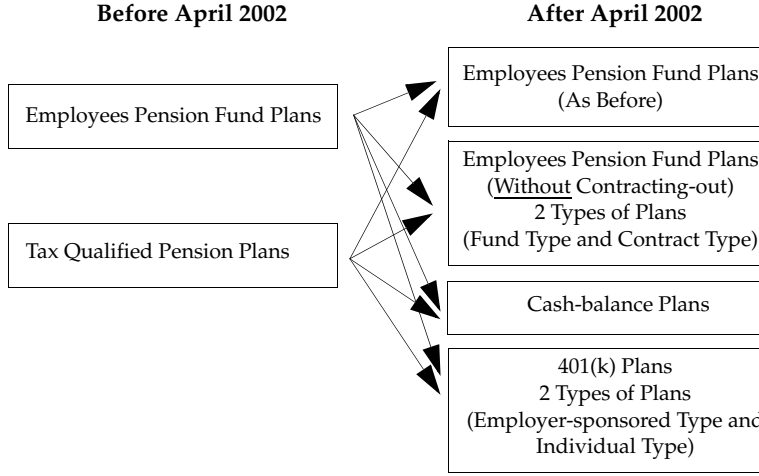
[16] 401(k) plans in the USA are constituted as mutual fund-type investment vehicles designed to attract pension assets. In contrast to defined benefit plans these schemes do not guarantee a definite benefit level dependent on former contribution payments and qualifying times. Instead, the benefits are dependent solely on the investment returns yielded by contribution payments. Contributions to these plans are tax-deductible. In general, the employees make their own contributions, but in most cases the employers match these contributions. The employee can choose investment strategies according to his own risk adversity. In case the employee changes his workplace, he has full control over his own contribution payments and their investment earnings (portability). In accordance with employee's service time in the company, he gradually becomes the owner of the employer's contributions and investment earnings (vesting) (KATZEFF 1996: 1–11, 108).

[17] Many contribution and participation features of a cash balance plan are similar to those of traditional defined benefit plans, rather than most defined contribution plans that allow employees to make decisions about participation and contribution rates. On the other hand, cash balance plans largely eliminate penalties for workers who terminate employment prior to retirement, which makes them similar to defined contribution plans. The accumulation of accounts and provision of lump-sum benefits at termination facilitate communication and portability like 401(k) plans.

Investment Fund will manage these assets and be responsible for paying the previously contracted-out benefits (CERULLI ASSOCIATES 2001).

- Companies offering TQPPs will be required to terminate them by March 2012 (LIFE DESIGN KENKYŪJO 2000: 24). The new legislation creates another new defined benefit scheme of the so-called "Contract Type" (*kiyakukei*) to replace existing TQPPs. Unlike the new defined benefit plans of the "Fund Type", setting up these schemes does not require a pension entity separate from the employer (TAKAYAMA 2001a, 2001b).

Figure 3: **The 2001 occupational pension reform**



Source: Own representation.

- After employers and employees have worked out a set of rules agreeable to both parties, companies can set up defined contribution 401(k) plans of the "Employer-sponsored Type" (*kigyōkei*). Entitlements for existing defined benefit plans may be transferred into these new schemes. If the employer does not have a contracted-out EPFP or a TQPP, an annual tax-qualified contribution of up to ¥ 432,000 per employee is permitted. If the employer already runs a defined benefit scheme, only ¥ 216,000 per year can be put into the 401(k) plan. No matching employee contributions are allowed.
- Self-employed and non-salaried workers can contribute to a new type of 401(k) plan of the "Individual Type" (*kojinkei*). The tax-qualified

ceiling is ¥ 816,000 per year. Employees whose company does not have an occupational pension scheme (excluding BRPs) can also contribute up to ¥ 180,000 a year to such a personal "Individual Type" 401(k) scheme.

- For all types of plans, stricter rules with regard to minimum capital, fiduciary duty, and disclosure standards apply.

3. The Effects of Recent Reforms

The first three subsections analyze how recent public pension reforms can be evaluated in terms of financial sustainability, distributive effects, and minimum income security. The last subsection focuses on the long-term effects of public and occupational pension reforms on the public-private mix in pensions.

3.1 Financial sustainability

As pointed out above, Japan's public pension schemes still manage immense capital funds. In the cases of EPI and NPI – the most important public schemes – the ratios of pension fund reserves to yearly expenditures are 6.1 and 3.3 respectively (2000) (Shakai Hoken Kenkyūjo 1999: 205–209). On the other hand, large pension entitlements are to be paid out in the coming years, so that these reserves will have to be melted down to prevent high increases of contribution rates (Conrad 2000a: 155–161). In comparison with Germany – where the pension fund reserves equal only one month of expenditures – the situation is still comparatively positive. A major reason for this is that the Japanese system has not yet reached the same level of system maturity existing in Germany's case (Conrad 2000a: 135–154).

When judging the impact of the last pension reform on the financial sustainability of the public pension finances, official projections of the Ministry of Health, Labor and Welfare are not very helpful, because their underlying assumptions have proven to be too optimistic, especially with respect to the development of the birth rate. Neither the calculation methods nor the results of the five yearly actuarial reviews are disclosed in detail (Conrad 2000a: 170–173). Also, the financial projection that was the base for the 1999 reform assumed a rise of the birth rate (TFR) to 1.61 by 2050, although the actual birth rate has been sinking for years. In 2000 the birth rate was 1.35 (*Nihon Keizai Shinbun* 09.08.2001: 46). Because there are no significant new family policy measures that would allow a positive

assessment of the development in the birth rate, official statistics should be regarded with care.

Therefore, in order to evaluate the impact of the last reform, this paper draws on projections which a group of well-known Japanese economists published in 1997 (KEIZAI KIKAKUCHŌ KEIZAI KENKYŪJO 1997). This projection differs from the official calculations in that:

1. it specifies assumptions which are more realistic and up-to-date,
2. it includes the interaction of macroeconomic variables, and
3. it simulates the effects of different reform measures.

The reform measures tested by the researchers and the actual amendments of the 1999 reform differ in various aspects. Nevertheless, one can reasonably argue that the 1999 reform measures will considerably improve the finances of the EPI and safeguard its financial sustainability (CONRAD 2001b: 56–60). This positive evaluation is also supported by recent calculations done by KATŌ (2001) and OGUCHI and HATTA (2001), who demonstrate that the EPI is not likely to run any deficits in the projection period up to the year 2050.

The financial situation of the NPI is much more difficult to assess. Hitherto, NPI benefit levels depended largely on political decisions, but were frequently raised in line with changes in the net wages of the working population and the development of the consumer price index. The 1999 pension reform stipulates that starting from April 2000, the benefit level of newly awarded NPI pensions will be decided every five years, at which point the development of the consumer price index in the previous five years is taken into consideration. In future, NPI benefits will only be adjusted to changes in the consumer price index (SHAKAI HOKEN KŌHŌSHA 2000: 2). The projection does not take into account that the NPI faces a problem with participants who either evade contribution payments (8.9% of Type 1 insured members) or who are, because of low income, exempted from paying contributions (17.3% of Type 1 insured members) (KŌSEISHŌ NENKINKYOKU 1998: 32). The problem of contribution evasion might become even more pronounced if the contributions, but not the benefits, are raised. Another factor which makes it hard to assess the future of the NPI is the question of how the government is going to finance the increase of the state subsidy from one-third to one-half by 2004 (*The Nikkei Weekly* 03.04 2000: 7) and how this will influence future contributions. Although the 1999 official projection indicates that, given a state subsidy of one-half of the benefits, the contributions only need to rise to ¥ 18,200 by 2020 – instead of ¥ 24,800 in the case of a state subsidy of one-third – (SHAKAI HOKEN KENKYŪJO 1999: 208–209), this calculation should be regarded with care. Taking all these factors into consideration

one can argue that, at the minimum, the 1999 reform will improve the financial position of the NPI significantly, even if future adjustments are likely to be necessary.

This positive evaluation with regard to financial sustainability does not mean that contribution hikes will not be required in future. With the introduction of annual earnings, including half-yearly bonuses as the new contribution base in 2003, the contribution rate will temporarily be lowered to around 13.5% so that the absolute burden remains about the same. After that, however, the contribution rate should be raised gradually to meet increasing expenditures. The officially projected contribution rate is estimated to top 20% of total compensation in 2025, a figure that the OECD has also adopted in its latest economic survey on Japan (2000: 125–126). However, given the above-mentioned unreliability of official projections, one should rather expect the future contribution rate to be a few percentage points higher than 20% – at least under the optimistic assumption that benefits will not be cut again by future reforms.

3.2 Distributive effects

In terms of distributive effects, one differentiates between inter- and intragenerational redistributive effects. Every pay-as-you-go system causes intergenerational redistribution. This simple truth is based on the fact that the first age cohorts receive benefits without having paid equivalent contributions. Geanakoplos, Mitchell and Zeldes (1999: 83–86) show that the internal rate of return (defined as the inflation-corrected discount rate that equates, for each individual, the present value of the stream of social security benefits to the present value of the stream of taxes paid) in a pay-as-you-go system must fall over time. This happens even in a system where the population has a constant life expectancy and age structure. However, these redistributive effects increase markedly if the growth rate of the working population (n) sinks. In this case the contribution rate (b) of the working population will have to be raised if the pension benefit per capita (p) is supposed to stay the same. In other words, later age cohorts realize an even smaller rate of return.

These redistributive effects have caught the attention of many Japanese economists and there are a number of so-called "money's worth calculations" (e.g., Honma *et al*. 1984; Ueda, Iwai and Hashimoto 1987; Takayama *et al.* 1990; Aso 1992). Most of these calculations on intergenerational redistributive effects are not based on historical data, but define a hypothetical individual (or a type of household) with a certain period of insurance and life expectancy. Assuming that all individuals are identical, this individual represents an age cohort. The contributions of the individ-

ual to the pension system are compared with the received benefits. This kind of comparison is undertaken for the same individual, while assuming that he or she joined the labor force at different times. In this way, past changes in the pension law are reflected in the contributions paid and the benefits received. Discounting contributions and benefits, the "benefit / tax ratio" (*jukyū futanritsu*) represents, for each age cohort, the present value of lifetime pension benefits received, divided by the present value of lifetime pension contributions paid.

Although these calculations are sometimes problematic in the sense that they tend to focus only on old age benefits, neglecting survivors and disability benefits, they show unanimously that today's pensioners receive benefits several times greater than what they paid as contributions and what they might have received had the money been invested in similarly safe investments. On the other hand, birth cohorts since the beginning of the 1960s will receive negative net-returns in the future (Conrad 2000a: 220–231; Conrad 2001b: 67–74).

How will the 1999 reform influence this pattern of intergenerational redistribution in the future? A tentative answer to this question can be given even without exhaustive calculations, if one considers to what extent the reform measures reduce the benefits of current or soon to be retirees without reducing the benefits of future pensioners. It can be shown, for example, that immediately increasing the contribution rate to a sustainable level would improve intergenerational equity, because age cohorts that are close to the pension age have to bear a relatively larger burden. The same is true for a temporary abolition of net-wage indexation (Hatta 1998).

However, the 1999 reform did not improve intergenerational equity (at least as far as currently living generations are concerned). On the contrary, a recent calculation by Katō (2001: 73–89) confirms that the gradual increases of contribution rates and entitlement age in the future will result in a relatively heavier burden for younger age cohorts. The 5% benefit cut concerns only newly awarded pensions; current retirees do not have to shoulder a heavier burden. Finally, the abolition of net-wage indexation will lower pension benefits for all generations in the same way, and does thus not improve the relative position of younger cohorts. Consequently, although the improvement of intergenerational equity is frequently indicated as one of the major objectives of reforms (e.g., Shakai Hoken Kenkyūjo 2000: 13), the 1999 measures have in fact worsened the position of younger age cohorts.

After this assessment of the intergenerational effects, the analysis turns now to the intragenerational redistributive impact of the current system and the 1999 reform.

Among the several functions of a welfare state and of public old age security programs is redistributing income to the poor and securing a minimum level of benefits for all elderly citizens. Although it is frequently argued that any targeted vertical income position can be better achieved through a progressive (income) tax system and social assistance benefits, in most countries, including Japan, public pension systems still count among their goals a redistributive function. The following analysis of the intragenerational effects of the 1999 reform therefore assesses whether the redistribution does indeed target the lower income groups.

In principal, the Japanese pension system is designed as a multi-pillar system in which the NPI fulfills the minimum income and redistributive function and the EPI performs the savings function. Thus, the system follows to a certain extent the philosophy of functional differentiation as it has been promoted by the WORLD BANK (1994). In general, such a functional differentiation is able to minimize the trade-off between social and individual equity aspects and can lead to higher "target efficiency" (KLANBERG and PRINZ 1988).

As described above, the NPI insures three types of participants. Whereas the fixed contributions and benefits of the "Type 1 insured persons" (mainly the self-employed) are closely related, this kind of equivalence principle does not hold for "Type 2 insured persons" (employees). Employees do not pay fixed contributions to the EPI, but a ratio of their working income – currently 17.35%. The remuneration-proportional benefits of the EPI increase in accord with higher contributions. In contrast, the benefits from the basic pension (NPI) are not related to contributions; they depend solely on the length of participation. "Type 3 insured persons" (non-working spouses of Type 2 insured persons) benefit directly from a redistribution, because they are entitled to NPI benefits without paying contributions. On the other hand, non-working spouses of the self-employed are required to pay full contributions to the NPI. The system becomes even more complicated if one considers the different financing sources for these plans, currently two thirds participant contributions and one third state subsidies.

Because of the system's complex setup, the distributive effects cannot be exactly quantified. However, on a higher level of aggregation one can show that "Type 1 insured persons" receive benefits from the basic pension system that are altogether higher than what they pay as contributions and taxes.[18] The same is true for the insured of the mutual aid associations, including their non-working spouses. On the other hand,

[18] This calculation is based on the basic assumption that all insured shoulder the same tax burden.

the overall benefits of the EPI-insured (including non-working spouses) are lower than their overall financing burden (CONRAD 2001b: 69–73).

These findings illustrate the fundamental problem of the Japanese basic pension system, where the redistribution depends more on the insured group type than on actual neediness. Within the Type 1 group, earners of low incomes probably constitute a larger fraction than they do within the Type 2 group (although the data to back up this statement is insufficient). However, it is at least debatable whether the self-employed persons who constitute the majority of participants insured in the Type 1 group are, in general, a needy constituency worthy of income redistribution. This is definitely true for the insured of the mutual aid associations, whose remuneration-proportional benefits are frequently higher than the ones paid by the EPI.[19]

The fundamental problem of the Japanese basic pension system is that, although it has a certain functional differentiation, it still aims to achieve two conflicting objectives within the basic pension pillar. Whereas the tax-financed state subsidies stress the social equity aspect (tax-transfer model), according to which all members of society are taxed according to their ability to pay, the contribution-based financing mode stresses the individual equity aspect by linking former contributions and later benefits (THOMPSON 1983: 1436–1438).

How does the 1999 reform influence this pattern of intragenerational redistribution? The increase of the state subsidy to one half of basic pension expenditures by 2004, part of the last reform, does not fundamentally change the above assessment. Although the planned increase of the state subsidy shows that there is a growing awareness of problematic distributive effects, a parametric change will not result in higher "target efficiency". It is indeed doubtful whether a combination of contributions and tax subsidies for the basic pension makes much sense at all, mainly because the resulting distributive effects remain largely opaque.

3.3 Minimum income adequacy

The above paragraph has shown that the basic pension system fares badly in terms of the distributive effects generated. This paragraph evaluates the system's record with regard to its effectiveness in securing an adequate minimum income.

The NPI model pension is supposed to cover the basic costs for nutrition, clothing, and housing of a non-working, 65-year-old pensioner who lives alone. Based on the National Survey of Family Income and Expen-

[19] In Figure 1, this is indicated by a longer vertical column.

diture (*Zenkoku shōhi jittai chōsa*), the Ministry of Health, Labor and Welfare determines this level at ¥ 72,336 per month (Kōseishō Nenkinkyoku 1998: 179–180). However, the model basic pension, based on 40 years of contributions, is currently only ¥ 67,016 per month. One would expect the Ministry to argue in favor of an increase in the NPI benefit level in order to meet these basic costs of living. Instead, the Ministry suggests, in its first ever Pension White Paper (1998), that the indicator for the minimum level of benefits should not be the basic cost of living for a single-person household, but rather the basic cost of living for an elderly couple (male 65 and older, female 60 and older) and that the median instead of the national average, should be applied as a suitable cost-of-living indicator. If these indicators were applied, an elderly couple would need at least ¥ 100,476 per month (¥ 50,238 per person) (Kōseishō Nenkinkyoku 1998: 179–180). Today's model pension totaling ¥ 134,034 for an elderly couple, would then indeed be sufficient. However, it remains unclear why the Ministry favors a new indicator, especially since the available statistics show that the economic situation of elderly living alone is markedly worse than that of other types of households (Takayama and Arita 1996).

Even disregarding the rather hairsplitting argument about a suitable cost-of-living indicator, the model basic pension is definitely low in comparison to the benefits paid by the national public assistance system. The benefit levels of the public assistance system are set nationally and vary among local municipalities according to variations in living standard. For a two-person, elderly household (male 72, female 67) this subsistence level varies between ¥ 116,120 and ¥ 149,989 among regions. For a single woman aged 70, this level ranges from ¥ 84,064 to ¥ 108,506. If the general assistance standard does not meet needs, a special standard is applied additionally to cover housing deposits, rent, and necessary repair costs up to ¥ 70,000 (Kōsei Tōkei Kyōkai 1998: 99; Eardley *et al.* 1996: 248). These numbers indicate that the current model basic pension for an elderly couple, ¥ 134,032 (¥ 67,016 · 2), suffices to maintain a subsistence level (without additional housing assistance) in some regions. However, the basic pension for a single-person household does not even meet the lowest subsistence level. In conclusion, the basic pension system hardly provides an adequate minimum income. How does the 1999 reform influence this assessment? If basic pension benefits are only indexed to prices, the basic pension will continue to lose its role as guarantor of a minimum income. In this respect, the situation in Britain might be indicative of what could also happen in Japan. Since basic state pension benefits in Britain were indexed to prices only in the 1980s, benefits kept falling relative to general living standards and were only 15% of average full-time male earnings in the late 1990s (Budd and Campbell 1998: 101).

3.4 Changes in the public-private mix in pensions

This paragraph deals with the question of how the 1999 public pension reform and the 2001 occupational pension reform will influence the relationship between public and occupational pension provisions in the long run.

Since the mid-1990s the Japanese government has followed neo-liberal ideas with regard to social policy, according to which the state should provide only a moderate level of benefits. The difference should be covered by private provisions (KŌSEISHŌ DAIJIN KANBŌ SEISAKUKA 1994: 7). The latest reforms have to be judged against this general policy background. The pension commission (NENKIN SHINGIKAI 1998) stated in its final report before the last reform that personal and occupational pensions should play a bigger role in the future so that public benefit cuts can be compensated for. However, for several reasons the chances of success for this replacement strategy appear to be rather limited.

- Occupational pension provisions are first of all a means to motivate and attract a certain type of employee (LOGUE and RADER 1998: 3–13). For this reason, human resource considerations are at least as important as the legal and tax environment when deciding on the implementation or modification of pension plans. Against the background of the ongoing restructuring of Japanese businesses and the massive lay-offs resulting from it, an expansion of occupational benefits certainly has little place in the current primary objectives of most companies.
- The current diffusion of occupational pension benefits is characterized by big differences between small-, middle-sized, and larger companies. Whereas the core work force of bigger companies can expect generous lump-sum benefits plus occupational annuities, employees of smaller companies generally receive markedly lower benefits. Since public benefits are being cut for all insured in the same way, while occupational provisions are, if at all, not extended uniformly, the inequality of incomes will inevitably rise in the long term.
- The dire financial situation of most occupational pension plans complicates the situation even further. It can be expected that many companies will make use of the option to shift their defined benefit plans into defined contribution plans – thereby shifting the investment risk to the employees. However, this does not rid them of the responsibility to close existing financing gaps in the future. Consequently, there will be reluctance to extend existing occupational provisions.
- The new legislation has introduced stricter protective regulations on the fiduciary duties and disclosure standards of the new defined

benefit plans (Contract Type and Fund Type), which are likely to lead to higher administration costs. Therefore, many companies might terminate their TQPPs, but without introducing new defined benefit schemes instead (TAKAYAMA 2001b: 15).

- The new 401(k) plans have a relatively low level of tax-qualified contributions.[20] The low employer contribution ceilings reflect the government's reluctance to allow more compensation to be protected from tax in a time of economic depression and rising fiscal deficits. This low tax-qualified cap, together with a 1.173% special annual corporate tax on pension assets (suspended until March 31, 2003 because of the current adverse investment environment), makes these plans unattractive at the moment. Although experts assume that the Japanese 401(k) market will rise in the next ten years to about ¥ 50 trillion, the initial take-off is expected to be rather slow because of the aforementioned problems (*Reuters Business News* 06.08.2001). According to a survey of the *Nihon Keizai Shinbun* for fiscal year 2001, which centered on stock market listed companies, only 24% of the responding companies named 401(k) plans as the pension plans they would like to introduce in the future. On the other hand, only 4% of the responding companies were considering the introduction of defined benefit EPFPs (*Nihon Kin'yū Shinbun* 19.10.2001: 10).
- With the exception of the 401(k) plans of the "Individual Type", private pension provisions are not supported by tax-qualified contributions and even the "Individual Type" private pensions have a very low tax-qualified ceiling of ¥ 180,000 per year for an employee in a private company. Unlike the newly introduced personal pensions in Germany, there are no subsidies for low income earners, so that there is a substantial risk that only those who have sufficient savings already will be able to put money into additional private provisions.

Even if some of the shortcomings of the current legislation can be addressed in the future, three tendencies support the argument that the shift in the public-private mix will eventually lead to growing inequalities among Japanese households. First, unlike most public pension schemes, private schemes usually do not include redistributional elements that would compensate for a low level of participation in the labor force during working life, low wages, or periods of non-employment. Second, occupational pension schemes frequently cover only the core workforce, while part-time workers are not included. Third, an occupational pen-

[20] In contrast, in the United States employee contributions may total $ 10,500 per year.

sion, where the employee bears some or all of the expense of accumulating savings, requires a certain level of income so that current consumption is not unduly restricted.

In her cross-national analysis,[21] BEHRENDT (2000: 18–23) confirms that private pensions (predominantly occupational pensions) have reproduced or even strengthened existing inequalities in the labor market. However, the study also shows that a high degree of inequality is not necessarily a characteristic of private pensions as such, but strongly depends on other policy factors. Regulation of private schemes can cause a large difference in distributive effects. For example, Finland and other Scandinavian countries have relatively high degrees of equality in private pension distribution, partly because private provisions are mandatory in some of these countries.

How one judges the likely increase in pension and income inequality in Japan depends largely upon one's view about social equity as a moral value underlying the welfare state. Whereas some egalitarians argue for "equal opportunity", others are more concerned about "equal outcomes" (GOODIN *et al.* 1999: 28–30). Followers of the latter school would naturally argue that Japanese pension policy needs better regulation and presumably mandatory private provisions – either occupational or personal. Conversely, for followers of the "equal opportunity" school the outcome of current pension policies is not a major concern.

4. CONCLUSION

This article has shown that the last reform of the pension system has had a considerable positive impact on the financial sustainability of the public pension finances. However, major problems in distributive effects and minimum income security remain. Although the government claims to have improved intergenerational fairness with the last reform (i.e., relieve the contribution burden of younger age cohorts and increase the burden for older cohorts), recent calculations show that the gradual increase of contribution rates and entitlement age in future will in fact result in a relatively heavier burden for younger cohorts. The last reform also fares badly with regards to improving intragenerational fairness. The fundamental problem here is that the basic pension system, although it follows a certain functional differentiation, still aims to meet two conflicting objectives. Whereas the tax-financed state subsidies stress the social equi-

[21] According to Ms. Behrendt, the study did not include Japan because of a lack of suitable data.

ty aspect, according to which all members of society are taxed according to their ability to pay, the contribution-based financing mode stresses the individual equity aspect by linking former contributions and later benefits. Also, the basic pension system tends to favor "Type 1 insured persons", who are not, by definition, a needy group who require income redistribution. The increase of the state subsidy to one half of basic pension expenditures by 2004, instituted as part of the last reform, does not fundamentally change this assessment.

The official replacement strategy regarding the new public-private mix in pensions is problematic because so far it lacks sufficient supportive measures such as higher tax-qualified contributions, or state subsidies for low income groups to foster the new occupational and/or personal pension plans. Partly because of these problems and partly because of more general considerations, it is likely that the pension distribution will show increasing disparities in the coming years. This will further strengthen the already noticeable trend of increasing income- and wealth inequality among Japanese households.[22]

Rising economic inequality in and of itself might not be a problem if only there were effective instruments to ensure an adequate minimum income. However, it has been shown that the basic pension system in Japan does not fulfill this role. This is problematic since means-test social assistance is still highly stigmatized and the take-up rate is low. Only 25 to 30% of those actually eligible are receiving those last-resort benefits (Esping-Andersen 1997: 184). Thus, both the basic pension system and the public assistance system are in need of reforms that will accompany the evolving new public-private mix in pensions.

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[22] See Conrad 2001a for a short overview on the recent development of inequality in Japan.

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