# **Long-Term Care Insurance Financing and Costs**

No explicit estimates of how much this program would cost was made nor questions such as the savings in "opportunity cost" to informal providers or savings on hospitalization costs estimated. The presence of long-term care insurance is hypothesized to affect both the demand for and supply of long-term care services. The supply of the services and the provider market will, to some extent, be determined by the contracting and reimbursement methods for different types of services. The mix of services, their price, and demand in turn will determine the cost of long-term care both to the insurance program as well as to households. Data collected from the national level. Local governments, the household and provider surveys will be used to address a number of research questions. These include:

- How have the different provider payment mechanisms affect the development of the provider market. In other words we would like to use econometric techniques to model and test a number of hypotheses on how differing provider payment mechanisms affect the growth of home care providers, nursing homes, and other providers.
- The national and individual statistics will be used to develop a cost model for long-term care based on the incidence, duration and intensity of service. This model will estimate the baseline costs of long-term care insurance including how these costs are distributed across areas and services.
- How do the elements of cost change over time since the evolution of the delivery system could impact of these elements in different ways. For example, the more hospital sponsored system could have higher incidence and intensity, but lower duration.
- Who benefits from long-term care insurance expenditures? A benefit-incidence approach will be used to estimate how long-term care expenditures are distributed across individuals by gender, income, health status, geographic location
- What is the impact of long-term care insurance on household out-of-pocket expenditures as well as the opportunity costs for informal caregivers

The Role of Local Governments in LTCI Program
This might be something that Professor John Campbell will be working on. He is in the process of identifying the main research questions.

#### Data Issues

Based upon Professor Ikegami's assessment it appears that the only data that is widely available are the eligibility levels of those who have applied for LTCI. The assessment form contains eighty-five items on which the eligibility algorithm is based. However,

obtaining access to this information will require the consent of the clients and at present no regional or national database exists. More detailed data are available for the assessment made for care plan purposes for those receiving LTCI services. However, there are at lease five assessment forms for care planning, none of which is compatible with the others. It will be possible to access care management agencies using the MDS-HC (home car), and the MDS. However, although these two are most widely used, it is not exclusively used in each local area. In fact, at present there appears to be only one town that exclusively uses them. Therefore, it would be difficult to obtain data from routine data sources.

If one were to look at the US context at least three datasets come to mind that are used by researchers to study utilization and costs on the elderly. These are the longitudinal study on aging --a portion of the national health interview survey; the health of seniors surveys linked to the Medicare beneficiary, utilization, and cost data; and service user characteristics as captured by nursing home and home health admissions systems under Medicare.

In Japan, they do not have anything equivalent of a national panel data, nor a readily accessible source such as Medicare. Hence a significant contribution of this joint research exercise will be the creation of a longitudinal database. Some of the key questions have to do with the levels of penetration into the elder market of use of formal institutional and community long-term care services, choices as to financing these services, and behavior with respect to informal care. The focus on longitudinal databases that are also cross-sectional with respect to the Japanese population of elders and near elders will allow us to address much more interesting questions than "did the new program change behavior or service costs." The proposed research design will allow us to track how over a period of slow implementation by the government and progressive (across age and functional status cohorts) adoption of new practices by Japanese elders that the interventions objectives are increasingly or decreasingly obtained.

The panel data will be developed in the study sites and will require obtaining permission from local authorities. This should be feasible. The work that goes into the creation of the database will not only inform this research activity but might also stimulate a broader discussion at a national level on the types of data and information that will be needed to accurately manage, monitor, and evaluate the LTCI program in Japan.

### 2. Capabilities

Stanley S. Wallack, Ph.D. is the Executive Director of the Schneider Institute for Health Policy, Associate Dean for Research at the Heller School, and a member of the faculty at Brandeis University. He established the Schneider Institute at Brandeis University in 1978. The Schneider Institute has been a major policy research center for the Health Care Financing Administration, Administration on Aging, and for the National Institute for Drug Abuse. From 1987 to 1998 he was Chairman of the Board and Chief Executive Officer of LifePlans, Inc., a Boston-based long-term care risk management company. He was Chairman of the Coalition for Long Term Care Reform from 1993-1997. After receiving his Ph.D. in Economics in 1969, Dr. Wallack taught at the University of Illinois in Champaign-Urbana, Illinois. He was a Brookings Institute Policy Fellow in 1969-1970. In the 1970's, he served as Deputy Assistant Director for Health, Income Assistance, and Veterans Affairs, at the Congressional Budget Office, and in the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education and Welfare. Much of Dr. Wallack's extensive research and publications have focused on effective reimbursement systems and organizational arrangements for acute and chronic health care. He developed the concept of the Social Health Maintenance Organization, which integrates the financing and delivery of acute and long-term care services.

Naoki Ikegami, M.D., Ph.D., M.A. is Professor and Chair of the Department of Health Policy and Management at the Keio School of Medicine, from which he Received his MD and PhD. He also received a Master of Arts degree in health services studies with Distinction from Leeds University (United Kingdom). During 1990-1991, he was a visiting professor at the University of Pennsylvania's Wharton School and Medical School, and has continued to be a Senior Fellow at the Wharton. He is a board member of interRAI (an non-profit international consortium of researchers and clinicians focused on care planning instruments), Priorities in Health Care, and the Japanese Society on Hospital Administration. His research areas are health policy, long-term care and pharmacoeconomics. His publications include (The Art of Balance in Health Policy – Maintaining Japan Low-Cost Egalitarian System (Cambridge University Press, 1998) with John C. Campbell.

<u>Christine Bishop, Ph.D.</u> is a Professor at the Heller Graduate School, Brandeis University, and joined the research staff at the Schneider Institute for Health Policy in 1979. She earned her doctorate in Economics at Harvard University. Her studies in the economics of

long-term and post-acute care have concerned both provider and recipient behavior, considering costs, production efficiency, reimbursement, and utilization of nursing homes and home health services. She is currently Principal Investigator of a project funded by Centers for Medicare and Medicaid (HCFA) to conduct a Congressionally-mandated study of the impact of repeal of the Boren Amendment on Medicaid beneficiaries' access to and quality of nursing home care. Her research on home health policy has generated publications on Medicare payment, visit content, and productive efficiency. She has investigated the interaction of Medicaid with long-term care insurance, and has compared private LTC insurance claimants to others receiving nursing home and home care. She has modeled the effect of living arrangements and informal support on the propensity to seek nursing home care. She participated in an international study of globally budgeted health systems.

Walter Leutz, Ph.D. is Director of the Social HMO Consortium, a university-provider cooperative that has developed, expanded, and researched a managed care model for integrating acute and long-term care services that currently serve 100,000 Medicare beneficiaries. He also is Research Director of a 32-site Kaiser Permanente demonstration of how to add community long-term care services to the Kaiser Permanente clinical continuum. Recent articles include "A community care entitlement in the Social HMO: how members use services." Journal of Aging and Social Policy, 2001. "Five laws for integrating medical and social care: lessons from the US and UK," Milbank Quarterly, 1999 and "Policy Choices for Medicare and Medicaid Waivers," The Gerontologist, 1999. Dr. Leutz is also primary author of two books on the practical development of coordinated community health care systems for elders.

John Amson Capitman, Ph.D. is Director of Long-Term Care Studies at the Institute for Health Policy and Research Professor, Heller School, Brandeis University. Capitman's current projects are focused on health and behavioral health issues for elders and adolescents; increasing the capacity of health care providers and community groups to address behavioral health and long-term care issues; and interventions with health and social services providers to improve responsiveness to race/ethnicity, gender, and other aspects of diversity. Capitman teaches Ph.D. program courses on applications of metaanalysis methods in health services research and race/ethnicity and gender in health and social policy research and. He was Director of the National Resource Center: Diversity and Long-Term Care. This Administration on Aging sponsored program (1991-1998) provided research and technical assistance to long-term care decision-makers at the national, state, and local levels. Capitman also lead several projects focused on Medicaid and managed care, helping groups in several states improve care access for Medicaid beneficiaries with disabilities. He was also principal investigator for studies of lowincome persons' attitudes towards alternative service configurations and how persons seeking improved health and long-term care can be assisted in decision making. Capitman led a Health Care Financing Administration study of quality in home care and evaluations of the Robert Wood Johnson Foundation's Dementia Care and Respite Services and Hospital Initiatives in LTC demonstration. These projects each combined qualitative case studies and analyses of quantitative data. Capitman was Co-Principal Investigator of the Commonwealth Fund survey of assisted living program tenants. He has published extensively on financing, organization, and delivery issues in health and long-term care.

A.K. Nandakumar, Ph.D. is a Senior Health Economist at Abt Associates Inc., and an Associate Professor at Brandeis University. He has over 20 years of professional experience on issues of long-term care financing, aging populations and its impact on health systems. National Health Accounts, and other health care financing issues. Along with Professor Stanley Wallack and Dr. Marc Cohen he developed a model that could be used to estimate the costs and benefits of various long-term care financing reform initiatives in the United States. This was used to assess various bills before Congress and inform the discussion on long-term care financing reforms in the United States. He has conducted survey research of individuals to better understand reasons behind insurance purchase/non-purchase decision, and conducted extensive research on the costs, distributional impacts and effects on private insurance markets of legislative proposals designed to provide long-term care protection. His work in international health has focused primarily on National Health Accounts, financing issues in the Middle East and North Africa, the financing of HIV/AIDS services, and the impact of aging populations on health systems. He works as a Senior Health Economist with PHRPlus, which is USAID's flagship project on health systems strengthening. He was on the faculty at Harvard University and served as a resident advisor in Egypt under the USAID funded Data for Decision-Making project. He also was a member of the Indian Administrative Service where he served in several key positions in government. He has worked as a consultant to the World Bank and WHO and has published extensively in peer-reviewed journals on both domestic and international health issues.

#### References

Berg, K., S. Sherwood, K. Murphy, G.I. Carpenter, et al. (1997). "Rehabilitation in nursing homes: a cross-national comparison of recipients." Age Ageing 26 Suppl 2: 37-42.

Bishop, C.E. and M. Visconti (2000). Impact of Medicaid Rate Methods on Case-Mix Adjusted Nursing Home Staffing. Prepared for Presentation at the American Public Health Association Annual Meeting, Boston, Massachusetts, November 14, 2000: Schneider Institute for Health Policy, Heller Graduate School, Brandeis University.

Bishop, C.E. and M. Visconti (2001). A Two-Tier Market for Nursing Home Care? Inequality of Access and its Relationship to Payment. Schneider Institute for Health Policy, Brandeis University.

Campbell, J.C. and N. Ikegami (2000). "Long-term care insurance comes to Japan." Health Aff (Millwood) 19(3): 26-39.

Carpenter, G.I., J.P. Hirdes, M.W. Ribbe, N. Ikegami, et al. (1999). "Targeting and quality of nursing home care. A five-nation study." <u>Aging (Milano)</u> 11(2): 83-9.

Chalkley, M. and J.M. Malcomson (1998). "Contracting for health services when patient demand does not reflect quality." <u>J Health Econ</u> 17(1): 1-19.

Fries, B.E., M. Schroll, C. Hawes, R. Gilgen, et al. (1997). "Approaching cross-national comparisons of nursing home residents." Age Ageing 26 Suppl 2: 13-8.

Frijters, D.H., V. Mor, J.N. DuPaquier, K. Berg, et al. (1997). "Transitions across various continuing care settings." Age Ageing 26 Suppl 2: 73-6.

Ikegami, N., J.N. Morris and B.E. Fries (1997). "Low-care cases in long-term care settings: variation among nations." Age Ageing 26 Suppl 2: 67-71.

Leutz, W.N. (1999). "Five laws for integrating medical and social services: lessons from the United States and the United Kingdom." Milbank Q 77(1): 77-110.

Minemawari, Y., Y. Nakagawa, K. Shido, K. Aso, et al. (2001). "[Evaluation and improvement of medical and nursing service and caregiving for the elderly using MDS. 3. Revised recording system of diagnoses and symptoms suitable for use in Japan]." Nippon Ronen Igakkai Zasshi 38(3): 347-51.

Nakagawa, Y., K. Shido, Y. Minemawari, M. Kawabata, et al. (2000). "[Evaluation and improvement of medical and nursing service and caregiving for the elderly using MDS. 2. Diagnosis and symptoms, especially diseases causing care-requiring conditions]." Nippon Ronen Igakkai Zasshi 37(12): 1014-21.

# 第II部 平成14年度 研究報告 第2研究「高齢者の所得保障としての年金に関する5カ国共同研究」

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厚生労働科学研究費補助金政策科学推進研究事業 平成14年度「高齢者の生活保障システムに関する国際比較研究」

第2研究「髙齢者の所得保障としての年金に関する5カ国共同研究」

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#### 1. 研究の概要

#### 研究要旨

日本の年金改革の議論にとって欠かすことのできない論点について、先進5か国(アメリカ、イギリス、ドイツ、フランス、スウェーデン)での議論やエビデンスを調べるため、日本の研究会で Questionnaire を作成し、5カ国の研究者と共同研究を実施した。2004年度に予定されている次期年金改正の議論に資するため、2003年の春に東京で Workshop を開催した。

#### A 研究目的

日本の年金改革の議論にとって欠かすことのできない論点について、先進5か国(アメリカ、イギリス、ドイツ、フランス、スウェーデン)でどのような議論がなされ、どのようなエビデンスが提示されているかを調べるため、日本の研究会で Questionnaire を作成し、5カ国の研究者との共同研究を通して解答を探る。 Questionnaire の作成に当たっては、年金制度の公平性・整合性、給付の十分性、制度の中長期安定性、公私の役割分担、等を盛り込むとともに、各国の改革(案)を解釈するに当たっては、各国の制度的背景を十分考慮する。このような比較研究から日本の年金改革の議論に有益な選択肢を考察する。

#### B 研究方法

初年度である 14 年度は、Questionnaire を作成し、研究の枠組みを設定した。次期年金改革のスケジュールを考慮して、2年目に予定していた workshop を 14年度に開催した。 2002年11月22日にスウェーデンに関する会議を開催し、2002年2月21日にスウェーデン以外の国に関する workshop を開催した。

15 年度は1年目の workshop の成果を踏まえて、Questionnaire の回答を完成させる。また、研究者同士の共同研究を継続して共著ペーパーの作成を目指す。日本に関する論文は2003年5月にベルギーで開かれる第4回 ISSA Research Conference で発表する。また、workshop で議論したペーパーの改訂版は2003年12月発行予定の社人研 Web Journal (英文)において公表する予定である。

16 年度は特定のテーマを選んで共同研究をさらに進め、研究の深化を図るとともに、研究成果の普及を図るために日本の雑誌での発表やセミナーの開催を計画する。その際、推進事業を活用して海外の研究者を招聘する予定である。

#### C 研究結果

- 1. Questionnaireのうち5か国に共通の事項は次のとおりである。
- 1) 給付:

年金給付の対GDP比、給付の型 (DBかDCか)、被用者年金 (支給開始年齢と給付額の水準、所得代替率)、定額年金 (支給開始年齢と給付額の水準)、高齢者 5 分位階級別収入源構成割合、等

#### 2) 負担:

財源構成(国庫負担の割合,目的税)、保険料率(上限所得、税を含めた実質保険料率)、 財政方式、保険料率の将来推計

#### 3) トピックス:

被用者VS自営業者、再分配の種類と程度、女性と年金(専業主婦の扱い、遺族年金)、育児・介護との関係、公的年金の機能 (Income Smoothing, 所得再分配、世帯vs.個人)、lifetime rich/poor に対する公的年金の作用、企業年金のウエイト(拠出面、給付面)、等

4) 問題点と改革の方向:

負担の限界と長期安定性、世代間公平性、制度の整合性で特に問題になる点、どの部分を 私的仕組みに依存するか(積み立て方式のウエイト)、国民のサポート、等

2. 各国ごとに下記のペーパーが 2月 21 日の workshop で発表された。

日本 Public pension reforms in Japan: background (Fukawa)

Next Public Pension Reform in Japan (Yamamoto)

Pension Reform Toward an Aging Society (Seike)

フランス Pension Reform in recent France (Oka)

スウェーデン Pension Reform in Sweden (Mivazato)

イギリス Pension Reform in the UK: Implications for Japan (Yamamoto)

アメリカ Social Security Reform in the United States : Implications for Japan (Clark)

3. 今後の課題として次のような点が明らかになった。

フランス

- 一公的年金改革の過去 10 年間の歩みと今後の展望
- 一社会連带 vs 存続可能性

ドイツ

- 実質保険料率と労働コスト
- 育児クレジット・介護クレジットの比重
- -Riester 年金の動向
- ースライドの新方式
- スウェーデン
- -NDC の光と陰
- 日本への適用について

#### イギリス

- -公対私:6対4から4対6へ
- -年金制度の所得再分配効果
- -個人が負担する老後の総コスト

#### アメリカ

- -OASDI による所得再分配の大きさ
- -年金改革の選択肢の幅
- -Earnings test、年金課税
- -私的仕組みの重要性

#### D 考察

経済の成熟化とグローバル化、人口の少子高齢化、財政状況の深刻化などにともなって、 今日、先進諸国は福祉国家の再構築という大きな課題に直面している。先進諸国はそれぞれの国ごとにその置かれた状況の中で社会保障改革を行っているが、一方で他国の経験を 参考にし、他国の改革の方向を自国の改革の選択肢に加えるなど、改革の理念や改革の土 台となるエビデンスを共有しようという動きが活発になっている。

5か国はそれぞれの経済・社会的状況の中で公的年金の改革を行い、各国ごとに以下のような際立った特徴がみられた。

#### フランス

- 1) フランスの近年の年金改革の議論の主要要素は a) PAYG 方式の公的年金の給付水準低下を補う年金貯蓄基金の創設、b) 早期引退の流れを覆し、50 歳以上の労働参加率を高める施策、の2つである。
- 2) 数多くの改革案が提示されてきたが、いずれも早期引退の現実と既得権擁護の壁に阻まれて、改革は進んでいない。

#### ドイツ

- 1) 2001 年改正の影響は今のところまだ小さいが、a) 給付→拠出から拠出→給付へ、b) 1 階建て制度から 2 階建て制度へ、とパラダイムの転換を伴っている。
- 2) Riester 年金の給付に占める割合は 2030 年の退職者でも多くて 12%程度であるが、この部分の給付は不平等を拡大する。
- 3) 2001 年改正は甘い前提に基づいているので、今後「1階部分の縮小・2階部分の拡大」の方向の改正が必要になる。
- 4) ドイツの育児クレジットは国際的にみて大変寛大である。早期引退をくい止める措置はさらに必要である。

#### イギリス

- 1) 2000 年以降のイギリスの仕組みは
  - 1階 PAYG 基礎年金
  - 2階公的 第2年金 (State Second Pension: 定額給付で低所得者向; PAYG SERPS は2002年4月に廃止)
  - 2階私的 企業年金又は個人年金

さらに積立方式の SHP (Stakeholder private pension; 2002 年から) 従来からの基本構造(低所得者には means-testing、中所得以上には私的仕組みを用意し、 政府の役割は最小にとどめる) は変わっていない。この背景には強力な保険業界の存在が ある。

- 2) イギリスの企業年金は充実していた(最終給与にリンクした DB、被用者の 3/5 をカバー)が、近年 DC プランが増え(DB 加入者数は 1991 年の 5.6 百万人から 2001 年には 3.8 百万人に減少)、同時に DC プランでは事業主負担の割合が減っている。
- 3) 退職所得の option として高所得者は投資(特に住宅投資)、中所得者は個人年金や企業年金が重要で、国の年金に頼っているのは低所得者のみである。

#### アメリカ

- 1) 1983 年の改正以降、大きな改正はない。高所得者への年金給付の課税が強化されたが、これはむしろ公的年金の給付削減と受け取られている。
- 2) 抜本的な改革を主張する声は高まっている (Martin Feldstein, Heritage Foundation, Cato Institute) が、個人退職勘定 (PRA) が近い将来導入される可能性は小さい。
- 3) アメリカは高齢者の中で所得格差が大きく、高齢者の貧困も存在しているが、大きな問題になっていない。
- 4) アメリカの年金改革の議論では保険料率の引き上げという選択肢が存在せず、育児や介護のクレジット、高齢者へのもっと寛大なセーフティー・ネット、などが無視されている。

#### E 結論

先進国の中で最も深刻な少子高齢社会を迎えると予想されている日本にとって、福祉国家の再構築は最も緊急性の高い政策課題である。日本が他の先進諸国から学ぶものは個別の制度改革もさることながら、その背景にある改革の理念や改革の土台となっているエビデンスであろう。そのためには2国間で研究機関同士が共同研究を実施・継続していくことが必要である。

# Public pension reforms in Japan: background T. Fukawa(IPSS), February 14, 2003

#### 1. Present situation in Japan

Entire working population has been covered by public pension system since 1961, but employees and self-employed are treated differently: Employees Pension Insurance (EPI) for private sector employees; National Pension for self-employed; and Mutual Associations for public sector employees. Therefore, Japanese public pension is a multi-tiered system. The first tier is the Basic Pension (BP), which was created in 1986, providing a flat rate benefit for every elderly. Participation in this scheme is mandatory for all residents between the ages of 20 and 60, and monthly premium per participant is a flat rate of 13.3 thousand yen. The system provides an individual benefit proportional to the number of years of contribution, and the benefit for those with 40 years of participation has amounted to 67 thousand yen per month per person since 1999. In order to help finance the first-tier pension, tax revenues, equivalent one-third of the actual benefit expenditure, are transferred to this scheme by the central government. The National Pension provides only the Basic Pension.

The Employees Pension Insurance (EPI) covers most of the employees in the private sector, although it does not cover part-time workers. The contribution to the EPI is 17.35 percent of monthly earnings (excluding bonuses) since October 1996 and 1 percent of bonuses since April 1995, both shared equally by employees and employers. In other words, the contribution rate is about 13.6 percent of annual earnings. This second-tier contribution includes the premium of the first-tier for both employees and dependent spouses of employees. The second-tier earning-related pension benefits are proportional both to the number of years of contribution and the average level of earnings, and benefits accrue at the rate of 0.7125 percent of earnings per year. The amount of old age pension received by retired employees is the sum of Basic Pension (basic part) and the earnings-related part, which was 108 thousand yen per month on average in 1999. Past earnings are revalued every five years to reflect the growth in post-tax earnings. Between reevaluations, the amount of the benefit is indexed to the increase in the CPI.

After retirement, the same indexation rules apply to benefits as apply to the revaluation of past earnings. An additional flat rate benefit of about 20 thousand yen per month is paid for dependent spouse.

The main characteristics of the EPI are summarized as follows: a) earned benefits depending on former contributions; b) combination of flat rate benefit (basic part) and earnings related benefit; c) income redistribution based on lifetime earnings; d) Pay-As-You-Go financing with accumulated fund payable for five years of benefits; and e) protection against inflation through adjusting benefits in line with a price increase. Expenditure on public pension was 7 percent of GDP, and model replacement rate of EPI old age pension was 43-44 percent (without dependent spouse) and about 60 percent (with dependent spouse) of net annual earnings of active employees. According to the Household Survey of the Ministry of Health, Labor and Welfare (MHLW), the share of public pension benefit for the elderly households (65 years or over) was 66 percent in 2000, and about 60 percent of elderly households depended completely on public pension.

#### 2. Public pension reforms in Japan

Public Pension reform has been one of the major issues for years in many developed countries. The issue is especially serious in Japan because of the very rapid ageing of the population as well as the structural issues within the system. The Japanese public pension system is statutorily required to review its financial stability at least once every 5 years. Public pension reform has been carried out together with these financial reviews. Benefit improvement was the main issue in the 1960s and 1970s. However, benefit reduction in various forms as well as the increase in efficiency and fairness of the system have been the main focus of the reforms since the 1980s. The Basic Pension was introduced in 1985 in order to provide a certain amount of benefits to every elderly person and to reduce financial burden of the National Pension. The most recent reform was in March 2000 (1999 Reform). Because of the rapid deterioration of the relation between the number of insured and beneficiaries in the near future, the Japanese system has been forced to reestablish its long-term financial stability by cutting future

benefit levels, in combination with other measures.

Hereafter, we discuss public pension reform in Japan, mainly focusing on EPI.

#### (1) 1994 Reform

The normal pension age was increased from 60 to 65 years old for the basic part of the EPI in 1994 Reform (gradual implementation between 2001 and 2013 for males; five years later for females). The following measures were also introduced in 1994 Reform:

a) revaluing past earnings in line with net wage increase (from gross wage increase); b) levying a contribution from bonuses, although the rate is only one percent; c) increasing work incentives for working pensioners aged 60-64; and d) exempting contributions (employee part only) during the child rearing period.

#### (2) 1999 Reform

The most serious problems in EPI are 1) the height of eventual contribution rate in order to maintain the present benefit level and 2) the degree of inter-generational inequality in the contribution-benefit relation due to the funding system (PAYG), which is vulnerable to demographic changes and economic fluctuations. The key issue in the 1999 reform was the reduction of future pension expenditures in order to keep contribution levels acceptable to active generations in future years.

The Japanese government showed five options for EPI reform in December 1997, and three alternatives to realize Option C (mentioned below) were made public in November 1998. Among the five options, Option A was to maintain the present benefit level, which meant that the contribution rate would ultimately increase to 34.3 percent of monthly earnings, or 26.4 percent of annual earnings. Option B was to reduce the final contribution rate to 30 percent of monthly earnings, which was agreed as the upper ceiling of contributions in the 1994 Reform. Option C was to reduce the final contribution rate to 20 percent of annual earnings, which meant reducing the total pension expenditure by 20 percent from Option A. Option D was to freeze the contribution rate almost at its present level, requiring a significant benefit reduction. Options A to D were all based on the present system, but Option E was completely different from the other options. Option E was to privatize the earnings-related part of the EPI, and the following points were argued by the government as the problems involved in this option

(Sakamoto, 1998): 1) Income security for those who work at middle or small companies may be seriously damaged; 2) Benefits cannot be protected against inflation; 3) It is estimated that the unfunded liabilities to be borne by the EPI are about 350 trillion yen, or 70 percent of GDP, in 1999, and the double burden borne by the transitional generations is huge.

The 1999 pension reform bill was passed by the Diet in March 2000, and its main features are summarized as follows:

- 1) (EPI) Benefit reduction of five percent in the earnings related part and benefit adjustment in line with price increase (not net wage increase);
- 2) (EPI) Gradual increase of normal pension age for earnings related part to 65 years over the period 2013-2025 for males and five years later for females;
- 3) (EPI) Expansion of contribution base from monthly earnings to annual earnings starting from April 2003;
- 4) (BP) Increase in government subsidy from present one-third to one-half of Basic Pension expenditure by the year 2004.

It is estimated by the government that these measures combined would reduce the total pension spending in 2025 by 20 percent, keeping the final contribution rate at 20 percent of annual earnings.

#### 3. Public pension reform in 2004

A new population projection was made public in January 2002, and discussions on the next pension reform, which is scheduled in FY 2004, has already started. Japan is trying to redefine the role of public pension system and make the system less vulnerable to economic and demographic changes.

Issues for the next pension reform proposed by the Ministry in December 2002:

#### (1) Backward

- Increase in government subsidy from present one-third to one-half of the Basic Pension expenditure;
- Increase in contribution which has been frozen due to economic situations;

#### (2) Forward

- Fixed contribution approach following Swedish model;
- Consideration of child raising; Taxation on pension benefits; etc.

According to the proposed fixed contribution approach, the premium rate will be increased gradually but be fixed at a certain level and the future pension benefit will be adjusted (i.e.decreased). The model replacement rate (average earners for 40 years with dependent spouse) will be around 52 % (currently about 59 %) under a scenario which fixes the premium rate of the EPI at 20 % (currently about 13.6 %). Part-time workers will also be included in the EPI to expand the premium paying population. Currently, they are either paying the premium of the National Pension, or if their spouses are subscribers of the EPI and their income is below a certain level, they are covered under their spouse's insurance for free. In order to support to increase the futere generations, various measures to help raising children will be incorporated in the pension scheme. As an effort to increase transparency of the system, a better notification will be introduced to inform the subscribers on the amount of pension they will be entitled to in future.

#### 4. Discussion

The public pension system for employees in private sectors in Japan has much in common with the other developed countries: pay-as-you-go financing method; earnings-related contributions and benefits; defined benefits; etc. However, the Japanese system has a flat rate benefit part, which of course increases the degree of income redistribution but also causes problems concerning contributions and the national subsidy. Public pension spending is 7 percent of GDP now in Japan, which is considerably lower than that in Continental European countries. However, the potential spending level promised by the system in Japan is more or less the same as in those countries.

Japan's 1999 Pension Reform would surely contribute to the stability of the public pension system, but many problems still remain unsolved. Other than the serious problems mentioned previously, there are several inconsistencies in the present system:

1) dependent spouses of employees are treated favorably; and 2) most pensioners do not pay taxes. The most important unsolved problem would be the people's lack of trust in

the public pension system. The public pension system is a long-term social institution, which should be supported by most of the population. How to redefine public pension system is the issue here, which needs a broad national consensus.

There is a growing recognition that pension programs need to reflect the profound changes which have occurred in society such as higher labor force participation of women, smaller family size, much longer periods spent in education and elderly people who are healthier in their later years than previous generations. This implies taking more explicitly into account a life-cycle perspective which will permit people to opt more readily for non-traditional work patterns, for family care periods, for lifelong learning and for gradual retirement (Hoskins, 1998). Reform discussions should also take into account such factors as a) intergenerational equity, b) individualization of social security rights for men and women, and c) consistency of social security with regard to work incentives.

More significant reform of the public pension system in Japan is to reduce the extent of the imbalance in the inter-generation transfers that occurs in the current system. This could be accomplished by reducing contributions to the state system to the actuarially fair level and then funding the remaining cost by general taxation (OECD, 1997a). The public pension reforms in Japan aimed to establish middle- and long-term stability of the system against ageing of the population. Japan is trying to redefine the role of public pension system and make the system less vulnerable to economic and demographic changes. Obvious options are to increase the pension age, to improve the management of the assets held by the state pension funds in order to raise the rate of return, to change the post-retirement indexation of benefits, to reduce the rate at which pension benefits accrue, and to raise the share of national subsidy. All of these options are included in the 1999 reform in full or to some extent (Fukawa, 1999). A number of other reforms are necessary to improve the equity of the system. To this end, it is indispensable to coordinate pension policy with other policies such as tax, employment, and family policy. Working longer is an obvious solution, and tax and social security policies that discourage women and the elderly from working should be revised as soon as possible. The tax treatment of pensions should be aligned with that of income from

employment (OECD, 1997a).

The most important factors for the sustainability of the public pension system are fairness of the system and public trust to the system. The following 4 points, among others, are the key points in the Japanese pension reform:

- 1) People need to continue their accustomed standard of living after retirement. It will be realized through a mixture of public and private arrangements.
- 2) It is important to avoid different treatment against different income sources.
- 3) Under the ageing of the population, contribution level should be decided first and benefit level should follow.
- 4) The roll of the public pension, such as degree of income redistribution, degree of linkage between contribution and benefit, etc., should be defined and agreed upon. It is also necessary to define which benefits will be covered by the public fund.

Japan is already undertaking such efforts as 1) expanding the financing basis; 2) reducing the benefit level; and 3) relying more on private arrangements. Intergenerational inequality is perceived as a serious problem (Ministry of Health, Labor and Welfare, 2001) and effects of population ageing are quite serious in Japan. Therefore, we are anxious to draw lessons from reform effects in other countries: Notional DC approach in Sweden; to offset the reduction of public pension benefits through introducing a tax-supported private pension system in Germany; and personal retirement account approach in the United States.

Table 1. Population an	d Social Sec	uritv Benefits	in Japan
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	Popula	ation	Co- resident	1		Life expectancy at		Social security benefits				GDP
Year			rate of	TFR	birth		As percentage of GDP (%)				Elderly	(trillion
	Total	65+	the				Total		Pension		related	yen)
	(million)	(%)	elderly		Male	Female		benefits	benefits		benefit	
			(65+)(%)								(%)	
1950	83.2	4.9		3.65	59.6	63.0						
1955	89.3	5.3		2.37	63.6	67.8	4.5	2.2	2.	2		8.60
1960	93.4	5.7	86.8	2.00	65.3	70.2	4.0	1.7	2.2			16.68
1965	98.3	6.3	83.8	2.14	67.7	72.9	4.7	2.7	1.0	1.0	:	33.77
1970	103.7	7.1	79.6	2.13	69.3	74.7	4.7	2.8	1.1	0.8		75.30
1975	111.9	7.9	74.4	1.91	71.7	76.9	7.7	3.7	2.5	1.4	32.9	152.4
1980	117.1	9.1	69.0	1.75	73.4	78.8	10.1	4.4	4.3	1.5	43.4	245.5
1985	121.0	10.3	64.6	1.76	74.8	80.5	11.0	4.4	5.2	1.4	52.8	324.3
1990	123.6	12.0	59.7	1.54	75.9	81.9	11.0	4.3	5.6	1.1	59.1	430.0
1995	125.5	14.5	54.3	1.42	76.5	83.0	13.4	5.0	6.9	1.5	62.9	483.2
2000	126.9	17.4	49.1	1.36	77.7	84.6	15.2	5.1	8.0	2.1	68.1	515.5
2025	121.1	28.7		1.38	79.8	87.5	23.4	8.0	11.2	4.2		
2050	100.6	35.7		1.39	80.9	89.2						