The Eight Key Questions on the 2004 Pension Reforms in Japan

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By

Dr. Kazutoshi KOSHIRO

Vice-chair, the Sub-committee on Pension

The Social Security Deliberation Council

Emeritus Professor, Yokohama National University

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Research Institute of Economy, Trade and Industry Japan

Q1 By What Measures Is the Pension System Made Financially Sustainable?

1. The contribution rate should be increased every year until 2017 to the ceiling 18.30%.
2. National government subsidy for the Basic Pension should be increased from 1/3 to 1/2 by 2009.
3. The Pension Reserve Funds be invested to earn a 3.2% (nominal, inflation at 1.0%) return.
4. Pension benefit should be restrained within the financial resources available by above 1~3 through (a) the automatic balancing mechanism, and (b) drawing out to one year's reserve by 2100 (see Table 1).
5. Thus, the Replacement Rate can be maintained at 50%

Provided that
(A) The TFR is to be restored to 1.39 in the future. Not easy task, but possible.
(B) The economy continues to grow so as to maintain
   (a) an annual 1.1% growth of real wages (inflation rate:1.0%),
   (b) the reserves should produce a 2.2% (real) return.

If not, further remedies will become necessary. The financial balance should be reviewed every five years.

The Automatic Balancing Mechanism through Modified Indexation

- The Initial Pension Benefit Determination for a New Retiree
  =The Annual Rate of Increase of Real Wages(1.1%) minus Modifiers

  Modifiers = Decrease in the Labor Force (the number of the active
  participants in the pension schemes) = - 0.6%
  and the Extension of the Life Expectancy beyond 65= - 0.3%
  The total deduction = 0.9%
  The Period of Adjustment = until 2023(p)

- The Pension Benefit of Current Retirees
  The Inflation rate minus 0.9%

  If the inflation rate remains below 0.9%, no further decrease below
  zero%
  If the prices decline, pension benefits also be decreased proportionately.

Table 1 Annual Balances, Revenues, Expenditure, and Reserves of Employees Pension Insurance, 2005~2100

| Fiscal Year | Contrubution Rate | Revenues | of which | | | Expenditure | of which | Balance | Amount of Reseves at the end of FY | Reseve Ratio | Replacement Ratio |
			Premiums	Investment Returns	%of Investment Returns		National Subsidy				
	%	trillino yen	trillino yen	trillino yen	%	trillino yen	trillino yen	trillino yen	trillino yen		%
2005	14.288	28.3	20.8	3.0	10.6	31.9	11.1	-3.6	163.9	5.2	58.8
2010	16.058	37.6	25.5	4.9	13.6	37.5	13.0	0.0	156.0	4.2	56.3
2020	18.300	49.2	34.8	5.8	11.8	43.3	16.5	5.9	186.3	4.2	51.5
2030	18.300	58.2	40.0	8.3	14.3	49.5	19.4	8.7	266.3	5.2	50.2
2040	18.300	66.2	43.1	10.3	15.5	62.9	25.4	3.3	330.1	5.2	50.2
2050	18.300	73.5	47.2	10.6	14.4	74.8	31.4	-1.3	335.0	4.5	50.2
2070	18.300	87.0	58.4	9.0	10.3	90.8	39.3	-3.7	284.4	3.2	50.2
2100	18.300	115.2	84.5	3.7	3.2	121.5	53.3	-6.4	115.1	1.0	50.2

Basic Assumptions:
      The final contribution rate 18.3% by 2017
      National subsidy   for the Basic Pension Benefit ½ by FY2009
      TFR after FY2050 is 1.39
      Macroeconomic slide is put in effect until FY2023
      Final replacement rate at 50.2%
Source: Mathematics Department, Pension Bureau, the MHLW, March 2005, p.249

(Replacement ratio is estimated by author based on MHLW's report.)

Q2 How will the Net Pension Liabilities Affect the Future Contribution Rates and the Replacement Rate?

- Even under the PAYG system with a stable population, a certain amount of Net Pension Liabilities arises conceptually. But that is a conceptual artifice.

  In Japan, due to the very aged population as well as the historical leftovers, "Net Pension Liabilities" are calculated as 570 trillion yen (Figure1). That will be financially covered by the proposed increase of the contribution rates together with the increased government subsidy, the drawing out of the reserve funds, and the introduction of the ABM.
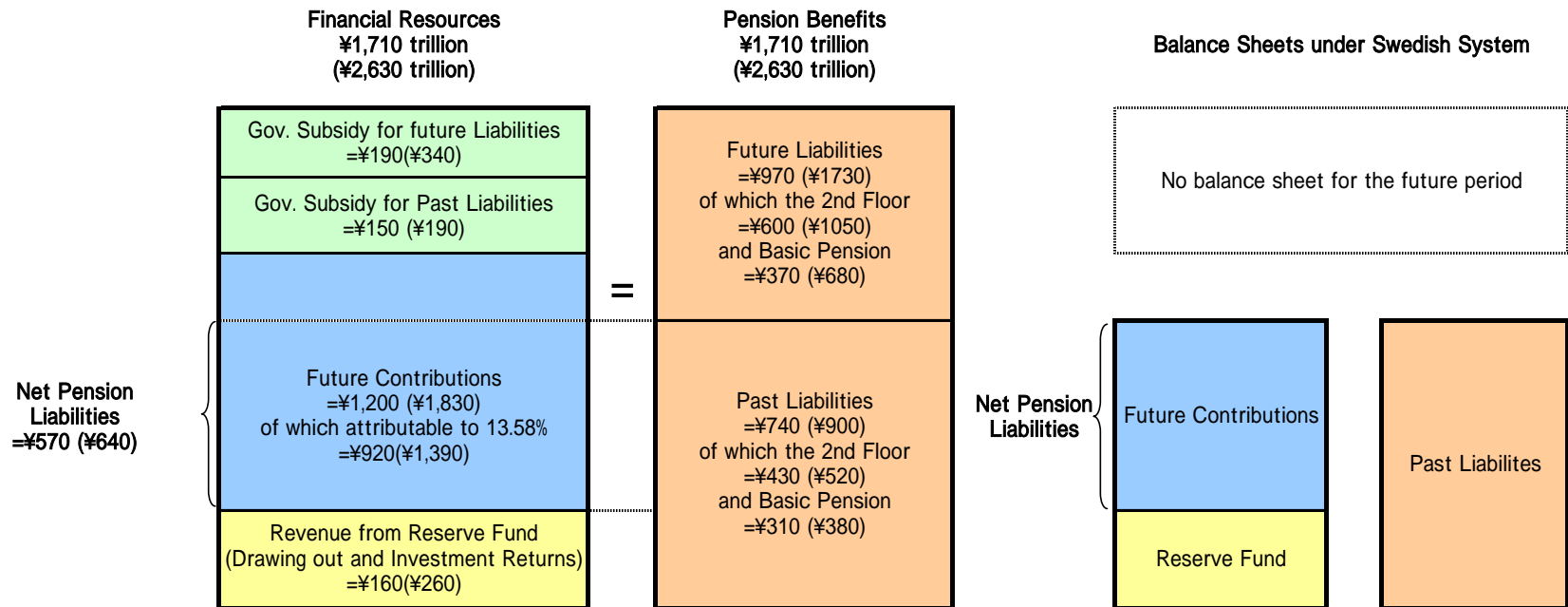
Q2   Continued

Some economists suggest that the "Pension Debts" (Net Liabilities) may become unendurable by the future generations under the decreasing population.

- An Alternative Idea to Reduce "Pension Debts" in the Course of Decreasing Population:
- Freezing the Contribution Rate at the Previous 13.58%,
- Keeping the 1/3 Government Subsidy to the Basic Pension (not increasing to ½).
- Thus, Reducing the Replacement Rate to 35%.
  (T.Oshio, 2005:129~139)

- Which Choice is better depends on Value Judgment on the Political Stability and Feasibility.

Figure . "Net Pension Liabilities" of the End of the FY 2004

Based on the Rate of Investment Return, 3.2%

(Based on the Increasing Rate of Nominal Wages, 2.1%)

Financial Resources
\1,710 trillion
(\2,630 trillion)

Pension Benefits
\1,710 trillion
(\2,630 trillion)

Balance Sheets under Swedish System

Gov. Subsidy for future Liabilities =\190(\340)

Gov. Subsidy for Past Liabilities =\150 (\190)

Future Contributions
=\1,200 (\1,830)
of which attributable to 13.58%
=\920(\1,390)

Revenue from Reserve Fund
(Drawing out and Investment Returns)
=\160(\260)

Net Pension Liabilities =\570 (\640)

=

Future Liabilities
=\970 (\1730)
of which the 2nd Floor
=\600 (\1050)
and Basic Pension
=\370 (\680)

Past Liabilities
=\740 (\900)
of which the 2nd Floor
=\430 (\520)
and Basic Pension
=\310 (\380)

No balance sheet for the future period

Net Pension Liabilities

Future Contributions

Reserve Fund

Past Liabilites

Figure Ⅱ. The Balance Sheet of the EPS As of the End of the FY 2004

Based on the Rate of Investment Return, 3.2%

(Based on the Increasing Rate of Nominal Wages, 2.1%)

Financial Resources
\1,710 trillion
(\2,630 trillion)*

Pension Benefits
\1,710 trillion
(\2,630 trillion)

Future Contributions
=\1,200 (\1,830)
of which attributable to 13.58%=\920(\1,390)**

Revenue from Reserve Fund
(Drawing out and Investment Returns)
=\160(\260)

Government Subsidy
=\340 (\540)

Gov. Subsidy for Past Liabilities
=\150 (\190)

Gov. Subsidy for future Liabilities
=\190(\340)

2004

Past Liabilities
=\740 (\900)
of which the 2nd Floor
=\430 (\520)
and Basic Pension
=\310 (\380)

Future Liabilities
=\970 (\1730)
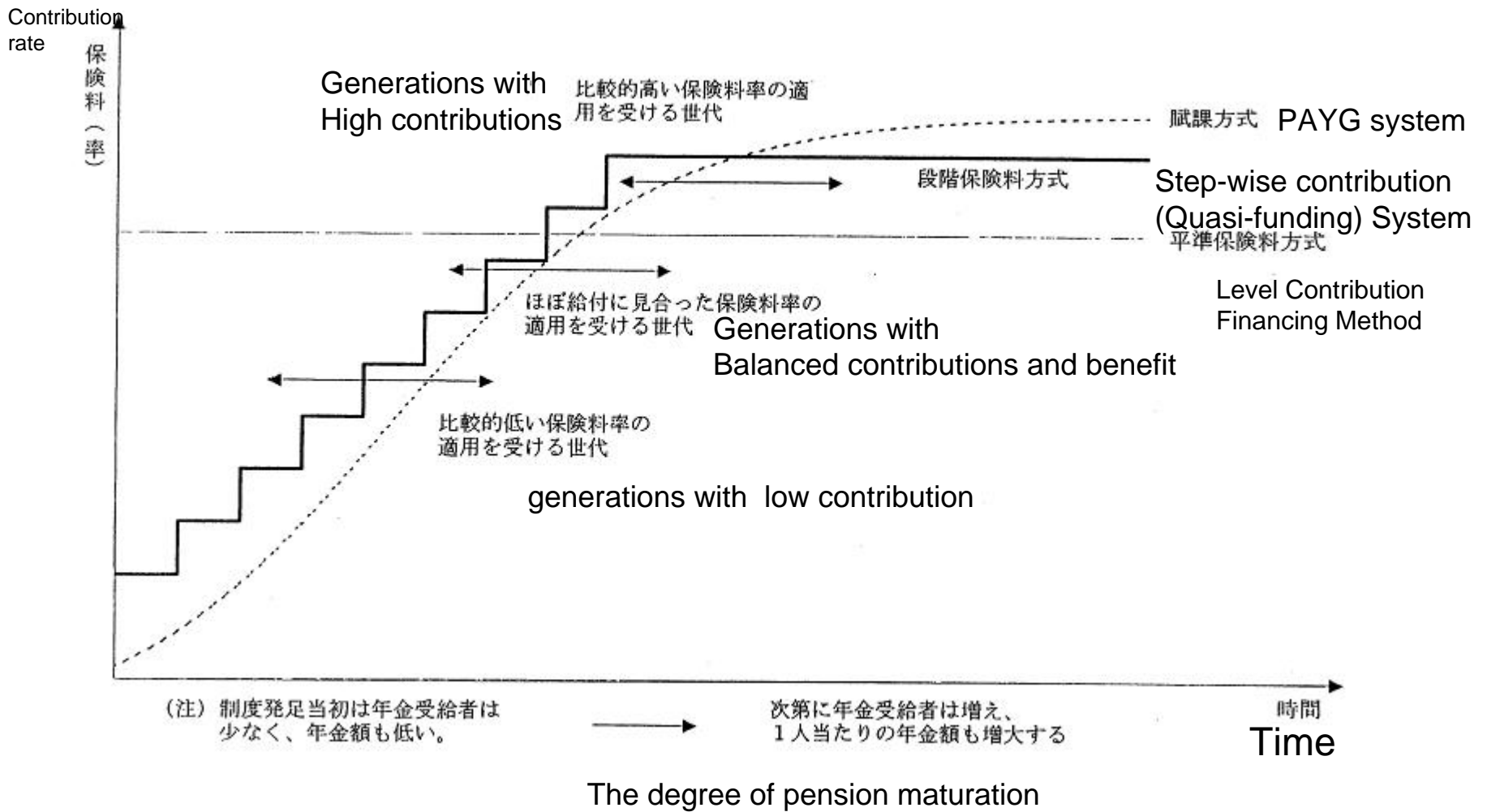of which the 2nd Floor
=\600 (\1050)
and Basic Pension
=\370 (\680)

2004

=

* : Numbers in blackets are as in the case of increase rate of nominal wage (2.1%) as discount rate
** : 13.58%is contribution rate up to the point of 2004. Thus \220 (1200-920) tri is axxociated with raising contribution rate.

Source: MHLW, The Results of the Financial Revaluation of the EPS and the NPS, 2005, p.296

Figure 3   A Comparison of Different Pension Contribution Systems

Contribution rate

保険料（率）

Generations with High contributions

比較的高い保険料率の適用を受ける世代

賦課方式 PAYG system

段階保険料方式 Step-wise contribution (Quasi-funding) System

平準保険料方式

Level Contribution Financing Method

ほぼ給付に見合った保険料率の適用を受ける世代

Generations with Balanced contributions and benefit

比較的低い保険料率の適用を受ける世代

generations with low contribution

（注）制度発足当初は年金受給者は少なく、年金額も低い。

次第に年金受給者は増え、1人当たりの年金額も増大する

時間 Time

The degree of pension maturation

Table 2 The Difference of Contributions and Benefits of the Employees Pension Insurance By the Year of Birth (Men)

The Year at Age 60	Age in 2002	Insured Year	Total Paid Contributions with Interest (10,000 yen)	Excluding Interests	Life Expectancy at Age 60	Monthly Pension Benefit Out of Own Contributions Including Employers' Contributions and Interest	Model Pension (monthly, 10,000 yen)	
							Initial Payment	Amount in 2002
1965	97	20	14	10	14.84	0.1	1.0	8.4
1969	93	24.4	30	20	15.20	0.2	2.0	11.2
1973	89	27	62	41	15.93	0.5	5.2	19.4
1976	86	28	111	74	17.38	0.8	9.0	21.0
1980	82	30	233	154	17.38	1.8	13.6	22.7
1985	77	32	502	303	18.31	3.7	17.3	23.0
1989	73	35	836	466	19.34	5.9	19.5	23.4
1994	68	37	1411	742	20.01	9.8	22.0	22.5
1999	63	40	2329	1176	20.30	16.1	22.0	22.0

MHLW, Pension Mathematics Department.

Q3 Will not the ABM Reduce the Basic Pension below the Subsistence Level?

The ABM is applied also to the Basic Pension.

The Monthly Amount of Basic Pension for a Retired Couple: ¥132,000

- The Minimum Subsistence Level: ¥122,000
- The Nominal Wages Increase=2.1%
- The Modifiers = - 0.9 %
- The Basic Pension Benefit be increased by 1.2%

  (2.1 – 0.9 = 1.2% > inflation rate 1.0%)

- Therefore, the real value of the basic pension benefit will be maintained above the subsistence level even under the ABM. <However, (Basic Pension Benefit)/(Average Wage) will decline during the ABM applying period.>

- The Amount of the Basic Pension in the Future:

    For those who were 65 years old in 2004: ¥66,000 16.6   for average earnings of active generation). Will be increased to ¥69,000 by 2024(11.4%).

    For those who were 45 years old in 2004:

    Will start at ¥81,000 in 2024(13.4%), and will become ¥99,000 by 2044(10.8%).

    For those who have not paid full contributions, their basic pension may become less than the subsistence level. They should be relieved by the welfare programs. The role of social insurances differs from that of the welfare programs.
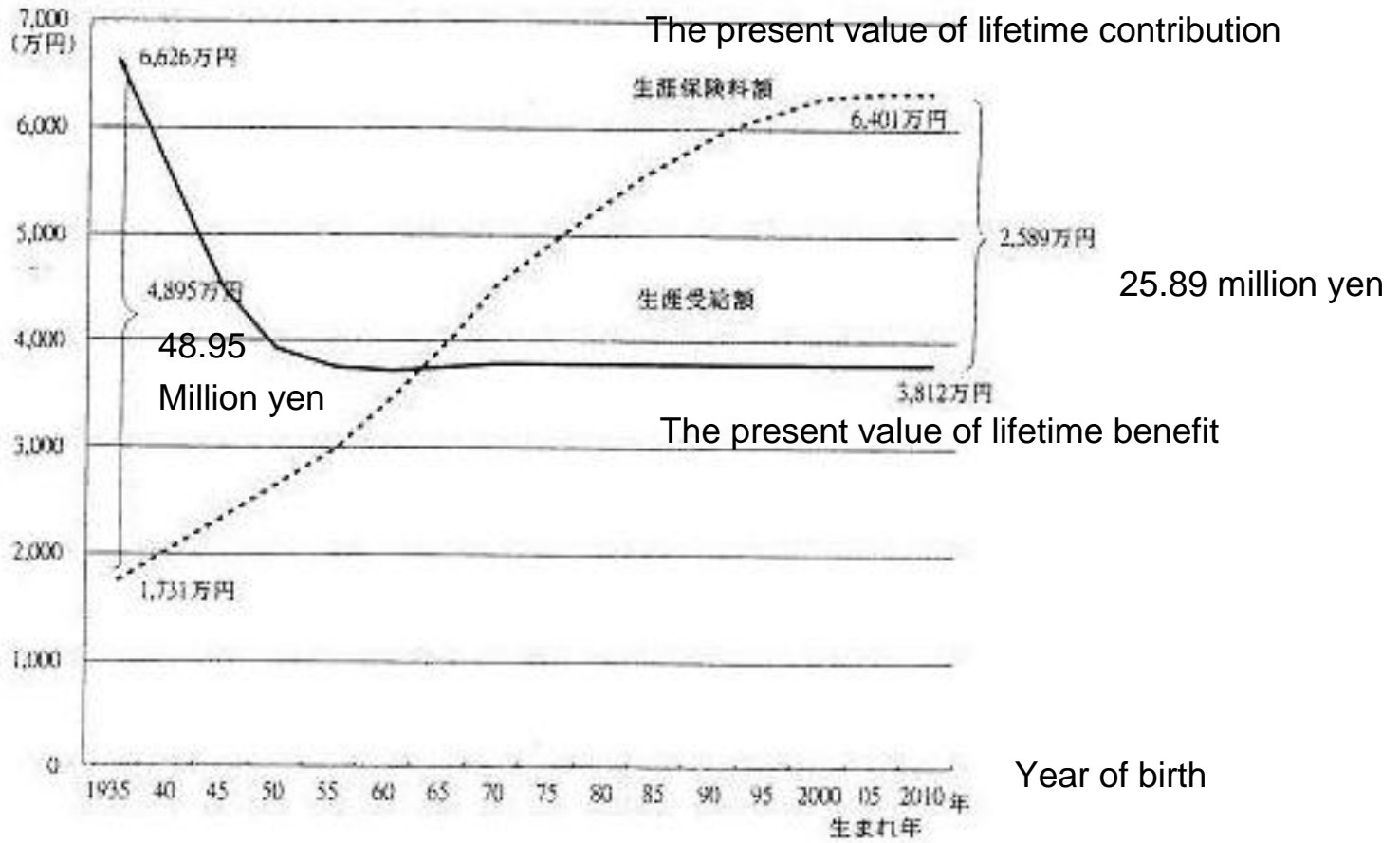
Q4
The Pension Benefit/Cost Ratio keeps above 1 even for the Younger Generations. Is the "Intergenerational Equity" really Preserved?

- Unlike the arguments raised by some academics, the Pension Benefit/ Cost (joint contributions with the employers) ratio keeps 1.15 even for those who were born after 1980. This is actuarially possible thanks to the increased government subsidy to the basic pension as well as an expected return from and the demolition of the large reserve funds. It also depends on the discount rate (the rate of increase of 2.1 % nominal wage increase).

- The concept of "intergenerational equity" should not be confined only to the cost/benefit of old age pensions. It should be extended to cover the broader social and private investment in the past. Any Aged Person must finally depend on societal support.
- The simulations for the families other than the "model type" is not available.

Figure 4 "Intergenerational Inequity" among Generations under the PAYG Employees Pension System

Ten Thousand Yen

The present value of lifetime contribution

7,000
(万円)
6,626万円
生涯保険料額
6,000
6,401万円
5,000
2,589万円
4,895万円
25.89 million yen
4,000
48.95
Million yen
生涯受給額
3,000
3,812万円
The present value of lifetime benefit
2,000
1,731万円
1,000
0
1935 40 45 50 55 60 65 70 75 80 85 90 95 2000 05 2010年
生まれ年

Year of birth

右上がりの実線は，生涯保険料額を，右下がりの点線は，生涯受給額を示している。
1935年生まれの人がネットで4895万円得をしているのに対し，2010年生まれの人は2589
万円損している。

注）賃金ベースは1935年生まれのもの。

Source: Oguchi & Hatta (1999), pp.4~5.

Table 3 The Intergenerational Differentials of Cost and Benefit of the Employees Pension Insurance System

	Year of Birth	1935	1945	1955	1965	1975	1985	1995	2005
	Age at 2005	70	60	50	40	30	20	10	0
Discount Rate : Increase Rate of Nominal Wage (2.1%)	Total Contributions (10,000 yen)	680	1,200	1,900	2,800	3,900	5,100	6,500	8,000
	Total Benefit (10,000 yen)	5,600	5,400	6,000	7,600	9,600	12,000	14,900	18,300
	B/C Ratio (excluding employer's contributons)	8.3	4.6	3.2	2.7	2.4	2.3	2.3	2.3
	B/C Ratio (including employer's contributons)	4.15	2.3	1.6	1.35	1.2	1.15	1.15	1.15
Discount Rate : Rate of Return of Investment (3.2%)	Total Contributions (10,000 yen)	830	1,500	2,500	3,700	5,100	6,600	8,300	10,300
	Total Benefit (10,000 yen)	5,200	4,900	5,500	6,800	8,600	10,700	13,300	16,400
	B/C Ratio (excluding employer's contributons)	4.7	2.6	2	1.9	1.7	1.6	1.6	1.6
	B/C Ratio (including employer's contributons)	2.35	1.3	1	0.95	0.85	0.8	0.8	0.8

Source: MHLW, The Summary of the Proposed 2004 Pension Reforms, January 2005

Q5 To What Extent the Adversarial Effects of Pension Systems on the Labor Market Be Alleviated?

- The 3rd Category Insured still exceeds 11.2 million. Polls split on the problem "Whether they should pay their own contributions?" The principle of "Pay as You Earn" vs. the economic theory of "the Imputed Income" from household work.

- The Extension of the Pension rights to Part-time Workers who work more than 20 hours a week?

- About 4 million more workers will be covered by the EPS.

Q5 continued

- The Partial Pension for Aged Workers after the Mandatory Retirement Age. The 20% cut was deleted (from April 2005).

- Pension Benefit of the Aged Workers between 65 and 69 who earn more than a certain amount be reduced (from April 2002).

- The 2nd Floor Pension benefit of the Rich Aged Workers above 70 shall be reduced to some extent (from April 2007).

Q6 Other Remaining Problems

1) The consolidation of the public pension schemes. Discussed since 1984. Consolidation of the EPS and the Mutual Aid Associations be achieved by 2007.

2) The DP bill to consolidate all the public pension schemes including the NPS is unrealistic because (a) incomes of the self-employed should be confirmed first by the tax-number for all citizens; (b) How much are the thresholds for the guaranteed pension benefit? (c) Most of the Rengo union members will not be able to receive the GPB despite their payment for the increased sales tax. Is such an idea politically feasible?

3) How to find out the financial resources to be appropriated for the increased government subsidy for he basic pension? Out of necessary 2.6 trillion yen, only a few hundred billion yen was appropriated from the increased tax for pension benefits. The remaining amount should be raised through tax reforms including the increase of sales tax.
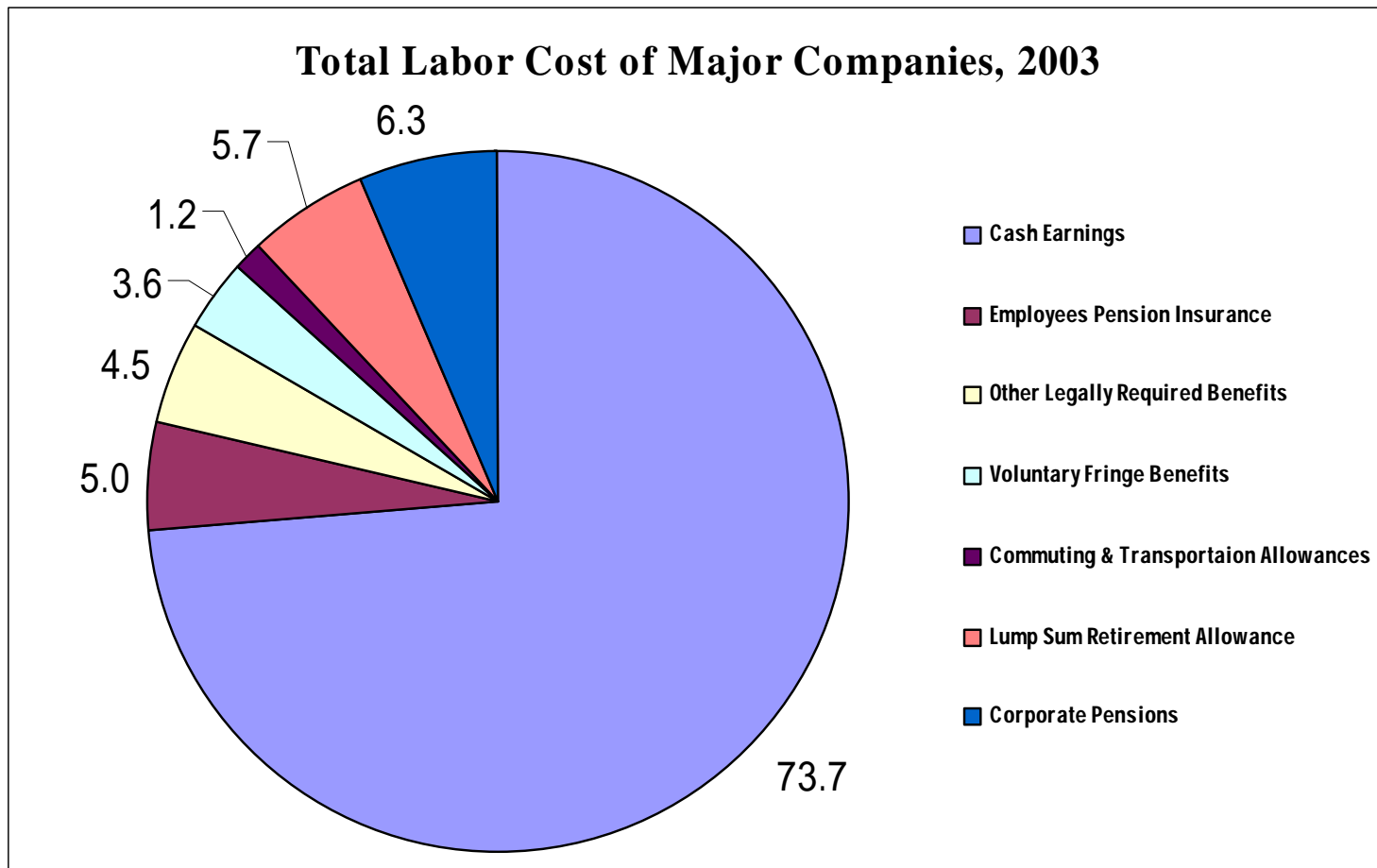
Q6 Continued
) Easy Understandable Formula

- The Formulas of Pension Benefit have become so complicated as a result of successive reforms that more simplified and understandable formulas are needed.

- The Point system be introduced in 2008.

- The Pension Points be informed to all the contributors individually.

Q7   Why not the NDC in Japan?

- The Reasons: (a) The Degree of Ageing is more serious in Japan; (b) The Swedish NDC is applied only to Old Age Pension (excluding survivors and disability pensions); (c) The Swedish pension system does not have a flat-rate benefit.

- As a result, the "Turnover Duration", an essential mathematical element for establishing the NDC system, can not be defined in Japan (see B.D. Mikula, 2001).Instead, the ABM was introduced.

Q8 The Increasing Supplementary Role of Corporate Pensions to Maintain the Reasonable Replacement Rate

Total Labor Cost of Major Companies, 2003

Pie chart values: 6.3, 5.7, 1.2, 3.6, 4.5, 5.0, 73.7

Legend:
- Cash Earnings
- Employees Pension Insurance
- Other Legally Required Benefits
- Voluntary Fringe Benefits
- Commuting & Transportaion Allowances
- Lump Sum Retirement Allowance
- Corporate Pensions

Source: Nippon Keidanren, Annual Survey of Fringe Benefits in the Fiscal Year 2003, Table 2, January 2005.

Figure 6   The Percentage Share of Corporate Retirement Benefits In the Total Labor Costs of Major Companies Affiliated to the Nippon Keidanren, 1960~2002