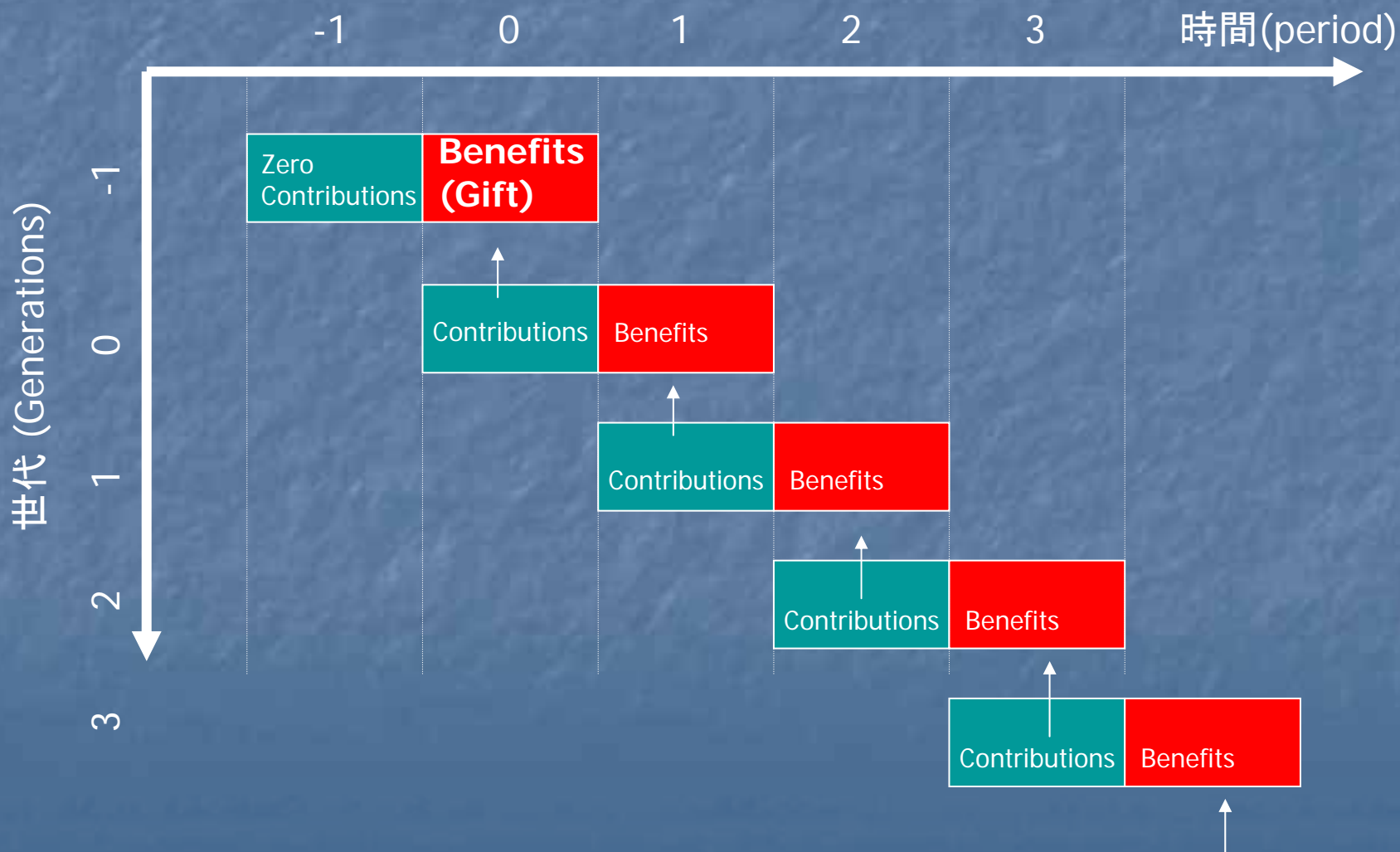


Supplemental data

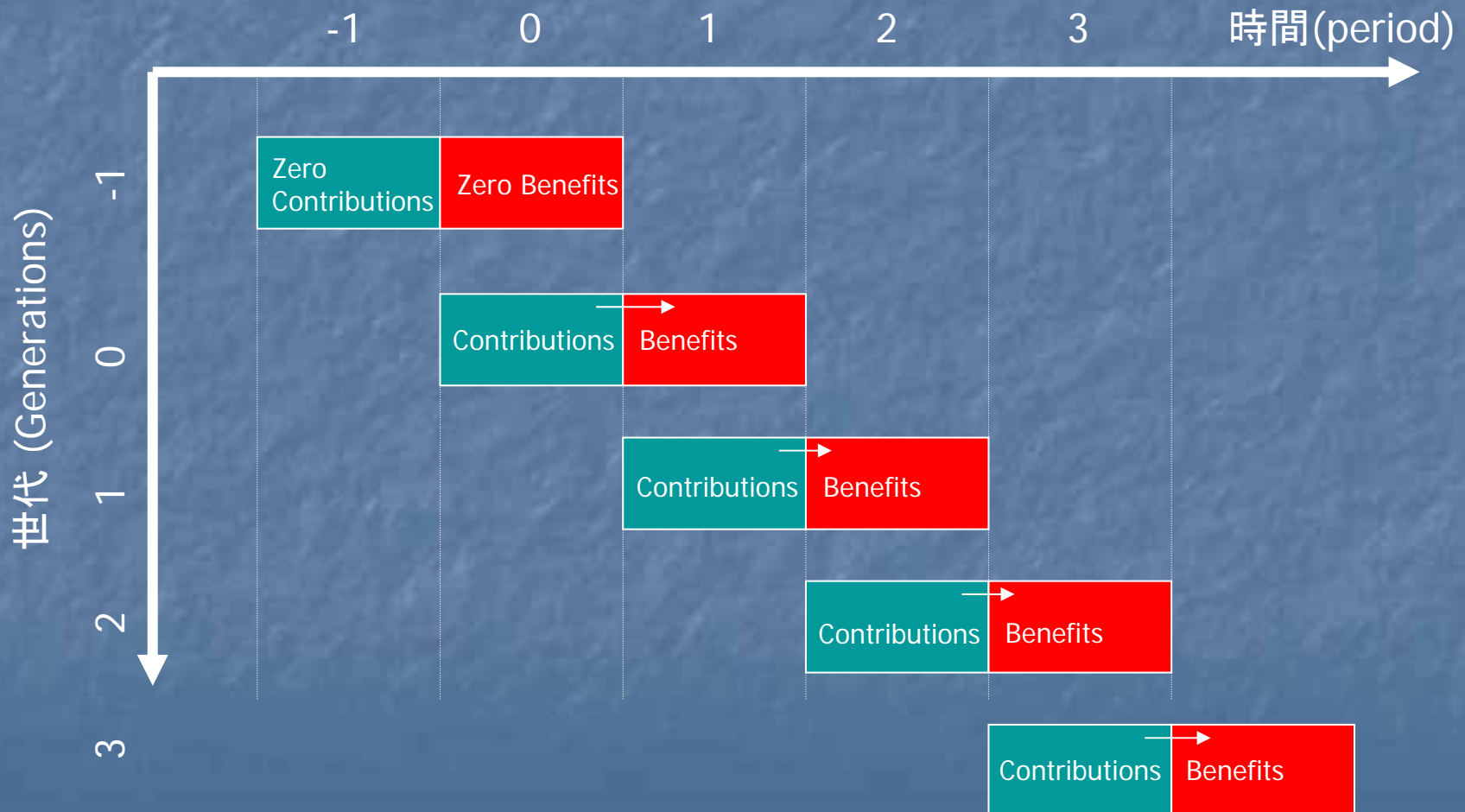
Nakata and Yoshitomi, RIETI

December 16 2005

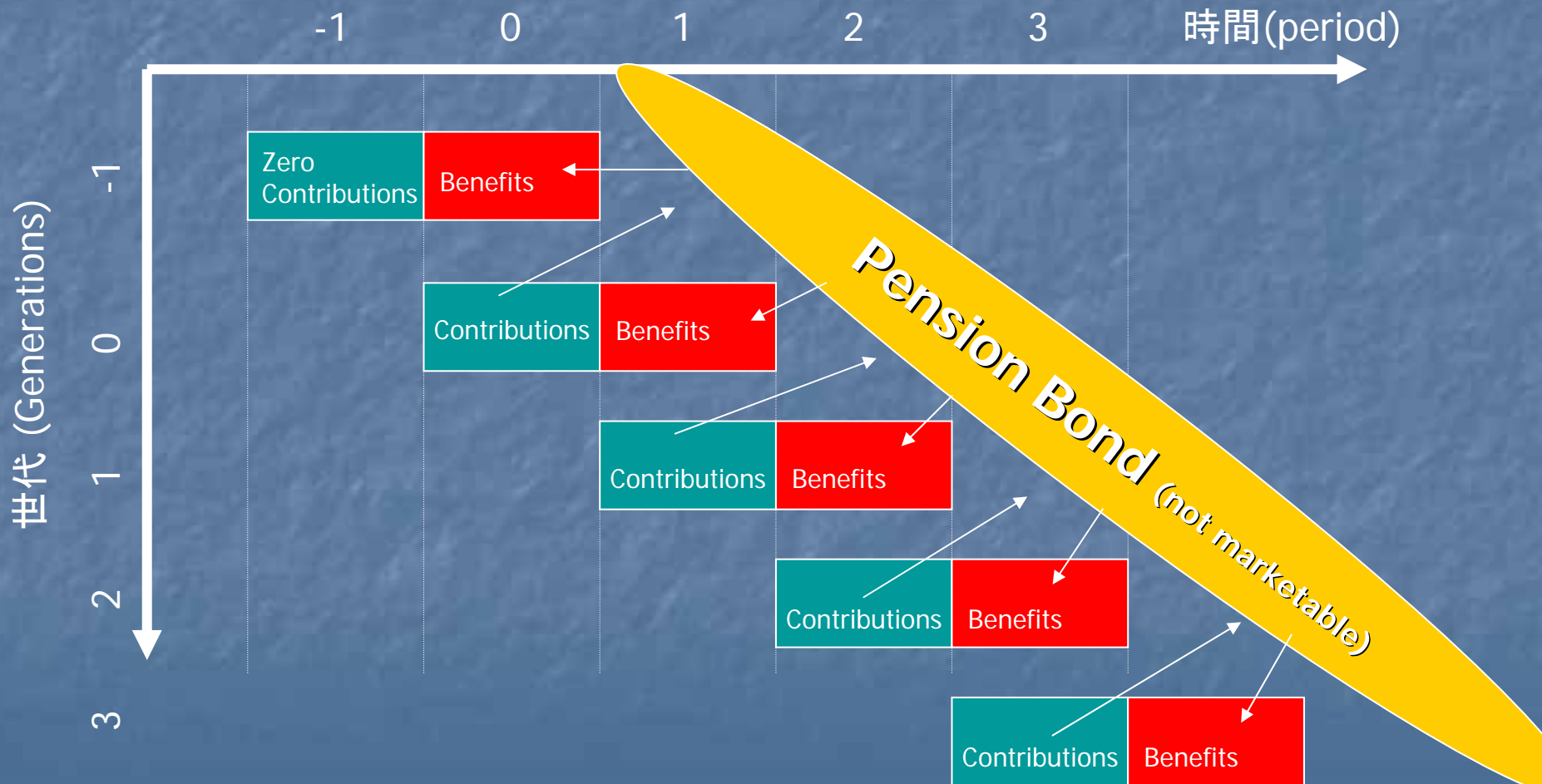
賦課方式の導入 — 初期世代に給付(Gift)あり — (Introducing PAYG System)



積立方式の導入 —その(1) 初期世代に給付なし— (Introducing Fully Funded System)



積立方式の導入 — その(2) 初期世代に給付(Gift)あり — (Fully Funded System: Revisited)



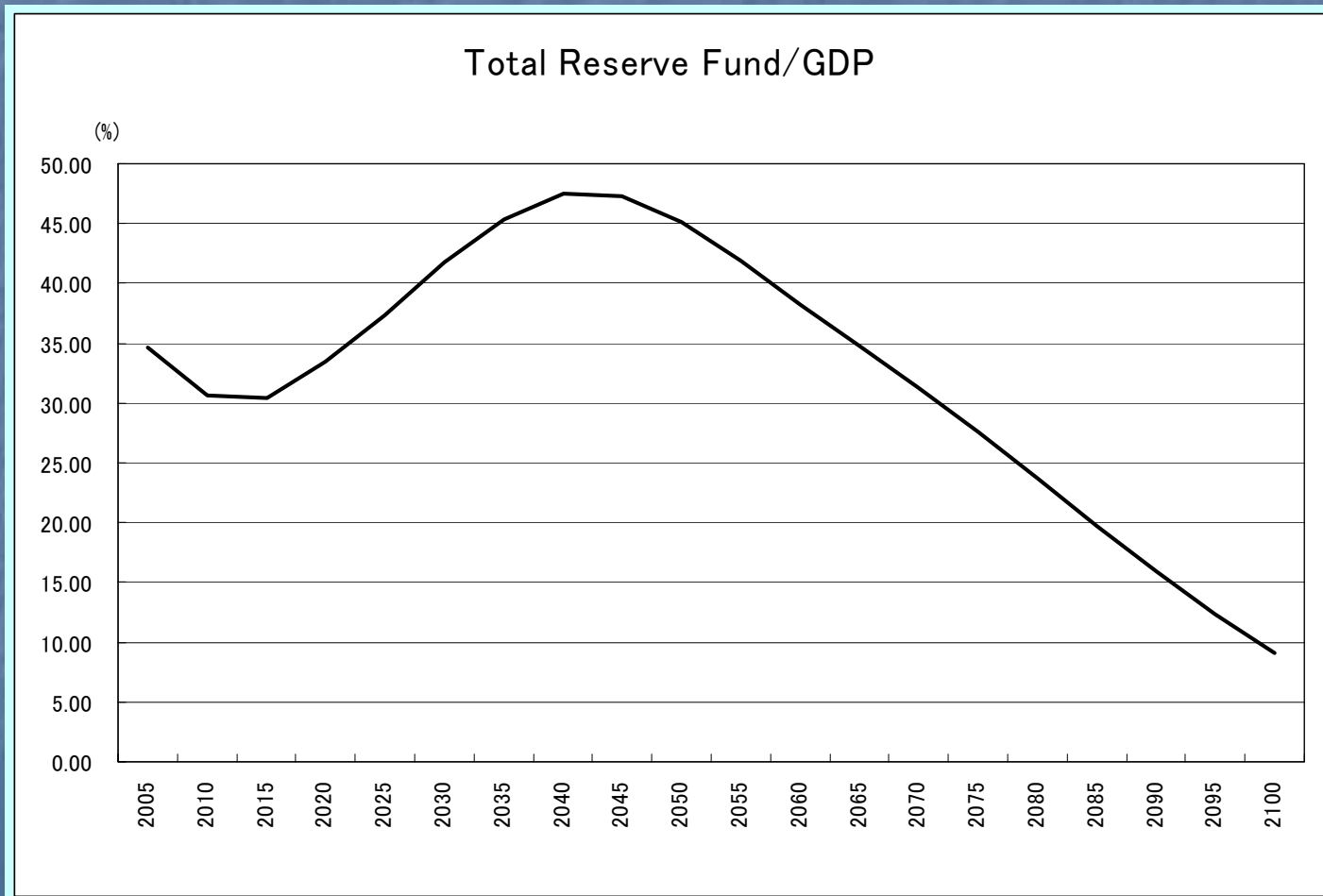
Public Pension Benefits and These GDP Ratio under the MHLW's Estimation

year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	GDP	Total Benefit of Basic Pension (including Gov. Subsidy)	BP /GDP	Total Benefit of Earnings-Related Pension(2nd-tier)	2nd-tier /GDP	Total Benefit	Total Benefit /GDP	Reserve Fund of EP	Reserve Fund of EP/GDP	Reserve Fund of NP/GDP	Reserve Fund of NP	Total Reserve Fund	Total Reserve Fund/GDP
	(Trillion Yen)	(Trillion Yen)	(%)	(Trillion Yen)	(%)	(Trillion Yen)	(%)	(Trillion Yen)	(%)	(Trillion Yen)	(%)	(Trillion Yen)	(%)
2005	504.6	16.8	3.33	20.8	4.12	37.6	7.45	163.9	32.48	10.8	2.14	174.7	34.62
2010	544.9	19.8	3.63	24.5	4.50	44.3	8.13	156.0	28.63	11.0	2.02	167.0	30.65
2015	579.5	23.1	3.99	26.3	4.54	49.4	8.52	162.5	28.04	13.8	2.38	176.3	30.42
2020	609.9	25.2	4.13	26.8	4.39	52.0	8.53	186.3	30.54	17.9	2.93	204.2	33.48
2025	658.9	27.2	4.13	27.8	4.22	55.0	8.35	223.1	33.86	23.2	3.52	246.3	37.38
2030	708.9	30.2	4.26	30.1	4.25	60.3	8.51	266.6	37.61	29.2	4.12	295.8	41.73
2035	751.5	34.5	4.59	33.3	4.43	67.8	9.02	306.1	40.73	34.7	4.62	340.8	45.35
2040	776.3	40.0	5.15	37.5	4.83	77.5	9.98	330.1	42.52	38.7	4.99	368.8	47.51
2045	800.5	44.8	5.60	40.7	5.08	85.5	10.68	338.0	42.22	41.0	5.12	379.0	47.35
2050	835.5	49.1	5.88	43.4	5.19	92.5	11.07	335.0	40.10	42.0	5.03	377.0	45.12
2055	878.3	52.6	5.99	45.5	5.18	98.1	11.17	325.6	37.07	42.2	4.80	367.8	41.88
2060	931.8	55.6	5.97	47.4	5.09	103.0	11.05	314.4	33.74	41.9	4.50	356.3	38.24
2065	984.7	58.6	5.95	49.3	5.01	107.9	10.96	301.2	30.59	41.1	4.17	342.3	34.76
2070	1036.2	61.7	5.95	51.5	4.97	113.2	10.92	284.4	27.45	39.7	3.83	324.1	31.28
2075	1090.5	64.9	5.95	53.8	4.93	118.7	10.88	263.2	24.14	37.7	3.46	300.9	27.59
2080	1153.0	68.2	5.92	56.2	4.87	124.4	10.79	237.9	20.63	35.2	3.05	273.1	23.69
2085	1224.7	71.7	5.85	58.9	4.81	130.6	10.66	209.1	17.07	32.3	2.64	241.4	19.71
2090	1308.0	75.4	5.76	61.8	4.72	137.2	10.49	178.4	13.64	29.0	2.22	207.4	15.86
2095	1401.2	79.3	5.66	64.9	4.63	144.2	10.29	147.0	10.49	25.4	1.81	172.4	12.30
2100	1503.4	83.6	5.56	68.2	4.54	151.8	10.10	115.1	7.66	21.6	1.44	136.7	9.09

Source: Author's Calculation based on MHLW's Projecon (<http://www.mhlw.go.jp>)

総積立残高/GDP 比率

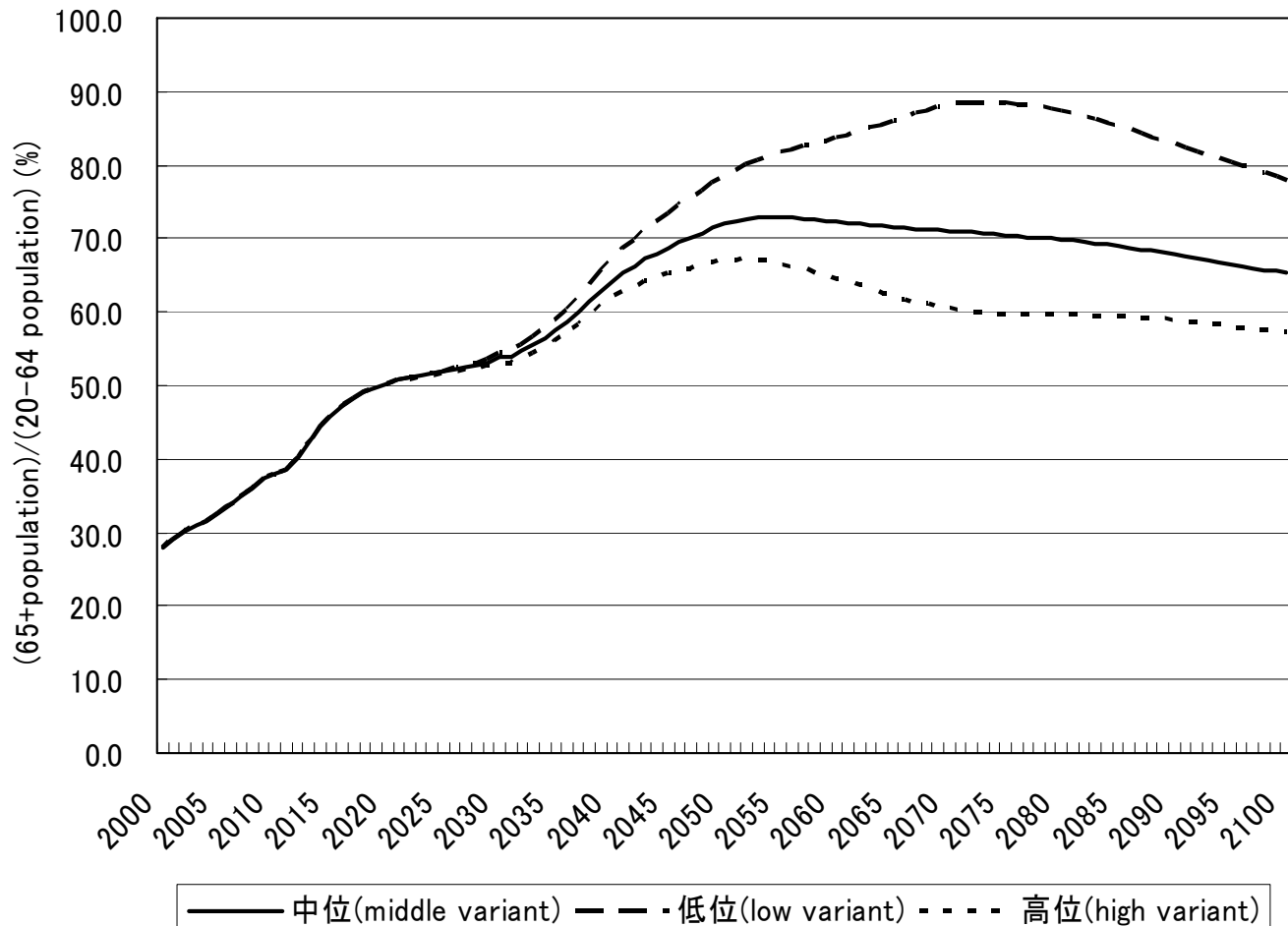
Total Reserve Fund/GDP Ratio



少子化による扶養比率の推移

Pensioner Support Ratio

(40-50年間は大きな影響なし)



- 社人研H14人口推計に基づく
- Based on IPSS's population projection
- 2050年以降のTFRは、
中位:1.387
低位:1.103
高位:1.625
- Assuming TFRs after 2050 are
middle:1.387
low:1.103
high:1.625

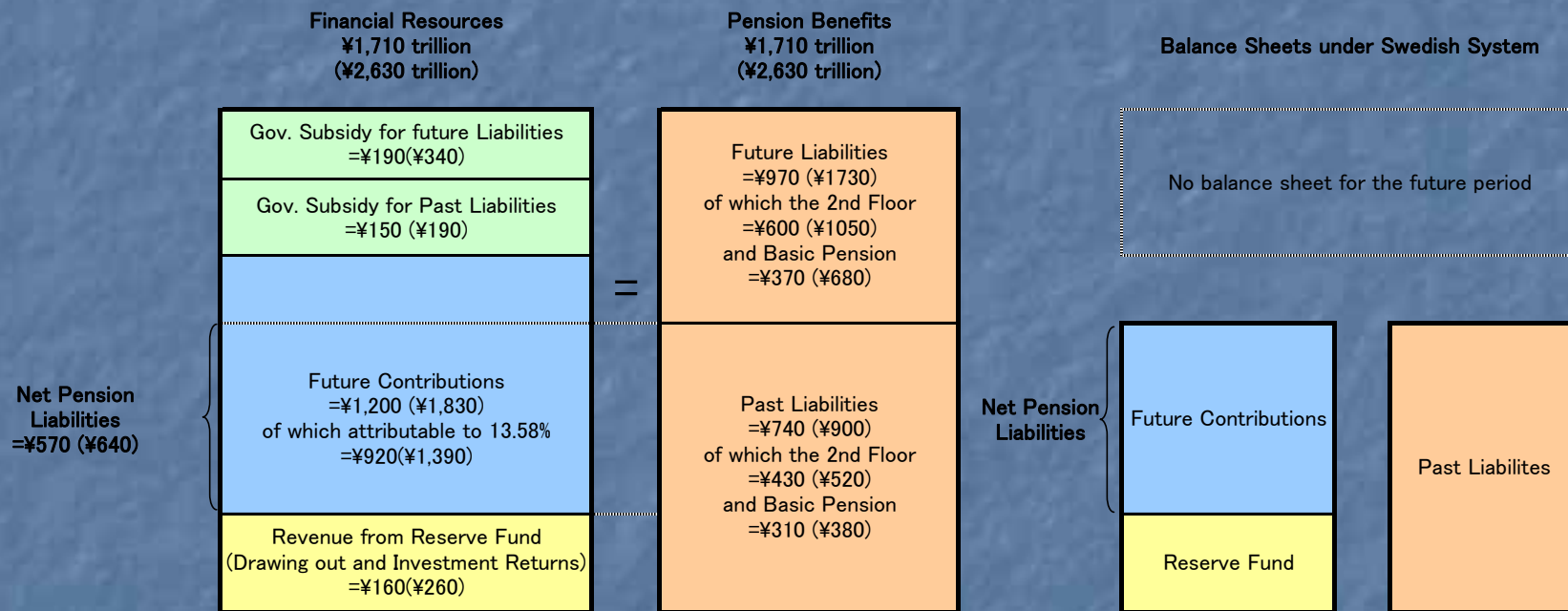
Table 3 The Intergenerational Differentials of Cost and Benefit of the Employees Pension Insurance System

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

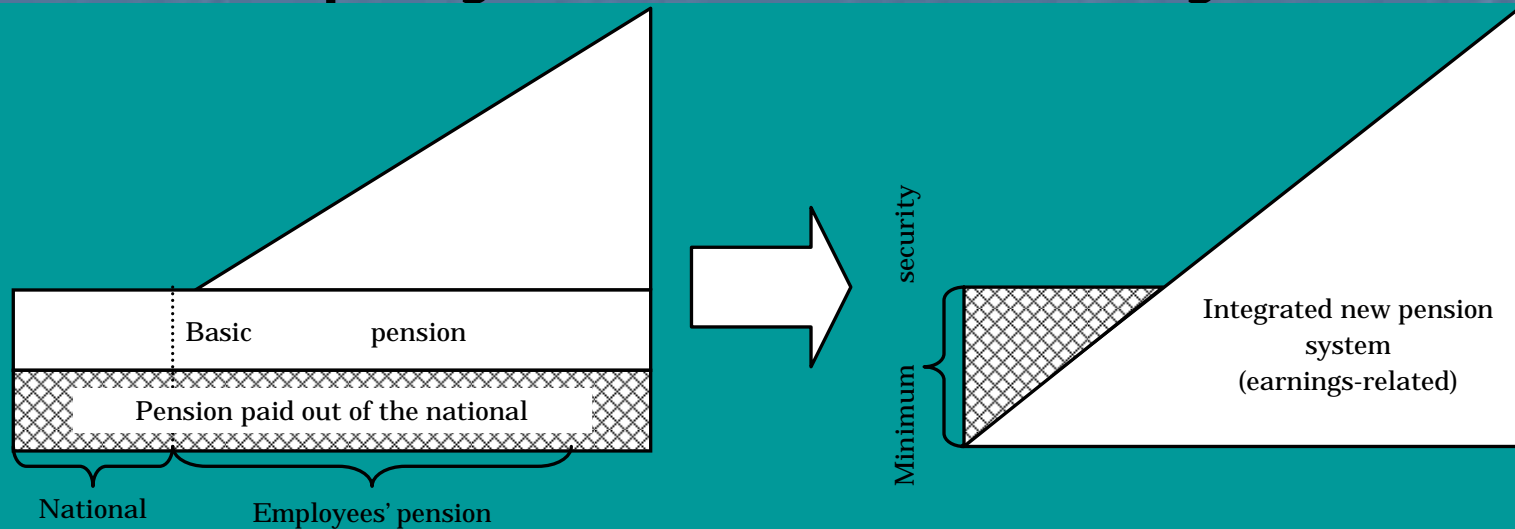
Source: MHLW, The Summary of the Proposed 2004 Pension Reforms, January 2005

Figure 1. “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%)



II. Integrating The National Pension and Employees' Pension Systems

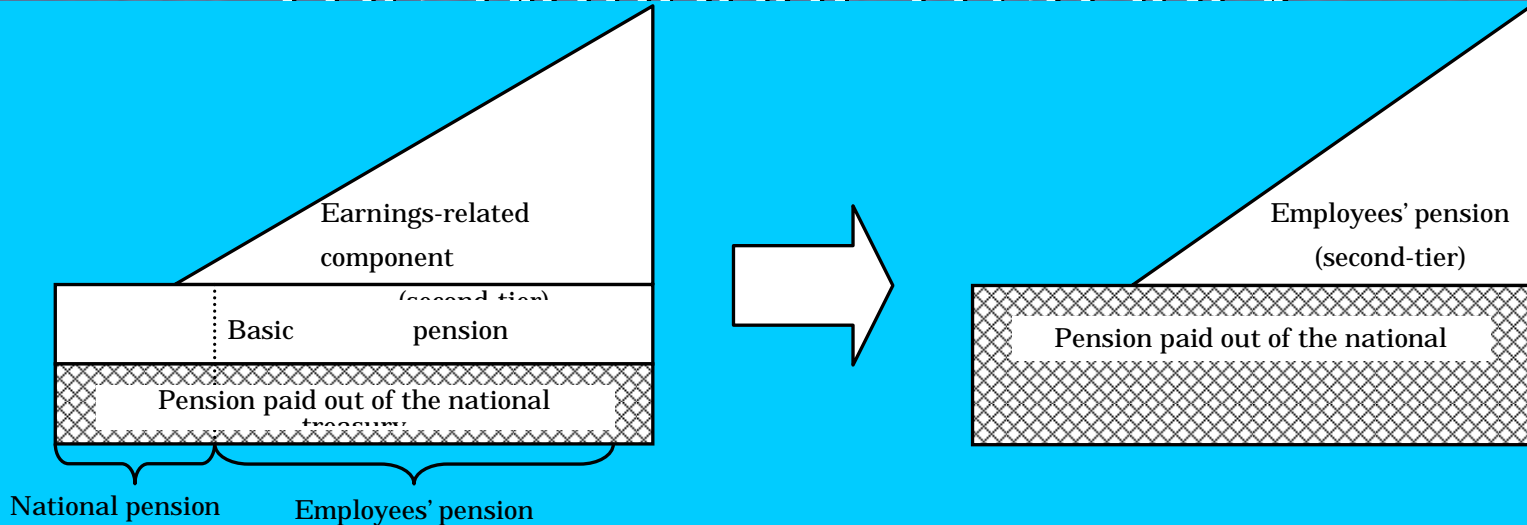


★ The current national pension and employees' pension systems are integrated into a new pension system based on earnings-related pensions.

★ While minimum security pensions are paid out of the national treasury on the basis of the assistance principle for those recipients who cannot afford to live on their earnings-related pensions alone.

- Advantage:
 - Neutrality to the subscriber's choice of occupation
 - The burden on the national treasury for the payment based on the assistance principle could be maintained at a low level toward the future.
- Disadvantage:
 - Because it would entail a significant change in the current pension system's framework, the costs relating to the transfer to the new system might be prohibitively high.
 - There is a possibility that differences may remain between different industries with respect to their ability to ascertain the incomes of the workers contributing to the pension system.

I . Paying Basic Pensions out of The National Treasury



★ 1st-tier : Minimum livelihood security based on the assistance principle. The revenue source from the government's general revenues or collection of taxes for this express purpose

★ 2nd-tier: Earnings-related benefit based on the insurance principle.

- Advantage:
 - Securable for the payment of pensions for the zero-income and low-income layers and for Category-3 insured without altering the current two-tier structure.
 - The assistance principle could be eliminated from the relationship between contributions and benefits under the second-tier premiums and a well-defined benefit scheme based exclusively on the insurance principle could be designed.
- Disadvantage:
 - the burden on the national treasury might prove to be too high because basic pensions based on the assistance principle would also be paid to the high-income layers.