Table 1 Income redistribution of the social security system as a whole

(1) Total

Gross Income (1,000 yen)	average	st. dev.	SCV
Total	2,385	3,494	2.147
Young (age 20-59)	2,914	3,530	1.468
Old (age 60+)	1,114	3,051	7.500
Gini Index (G_{BT})			0.662
Net Income with Social Security (1,000 yen)	average	st. dev.	SCV
Total	2,579	3,352	1.690
Young (age 20-59)	2,789	3,408	1.494
Old (age 60+)	2,075	3,157	2.315
Gini Index (G_{AT})			0.593
Reduction in SCV (%)			
Total			21.3
Inter-age group			4.6
Intra-age group			3.3
Incompleteness			13.3
Effective Progression [$=(1-G_{AT})/(1-G_{BT})$]			1.2057

(2) Private and public employees' pension programs

Gross Income (1,000 yen)	average	st. dev.	SCV
Total	3,867	3,511	0.825
Young (age 20-59)	5,128	2,998	0.342
Old (age 60+)	1,012	2,853	7.953
Gini Index (G_{BT})			0.475
Net Income with Social Security (1,000 yen)	average	st. dev.	SCV
Total	4,239	3,068	0.524
Young (age 20-59)	4,838	2,884	0.355
Old (age 60+)	2,882	3,042	1.114
Gini Index (G_{AT})			0.355
Reduction in SCV (%)			
Total			36.5
Inter-age group			22.6
Intra-age group			1.0
Incompleteness			12.8
Effective Progression [$=(1-G_{AT})/(1-G_{BT})$]			1.2269

(Source) The micro data from the 1996 Survey on the Redistribution of Income.
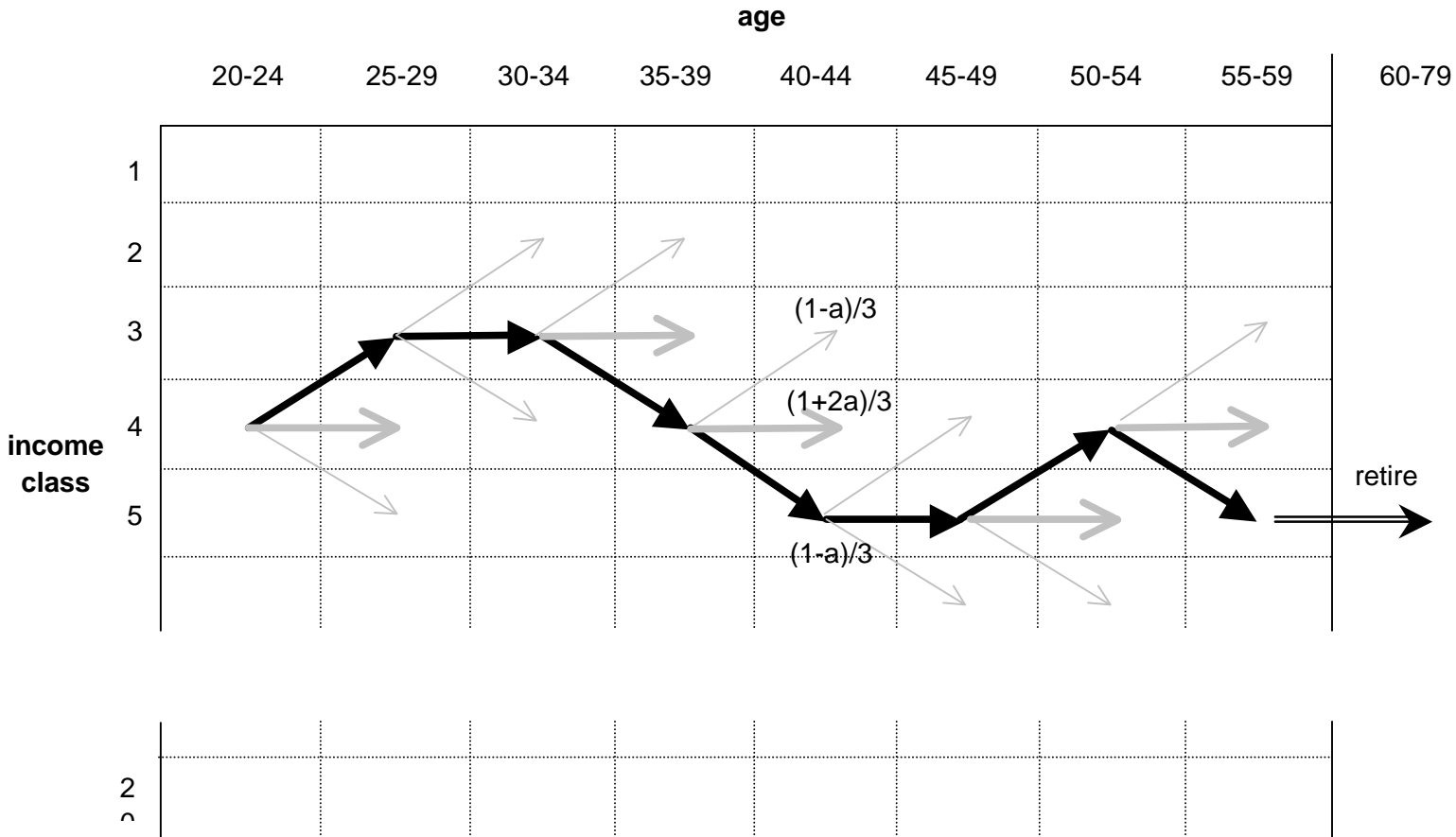
Figure 1 Simulated Life (an Example)

Table 2. Income redistribution of the current *Kosei Nenkin* program

	Interest Rate (% annual)	Degree of Immobility	Premium Rate (%)	SCV			Gini Indices			Change in Average Income (%)
				Gross Income	Net Income	Reduction (%)	Gross Income	Net Income	Effetive Progression	
Incomplete Sytem	Annual Income			0.986	0.341	65.4	0.526	0.294	1.4898	14.8
	Lifetime Income									
	1	0		0.141	0.119	16.1	0.214	0.196	1.0229	
		0.5		0.150	0.126	16.0	0.218	0.200	1.0235	5.8
		1		0.166	0.140	15.7	0.224	0.205	1.0242	
	2	0	16.5 (given)	0.138	0.122	12.0	0.211	0.198	1.0168	
		0.5		0.147	0.129	11.8	0.216	0.202	1.0171	1.5
		1		0.161	0.143	11.5	0.221	0.207	1.0175	
	3	0		0.136	0.124	8.6	0.209	0.199	1.0119	
		0.5		0.144	0.132	8.4	0.213	0.204	1.0121	- 1.9
		1		0.157	0.145	8.0	0.218	0.208	1.0123	
Complete Sytem	Annual Income			0.986	0.314	68.1	0.526	0.275	1.5302	0
	Lifetime Income									
	1	0		0.141	0.123	13.1	0.214	0.198	1.0198	
		0.5		0.150	0.131	12.5	0.218	0.203	1.0201	- 9.1
		1		0.166	0.147	11.0	0.224	0.208	1.0204	
	2	0	37.5	0.138	0.127	8.4	0.211	0.201	1.0130	
		0.5		0.147	0.135	7.7	0.216	0.205	1.0131	- 13.5
		1		0.161	0.152	6.1	0.221	0.211	1.0131	
	3	0		0.136	0.129	4.6	0.209	0.203	1.0077	
		0.5		0.144	0.138	3.9	0.213	0.207	1.0076	- 17.0
		1		0.157	0.154	2.1	0.218	0.212	1.0074	

(Note) A rate of population growth (n) is assumed to be equal to - 0.5% (annual).

Table 3: Simulation Results: Alternative Systems

Assumptions

Reform	Benefits	Premium/Taxation	Cap	Taxed income
Current	Wage- proportional & Flat	Wage- proprtional premium and no tax on benefits	7,080,000 yen/year	excl. bonus
I	Wage- proportional & Flat	Wage- proprtional premium and no tax on benefits	no	incl. bonus
II	Flat	Wage- proprtional premium and no tax on benefits	no	incl. bonus
III	Flat	Proprtional tax on wage and benefits	no	incl. bonus
IV	Flat	Consumption Tax without Price Indexation	no	incl. bonus
V	Flat	Consumption Tax with Price Indexation	no	incl. bonus

Premium/tax rate and income redistribution

Reform	Premium or Tax Rate (%)	Lifetime Income			Annual Income	
		Reduction in SCV (%)	Effective Progression	Change in Average Income (%)	Reduction in SCV (%)	Effective Progression
Current	37.5	7.7	1.0131	- 13.5	68.1	1.5298
I	27.2	15.6	1.0223	- 13.6	73.5	1.5525
II	14.3	14.8	1.0212	- 7.2	47.9	1.3364
III	12.5	12.9	1.0184	- 6.3	43.0	1.2953
IV	11.4	12.9	1.0184	- 3.8	31.1	1.2076
V	12.8	14.4	1.0206	- 4.2	34.6	1.2339

(Note) A rate of population growth (n) , the interest rate (r), and the degree of immobility of income class ( ) are assumed to be - 0.5%, 2%, and 0.5, respectively.

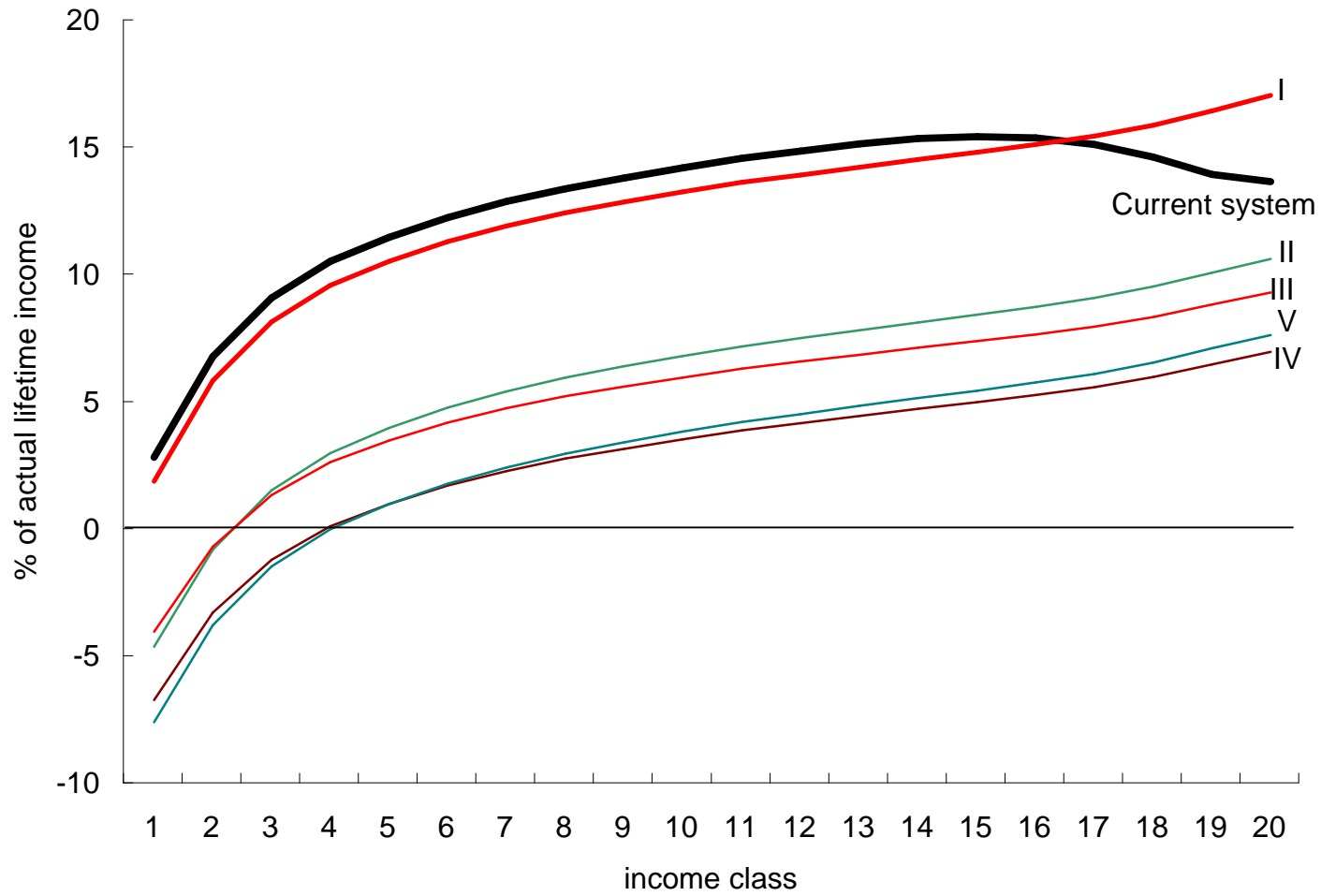**Figure 2 Net social security tax rates under the current system and propsed reforms**

Figure 3 Changes in average lifetime income and reductions in SCV