

# Income Inequality and Seriousness of Poverty in Japan

Toshiaki Tachibanaki  
Kyoto University

Table 1, Income distribution in Japan and other advanced countries compared

Country	Gini	Country	Gini
Denmark	0.225	Canada	0.301
Sweden	0.243	Spain	0.303
Netherlands	0.251	Ireland	0.304
Austria	0.252	Australia	0.305
Finland	0.261	<b>Japan</b>	0.314
Norway	0.261	U.K.	0.326
Switzerland	0.267	New Zealand	0.337
Belgium	0.272	U.S.	0.337
France	0.273	Italy	0.347
Germany	0.277	Portugal	0.356

Source: OECD(2004), Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s.

Note: An adjustment was made for household size by using an equivalent scale and data on disposable income.

Table 2, Poverty rates in OECD countries (in percent)

Mexico	20.3	Germany	10.0
U.S.	17.0	Austria	9.3
Turkey	15.9	Poland	8.2
Ireland	15.4	Hungary	8.1
<b>Japan</b>	15.3	Belgium	7.8
Portugal	13.7	France	7.0
Greece	13.5	Switzerland	6.7
Italy	12.0	Finland	6.4
Australia	11.9	Norway	6.3
Spain	11.5	Netherlands	6.0
U.K.	11.4	Sweden	5.3
New Zealand	10.4	Czech	4.4
Canada	10.3	Denmark	4.3
		Total	10.7

Source: OECD(2004), Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s.

Table 3, Poverty Rates by Age Class in Japan (%)

Age	Poverty Rate	Share
0-17	14.3	17.4
18-25	16.6	8.9
26-40	12.4	14.9
41-50	11.7	10.3
51-65	14.4	19.4
66-75	19.5	16.4
76 over	23.8	12.7

Source: OECD (2004)

Table 4, Various Poverty Measures for all Households

			Poverty Indices					
	Median	Poverty	Headcount	Poverty	Watts	CHU(0.5)	FGT(2)	FGT(3)
	(10 thousand yen)	Line (10 thousand yen)	Ratio (%)	gap Ratio (%)	Index	X 100	X 100	X 100
1993	284	142	<b>15.7</b>	6	8.7	7.8	3.5	2.5
1996	295	147.5	<b>15.6</b>	5.7	8.7	7.1	3.1	2
1999	292	146	<b>16.4</b>	6.4	9.8	8.2	3.7	2.5
2002	267	133.5	<b>17.3</b>	6.7	9.5	8.6	3.8	2.6

Source: Ministry of Welfare and Labour, Income Redistribution Survey.

Notes: Poverty line is defined by the 50% figure of the median income. Equivalent incomes are estimated on the basis of Yagi and Tachibanaki (1996).

			Poverty Indices					
	Median	Poverty	Headcount	Poverty	Watts	CHU(0.5)	FGT(2)	FGT(3)
	(10 thousand yen)	Line (10 thousand yen)	Ratio (%)	gap Ratio (%)	Index	X 100	X 100	X 100
1993	284	113.6	<b>10.4</b>	4.3	5.9	5.2	2.6	1.8
1996	295	118	<b>10.5</b>	3.9	5.9	4.9	2.1	1.4
1999	292	116.7	<b>11.6</b>	4.5	6.8	5.2	2.6	1.8
2002	267	106.8	<b>11.8</b>	4.7	6.4	6.2	2.8	1.9

Source: Ministry of Welfare and Labour, Income Redistribution Survey.

Notes: Poverty line is defined by the 40% figure of the median income. Equivalent incomes are estimated on the basis of Yagi and Tachibanaki (1996).

Table 5, Various Poverty Measures when Poverty Line is Fixed at the 1996 level

			Poverty Indices					
	Median	Poverty	Headcount	Poverty	Watts	CHU(0.5)	FGT(2)	FGT(3)
	(10	Line	Ratio	gap	Index	X 100	X 100	X 100
	thousa	(10	(%)	Ratio				
	nd yen)	thousan		(%)				
	)	d yen)						
1993	284	147.5	<b>16.6</b>	6.3	9.2	8.3	3.7	2.5
1996	295	147.5	<b>15.6</b>	5.7	8.7	7.1	3.1	2.0
1999	292	147.5	<b>16.7</b>	6.5	10	8.4	3.7	2.5
2002	267	147.5	<b>20.5</b>	7.8	11.4	10	4.4	3.0

Source: Ministry of Welfare and Labour, Income Redistribution Survey.

Notes: Poverty line is defined by the 50% figure of the median income. Equivalent incomes are estimated on the basis of Yagi and Tachibanaki (1996).

Table 6, Various Poverty Measures for Several Demographic Groups and Age Classes

	2002						
	N	Poverty Share	Head Count Ratio	Poverty gap Ratio	Watts Index ( $\beta=0$ )	FGT ( $\alpha=2$ ) X 100	CHU ( $\beta=0.5$ ) X 100
all households	7600	/	17.30%	6.70%	9.5	3.8	8.6
household type							
Couples with 3 or more children	303	1.8%	7.9	2.4	<b>3.6</b>	<b>1.1</b>	<b>2.9</b>
Couples with 2 children	1041	4.6	5.9	1.8	2.3	0.8	2.1
Couples with 1 child	1123	7.5	8.7	2.9	4.5	1.5	3.5
Couples	1010	10.5	13.7	4.8	7.2	2.5	5.9
Single members	966	<b>16.1</b>	<b>21.8</b>	<b>9.6</b>	11.9	6.5	13.9
Single mothers	115	5.6	64.4	29.7	38.5	17.8	39.4
Elderly couples	729	13.6	24.6	8.4	12.5	4.3	10.1
Elderly widows	618	21.6	46.0	19.9	29.4	11.9	25.7
Three generations households	860	5.1	7.8	2.8	4.3	1.4	3.3
Others	858	13.6	20.9	7.9	11.6	4.3	9.9

(continued)

	N	Poverty Share	Head Count Ratio	Poverty gap Ratio	Watts Index ( $\beta=0$ )	FGT ( $\alpha=2$ ) X 100	CHU ( $\beta=0.5$ ) X 100
30-39	991	9.1	12.1	4.8	66.3	2.9	6.4
40-49	1154	10.1	11.5	4.4	6.3	2.5	5.6
50-54	927	8.0	11.3	4.4	5.9	2.5	5.7
55-59	769	8.0	13.7	6.2	8.1	4.1	8.7
60-64	793	10.6	<b>17.5</b>	7.3	11.2	4.6	9.8
65-	2395	<b>47.0</b>	25.8	9.9	14.5	5.5	12.4

Notes: Elderly here implies that male ages are over 65, and female ages are over 60.

Table 7, The Estimated Efficiencies for Income Support Programme (%)

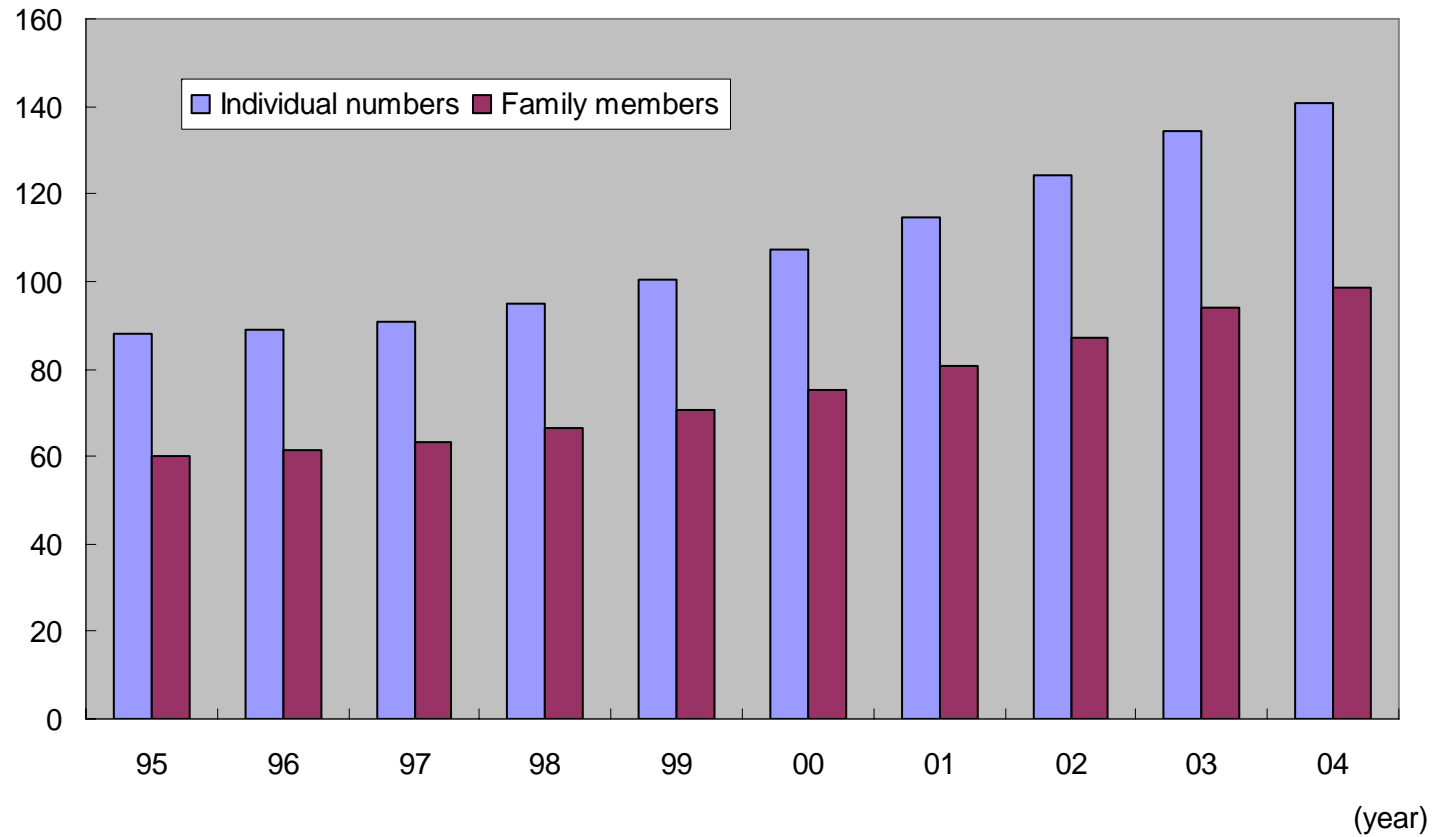
Poverty Line	Horizontal Efficiency		Vertical Efficiency	
	1996	2002	1996	2002
50 percent of the median income	3.5	7.9	88.4	95.8
40 percent of the median income	5.4	12.8	80.5	92.6

Table 8, The Estimated Efficiencies for Public Pension Programme to Reduce Poverty (%)

Poverty Line	Horizontal Efficiency		Vertical Efficiency	
	1996	2002	1996	2002
50 percent of the median income	75.9	76.7	41.5	47.5
40 percent of the median income	81.7	82.3	32.5	37.4

Figure 1, The Number of Income Support Recipients  
(i.e., Livelihood Protection Assistance)

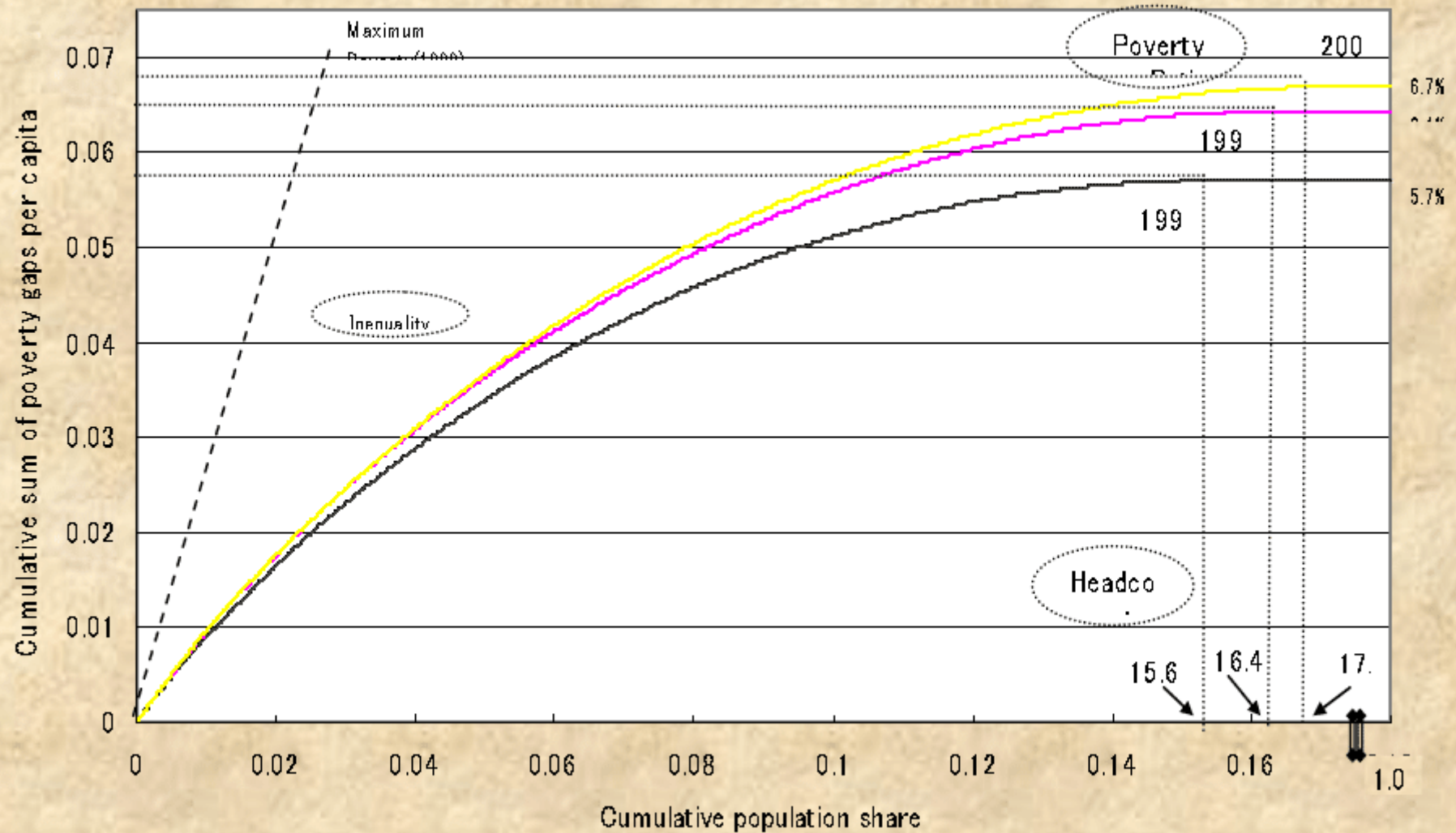
(ten-thousands)



Note: Figure are annual average.

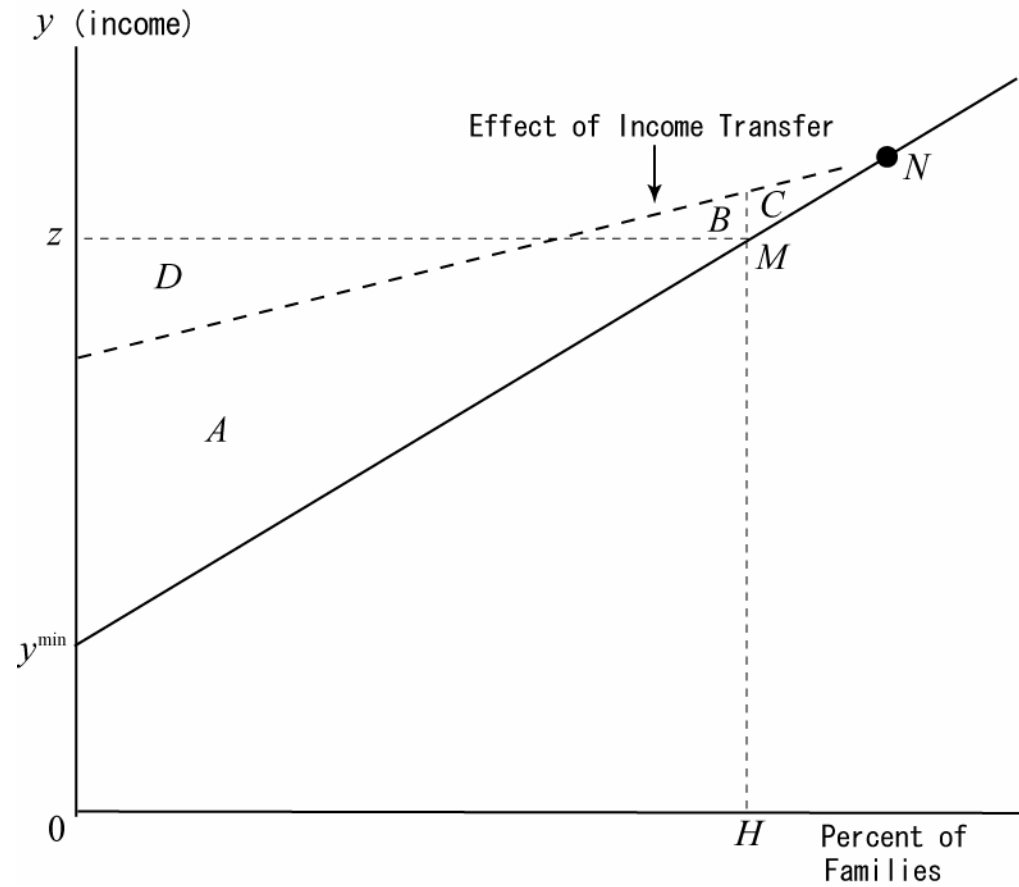
Source: Ministry of Welfare and Labour: Annual Report

Figure 2, The TIP curve and three 'I's of Poverty (Equivalent Disposable income figures)



$z(1006)=1475000$   
 $z(1000)=1460000$   
 $z(2002)=1335000$

Figure 3, Two Criteria to Evaluate the Efficiency of Income Support Programmes



source: Atkinson (1995) p.227.