

Generational Accounting: The Case of Japan

by

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Abstract

In this paper, we develop generational accounting to analyze the intertemporal stance of Japanese public finance in 2005. Japanese public finance is challenged by critical situation such as increasing demand for public pension and social welfare expenditures, public long-term debt, and population ageing. Our findings suggest that future generations will face an excessively heavy fiscal burden. For 1.5 % economic growth rate and 5.0% interest rate assumptions, the difference between 2005 newborns and those born after 2005 is about 700%. This means future generations must pay near 8 times net burden than 2005 newborns generation. We also find that a substantial part of the fiscal burden on the future generations is explained by the population ageing and population decreasing. (Main results are reported in the next pages.)

Keywords: *generational accounting; fiscal sustainability; population ageing; government debt*

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Table 1 Generational Accounts for Japan (thousands of 2005 U.S. dollars)

Generation's Age in 2005	Net Payment	Transfer Receipts	Tax Payments
0	138	128	266
5	160	135	295
10	181	147	329
15	204	162	365
20	226	177	403
25	224	181	405
30	213	185	399
35	197	191	388
40	169	198	367
45	124	206	330
50	63	219	281
55	-8	235	227
60	-88	259	171
65	-128	263	135
70	-125	236	111
75	-106	197	91
80	-86	158	71
85	-64	117	53
90	-37	73	36
Future generations	1,104	-	-
Difference	966	-	-
Percentage differences	698.6	-	-

Table 2 Generational Accounts for Alternative Fertility Rate

(thousands of 2005 U.S. dollars)

Generation's Age in 2005	Baseline	Low Fertility Rate	High Fertility Rate	No Demographic Change
0	138	145	131	142
5	160	166	154	158
10	181	186	177	188
15	204	207	201	220
20	226	228	225	224
25	224	225	223	219
30	213	214	213	179
35	197	197	197	164
40	169	169	169	150
45	124	123	124	127
50	63	62	63	68
55	-8	-9	-8	3
60	-88	-89	-88	-101
65	-128	-128	-128	-123
70	-125	-126	-125	-115
75	-106	-107	-106	-95
80	-86	-86	-86	-74
85	-64	-64	-64	-55
90	-37	-37	-37	-36
Future generations	1,104	1,318	905	701
Difference	966	1,172	774	559
Percentage differences	698.6	806.6	589.2	393.3