



Refer to S3NL

Memorandum

Date: December 8, 1993

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Subject: Long-Range OASDI Financial Effect of Two Options to Adjust
the Concord Coalition Means Test--INFORMATION

To: Harry Ballantyne
Chief Actuary

Estimates of the effect on the OASDI, HI, and SMI programs of the "means" test proposed in the "Zero Deficit Plan" of the Concord Coalition were described in memoranda from Goss, Donkar, and McKay on November 18, 1993. Last week Principal Deputy Commissioner Lawrence Thompson requested estimates for a modified version of the "means" test that would better follow the apparent intent of Pete Peterson as stated on page 275 of his book Facing Up. Mr. Peterson states that "Under my affluence test, the 15 percent share of each family's benefits that is not subject to withholding will ensure that even today's sixty-five-year-old retired millionaire enjoys a (respectable) 3.5 percent tax-free return on all Social Security FICA taxes he or she personally paid into the system. But there will be no windfall." He thus suggests that the test does not, and presumably should not, reduce benefits below a fair return on contributions.

In fact, the ratio of (1) the present value of expected OASDI benefits to (2) the present value of expected OASDI employee payroll tax contributions is 257 percent¹ for males with steady high earnings who retired at age 65 in 1985. For such retirees with sufficiently high family income that OASDI benefits would be reduced by 85 percent under the means test, this "money's worth" ratio would drop to 39 percent ($257 \times .15$). Present values for these ratios are based on the actual yields received on securities held by the OASI and DI trust funds, which are Federal securities with long-term "risk-free" rates that averaged nearly 8 percent per year in nominal terms, and about 2.6 percent per year in real terms over the past 30 years. Thus, the 3.5 percent return that Mr. Peterson cites is less than half the rate of return for conservative investment in long-term United States Government securities over the past 30 years. With a return of only 39 percent of the amount that would have accumulated at "Trust-Fund" interest rates, it is difficult to argue that the steady high earner who incurs an 85 percent reduction is receiving a fair

¹Benefits after 1983 are, of course, tax deferred, not tax free. All benefits that are not eliminated by the means test are subject to income tax on the same basis as under current law.

return. For similar high earners reaching 65 after 1985, money's worth ratios under present law are much lower, and thus the effect of the Concord means test would produce even lower returns.

The question of whether a fair return should be based on the accumulated value of payroll tax contributions of both the employer and employee, or on contributions of the employee alone, is unresolvable. Certainly the employer contributions are considered a part of employee compensation by the employer, and in the case of the self-employed, both shares are paid directly by the worker.

Without attempting to resolve this long-standing debate, the analysis that follows reflects two possible options for adjusting the basic Concord "means" test that avoid reduction of OASDI benefits below a "reasonable return" on either employer and employee contributions (option A), or employee contributions only (option B).

The adjusted means tests are assumed to be applied by first computing reductions for all entitlements based on the basic Concord plan. The ratio of total reduction to total entitlements is then computed. This ratio of reduction is applied to all entitlements except for OASDI benefits. For OASDI benefits, the family is paid the higher of (1) OASDI benefits multiplied by the ratio of reduction, or (2) the amount that would yield a lifetime return on either employee plus employer contributions (option A), or employee contributions only (option B), equivalent to the yield on trust fund securities (an ultimate 2.3 percent real interest rate is assumed), but in no case more than the present law benefit.

Effect of Adjusted Means Tests

Option A: No reduction below fair return on ee + er contributions

Because money's worth ratios (PV of benefits to ee contributions) are well above 200 percent for the vast majority of current beneficiaries, the initial effect of limiting the Concord proposal in the manner outlined for the option A adjusted means test would reduce the estimated savings relatively little (the reduction in OASDHSMI savings is estimated to be about 15 percent, or about a 25 percent reduction in savings from means testing OASDI benefits, see memorandum from Eli Donkar of December 2, 1993).

For more distant future years, however, money's worth ratios drop due to increases in contribution rates over the past decades. As a result, option A saves a far smaller

proportion of the amount saved by the unrestricted Concord test. By 2030, the adjusted test would reduce OASDHSMI savings by over one-fourth (from savings of about 3.7 percent of taxable payroll to savings of about 2.7 percent of taxable payroll), and OASDI savings by about 70 percent (from savings of about 1.6 percent of taxable payroll to savings of about 0.5 percent of taxable payroll).

For the long-range 75-year valuation period, savings under the unrestricted Concord plan for OASDHSMI combined would drop from 3.4 percent of taxable payroll to 2.5 percent of taxable payroll. For the OASDI program, the savings drop from 1.6 percent of payroll to 0.5 percent of payroll. Thus, while the unrestricted plan would eliminate the long-range actuarial deficit of 1.46 percent of taxable payroll (estimated using intermediate alternative II assumptions in the 1993 Trustees Report), the option A adjusted means test that guarantees not to reduce benefits below a fair return on employee and employer contributions would eliminate only about one-third of the deficit.

Option B: No reduction below fair return on employee contributions

Because money's worth ratios (PV of benefits to employee contributions) are very much above 100 percent for the vast majority of current beneficiaries, the initial effect of limiting the Concord proposal in the manner outlined for the option B adjusted means test would reduce the estimated savings by even less than option A.

For more distant future years declining money's worth ratios result in savings, under option B, that are a much larger proportion of the amount saved by the unrestricted Concord test than was the case for option A. By 2030, the adjusted test would reduce OASDHSMI savings by over one-seventh (from savings of about 3.7 percent of taxable payroll to savings of about 3.3 percent of taxable payroll), and OASDI savings by about 25 percent (from savings of about 1.6 percent of taxable payroll to savings of about 1.2 percent of taxable payroll).

For the long-range 75-year valuation period, savings under the unrestricted Concord plan for OASDHSMI combined would drop from 3.4 percent of taxable payroll to 3.1 percent of taxable payroll. For the OASDI program, the savings drop from 1.6 percent of payroll to 1.2 percent of payroll. Thus, while the unrestricted plan would eliminate the long-range actuarial deficit of 1.46 percent of taxable payroll (estimated using intermediate alternative II assumptions in the 1993 Trustees Report), the option B adjusted means test that guarantees not to reduce benefits below a fair return on employee contributions would eliminate about 80 percent of the deficit.

Effect on Trust-Fund Buildup

The combined OASI and DI trust funds are estimated to rise to a peak of 3.0 times the level of annual expenditures in the year 2015. The option A adjusted means test would result in even more trust-fund buildup with a peak of about 3.8 times annual expenditures reached around the year 2017. The year of exhaustion for the combined funds would increase by about 9 years, from the year 2036 estimated under current law to about 2045. The option B adjusted means test would increase the peak trust-fund buildup to a peak of over 4 times annual outgo around the year 2020.

Money's Worth Analysis


Table 1, attached, is very similar to the table included in the memorandum of November 18. Table 1 indicates the extent to which money's worth ratios² for current beneficiaries in the year 2030 would be affected by enactment of the basic Concord means test. About 60 percent of steady-high-earning single workers would be reduced to some extent, only about 40 percent of steady-average earners and about 20 percent of low earners. Larger percentages of married workers with spouse not working (married, 1 earner) would be reduced by the means test because family income after retirement tends to be higher for 1-earner couples than for single individuals.

The option A adjusted means test provides that benefits will not be reduced below a fair return on employee and employer contributions, i.e., the money's worth ratio will not be reduced below 200 percent. As shown in table 1A, this option would result in no reductions for the steady high earners and steady-average-earning single workers, because their money's worth ratios are already at or below 200 percent under present law. Thus, the option A adjusted test ultimately saves relatively little, and the savings retained are borne largely by middle and low earners.

The option B adjusted means test provides that benefits will not be reduced below a fair return on employee contributions only, i.e., the money's worth ratio will not be reduced below 100 percent. As shown in table 1B, this option would result in some reduction in benefits for most steady maximum earners. The extent of the reduction would be less under the option (as compared with that under the unrestricted Concord means test) for about 30 percent of steady maximum earners, but only

²The money's worth ratio is defined as the ratio of the present value of expected OASDI benefits to the present value of expected employee OASDI payroll-tax contributions for all persons in the defined cohort.

for about 10 percent of steady average or low earners. Moreover, the extent to which benefit reductions under the unrestricted Concord test would be cut by option B would be much greater for steady maximum workers. For example, benefit reductions under the Concord plan as high as 85 percent (yielding money's worth ratios of about 20 and 30 percent for single and married workers, respectively) would be cut to only about 10 percent for single workers and 50 percent for married workers with steady maximum earnings and very high income after retirement. Reductions provided by the adjusted means test would generally be well over half the size of the reduction provided under the Concord plan for steady average and steady low earners.



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Attachments

Table 1

Present Value of OASDI Benefits as a Percentage of
Present Value of Employee Contributions with
Steady Earnings for Current Beneficiaries in 2030:
Percentage under Current Law and Percentage at Selected
Percentiles with The Concord Coalition "Means" Test

	Low Earnings	Average Earnings	Maximum Earnings
<u>Single</u>			
Current Law	220%	160%	110%
Concord "Means" Test <u>1/</u> Percentile			
20	220	160	110
40	220	160	110
60	220	160	105
80	200	140	85
95	60	50	20
<u>Married (1 earner)</u>			
Current Law	401%	300%	200%
Concord "Means" Test <u>1/</u> Percentile			
20	401	300	195
40	401	300	160
60	401	295	140
80	370	250	60
95	120	60	30

1/ Estimates of the effects of the Concord "Means" Test on single workers and couples are based on a number of simplifying assumptions required to adapt available data. The results should be looked upon as only an indication of the likely effect and not as precise estimates.

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November 18, 1993

Table 1A

Present Value of OASDI Benefits as a Percentage of
 Present Value of Employee Contributions with
 Steady Earnings for Current Beneficiaries in 2030:
 Percentage under Current Law and Percentage at Selected
 Percentiles with The Concord Coalition "Means" Test
 Adjusted to Avoid Reduction Below a Fair Return on
 Employee and Employer Contributions

	Low Earnings	Average Earnings	Maximum Earnings
<u>Single</u>			
Current Law	220%	160%	110%
Adjusted "Means" Test <u>1</u> / Percentile			
20	220	160	110
40	220	160	110
60	220	160	110
80	200	160	110
95	200	160	110
<u>Married (1 earner)</u>			
Current Law	401%	300%	200%
Adjusted "Means" Test <u>1</u> / Percentile			
20	401	300	200
40	401	300	200
60	401	295	200
80	370	250	200
95	200	200	200

1/ Estimates of the effects of the adjusted "means" test on single workers and couples are based on a number of simplifying assumptions required to adapt available data. The results should be looked upon as only an indication of the likely effect and not as precise estimates.

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Table 1B

Present Value of OASDI Benefits as a Percentage of
 Present Value of Employee Contributions with
 Steady Earnings for Current Beneficiaries in 2030:
 Percentage under Current Law and Percentage at Selected
 Percentiles with The Concord Coalition "Means" Test
 Adjusted to Avoid Reduction Below a Fair Return on
 Employee Contributions

	Low Earnings	Average Earnings	Maximum Earnings
<u>Single</u>			
Current Law	220%	160%	110%
Adjusted "Means" Test <u>1</u> / Percentile			
20	220	160	110
40	220	160	110
60	220	160	105
80	200	140	100
95	100	100	100
<u>Married (1 earner)</u>			
Current Law	401%	300%	200%
Adjusted "Means" Test <u>1</u> / Percentile			
20	401	300	195
40	401	300	160
60	401	295	140
80	370	250	100
95	120	100	100

1/ Estimates of the effects of the adjusted "means" test on single workers and couples are based on a number of simplifying assumptions required to adapt available data. The results should be looked upon as only an indication of the likely effect and not as precise estimates.

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Table 2

Estimated OASDI and Medicare Long-Range Financial Effects
under the Concord Coalition Means Test and
Two Options for Adjusting the Test

Estimated Change in Cost as a Percentage of Taxable Payroll:	Basic Concord Means Test	<u>Adjustments to the Test</u>	
		No reduction below fair return on contributions: ee + er <u>Option A</u>	ee only <u>Option B</u>
For the Year 2030--			
OASDI	1.6%	0.5%	1.2%
Medicare	2.1	2.2	2.1
Total	3.7	2.7	3.3
For 1993-2067--			
OASDI	1.6	0.5	1.2
Medicare	1.8	1.9	1.9
Total	3.4	2.5	3.1

Note: The above estimates are made using a number of approximations required due to the nature of available data. These estimates should be viewed as indications of the effect these proposals would have. All estimates are based on the intermediate alternative II assumptions of the 1993 Trustees Reports.

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