



## SOCIAL SECURITY

### MEMORANDUM

**Date:** June 14, 1999 **Refer To:** TCC

**To:** Harry C. Ballantyne  
Chief Actuary

**From:** Stephen C. Goss  
Deputy Chief Actuary

**Subject:** Estimated Long-Range OASDI Financial Effect of Proposal by  
Representative John Kasich-INFORMATION

This memorandum provides the estimated effect on long-range OASDI financial status of a proposal developed for Representative John Kasich. Specifications for this proposal have been provided by Steve Robinson of Representative Kasich's staff.

This proposal would consist of two parts. The first is a gradual, across-the-board reduction in the rate of growth in the OASDI benefit level from that scheduled under present law. The second is an irrevocable option to accept a further reduction in OASDI benefit level in return for having between 1.0 and 3.5 percent of percent OASDI taxable earnings contributed to an individual account. For those who exercise the option, contributions to the Personal Savings Accounts (PSAs) would be financed by redirecting the appropriate percentage of the worker's OASDI payroll tax from the OASDI Trust Funds to the PSA. In order to maintain solvency for the OASDI Trust Funds, amounts roughly equal to the present value of expected reductions in OASDI benefit payments from the option would be loaned from the General Fund of the Treasury to the Trust Funds for each year, starting 2000, as long as needed. The loans would be repaid with interest at the trust-fund special issue bond yield later.

The first part of the proposal would modify the OASDI benefit formula so that benefit levels would tend to rise from one generation to the next at the rate of growth in consumer prices. Under current law, benefit levels tend to rise at the rate of growth in the average wage level from one generation to

the next. Future growth in the average wage level is assumed to average 4.2 percent per year for the intermediate assumptions of the 1999 Trustees Report. Future growth in consumer prices is assumed to average 3.3 percent. Benefit levels for those newly eligible in 2050 would be expected to be reduced by about 35 percent, and by about 48 percent for those newly eligible in 2075. Under these assumptions, this provision alone would be expected to eliminate the currently projected actuarial deficit and restore solvency for OASDI for the indefinite future.

The second part of the proposal would provide an irrevocable option to accept a further benefit reduction in return for a Government-financed contribution to an individual account for workers who will reach age 55 after December 31, 2000. The decision of whether or not to exercise this option would, for workers in their 40's up to age 54 in 2000, be complicated. Married workers, particularly those with only one earner, would be less inclined to exercise the option. Younger workers in 2000, and later, would be increasingly more inclined to exercise the option due to the reduced OASDI benefit levels provided in the first part of the proposal.

If all eligible workers were to exercise the option in 2000 or later, at their earliest opportunity, the specified annual loans from the Treasury to OASDI program would be needed through the year 2045, with repayment expected to begin in the year 2060. With the loans, the OASDI Trust Funds would be expected to remain solvent throughout the long-range period and beyond, under the intermediate assumptions of the 1999 Trustees report. While it is not possible to anticipate the level of voluntary participation in the second part of the proposal, it appears that the OASDI program would be returned to long-range solvency under any reasonable pattern of participation.

The balance of this memorandum provides a description and analysis of the proposal provisions, and estimates of the long-range financial effects of the proposal on the OASDI program. All estimates are based on the intermediate assumptions of the 1999 Trustees Report.

## Summary of Proposal Provisions

### Part 1. PIA Formula Change

The primary insurance amount (PIA) benefit formula determines the full, unreduced monthly benefit amount for worker beneficiaries. The PIA is subject to actuarial reduction for benefit entitlement before reaching the normal retirement age (NRA, currently 65) and, for retired worker beneficiaries, a delayed retirement credit for postponing benefit entitlement until after the NRA. Benefit levels are increased by the annual cost-of-living adjustment (COLA) after initial benefit eligibility.

The PIA formula consists of three brackets which are separated by two "bend points". For beneficiaries newly eligible in 1999 these bend points are \$505 and \$3,043. These bend points are indexed from year to year by the increase in the Social Security average wage indexing series (AWI). A worker's PIA is calculated as 90 percent of the first \$505 of career- average indexed monthly earnings (AIME), plus 32 percent of any AIME amount between \$505 and \$3,043, and 15 percent of any AIME amount in excess of \$3,043. Thus, the current-law formula results in PIA benefit levels that tend to rise with the increase in the AWI from one generation to the next.

The first provision of this proposal would modify the PIA formula so that the level of benefits would tend to rise with the growth in consumer prices rather than with the average wage (AWI) from one generation to the next. This would be accomplished by adjusting the 90, 32, and 15 percent factors to *remove* any real growth in the average wage from the increase in benefit levels from one generation to the next.

Specifically, the PIA factors (90, 32, and 15) would be successively reduced each year by the ratio of C to W, where

$$C = (\text{CPI-W for year-2} / \text{CPI-W for year -3}) \quad \text{and} \\ W = (\text{AWI for year-2} / \text{AWI for year-3}).$$

These reductions would be computed beginning with the year 2001, but would be first applied to beneficiaries becoming eligible in 2008. For beneficiaries becoming eligible in 2008, the PIA would be reduced by the total real growth in the AWI from 1998 to 2006. For new eligibles in 2009, the PIA would be further reduced by the real growth in the AWI between 2006 and 2007.

Under the intermediate assumptions of the 1999 Trustees Report, the CPI-W is assumed to increase at an average rate of 3.3 percent per year, and the AWI by an average of 4.2 percent per year. Thus the provision would successively slow the growth in benefit levels between generations by about 0.86 percent per year, on average ( $1.033/1.042 = 0.9914$ ). The first beneficiaries affected, those newly eligible in 2008, would have benefits reduced by an expected 6.7 percent, from the level anticipated under present law (note that this would be lower than the 2008 benefit for a similar worker, one year older, who had retired in 2007 and could be referred to as a "notch"). The size of the reduction would increase for new eligibles in later years.

## Part 2. Voluntary Option for the Personal Security Account

This provision would provide workers who will reach age 55 after December 31, 2000 (i.e., those born in 1946 or later) an irrevocable option to have Government-financed contributions made to a Personal Savings Account (PSA) on their behalf. For those who exercise the option, IA contributions would commence as early as the year 2000. However, eligible workers could decide to opt in at any time after 2000 if they choose. In addition, workers who first enter the workforce after 2000 would have the option to (1) start the PSA immediately, (2) delay the start of PSA contributions to a later year, or (3) never opt for the PSA. (Note that opting for the PSA has specific implications for the level of benefits payable from the OASDI program; this is discussed in the next section.)

Contributions each year would depend on the level of the worker's OASDI taxable earnings for the year. The PSA contribution would be equal to

$$3.5\% - 2.5\% \times (\text{Worker's annual earnings/taxable maximum})$$

Thus, for a worker with maximum taxable earnings in 2000, projected to be \$76,200, the PSA contribution would be 1 percent of annual earnings, or \$762. For a worker with earnings at half the taxable maximum, or \$38,100, the PSA contribution would be 2.25 percent, or \$857. The highest

dollar level of PSA contribution would occur for workers with earnings at 70 percent of the taxable maximum, or \$53,340. See the attached Table 1 for more examples. Of course, the PSA contribution would vary throughout each worker's career as a

percentage of their annual earnings, as their annual earnings vary relative to the taxable maximum.

PSA contributions for each year would be invested collectively in a money-market account until individual earnings records are reconciled late in the following year. At that point, PSA contributions would be credited to individual PSA accounts. The nature of PSA accounts would apparently be similar to the Federal Government employee Thrift Savings Plan (TSP) in order to keep administrative expenses as low as possible.

#### Part 2. Benefit Reduction for Those Who Opt for the PSA

For those who opt for the PSA contributions, the level of all OASDI benefits that would be payable based on the worker's earnings will be reduced, beyond reductions from part 1 of the proposal. The reduction is 1/3 percent for each year starting with the year of first PSA contribution and ending with the year prior to first benefit entitlement (regardless of the number of years for which the worker had earnings). Thus, for a worker who opted into the PSA at age 22 and retires at age 62, benefits would be reduced by 13 1/3 percent

$$\text{Reduction} = 1/3\% \times (62-22) = 13 \frac{1}{3}\%$$

The reduction for a disabled worker beneficiary would generally be smaller, because benefit entitlement generally begins before age 62. The average age at benefit entitlement for disabled worker beneficiaries is about 49, implying an average reduction of 9 percent for those who opt for the PSA starting at age 22. For disabled workers who are converted to retired worker status at their NRA, the lower reduction computed at disabled worker entitlement would continue to apply. Smaller reductions would similarly apply to benefits based on the earnings of workers who die before attaining eligibility for a retired worker benefit (before age 62).

#### Part 2. Borrowing from and Repaying the General Fund

Because PSA contributions would be financed by redirection the appropriate portion of each participating worker's OASDI payroll tax to the PSA, income to the OASDI program would be substantially reduced for many years before benefit reductions under the optional part 2 become large. Under the proposal, annual loans to the OASDI Trust Funds from the General Fund of

the Treasury would be made beginning in the year 2000, for as long as needed to assure that the projected assets in the combined OASDI Trust Funds would never fall below 100 percent of the annual cost of the program.

The amount loaned each year would be 11 percent of the annual benefit cost for the year. This is approximately the present value of the expected future reductions in OASDI benefit payments that would be incurred based on participation in the optional part 2 of the proposal for that year.

Repayment of the loans would commence when the trust fund assets are projected to begin rising steadily above 100 percent of annual cost. Repayments would be scheduled to maintain the trust fund assets at about 100 percent of program annual cost. When the loans have been fully repaid, with interest, the OASDI payroll tax rates could be reduced.

#### Analysis of Incentives to Exercise the Voluntary Option

Because the benefit reduction in part 2 of the proposal produces a 1/3 percent reduction in lifetime OASDI benefits for every year starting with the election of the PSA up to benefit entitlement, workers will consider carefully whether and when they should enroll. For young workers, particularly students, with very low earnings, it may be financially disadvantageous to enroll for the PSA. For example, a 20-year old student with \$1,000 earnings in 2000 would have \$34.67 deposited in his/her PSA account, at the cost of a 1/3-percentage-point reduction in lifetime OASDI benefits. Thus, workers may tend to wait to opt into the PSA plan until they have entered full-time employment.

Another group that might consider the option carefully would be workers who are in their mid 40's up to age 54 in 2000. These individuals will have fewer years for PSA contributions

to accumulate enough to offset the benefit reduction. These older workers will also already generally know what their eventual marital status is likely to be at retirement. For those who expect to retire with a spouse who had little or no paid employment, the benefit reduction on benefits for both spouses, including survivor benefits, is more likely to be larger than the potential gain from the PSA, than would be the case for a single worker or a 2-earner married couple.

Tables 2a and 2b, attached, provide comparisons of the reduction in OASI benefit with the value of an annuity from the PSA, assuming investment is half-stock/half-bonds or all bonds, respectively. Values in italics compare reductions in benefits under the optional Part 2 only with the value of the PSA annuity as a percentage of the benefit under the proposal reflecting the reductions from the universally-applied Part 1. These italicized values represent the comparison relevant to choosing whether or not to opt into Part 2 of the proposal.

The table below provides the approximate ages of married individuals in 2000, by earner status, which would be expected to be better off NOT opting for Part 2, assuming an expectation of a 7 percent real yield on stock and 3 percent on long-term U.S. Government bonds. All single workers who expect to remain single would be better off opting for Part 2.

**Ages of Workers in 2000 Who Would Expect to Be Better Off  
NOT Opting for Part 2 of the Kasich Proposal**

	Expected PSA Portfolio Return			
	<u>All Long-Term U.S. Govt Bonds</u>		<u>Half Stock Half Bonds</u>	
	2-Ern	1-Ern	2-Ern	1-Ern
Low Earners	--	48-54	--	52-54
Medium Earners	--	51-54	--	54
High Earners	--	45-54	--	53-54
Maximum Earners	54	34-54	--	43-54

Married 1-earner couples (and 2-earner couples with very low career earnings for the lower earner) who are between about age 50 and 54 in the year 2000 should be expected not to opt into Part 2 of the proposal. The determination of whether to opt in will depend on how the couple expects to invest the PSA until benefit entitlement, and their level of aversion to risk. Workers in their 50's may still opt for Part 2 if they are willing to invest aggressively (more than half in stock) and are willing to accept the risk that the market will not perform up to expectations. On the other hand, workers in their 40's (or even 30's with very high earnings) who would invest conservatively and prefer a "safer bet" will be more likely to decline to participate in Part 2. As the italicized values in

Tables 2a and 2b illustrate, however, all workers in their 20's in the year 2000, and those who enter the workforce after 2000 would be expected to participate in Part 2.

The examples presented in Tables 2a and 2b represent workers with four different earnings levels, and three different marital statuses. Workers with low, medium, and high career earnings have lifetime earnings patterns that reflect the relative earnings levels by age and the probability of having earnings by age for OASDI covered workers in recent years.

The level of earnings for these examples results in an AIME (average indexed monthly earnings) that is equal to that for a steady worker with earnings each year equal to: (a) the SSA average wage indexing series (AWI) for the medium worker,

(b) 45 percent of the AWI for the low worker, and

(c) 160 percent of the AWI for the high worker.

The AWI for 1999 is estimated to be \$29,732. The steady maximum worker is assumed to have earnings equal to the Social Security taxable maximum amount (\$72,600 for 1999).

The marital statuses are:

(1) single, never married,

(2) married 2-earner couple, meaning both spouses have career earnings averages at the same level, and (3) married 1-earner couple. All married couples are assumed to be the same age in the examples.

An additional consideration for worker participation in Part 2 would be when to become entitled to for benefits. Because the counting of years for benefit reduction under Part 2 ends with the year prior to benefit entitlement, it would generally be advantageous to become entitled as soon as possible, at age 62 for retired worker benefits. The additional PSA contributions after age 62 would be unlikely to be sufficient to offset the 1/3-percentage-point reduction in benefits that would result. It is assumed that both PSA contributions and further benefit reductions under Part 2 would cease after initial benefit entitlement. In this case, workers would be expected to become entitled for benefits at their earliest eligibility, by stopping or decrease work temporarily, if necessary.



### Expected Effects on Total Benefits from OASI and PSA

Tables 2a and 2b also illustrate the expected effects of the proposal on total benefit levels. The column labeled "Part 1: Reduction in PIA" illustrates the percentage reduction in the present-law OASI retirement and survivors benefits for workers by age cohort. For those reaching age 65 in 2070, the universal reduction from Part 1 would be 44 percent.

The column labeled "Total Reduction" illustrates the total reduction in OASI benefit from Parts 1 and 2 of the proposal. The total reduction would amount to 52 percent of the present law benefit for those age 65 in 2070. However, those opting for Part 2 will also receive an annuity from the accumulation of their PSA. The columns to the right of each table, labeled "Value of Annuity ... As a Percentage of Present Law Benefit" illustrate the comparable value of the PSA accumulation.

These tables show that very young workers (age 20-30) in 2000 who never marry, or marry someone with a fairly similar lifetime earnings record, may expect to have slightly higher retirement benefits if they (1) opt for Part 2, (2) invest fairly aggressively (at least half in stock), and (3) experience investment yields that at least match expectations. Workers will expect to have lower total retirement benefits from OASI and PSA if they (1) are older than 30 in 2000, (2) reach age 20 after about 2015, (3) retire as a member of a 1-earner couple, or a couple with very different levels of lifetime earnings, (4) invest conservatively, or (5) experience investment yields that fall short of expectations.

As noted earlier, benefit reductions under Part 1 would first affect retirees eligible at age 62 in 2008 (age 65 in 2011,

as in Tables 2a and 2b). This initial effect would be a benefit reduction of about 6.7 percent, as compared with no reduction for workers eligible in 2007 or earlier. This would result in a small notch (lower benefit payments in 2008 for new eligibles in 2008 than for similar workers who are 1-year older and were eligible in 2007). This small discrepancy would, at best be only partially offset by participation in Part 2 by those who will reach age 62 in 2008, and would be increased for many.

## Long-Range OASDI Financial Effects

### Part 1

Enactment of Part 1 of the proposal would progressively reduce OASDI benefits from the levels specified under present law. The extent of the reduction would allow the OASDI program the adequately financed indefinitely under the intermediate assumptions of the 1999 Trustees Report. With Part 1 alone (assuming no one opted for Part 2) the OASDI actuarial balance would be improved by an estimated 2.30 percent of effective taxable payroll, to a positive balance of about 0.24 percent of payroll. The assets of the combined OASDI trust funds would rise to a peak of 383 percent of annual program cost in 2016, then decline to a low of 192 percent of annual cost in 2047, and rise thereafter (as benefit levels continue to decline relative to present law), reaching an estimated 427 percent of annual cost at the end of the 75-year period. See table 4 for details.

It should be noted that under Part 1 of the proposal the financial status of the OASDI program would be considerably more sensitive to the level of real wage growth than under present law. If the real wage differential falls short of the 0.9 percentage point assumed for the intermediate projections of the 1999 Trustees Report, the growth in benefit levels would be reduced to a much smaller extent under Part 1. At the extreme, if the real wage differential averaged 0.0 percentage point (the average wage grows at the same rate as the CPI, on average) Part 1 would provide no savings for the OASDI program, and the long-range OASDI actuarial deficit would be about 3 percent of payroll.

### Part 2

If, in addition to enactment of Part 1, **all** eligible workers (under 55 on December 31, 2000) opted for Part 2 of the proposal, the specified borrowing from the General Fund of the Treasury would be required for years 2000 through 2045. This borrowing, equal to 11 percent of OASDI benefit cost each year, would assure that the combined OASDI Trust Funds would not fall below 100 percent of annual cost, under the intermediate assumptions of the 1999 Trustees Report.

With repayment of the loans commencing in 2060, when the trust fund assets would otherwise begin to rise above 100 percent of annual cost, the OASDI long-range actuarial balance would be

estimated to be 0.00 percent of taxable payroll. The assets of the combined OASDI trust funds would rise to a peak of 319 percent of annual program cost in 2013, then decline to 106 percent of annual cost in 2060, and stay at about 100 percent of annual cost thereafter (as repayment rates are adjusted to maintain this trust fund ratio). Repayment to the General Fund would be expected to be equal to 0.20 percent of OASDI taxable payroll for 2060 to 2064, 0.35 percent of payroll for 2065 to 2069, and 0.70 percent for 2070 to 2074. The repayment rate would continue to grow after 2074 due to the decreasing cost of the OASDI program, under the intermediate assumptions of the 1999 Trustees Report. See table 3 for details of the expected financing of OASDI under the proposal.

However, it is unlikely that all eligible workers would opt for Part 2, as suggested in the earlier section of this memorandum, "Analysis of Incentives to Exercise the Voluntary Option". It is likely that most workers age 50 to 54 in 2000 and some as young as 30 would choose not to participate in Part 2.

Any lack of participation by older workers in 2000 would tend to have a small negative effect on OASDI financial status as compared with universal participation. The present value of the potential further benefit reduction of Part 2 for these workers would generally be greater than the potential payroll-tax carveout. Thus, nonparticipation of these older workers would reduce the General Fund loan by more than the payroll-tax carveout over the next 2 decades. In addition, some part-time employment early in career would likely not be included in Part 2 benefit reduction because workers might choose to opt into the plan only after becoming employed on a full-time basis.

Even with the likely reduction in Part 2 participation, the OASDI program would be expected to be adequately financed indefinitely. The net effects of selective nonparticipation would be small and would be accommodated by extending the period of annual loans. If necessary, the size of loans could be increased above 11 percent of taxable payroll.

As described under financial effects of Part 1 alone, above, the OASDI program would be very sensitive to the real wage differential under this proposal.



Stephen C. Goss

Attachments

**Table 1. PSA (Kasich) Contribution for Workers in 2000**

Level of Annual OASDI Taxable Earnings	PSA Contribution as a Percentage of Earnings	PSA Contribution in Dollar Amount
\$1,000	3.47%	\$34.67
5,000	3.34%	166.80
10,000	3.17%	317.19
20,000	2.84%	568.77
30,000	2.52%	754.72
40,000	2.19%	875.07
50,000	1.86%	929.79
60,000	1.53%	918.90
70,000	1.20%	842.39
76,200 (taxable maximum)	1.00%	762.00
13,784 (Low = 45% of AWI)	3.05%	420.09
30,630 (Average = AWI)	2.50%	764.24
38,100 (1/2 taxable maximum)	2.25%	857.25
49,008 (High = 160% of AWI)	1.89%	927.29
53,340 (MaxContrib=0.7xTMax)	1.75%	933.45

OCACT/SSA  
June 9, 1999

Table 2a. Comparison of Potential PSA annuities with OASI Benefit Reduction for Kasich Proposal

For Worker Opting in 2000 (Age 21 if later) and **Investing Half Stock/Half U.S. Bonds** until Annuitization at Benefit Entitlement

Assume 0.1 % Annual Administrative Expense on PSA Account Balances

**Earnings Scale for Low, Medium, High Earners**

Year Entitled at Age 65	Age At Opting into PSA	Percentage Reduction in OASDI Benefit			Value of Annuity from PSA Contributions for Steady Workers by Marital Status					
		Part 1: Reduction in PIA	Part 2: Reduction for PSA	Total Reduction	As a Percentage of Part 1. Benefit			As a Percentage of Present Law Benefit		
					Single	Married 2-Earner	Married 1-Earner	Single	Married 2-Earner	Married 1-Earner
<b>Low Earners--Career-Average \$13,380 for 1999</b>										
2011	54	6.7	3.7	10.1	5.3	5.0	3.3	5.0	4.6	3.1
2020	45	13.8	6.7	19.5	14.4	13.3	9.0	12.4	11.5	7.7
2030	35	20.9	10.0	28.8	32.4	30.1	20.3	25.6	23.8	16.1
2040	25	27.5	13.3	37.2	56.2	52.3	35.3	40.8	37.9	25.6
2050	21	33.5	14.7	43.3	67.9	63.2	42.7	45.2	42.0	28.4
2060	21	39.0	14.7	48.0	74.1	69.0	46.6	45.2	42.0	28.4
2070	21	44.1	14.7	52.3	80.8	75.2	50.8	45.2	42.0	28.4
<b>Medium Earners--Career-Average \$29,732 for 1999</b>										
2011	54	6.7	3.7	10.1	6.0	5.5	3.7	5.6	5.2	3.5
2020	45	13.8	6.7	19.5	15.4	14.3	9.6	13.2	12.3	8.3
2030	35	20.9	10.0	28.8	34.2	31.7	21.4	27.0	25.1	17.0
2040	25	27.5	13.3	37.2	60.3	56.1	37.9	43.7	40.7	27.5
2050	21	33.5	14.7	43.3	73.9	68.8	46.4	49.1	45.7	30.9
2060	21	39.0	14.7	48.0	80.6	75.0	50.6	49.1	45.7	30.9
2070	21	44.1	14.7	52.3	87.9	81.8	55.2	49.1	45.7	30.9
<b>High Earners--Career-Average \$47,572 for 1999</b>										
2011	54	6.7	3.7	10.1	5.6	5.2	3.5	5.2	4.8	3.2
2020	45	13.8	6.7	19.5	13.3	12.4	8.3	11.5	10.7	7.2
2030	35	20.9	10.0	28.8	28.9	26.8	18.1	22.8	21.2	14.3
2040	25	27.5	13.3	37.2	52.7	49.0	33.1	38.2	35.5	24.0
2050	21	33.5	14.7	43.3	66.2	61.6	41.6	44.0	41.0	27.7
2060	21	39.0	14.7	48.0	72.2	67.2	45.4	44.0	41.0	27.7
2070	21	44.1	14.7	52.3	78.8	73.3	49.5	44.0	41.0	27.7
<b>Steady Maximum Earners--\$72,600 for 1999</b>										
2011	54	6.7	3.7	10.1	4.5	4.1	2.8	4.2	3.9	2.6
2020	45	13.8	6.7	19.5	10.2	9.5	6.4	8.8	8.2	5.5
2030	35	20.9	10.0	28.8	21.9	20.4	13.8	17.3	16.1	10.9
2040	25	27.5	13.3	37.2	39.9	37.1	25.1	28.9	26.9	18.2
2050	21	33.5	14.7	43.3	51.9	48.3	32.6	34.5	32.1	21.7
2060	21	39.0	14.7	48.0	56.6	52.7	35.6	34.5	32.1	21.7
2070	21	44.1	14.7	52.3	61.8	57.5	38.8	34.5	32.1	21.7

Based on intermediate assumptions of the 1999 Trustees Report, and assumed 7% real stock yield

Assume 3% net real annuity yield (CPI-indexed; Unisex single or Joint and 2/3 Survivor)

OCACT/SSA June 13, 1999

Table 2b. Comparison of Potential PSA annuities with OASI Benefit Reduction for Kasich Proposal

For Worker Opting in 2000 (Age 21 if later) and **Investing ALL U.S. Bonds** until Annuitization at Benefit Entitlement

Assume 0.1 % Annual Administrative Expense on PSA Account Balances

**Earnings Scale for Low, Medium, High Earners**

Year Entitled at Age 65	Age At Opting into PSA	Percentage Reduction in OASDI Benefit			Value of Annuity from PSA Contributions for Steady Workers by Marital Status					
		Part 1: Reduction in PIA	Part 2: Reduction for PSA	Total Reduction	As a Percentage of Part 1. Benefit			As a Percentage of Present Law Benefit		
					Single	Married 2-Earner	Married 1-Earner	Single	Married 2-Earner	Married 1-Earner
<b>Low Earners--Career-Average \$13,380 for 1999</b>										
2011	54	6.7	3.7	10.1	4.7	4.3	2.9	4.4	4.0	2.7
2020	45	13.8	6.7	19.5	11.4	10.6	7.1	9.9	9.2	6.2
2030	35	20.9	10.0	28.8	22.9	21.3	14.4	18.1	16.8	11.4
2040	25	27.5	13.3	37.2	35.5	33.1	22.3	25.8	24.0	16.2
2050	21	33.5	14.7	43.3	41.5	38.7	26.1	27.6	25.7	17.4
2060	21	39.0	14.7	48.0	45.3	42.2	28.5	27.6	25.7	17.4
2070	21	44.1	14.7	52.3	49.4	46.0	31.1	27.6	25.7	17.4
<b>Medium Earners--Career-Average \$29,732 for 1999</b>										
2011	54	6.7	3.7	10.1	5.2	4.8	3.3	4.9	4.5	3.0
2020	45	13.8	6.7	19.5	12.3	11.4	7.7	10.6	9.8	6.6
2030	35	20.9	10.0	28.8	24.3	22.6	15.2	19.2	17.8	12.0
2040	25	27.5	13.3	37.2	38.1	35.4	23.9	27.6	25.7	17.3
2050	21	33.5	14.7	43.3	45.0	41.9	28.3	29.9	27.8	18.8
2060	21	39.0	14.7	48.0	49.1	45.7	30.8	29.9	27.8	18.8
2070	21	44.1	14.7	52.3	53.5	49.8	33.6	29.9	27.8	18.8
<b>High Earners--Career-Average \$47,572 for 1999</b>										
2011	54	6.7	3.7	10.1	4.9	4.6	3.1	4.6	4.3	2.9
2020	45	13.8	6.7	19.5	10.8	10.0	6.7	9.3	8.6	5.8
2030	35	20.9	10.0	28.8	20.7	19.2	13.0	16.4	15.2	10.3
2040	25	27.5	13.3	37.2	33.2	30.9	20.9	24.1	22.4	15.1
2050	21	33.5	14.7	43.3	40.0	37.2	25.1	26.6	24.7	16.7
2060	21	39.0	14.7	48.0	43.6	40.6	27.4	26.6	24.7	16.7
2070	21	44.1	14.7	52.3	47.6	44.3	29.9	26.6	24.7	16.7
<b>Steady Maximum Earners--\$72,600 for 1999</b>										
2011	54	6.7	3.7	10.1	3.9	3.7	2.5	3.7	3.4	2.3
2020	45	13.8	6.7	19.5	8.3	7.7	5.2	7.1	6.6	4.5
2030	35	20.9	10.0	28.8	15.7	14.6	9.9	12.4	11.6	7.8
2040	25	27.5	13.3	37.2	25.2	23.4	15.8	18.3	17.0	11.5
2050	21	33.5	14.7	43.3	31.1	29.0	19.6	20.7	19.2	13.0
2060	21	39.0	14.7	48.0	33.9	31.6	21.3	20.7	19.2	13.0
2070	21	44.1	14.7	52.3	37.0	34.4	23.3	20.7	19.2	13.0

Based on intermediate assumptions of the 1999 Trustees Report, and assumed 7% real stock yield

Assume 3% net real annuity yield (CPI-indexed; Unisex single or Joint and 2/3 Survivor)

OCACT/SSA June 13, 1999