Report on the Taxation of Social Security and Railroad Retirement Benefits in Calendar Years 1994, 1995, and 1996

Report to the Congress,
the Secretary of Health and Human Services,
and the Railroad Retirement Board

Department of the Treasury

January 2001

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C.

SECRETARY OF THE TREASURY

January 19, 2001

The Honorable Al Gore, Jr.
President of the Senate
Washington, DC 20510

Dear Mr. President:

Section 121 of the Social Security Amendments of 1983 (P.L. 98-21), directs the Secretary of the Treasury to transfer from the general fund of the Treasury to the Social Security and Railroad Retirement trust funds amounts equivalent to the tax liabilities attributable to the taxation of the Social Security and Railroad Retirement benefits. Section 121 further provides that the Secretary of the Treasury shall submit annual reports concerning (1) the transfers made that year, and the methodology used in determining the amount of such transfers and the funds or accounts to which made, and (2) the anticipated operation of these transfers during the next 5 years.

Pursuant to Section 1121, I am pleased to submit the "Report on the Taxation of Social Security and Railroad Retirement Benefits in Calendar Years 1994, 1995, and 1996."

This report is also being transmitted to the President of the Senate, the Commissioner of the Social Security Administration, and the Chair of the Railroad Retirement Board.

Sincerely,

Lawrence H. Summers

cc: The Honorable Donna E. Shalala
Secretary of the Department of Health and Human Services

The Honorable Jolene M. Molitoris
Administrator, Federal Railroad Administration

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C.

SECRETARY OF THE TREASURY

January 19, 2001

The Honorable Dennis Hastert
The Speaker
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Speaker:

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CHAPTER 1: INTRODUCTION AND SUMMARY

I. Introduction

Since January of 1984, the Treasury Department has been required to estimate the individual income tax liabilities attributable to the inclusion of Social Security and Railroad Social Security Equivalent benefits in adjusted gross income (AGI) for each liability year. These estimated liabilities are transferred to the Federal Old Age and Survivors Insurance (FOASI), Federal Disability Insurance (FDI), and Social Security Equivalent Benefit Account (SSEBA) trust funds on a quarterly basis. Beginning in 1994, transfers have also been made to the Federal Medicare Insurance trust fund (FHI). The amounts transferred to these trust funds are calculated as the difference between forecasts of tax liabilities made with, and without, the inclusion of forecasted levels of benefits in AGI. Both the taxation of benefits and the transfers to the trust funds are required by the Social Security Amendments of 1983 (P.L. 98-21), as amended by the Railroad Retirement Solvency Act of 1983 (P.L. 98-76), the Consolidated Budget Reconciliation Act of 1985 (P.L. 99-272), and the Omnibus Budget and Reconciliation Act of 1993 (OBRA 93) (P.L.103-66). The 1983 Act also required that correcting adjustments be made to the amounts transferred to the trust funds if the estimates of the tax liability attributable to the benefits are subsequently shown to be incorrect.

In addition, P.L. 98-21 required the Treasury Department to submit annual reports to the Congress, the Secretary of Health and Human Services, and the Railroad Retirement Board containing both a description of the methodology used to estimate the transfers to the trust funds and a forecast of transfers over the five subsequent years. The Treasury Department's Office of Tax Analysis (OTA) is responsible for preparing these annual reports, as well as for estimating transfers to the trust funds and calculating correcting adjustments to the transfers based on actual tax return data. This report covers a three year period,[1] and describes the methodology used to determine (1) the estimated transfers to the trust funds for calendar years 1994, 1995, and 1996 income tax liability attributable to the inclusion of benefits in AGI, (2) the necessary correcting adjustments to the transfers for calendar years 1994, 1995, and 1996, and (3) the forecast of liability and transfers for the 1997 through 2001 period.

To determine if any benefits were taxable in tax year 1994, 1995, or 1996, taxpayers had to add both tax-exempt interest income and one-half of Social Security and Railroad Social Security Equivalent benefits to AGI. This augmented AGI may be referred to as provisional income. If provisional income exceeded thresholds of $25,000 for single filers and $32,000 for joint filers, taxpayers were required to include in AGI the lesser of one-half of the benefits or one-half of the excess of provisional income over the thresholds.

OBRA 93 expanded the amount of benefits included in AGI for the highest income beneficiaries, and provided that the additional income tax revenue be transferred to the FHI trust fund. For tax years beginning on or after January 1, 1994, the provisional income thresholds of $25,000 for single filers and $32,000 for joint filers remained in effect for calculating the 50 percent of benefits inclusion rule. However, the benefit inclusion in AGI was increased for higher income beneficiaries. For beneficiaries with provisional incomes above $34,000 for single filers and $44,000 for joint filers, adjusted gross income included the lesser of:

(1) 85 percent of the recipient's Social Security or Railroad Retirement Tier I benefit

or

(2) the sum of

(a) the smaller of (i) the amount included under the lower thresholds or (ii) $4,500 (for single filers) or $6,000 (for joint filers)[2]

plus

(b) 85 percent of the excess of the recipient's provisional income over the applicable secondary provisional income threshold.

Certain married beneficiaries not filing joint returns had a provisional income threshold of zero. The adjusted gross income of these individuals included the lesser of 85 percent of the beneficiary's Social Security or Railroad Social Security Equivalent benefit or 85 percent of the recipient's provisional income. Thereby, for the highest income beneficiaries, a maximum of 85 percent of Social Security or Railroad Social Security Equivalent benefits were includable in AGI. None of the provisional income thresholds are indexed for inflation.

II. Summary

For calendar year 1994, OTA initially estimated that the tax liability attributable to partial inclusion of Social Security and Railroad Social Security Equivalent benefits was $9,979 million.[3] Based on this estimate, transfers of $5,729 million, $301 million, $3,897 million, and $52 million were made from the general fund to the FOASI, FDI, FHI, and SSEBA trust funds, respectively. These transfers, on net, exceeded the amount of tax liability calculated from actual 1994 tax return data by $893 million. Transfers to the FOASI, FHI and the SSEBA trust funds were overstated by $334 million, $558 million, and $4 million, respectively. Transfers to the FDI trust fund were understated by $3 million. Correcting adjustments to the FOASI, FDI, and SSEBA trust funds were made in July 1997. The correcting adjustment for the FHI trust fund was made in September 1997.

For calendar year 1995, OTA estimated that the tax liability attributable to the partial inclusion of Social Security and Railroad Social Security Equivalent benefits was $10,273 million. Based on this estimate, transfers of $5,929 million, $333 million, $3,961 million, and $50 million were made from the general fund to the FOASI, FDI, FHI, and SSEBA trust funds, respectively. On net, the amount of tax liability calculated from actual 1995 tax return data exceeded the amount transferred by $578 million. Transfers to the FOASI, FDI, FHI, and SSEBA trust funds were understated by $460 million, $32 million, $77 million, and $9 million, respectively. Correcting adjustments to the FOASI, FDI, FHI, and SSEBA trust funds were made in January 1999.

For calendar year 1996, OTA estimated that the tax liability attributable to the partial inclusion of Social Security and Railroad Social Security Equivalent benefits was $10,779 million. Based on this estimate, transfers of $6,279 million, $364 million, $4,079 million, and $57 million were made from the general fund to the FOASI, FDI, FHI, and SSEBA trust funds, respectively. On net, the amount of tax liability calculated from actual 1996 tax return data exceeded these transfers by $1,902 million. Transfers to the FOASI, FDI, FHI, and SSEBA trust funds were understated by $1,083 million, $51 million, $750 million, and $18 million, respectively. Correcting adjustments to the FOASI, FDI, and SSEBA trust funds were made in October 1999. The correcting adjustment to the FHI trust fund was made in January 2000.

Chapter 2 presents the OTA's methodology for estimating liability along with a comparison of the estimates with calculated amounts of 1994, 1995, and 1996 income tax liability attributable to the partial inclusion of benefits in AGI. The methodology for estimated transfers and adjustments to estimated transfers along with the correcting adjustments for estimated 1994, 1995, and 1996 liabilities are presented in Chapter 3. The forecast of 1997-2001 liabilities by trust fund and the estimated transfers to the trust funds are presented in Chapter 4. Chapter 5 describes the distribution of taxable benefits by income class for tax years 1994, 1995, and 1996. It also contains analyses of the sources of AGI for taxpayers with taxable Social Security benefits and the effect of OBRA 93 on the amount of taxable Social Security benefits and taxes from Social Security benefits.

CHAPTER 2: METHODOLOGY AND ESTIMATES OF THE TAX LIABILITY ATTRIBUTABLE TO THE TAXATION OF SOCIAL SECURITY BENEFITS FOR CALENDAR YEARS 1994-1996

I. Methodology

The Office of Tax Analysis (OTA) is responsible for estimating the annual tax liability attributable to the partial inclusion of Social Security and Railroad Social Security Equivalent benefits received in AGI, estimating quarterly transfers from the general fund to the trust funds based on these estimates, and calculating correcting adjustments to amounts initially transferred. OTA provides this information to the Treasury Department's Financial Management Services, which has the authority to transfer funds from general revenue to the trust funds.

OTA estimated the amount of 1994, 1995, and 1996 tax liability attributable to the inclusion of Social Security benefits in AGI using results from OTA's Individual Income Tax Model (ITM).[4, 5] The ITM contained information from a stratified random sample of 110,000 tax returns selected from the Internal Revenue Service's Statistics of Income (SOI) file for 1989, various imputations of data not available from tax returns, and a tax calculator.[6] Records on the ITM file were extrapolated to future years. Computations based on the ITM were weighted to produce results that were representative of the entire population of taxpayers.

Individual tax returns alone do not provide sufficient data to estimate the revenue effects of the partial inclusion of Social Security and Railroad Retirement benefits in AGI. Therefore, imputations were added to the ITM to compensate for the missing data. The Social Security Administration and the Railroad Retirement Board provided information on the total amounts of benefits paid to recipients. These amounts were distributed among appropriate taxpayers on the ITM using, as a guide, two important data sources --- (1) a file of form SSA-1099 and form RRB-1099 information returns for tax year 1989 that are matched to the 1989 SOI file; and (2) the most recent Current Population Survey data from the Census Bureau to aid in matching benefits to recipients who were not required to file a tax return. For purposes of extrapolating the ITM, total Social Security and Railroad Social Security Equivalent benefits were projected to grow at the rate indicated in the most recent benefits forecast provided by the Social Security Administration and the Railroad Retirement Board.[7]

The tax calculator used the information (including the imputations and extrapolations discussed above) for each filing unit to calculate the estimated Federal income tax liability of each taxpayer on the model. Results from the ITM were then obtained by estimating tax liabilities with, and without, Social Security and Railroad Social Security Equivalent benefits included in AGI.

The ITM accounted for changes in the effects of the various tax provisions resulting from the inclusion of these benefits in AGI. That is, the use of deductions and credits, as well as calculations of alternative minimum tax liabilities, can be affected by the inclusion of benefits in AGI. For example, as AGI increases, a lesser amount of medical, casualty and certain miscellaneous expenses may be deducted. On the other hand, the increased tax liability resulting from the inclusion of benefits in AGI enables some taxpayers to use tax credits that otherwise might not be usable in that year. The ITM calculated both the percentage of total benefits included in AGI as a result of the special benefit inclusion formulas and the average marginal tax rates applicable to the taxable benefits. Final estimates of tax liability attributable to the partial inclusion of benefits were produced by supplementing results from the ITM with a spreadsheet model that allowed OTA to blend parameter estimates from the ITM with more recent tax return processing data, not available when the ITM was extrapolated, and the most current tax collection information.

II. Estimates of Tax Liability Attributable to the Taxation of Benefits in Calendar Year 1994[8]

Table 1.A compares the assumptions and parameters used for the final estimate of tax liability with the parameters calculated from actual tax return and benefits data from calendar year 1994. The top section of Table 1.A shows that OTA estimated that 13.67 percent of $322,093 million in benefits were included in AGI and taxed at an average marginal tax rate of 22.66 percent, resulting in estimated total liability of $9,979 million. The bottom section of the table shows that, based on calendar year 1994 tax return and benefits data, 12.31 percent of $321,118 million in benefits were included in AGI and taxed at an average marginal tax rate of 23.02 percent, resulting in actual tax liability of $9,086 million.

The total liability estimate was the sum of the estimates of the tax liability attributable to the partial inclusion of FOASI, DI, and SSEBA benefits. The top section of Table 1.A shows that OTA initially estimated that 14.75 percent of $279,518 million of FOASI benefits paid out in 1994 would be included in AGI and taxed at an average marginal tax rate of 22.81 percent, resulting in estimated tax liability of $9,401 million. The bottom section of the table shows that, based on calendar year 1994 tax return and benefits data, 13.25 percent of $278,537 million in FOASI benefits were included in AGI and taxed at an average marginal tax rate of 23.26 percent, resulting in actual tax liability of $8,569 million.

Recipients of FDI benefits have, on average, lower incomes than FOASI beneficiaries. Therefore, the estimated inclusion rates for benefits in AGI and average marginal tax rates for FDI beneficiaries are lower than those for FOASI recipients. The top section of Table 1.A shows it was estimated that 6.49 percent of $37,741 million in FDI benefits would be included in AGI and taxed at an average marginal tax rate of 20.18 percent, resulting in estimated tax liability of $494 million. The bottom section of the table shows that, based on calendar year 1994 tax return and benefits data, 6.08 percent of $37,717 million in FDI benefits were included in AGI and taxed at an average marginal tax rate of 19.62 percent, resulting in actual tax liability of $450 million.

Railroad SSEBA beneficiaries have, on average, incomes that are slightly lower than FOASI beneficiaries, but higher than FDI recipients. The top section of Table 1.A shows it was estimated that 8.58 percent of $4,836 million in SSEBA benefits would be included in AGI and taxed at an average marginal tax rate of 20.24 percent, resulting in estimated tax liability of $84 million. The bottom section of the table shows that, based on calendar year 1994 tax return and benefits data, 6.87 percent of $4,864 million in SSEBA benefits were included in AGI and taxed at an average marginal tax rate of 20.06 percent, resulting in actual tax liability of $67 million.

TABLE 1.A

Comparison of Parameters Used to Estimate Tax Liability Attributable to the Partial Inclusion of Benefits in AGI with Parameters Calculated from Actual Amounts 1/

Calendar Year 1994

Benefit Source	Total Benefits Paid ($millions)	Benefits Includable In AGI (percent)	Tax Rate on Benefits Includable In AGI (percent)	Tax Liabilities ($millions)
		Estimate Parameters 2/		
Federal Old-Age and Survivors Insurance	279,518	14.75	22.81	9,401
Federal Disability Insurance	37,741	6.49	20.18	494
Railroad Social Security Equivalent Benefits	4,836	8.58	20.24	84
Total	322,093	13.67	22.66	9,979
		Actual Parameters 3/		
Federal Old-Age and Survivors Insurance	278,537	13.25	23.26	8,569
Federal Disability Insurance	37,717	6.08	19.62	450
Railroad Social Security Equivalent Benefits	4,864	6.87	20.06	67
Total	321,118	12.31	23.02	9,086

Department of the Treasury
Office of Tax Analysis

1/ Estimated tax liabilities were updated on a semi-annual basis. The table compares the parameters used in the final estimates of tax liability with the parameters derived from actual tax return and benefits data. Rounding of results may prevent exact matching of total. Benefits paid to non-resident aliens are not included in the benefits paid figures.

2/ Source: The total benefits paid data are estimates provided by the Social Security Administration and the Railroad Retirement Board; the other data are estimated from the Office of Tax Analysis Individual Income Tax Model.

3/ Source: The total benefits paid data are derived from the 1998 Annual Statistical Supplement to the Social Security Bulletin (Tables 4.A1 and 4.A2), the Social Security Administration and the Railroad Retirement Board; the tax liability data come from the Internal Revenue Service's Individual Master File.

III. Estimates of Tax Liability Attributable to the Taxation of Benefits in Calendar Year 1995

Table 1.B compares the assumptions and parameters used for the final estimate of tax liability with the parameters calculated from actual tax return and benefits data from calendar year 1995. The top section of Table 1.B shows that OTA estimated that 13.40 percent of $337,578 million in benefits were included in AGI and taxed at an average marginal tax rate of 22.7 percent, resulting in estimated total tax liability of $10,273 million. The bottom section of the table shows that, based on calendar year 1995 tax return and benefits data, 13.58 percent of $336,301 million in benefits were included in AGI and taxed at an average marginal tax rate of 23.76 percent, resulting in actual total tax liability of $10,851 million.

The total liability estimate was the sum of the estimates of the tax liability attributable to the partial inclusion of FOASI, FDI, and SSEBA benefits in AGI. The top section of the Table 1.B shows that OTA estimated that 14.45 percent of $291,453 million of FOASI benefits paid out in 1995 would be included in AGI and taxed at an average marginal tax rate of 22.92 percent, resulting in estimated tax liability of $9,651 million. The bottom section of the table shows that, based on calendar year 1995 tax return and benefits data, 14.66 percent of $290,507 million in FOASI benefits were included in AGI and taxed at an average marginal tax rate of 23.96 percent, resulting in actual tax liability of $10,207 million.

Recipients of FDI benefits have, on average, lower incomes than FOASI beneficiaries. Therefore, the estimated inclusion rates for benefits in AGI and average marginal tax rates for FDI recipients are lower than those for FOASI beneficiaries. The top section of Table 1.B shows OTA estimated that 6.62 percent of $41,200 million in FDI benefits would be included in AGI and taxed at an average marginal tax rate of 19.89 percent, resulting in estimated tax liability of $542 million. The bottom section of the table shows that, based on calendar year 1995 tax return and benefits data, 6.54 percent of $40,866 million in FDI benefits were included in AGI and taxed at an average marginal tax rate of 20.81 percent, resulting in actual tax liability of $556 million.

SSEBA beneficiaries have, on average, incomes that are slightly lower than FOASI beneficiaries but higher than FDI recipients. The top section of Table 1.B shows OTA estimated that 8.15 percent of $4,925 million paid in SSEBA benefits would be included in AGI and taxed at an average marginal tax rate of 19.93 percent, resulting in estimated tax liability of $80 million. The bottom section of the table shows that, based on calendar year 1995 tax return and benefits data, 8.13 percent of $4,928 million in SSEBA benefits were included in AGI and taxed at an average marginal tax rate of 21.96 percent, resulting in actual tax liability of $88 million.

TABLE 1.B

Comparison of Parameters Used to Estimate Tax Liability Attributable to the Partial Inclusion of Benefits in AGI with Parameters Calculated from Actual Amounts 1/

Calendar Year 1995

Benefit Source	Total Benefits Paid ($millions)	Benefits Included in AGI (percent)	Tax Rate on Benefits Included in AGI (percent)	Tax Liability ($millions)
		Estimate Parameters 2/		
Federal Old-Age and Survivors Insurance	291,453	14.45	22.92	9,651
Federal Disability Insurance	41,200	6.62	19.89	542
Railroad Social Security Equivalent Benefits	4,925	8.15	19.93	80
Total	337,578	13.40	22.70	10,273
		Actual Parameters 3/		
Federal Old-Age and Survivors Insurance	290,507	14.66	23.96	10,207
Federal Disability Insurance	40,866	6.54	20.81	556
Railroad Social Security Equivalent Benefits	4,928	8.13	21.96	88
Total	336,301	13.58	23.76	10,851

Department of the Treasury
Office of Tax Analysis

1/ Estimated tax liabilities were updated on a semi-annual basis. The table compares the parameters used in the final estimates of tax liability with the parameters derived from actual tax return and benefits data. Rounding of results may prevent exact matching of total. Benefits paid to non-resident aliens are not included in the benefits paid figures.

2/ Source: The total benefits paid data are estimates provided by the Social Security Administration and the Railroad Retirement Board; the other data come from the Office of Tax Analysis Individual Tax Model.

3/ Source: Total benefits paid data are derived from the 1998 Annual Statistical Supplement to the Social Security Bulletin (Tables 4.A1 and 4.A2), the Social Security Administration and the Railroad Retirement Board; the tax liability data are from the Internal Revenue Service's Individual Master File.

IV. Estimates of Tax Liability Attributable to the Taxation of Benefits in Calendar Year 1996

Table 1.C compares the assumptions and parameters used for the final estimate of tax liability with the parameters calculated from actual tax return and benefits data from calendar year 1996. The top section of Table 1.C shows that OTA estimated that 13.89 percent of $351,872 million in benefits were included in AGI and taxed at an average marginal tax rate of 22.05 percent, resulting in estimated total tax liability of $10,799 million. The bottom section of the table shows that, based on calendar year 1996 tax return and benefits data, 14.99 percent of $350,441 million in benefits were included in AGI and taxed at an average marginal tax rate of 24.15 percent, resulting in actual total tax liability of $12,681 million.

The total liability estimate was the sum of the estimates of the tax liability attributable to the partial inclusion of FOASI, FDI, and SSEBA benefits in AGI. The top section of the Table 1.C shows that OTA estimated that 14.99 percent of $302,533 million of FOASI benefits paid out in 1996 would be included in AGI and taxed at an average marginal tax rate of 22.28 percent, resulting in estimated tax liability of $10,106 million. The bottom section of the table shows that, based on calendar year 1996 tax return and benefits data, 16.25 percent of $301,319 million in FOASI benefits were included in AGI and taxed at an average marginal tax rate of 24.37 percent, resulting in actual tax liability of $11,391 million.

Recipients of FDI benefits have, on average, lower incomes than FOASI beneficiaries. Therefore, the estimated inclusion rates for benefits in AGI and average marginal tax rates for FDI recipients are lower than those for FOASI beneficiaries. The top section of Table 1.B shows OTA estimated that 6.94 percent of $44,322 million in FDI benefits would to be included in AGI and taxed at an average marginal tax rate of 19.05 percent, resulting in estimated tax liability of $586 million. The bottom section of the table shows that, based on calendar year 1996 tax return and benefits data, 6.99 percent of $44,105 million in FDI benefits were included in AGI and taxed at an average marginal tax rate of 20.75 percent, resulting in actual tax liability of $640 million.

SSEBA recipients have, on average, incomes that are slightly lower than FOASI beneficiaries but higher than FDI recipients. The top section of Table 1.B shows OTA estimated that 8.73 percent of $5,017 million in SSEBA benefits would be included in AGI and taxed at an average marginal tax rate 19.86 percent, resulting in estimated tax liability of $87 million. The bottom section of the table shows that, based on calendar year 1995 tax return and benefits data, 9.51 percent of $5,017 million in SSEBA benefits were included in AGI and taxed at an average marginal tax rate of 23.05 percent, resulting in actual tax liability of $110 million.

TABLE 1.C

Comparison of Parameters Used to Estimate Tax Liability Attributable to the Partial Inclusion of Benefits in AGI with Parameters Calculated from Actual Amounts 1/

Calendar Year 1996

Benefit Source	Total Benefits Paid ($millions)	Benefits Included In AGI (percent)	Tax Rate on Benefits Included in AGI (percent)	Tax Liability ($millions)
		Estimate Parameters 2/		
Federal Old-Age and Survivors Insurance	302,533	14.99	22.28	10,106
Federal Disability Insurance	44,322	6.94	19.05	586
Railroad Social Security Equivalent Benefits	5,017	8.73	19.86	87
Total	351,872	13.89	22.05	10,799
		Actual Parameters 3/		
Federal Old-Age and Survivors Insurance	301,319	16.25	24.37	11,931
Federal Disability Insurance	44,105	6.99	20.75	640
Railroad Social Security Equivalent Benefits	5,017	9.51	23.05	110
Total	350,441	14.99	24.15	12,681

Department of the Treasury
Office of Tax Analysis

1/ Estimated tax liabilities were updated on a semi-annual basis. The table compares the parameters used in the final estimates of tax liability with the parameters derived from actual tax return and benefits data. Rounding of results may prevent exact matching of total. Benefits paid to non-resident aliens are not included in the benefits paid figures.

2/ Source: The total benefits paid data are estimates provided by the Social Security Administration and the Railroad Retirement Board; the other data come from the Office of Tax Analysis Individual Tax Model.

3/ Source: Total benefits paid data are derived from the 1998 Annual Statistical Supplement to the Social Security Bulletin (Tables 4.A1 and 4.A2), the Social Security Administration and the Railroad Retirement Board; the tax liability data are from the Internal Revenue Service's Individual Master File.

CHAPTER 3: METHODOLOGY, ESTIMATED TRANSFERS, AND ADJUSTMENTS TO ESTIMATED TRANSFERS FOR CALENDAR YEARS 1994, 1995, AND 1996 LIABILITY

I. Methodology for Estimated Transfers

Based on the estimates of annual liability given in chapter 2, the Department of the Treasury's Office of Tax Analysis constructed estimates of the annual and quarterly transfers from the general fund to the FOASI, FDI, FHI, and SSEBA trust funds. In order to estimate trust fund specific transfers, OTA first estimated the annual liability attributable to the inclusion of FOASI, FDI, and SSEBA benefits in AGI on both a pre-OBRA 93 and a post-OBRA 93 basis. The amount of liability transferable to the FHI trust fund was taken as the difference between the post-OBRA 93 total liability estimate and the pre-OBRA 93 total liability estimate. The amounts of liability transferable to the FOASI, FDI, and SSEBA trust funds were the pre-OBRA 93 liability estimates. OTA then estimated the quarterly transfer amounts associated with the current and subsequent calendar years. Separate methodologies were used for the pre-OBRA 93 and post-OBRA 93 quarterly transfer estimates due to differences in statutory requirements.

With respect to pre-OBRA 1993 transfers, statutory requirements dictate that liability should be transferred quarterly as it accrues. Thereby, the quarterly transfers were made on the first day of the calendar quarters beginning with the months of January, April, July, and October. For a given liability year, the total amounts transferable to the FOASI, FDI, or SSEBA trust funds were the amounts of liability estimated from the most recent forecast of estimated annual liability,[9] less any amounts of liability already transferred for that year. This net difference was then divided evenly over the remaining quarters still available for transfers.

With respect to the post-OBRA 1993 transfers, statutory requirements dictate that liability should be transferred quarterly as it is collected. Thereby, OTA estimated that calendar year liability would be transferred in five installments, which represented four quarterly estimated payments and one final payment of liability. Transfers to the FHI trust fund were made on the fifteenth day of the quarter beginning with the months April, June, September, and January. Thereby, the total April 15th transfer to the FHI trust fund always contains two installments – one estimated payment for the current year's liability and one final payment for the prior year's liability. For a given liability year, the total amount transferable to the FHI trust fund was the amount of liability estimated from the most recent forecast of estimated annual liability, less any amounts of liability already transferred for that year. This net difference was divided evenly over the remaining installment periods still available for transfers. The estimated installments for each liability year were then summed for each quarter (to account for the April 15th transfer) in order to provide the final estimate of quarterly transfers.

II. Methodology for Making Adjustments to Estimated Transfers

The Social Security Amendments of 1983 require adjustments to the trust funds if actual tax return data subsequently reveal that the initial transfers were incorrect. To calculate the actual additional tax liability for calendar years 1994, 1995, or 1996 resulting from partial taxation of Social Security and Railroad Retirement Social Security Equivalent benefits, the IRS created data files for each year based on Form 1040 records. All filers who reported taxable Social Security or Railroad Retirement Social Security Equivalent benefits on their Form 1040 in 1994, 1995, or 1996 were included in these data files. Although the Form 1040 provides information on the total amount of benefits includable in taxable income, it does not indicate whether the filer received FOASI, FDI, or SSEBA benefits. Such information is needed to allocate revenues accurately to the trust funds. To obtain this information, the Form 1040 records belonging to those beneficiaries who reported taxable benefits were matched to the Form 1099 records provided by the Social Security Administration and the Railroad Retirement Board. (The actual Forms SSA-1099 sent to taxpayers do not disclose whether the amounts shown are for retirement or disability benefits; however, the Form SSA-1099 records provided by the Social Security Administration to the IRS do include the source of benefits.)

Using this matched file of Form 1040 and Form SSA-1099 and RRB-1099 records, the IRS calculated, for each benefit type: (1) the number of tax returns with benefits that were includable in AGI, (2) the gross dollar amount of benefits paid to beneficiaries who filed tax returns and had benefits included in AGI, and (3) the amount of taxable benefits. Next, for each taxpayer on the file, taxable income and tax liability were computed with and without taxable benefits. The amount of revenue attributable to the taxation of benefits was calculated as the difference in actual tax liabilities and tax liabilities estimated with taxable benefits excluded from taxable income. This calculation was made for both pre-OBRA 93 liability and post-OBRA 93 liability.

After comparing the IRS liability calculations with the OTA liability estimates, OTA calculated adjustments to the estimated transfers. The adjustments were made in the first possible quarterly transfer after receiving the IRS calculations. The adjustments were added to the estimated transfer amounts, with the net transfer for the quarter reflecting the quarterly estimated transfer for the current period liability and the adjustment to the estimate of prior period liability.

III. Estimated Transfers and Adjustments to Estimated Transfers for Calendar Year 1994 Liability

Estimated calendar year 1994 tax liability attributable to the taxation of benefits was transferred quarterly to the FOASI, FDI, and SSEBA trust funds between January 1st and October 1st, 1994. Total transfers of $5,729 million, $301 million, and $52 million were made to the FOASI, FDI, and SSEBA trust funds, respectively. For the FHI trust fund, estimated calendar year 1994 tax liability attributable to the additional taxation of benefits was transferred quarterly between April 15th, 1994 and April 15th, 1995. Total transfers of

$3,897 million were made to the FHI trust fund.

Table 2 provides a summary of the amounts transferred based on OTA estimates, the amounts based on IRS calculations, and the resulting adjustments to the FOASI, FDI, FHI, and SSEBA trust funds due to the reconciliation of OTA estimates and IRS calculations. As a result of the reconciliation of estimated and actual 1994 tax liability, a total net negative adjustment of $893 million was made to the trust funds. That is, net excess estimated funds were transferred from the trust funds back to the general fund. Thereby, the July 1, 1997 transfer included adjustments to the FOASI, FDI, and SSEBA trust funds of -$334 million, $3 million, and -$4 million, respectively. The September 15, 1997 transfer to the FHI trust fund included an adjustment of -$558 million.

IV. Estimated Transfers and Adjustments to Estimated Transfers for Calendar Year 1995 Liability

Estimated calendar year 1995 tax liability attributable to the taxation of benefits was transferred quarterly to the FOASI, FDI, and SSEBA trust funds between January 1st and October 1st, 1995. Total transfers of $5,929 million, $333 million, and $50 million were made to the FOASI, FDI, and SSEBA trust funds, respectively. For the FHI trust fund, estimated calendar year 1995 tax liability attributable to the additional taxation of benefits was transferred quarterly between April 15th, 1995 and April 15th, 1996. Total transfers of $3,961 million were made to the FHI trust fund.

Table 2 provides a summary of the amounts transferred based on OTA estimates, the amounts based on IRS calculations, and the resulting adjustments to the FOASI, FDI, FHI, and SSEBA trust funds due to the reconciliation of OTA estimates and IRS calculations. As a result of the reconciliation of estimated and actual 1995 tax liability, a total net positive adjustment of $578 million was made to the trust funds. Thereby, the January 1st, 1999 transfer included adjustments to the FOASI, FDI, and SSEBA trust funds of $460 million, $32 million, and $9 million, respectively. The January 15th, 1999 transfer to the FHI trust fund included an adjustment of $77 million.

V. Estimated Transfers and Adjustments to Estimated Transfers for Calendar Year 1996 Liability

Estimated calendar year 1996 tax liability attributable to the taxation of benefits was transferred quarterly to the FOASI, FDI, and SSEBA trust funds between January 1st and October 1st, 1996. Total transfers of $6,279 million, $364 million, and $57 million were made to the FOASI, FDI, and SSEBA trust funds, respectively. For the FHI trust fund, estimated calendar year 1996 tax liability attributable to the additional taxation of benefits was transferred quarterly between April 15th, 1995 and April 15th, 1996. Total transfers of $4,079 million were made to the FHI trust fund.

Table 2 provides a summary of the amounts transferred based on OTA estimates, the amounts based on IRS calculations, and the resulting adjustments to the FOASI, FDI, FHI, and SSEBA trust funds due to the reconciliation of OTA estimates and IRS calculations. As a result of the reconciliation of estimated and actual 1996 tax liability, a total net positive adjustment of $1,902 million was made to the trust funds. Thereby, the October 1st, 1999 transfer included adjustments to the FOASI, FDI, and SSEBA trust funds of $1,083 million, $51 million, and $18 million, respectively. The January 15th, 2000 transfer to the FHI trust fund included an adjustment of $750 million.

Table 2

Comparison of OTA Estimated Transfers, IRS Calculated Transfers, and Corresponding Adjustments for Calendar Years 1994 – 1996
($'s Millions)

Trust Fund	OTA Estimated Transfers	IRS Calculated Transfers	Adjustment
CY 1994 Liability			
FOASI	5,729	5,395	-334
FDI	301	304	3
FHI	3,897	3,339	-558
SSEBA	52	48	-4
Total	9,979	9,086	-893
CY 1995 Liability			
FOASI	5,929	6,389	460
FDI	333	365	32
FHI	3,961	4,068	77
SSEBA	50	59	9
Total	10,273	10,852	578
CY 1996 Liability			
FOASI	6,279	7,362	1,083
FDI	364	415	51
FHI	4,079	4,829	750
SSEBA	57	75	18
Total	10,779	12,681	1,902

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CHAPTER 4: FORECAST OF TRANSFERS TO TRUST FUNDS FOR CALENDAR YEARS 1997 TO 2001

I. Forecasting Methodology

The Social Security Amendments of 1983 require that the annual report include a forecast of transfers to the trust funds for the next five years. The forecast for the 1997 through 2001 period was produced using results from two versions of the ITM. The 1997 and 1998 forecasts were produced using results from the 1989-based ITM. The 1999 through 2001 forecasts were produced using results from the 1995-based ITM. For each version, cross-sectional records on the ITM were extrapolated to future years. Computations based on the ITM were weighted to produce results that are representative of the entire population of taxpayers. Final estimates were produced by supplementing results from the ITM with a spreadsheet model, as described in Chapter 2.

As noted in Chapter 2, tax returns alone do not provide sufficient data to estimate the revenue effects of the partial inclusion of Social Security and Railroad Retirement Social Security Equivalent benefits in AGI. The ITM was modified to include the total amount of Social Security and Railroad Retirement Social Security Equivalent benefits paid, which were provided by the Social Security Administration and the Railroad Retirement Board, respectively. These amounts were distributed among appropriate recipients on the ITM by using a sample of SSA-1099 and RRB-1099 information returns that were matched to the tax returns in the SOI file, and the most recent Current Population Survey data from the Census Bureau was used as a guide to the non-filing population.

The Social Security Administration and the Railroad Retirement Board also provided forecasts of the total amounts of benefits expected to be paid in future years. The percent of aggregate retirement benefits includable in AGI and marginal tax rates were obtained by extrapolating the ITM in accordance with the Administration's macro-economic forecasts. In addition, the forecast of future transfers reflects the information obtained from the IRS computation of marginal tax rates and benefits includable in AGI reported on tax returns for calendar year 1996.

II. Forecast of Annual Transfers to the Trust Funds

The estimated transfers for calendar years 1997 through 2001 are presented in Table 3. The estimated transfers for 1997 through 1999 have been completed and include adjusting transfers attributable to prior years' liabilities. The transfers made for calendar year 1997 include adjustments due to the reconciliation of calendar year 1994 estimated and actual liabilities. The FHI transfer for calendar year 1998 includes an adjustment due to the reconciliation of calendar year 1995 estimated and actual liability. The FOASI, FDI, and SSEBA transfers made for calendar year 1999 include adjustments due to the reconciliation of calendar years 1995 and 1996 estimated and actual liabilities. The FHI transfer for calendar year 1999 includes an adjustment due to the reconciliation of calendar year 1996 estimated and actual liability. For calendar years 1997 through 2001, OTA forecasts that

$46,959 million, $2,879 million, $31,341 million, and $412 million will be transferred from general revenues to the FOASI, FDI, FHI, and SSEBA trust funds, respectively, for net income tax liability attributable to the partial inclusion of Social Security and Railroad Social Security Equivalent benefits in AGI.

Table 3
Forecast of Transfers, Net of Adjustments,
to the FOASI, FDI, FHI, and SSEBA Trust Funds
for Calendar Years 1997 – 2001

($'s Millions)

Trust Fund	Calendar Year Liability					
	Completed Transfers			Estimated Transfers		Totals
	1997	1998	1999	2000	2001	1997-2001
FOASI						
Estimated Transfer	7,561	9,003	9,219	9,686	10,281	45,750
Prior Year Adjustment	-334	0	1,543	0	0	1,209
Net Transfer	7,227	9,003	10,762	9,686	10,281	46,959
FDI						
Estimated Transfer	458	519	572	599	645	2,793
Prior Year Adjustment	3	0	83	0	0	86
Net Transfer	461	552	655	599	645	2,879
FHI						
Estimated Transfer	4,856	5,990	6,314	6,683	7,169	31,012
Prior Year Adjustment	-498	77	750	0	0	329
Net Transfer	4,298	6,067	7,064	6,683	7,169	31,341
SSEBA						
Estimated Transfer	61	74	79	87	88	389
Prior Year Adjustment	-4	0	27	0	0	23
Net Transfer	57	74	106	87	88	412
Totals						
Estimated Transfer	12,936	15,586	16,184	17,055	18,183	79,944
Prior Year Adjustment	-833	77	2,403	0	0	1,647
Net Transfer	12,103	15,663	18,587	17,055	18,183	81,591

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CHAPTER 5: ANALYSIS OF TAXABLE SOCIAL SECURITY BENEFITS IN CALENDAR YEARS 1992 -1997

I. Distribution of Taxable Social Security Benefits by Family Economic Income Class for Calendar Years 1994 through 1996

This section presents a distributional analysis of taxable Social Security and Railroad Retirement SSEBA Tier 1 benefits. The tabulations are based on the 1989-based Individual Tax Model (ITM) and are for calendar years 1994-1996. The ITM uses information provided by the Social Security Administration and the Railroad Retirement Board on benefits paid, as well as data from the Current Population Survey and other sources (see Chapter 2).[10] These data were statistically matched to create a file that represents both beneficiaries with taxable benefits and the recipient population that (1) is not required to file tax returns or (2) files tax returns but has insufficient income to require the inclusion of benefits in AGI.

The matched file can be used to create families by grouping related taxpayers. Income received by families that may not be recorded on tax returns, such as means-tested transfer payments and employer-provided fringe benefits, can also be computed using the matched file. The total income of families computed on the ITM, "Family Economic Income," is used to classify families in distributional tables by their economic well-being.[11]

Tables 5.A, 5.B, and 5.C summarize the benefit inclusion rates and average marginal tax rates on benefits for families with taxable benefits for tax years 1994, 1995, and 1996, respectively. The tables reflect the distribution of taxable benefits on a post-OBRA 1993 basis. Table 5.A shows that, on average, families with taxable benefits in 1994 included 41 percent of their benefits in AGI. The overall average marginal tax rate on taxable benefits was 23 percent. Tables 5.B and 5.C show that the corresponding benefit inclusion rates for tax years 1995 and 1996 are 42 percent and 41 percent, respectively. The overall average marginal tax rates on taxable benefits for tax years 1995 and 1996 were 24 percent and 25 percent, respectively.

II. Comparison of Income Sources for Tax Years 1992 through 1997

Table 6 shows the sources of income for taxpayers with taxable Social Security income in tax years 1992 through 1997 as a percent of AGI.[12] Several interesting patterns emerge. First, taxpayers with taxable Social Security benefits in 1992 through 1994 had similar income profiles. The two largest income sources combined---taxable pension income and wages---averaged about 43.6 percent of AGI in these years. Beginning in 1995, however, the year-over-year population profile changed dramatically. The amount of AGI attributable to labor income fell steadily, representing 39 percent of AGI in 1997. In addition, there was a switch in the relative importance of interest income (both taxable and tax-exempt) and equity income (dividends and capital gains) over the 1992 through 1997 period. In 1992, interest income for taxpayers with taxable Social Security benefits totaled $82.1 billion, an amount equivalent to 25 percent of AGI. Equity income was $66.5 billion, or 20.3 percent of AGI. By 1997, interest income for taxpayers with taxable benefits had grown to $99.5 billion, a 21 percent increase relative to 1992 levels, but fell to 16.8 percent of AGI. Conversely, equity income rose to $150.7 billion, a 126.4 percent increase over 1992 levels, and represented 25.4 percent of AGI in 1997.

For the 1992 to 1995 period, nearly all of the change in the relative amounts of debt and equity income included in modified AGI occurred from taxable interest income and capital gains, rather than from tax-exempt interest and dividends. In particular, there was a sharp decline in the level of taxable interest income in 1993 and 1994, with steady growth thereafter. In contrast, tax-exempt interest grew slowly over the entire period. However, this growth was outpaced by growth in other components of income. By the end of 1995, taxable interest income, tax-exempt interest income, and AGI had grown 3.3 percent, 5.4 percent and 29.4 percent respectively, relative to their 1992 levels.

While the growth of interest income was stronger in 1996 and 1997, this growth remained slower than other components of AGI. In particular, the growth of tax-exempt interest income has lagged far behind other components of AGI during this period. By the end of 1997, taxable interest income, tax-exempt interest income and AGI had grown 23 percent, 3.6 percent and 38.8 percent respectively, relative to their 1995 levels.

The rise in equity income from 1992 to 1997 was driven by a sizeable increase in net positive capital gains realizations in AGI for taxpayers with taxable Social Security benefits. From 1992 to 1997, net positive capital gains in AGI increased from $126.7 billion to $360 billion for the total taxpaying population, an increase of 186 percent. The growth in net positive capital gains realizations was even greater for the subset of taxpayers with taxable Social Security benefits. Net positive realizations for these taxpayers rose from $32 billion in 1992 to $96.8 billion in 1997, an increase of 302 percent. In contrast, dividends earned by taxpayers with taxable Social Security benefits (the other component of equity income) grew by 156 percent, or approximately half the capital gains rate, over the same time period. It is interesting to note that the growth in capital gains realizations far outpaced growth in asset prices during this period. For example, from the end of 1992 to the end of 1997, the S&P 500 index grew from 415.7 to 872.7, an increase of approximately 110 percent.

III. The Effect of OBRA 1993 on Taxable Social Security Benefits for 1993 through 1996

Based on the matched Form 1040 and Form 1099 data described in Chapter 3, it is estimated that the amount of benefits in AGI grew by about 116 percent over the 1993 to 1996 period ($24,650 million to $53,203 million). Tax liability attributable to the inclusion of Social Security benefits in AGI grew at a slightly faster rate---nearly 128 percent ($5,558 million to $12,681 million).

The rapid growth in the amount of included benefits and the resulting tax liability is, in large part, attributable to OBRA 1993, which simultaneously increased the amount of benefits included in AGI and increased marginal tax rates for high-income taxpayers. As explained in chapter 1, high-income taxpayers were required to include up to an additional 35 percent of benefits in AGI beginning in 1994. In addition, the passage of OBRA 1993 added two new statutory tax rates for high-income taxpayers. For tax year 1993, a 36 percent marginal rate applied to taxable income in excess of $140,000 for joint returns and surviving spouses, $127,500 for heads of households, $115,000 for single individuals, and $70,000 for married individuals filing separately. A 39.6 percent marginal rate applied to taxable income in excess of $250,000 ($125,000 for married individuals filing separately).

The alternative minimum tax (AMT) calculation also was altered in OBRA 1993 for tax year 1993 and beyond. The tentative minimum tax changed from a top marginal rate of 24 percent to 26 percent of the first $175,000 ($87,500 for married individuals filing separately) of alternative minimum taxable income in excess of the applicable exemption amount, and 28 percent of any additional alternative minimum taxable income. However, the amount of alternative minimum taxable income exempt from the alternative minimum tax was raised from $40,000 to $45,000 for married taxpayers filing jointly and for surviving spouses. The exempt amount for single individuals and heads of households was raised from $30,000 to $33,750.

Table 6 shows the rapid growth of included taxable benefits. For tax years 1992 and 1993, taxable benefits averaged approximately 7.2 percent of AGI, with average growth of approximately 7.5 percent over the previous year.[13] For tax year 1994, the first year of the higher inclusion rates, taxable benefits were approximately 10.5 percent of AGI, growing approximately 57 percent over the previous year. For tax years 1995 through 1997, taxable benefits averaged approximately 10.5 percent of AGI and grew at an average rate of 16.7 percent.

Using the SOI data, we estimate that, for tax year 1994, the OBRA 1993 changes affected about 226,900 returns with taxable Social Security benefits and generated approximately $96 million in additional tax revenue from Social Security benefits. For tax years 1995 and 1996, we estimate that the tax rate changes affected about approximately 253,600 and 295,800 returns, and generated about $123 million and $138 million in additional tax revenue from Social Security benefits, respectively.

TABLE 5.A
Distribution of Taxable Social Security and Railroad Retirement Benefits and Tax Liability Due to Taxable Benefits in Calendar Year 1994 By Family Economic Income Class 1/

Family Economic Income ($ thousands)	Families 2/ (000)	Total Benefits Amount ($ millions)	Amount of Benefits Included in AGI ($ millions)	Benefit Inclusion Rate in AGI (percent)	Tax Liability due to Inclusion of Benefits in AGI ($ millions)	Tax Rate on Benefits in AGI (percent)
under 20	33	243	87	0.36	19	0.22
20-30	151	1,338	383	0.29	75	0.20
30-50	1,139	10,910	2,805	0.26	529	0.19
50-75	2,068	23,854	8,028	0.34	1,505	0.19
75-100	1,428	18,980	8,127	0.43	1,702	0.21
100-200	1,760	25,012	11,820	0.47	2,915	0.25
> 200	814	15,232	7,549	0.50	2,330	0.31
Total	7,393	95,569	38,799	0.41	9,075	0.23

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1/ Family Economic Income (FEI) is calculated as AGI plus: IRA and Keogh deductions; nontaxable transfer payments, such as Social Security benefits and Aid to Families with Dependent Children; employer-provided fringe benefits; inside build-up on pensions, IRAs, Keoghs, and life insurance; tax-exempt interest; and imputed rent on owner-occupied housing. Capital gains are computed on an accrual basis, adjusted for inflation to the extent reliable data allows. Inflationary losses of lenders and of borrowers are subtracted and added to economic income, respectively. There is also an adjustment for accelerated depreciation of non-corporate businesses. FEI is shown on a family rather than on a tax return basis. The economic incomes of all members of a family unit are added to arrive at the family's economic income used in the distributions.

2/ About 33,000 families have FEI of $20,000 or less but pay tax on their Social Security benefits. A small number of these families represent married recipients who do not file jointly; these taxpayers face zero provisional income thresholds and automatically include 50 percent of their benefits in AGI. The majority of these families, however, have lower FEI than AGI largely because their accrued capital gains, adjusted for inflation, are less than their realized (nominal) capital gains.

TABLE 5.B
Distribution of Taxable Social Security and Railroad Retirement Benefits and Tax Liability Due to Taxable Benefits in Calendar Year 1995 By Family Economic Income Class 1/

Family Economic Income ($ thousands)	Families 2/ (000)	Total Benefits Amount ($ millions)	Amount of Benefits Included in AGI ($ millions)	Benefit Inclusion Rate in AGI (percent)	Tax Liability due to Inclusion of Benefits in AGI ($ millions)	Tax Rate on Benefits in AGI (percent)
under 20	43	339	119	0.35	26	0.22
20-30	156	1,396	406	0.29	77	0.19
30-50	1,242	11,982	3,324	0.28	639	0.19
50-75	2,192	25,752	9,014	0.35	1,715	0.19
75-100	1,588	21,772	9,525	0.44	1,979	0.21
100-200	2,004	29,628	14,143	0.48	3,547	0.25
> 200	942	18,517	9,179	0.50	2,868	0.31
Total	8,167	109,386	45,710	0.42	10,851	0.24

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1/ Family Economic Income (FEI) is calculated as AGI plus: IRA and Keogh deductions; nontaxable transfer payments, such as Social Security benefits and Aid to Families with Dependent Children; employer-provided fringe benefits; inside build-up on pensions, IRAs, Keoghs, and life insurance; tax-exempt interest; and imputed rent on owner-occupied housing. Capital gains are computed on an accrual basis, adjusted for inflation to the extent reliable data allows. Inflationary losses of lenders and of borrowers are subtracted and added to economic income, respectively. There is also an adjustment for accelerated depreciation of non-corporate businesses. FEI is shown on a family rather than on a tax return basis. The economic incomes of all members of a family unit are added to arrive at the family's economic income used in the distributions.

2/ About 43,000 families have FEI of $20,000 or less but pay tax on their Social Security benefits. A small number of these families represent married recipients who do not file jointly; these taxpayers face zero provisional income thresholds and automatically include 50 percent of their benefits in AGI. The majority of these families, however, have lower FEI than AGI largely because their accrued capital gains, adjusted for inflation, are less than their realized (nominal) capital gains.

TABLE 5.C
Distribution of Taxable Social Security and Railroad Retirement Benefits and Tax Liability Due to Taxable Benefits in Calendar Year 1996 By Family Economic Income Class 1/

Family Economic Income ($ thousands)	Families 2/ (000)	Total Benefits Amount ($ millions)	Amount of Benefits Included in AGI ($ millions)	Benefit Inclusion Rate in AGI (percent)	Tax Liability due to Inclusion of Benefits in AGI ($ millions)	Tax Rate on Benefits in AGI (percent)
under 20	71	600	186	0.31	41	0.22
20-30	188	1,712	551	0.32	110	0.20
30-50	1,309	13,129	3,718	0.28	737	0.20
50-75	2,295	27,816	9,726	0.35	1,883	0.19
75-100	1,712	23,982	9,561	0.40	2,183	0.23
100-200	2,263	35,084	16,827	0.48	4,292	0.26
> 200	1,058	21,820	10,817	0.50	3,434	0.32
Total	8,896	124,143	51,386	0.41	12,680	0.25

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1/ Family Economic Income (FEI) is calculated as AGI plus: IRA and Keogh deductions; nontaxable transfer payments, such as Social Security benefits and Aid to Families with Dependent Children; employer-provided fringe benefits; inside build-up on pensions, IRAs, Keoghs, and life insurance; tax-exempt interest; and imputed rent on owner-occupied housing. Capital gains are computed on an accrual basis, adjusted for inflation to the extent reliable data allows. Inflationary losses of lenders and of borrowers are subtracted and added to economic income, respectively. There is also an adjustment for accelerated depreciation of non-corporate businesses. FEI is shown on a family rather than on a tax return basis. The economic incomes of all members of a family unit are added to arrive at the family's economic income used in the distributions.

2/ About 71,000 families have FEI of $20,000 or less but pay tax on their Social Security benefits. A small number of these families represent married recipients who do not file jointly; these taxpayers face zero provisional income thresholds and automatically include 50 percent of their benefits in AGI. The majority of these families, however, have lower FEI than AGI largely because their accrued capital gains, adjusted for inflation, are less than their realized (nominal) capital gains.

TABLE 6
Income Sources of Beneficiaries With Taxable Benefits 1/
Tax Years 1992-1997

	Returns with Taxable Benefits in 1992		Returns with Taxable Benefits in 1993		Returns with Taxable Benefits in 1994		Returns with Taxable Benefits in 1995		Returns with Taxable Benefits in 1996		Returns with Taxable Benefits in 1997	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
AGI	328,421		339,881		368,260		425,862		505,054		590,999	
Sources of AGI												
Pensions	71,502	21.8	75,755	22.3	82,426	22.4	94,307	22.1	107,386	21.3	123,259	20.9
Wages & Salaries	70,562	21.5	73,766	21.7	77,668	21.1	84,894	19.9	96,615	19.1	107,020	18.1
Interest	54,912	16.7	44,544	13.1	42,796	11.6	56,708	13.3	64,799	12.8	69,768	11.8
Dividends	34,393	10.5	35,817	10.5	36,261	9.8	41,669	9.8	46,624	9.2	53,851	9.1
Net Capital Gains	32,048	9.8	40,908	12.0	39,089	10.6	46,776	11.0	69,030	13.7	96,822	16.4
Income Sources not in AGI												
Social Security in modified AGI 2/	23,140	7.0	24,650	7.3	38,737	10.5	45,620	10.7	53,203	10.5	61,558	10.4
Tax-Exempt Interest	27,197	8.3	28,009	8.2	28,701	7.8	28,675	6.7	28,915	5.7	29,707	5.0

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1/ Income sources total differs from AGI by the amount of adjustments to income, such as the deduction for one-half of self-employment tax paid, and by other income sources, such as partnership and other Schedule E income.

2/ Includes additional taxable benefits due to OBRA 93.

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ENDNOTES

1 This submission consolidates the annual reports for tax liability years 1994 through 1996 and makes them current with the status of the reconciliation of estimated transfers and correcting adjustments. Prior reports were delayed due to the discovery of a computer programming error affecting the calculation of tax liability associated with Railroad Retirement Tier II benefits over the 1988 through 1994 period. There is no statutory requirement to report on the transfer of tax liability attributable to Railroad Retirement Tier II benefits, however, the reconciliation process was delayed while calculations related to the taxation of all benefits data were verified. While no other errors were discovered, the systems verification delayed the production of the reports for tax years 1992 and 1993.

2. For single filers, $4,500 represents one-half of the difference in the first and second provisional income thresholds ($25,000 and $34,000). For joint filers, $6,000 represents one-half of the difference in the first and second provisional income thresholds ($32,000 and $44,000).

3 A full description of OTA's methodology is given in Chapter 2.

4. A detailed description of the Individual Income Tax Model can be found in Cilke (1994).

5. OTA does not estimate the liability attributable to the receipt of FOASI and FDI benefits by non-resident aliens. Prior to tax year 1995, one-half of any Social Security benefit received by a non-resident alien was subject to a 30 percent tax rate, and this amount was automatically withheld by the Social Security Administration. According to P.L. 103-465, 85 percent of any Social Security benefit received by a non-resident alien is subject to a 30 percent tax rate for tax year 1995 and after.

Each month, the Social Security Administration sends a certification of the amount withheld to the Treasury Department's Financial Management Services, and the transfer of the withheld amount from the FOASI and FDI trust funds to general revenues and back again to the FOASI and FDI trust funds is made. Since the Social Security Administration has information on the actual amounts withheld, OTA does not estimate these withheld amounts.

Similarly, the Railroad Retirement Board automatically withholds taxes on Railroad Social Security Equivalent benefits received by non-resident aliens. However, a different procedure is used to transfer these amounts to the SSEBA. OTA includes an estimate of the withheld amounts in its initial estimates of transfers to the trust funds and subsequently verifies these estimates with the Railroad Retirement Board.

The tables in the report do not include FOASI or FDI benefits received by non-resident aliens or the taxes attributable to these benefits. However, the tables show the Railroad Social Security Equivalent benefits received by non-resident aliens.

6. For tax years after 1997, the initial estimates of tax liability attributable to the inclusion of

benefits in AGI have been made using an ITM based on an SOI file for 1995.

7. These forecasts for FOASI and FDI do not include benefits received by non-resident aliens.

8. These estimates were made semi-annually. For each forecasted year, a first estimate was made in late December for the President's budget. This estimate was updated in late June for the Mid-Session review of the President's budget.

9. Ten-year estimates for the Presidents budget are typically completed in December and then revised in June for the Mid-Session review of the President's budget.

10. The SOI sample excludes beneficiaries who live in institutions and who do not earn sufficient income to file a return. The benefit figures from SSA and RRB are adjusted for these non-filers.

11. See Cronin (1999) for a complete description of the U.S. Treasury distributional analysis methodology.

12. The data in table 6 are from the 1992 through 1997 SOI files.

13. Social Security benefits in AGI were $21,359 million in calendar year 1991.

This study was prepared by David Richardson of the Office of Tax Analysis, under the direction of Joel Platt.