[JOINT COMMITTEE PRINT]

PRESENT LAW AND ANALYSIS RELATING TO INDIVIDUAL EFFECTIVE MARGINAL TAX RATES

SCHEDULED FOR A PUBLIC HEARING

BY THE

HOUSE COMMITTEE ON WAYS AND MEANS

ON FEBRUARY 4, 1998

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

FEBRUARY 3, 1998

U.S. GOVERNMENT PRINTING OFFICE

46–072 WASHINGTON : 1998 JCS–3–98

JOINT COMMITTEE ON TAXATION

105TH CONGRESS, 2D SESSION

SENATE

WILLIAM V. ROTH, JR., Delaware,
Chairman
JOHN H. CHAFEE, Rhode Island
CHARLES GRASSLEY, Iowa
DANIEL PATRICK MOYNIHAN, New York
MAX BAUCUS, Montana

HOUSE

BILL ARCHER, Texas,
Vice Chairman
PHILIP M. CRANE, Illinois
WILLIAM M. THOMAS, California
CHARLES B. RANGEL, New York
FORTNEY PETE STARK, California

MARY M. SCHMITT, *Deputy Chief of Staff (Law)*
BERNARD A. SCHMITT, *Deputy Chief of Staff (Revenue Analysis)*

CONTENTS

	Page
INTRODUCTION	1
I. EXECUTIVE SUMMARY	2
II. PROVISIONS FOR WHICH EFFECTIVE MARGINAL TAX RATES DIFFER FROM STATUTORY MARGINAL TAX RATES	10
A. Overview of Issues Relating to Marginal Tax Rates	10
B. Phaseouts of Exclusion of Social Security Benefits	20
C. Limitations on Itemized Deductions ("Pease" Limitation; Floors on Deductions for Medical and Miscellaneous Expenses and Casualty Losses)	25
D. Personal Exemption Phaseout	32
E. Phaseout of Earned Income Credit	36
F. Phaseout of Child Tax Credit	46
G. Partial Phaseout of Dependent Care Tax Credit	50
H. Phaseout of Eligibility for Deductible and Roth IRA Contributions	54
I. Phaseout of Eligibility to Make Contributions to Education Savings Accounts ("Education IRAs")	62
J. Phaseout of Education Tax Credits (HOPE and Lifetime Learning Tax Credits)	66
K. Phaseout of Deductibility of Interest on Qualified Student Loans	71
L. Phaseout of Exclusion of Interest from Education Savings Bonds	74
M. Phaseout of Tax Credit for Elderly and Disabled	77

Page

N. Phaseout of Adoption Tax Credit and Exclusion for Adoption Expenses 79

O. Phaseout of First-Time Homebuyer Tax Credit for the District of Columbia 84

P. Phaseout of Allowance of Certain Rental Real Estate Losses Under the Passive Loss Rules 86

Q. Income Phasein of Recapture of Subsidy from Use of Qualified Mortgage Revenue Bonds and Mortgage Credit Certificates 90

III. DISCUSSION OF ISSUES GENERALLY 93

INTRODUCTION

This pamphlet,[1] prepared by the staff of the Joint Committee on Taxation ("Joint Committee staff"), provides a description of present law, legislative history, and an analysis relating to various provisions of the Internal Revenue Code (the "Code") under which the effective marginal tax rate may differ from the statutory marginal tax rates specified in the Code. The Joint Committee staff prepared this pamphlet in response to a request from the Chairman of the House Committee on Ways and Means, Bill Archer. Also, the effective marginal tax rate issues are a subject of the February 4, 1998 public hearing before the Committee on Ways and Means on tax rates and other tax reduction issues.

Part I of the pamphlet is an executive summary. Part II commences with a description of the statutory marginal tax rates under present law and a discussion of the concept of "effective marginal tax rate." The subsequent sections of Part II identify phase-outs, phase-ins, floors and other provisions that cause a taxpayer's effective marginal tax rates to differ from the statutory marginal tax rates. The order of the presentation of the provisions commences with those that are of greater significance or are more frequently noted by commentators, followed by those provisions of more narrow application. Each section describes present law, provides a brief legislative history, and describes the effective marginal tax rate created by the provision. Data document the number of taxpayers affected by the provision. Footnotes accompany each section with algebraic derivations of the effective marginal tax rate created by the provision. For simplicity of mathematical exposition, the footnotes assume a tax system with one single statutory marginal tax rate. This assumption does not affect the derivation of the effective marginal tax rate. The analysis of Part II calculates effective marginal tax rates solely by reference to the regular Federal individual income tax.

Part III provides a discussion of the tax policy issues raised by provisions that cause the effective marginal tax rates to deviate from the statutory marginal tax rates. The primary issues are the effects of these provisions on economic efficiency, equity, and tax complexity. Part III also discusses the calculation of effective marginal tax rates when the payroll tax, the alternative minimum tax, and State income taxes are considered in addition to the regular Federal individual income tax.

[1] This pamphlet may be cited as follows: Joint Committee on Taxation, *Present Law and Analysis Relating to Individual Effective Marginal Tax Rates* (JCS–3–98), February 3, 1998.

I. EXECUTIVE SUMMARY

Marginal tax rate defined

The term "marginal tax rate" refers to the additional, or incremental, increase in tax liability that a taxpayer incurs under the income tax from a $1.00 increase in his or her income. The term "statutory marginal tax rate" refers to the marginal tax rates for individuals as defined in section 1 of the Code. The basic rate structure of the Federal individual income tax is defined in terms of five marginal tax rates: 15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent. The statutory marginal tax rates increase as the taxpayer's taxable income increases. In general, if an additional $1.00 of income to the taxpayer resulted in the taxpayer's *taxable income* increasing by $1.00, then there would be no difference between *statutory* marginal tax rates and *effective* marginal tax rates. Because of the design of certain provisions of the Code, an "effective marginal tax rate" may not always correspond to the statutory marginal tax rate.

Scope of provisions

The Code includes 22 provisions that can result in a taxpayer's effective marginal tax rate deviating from the statutory marginal tax rate. In general, these provisions represent phaseouts, phase-ins, and floors that limit the ability of certain taxpayers to claim certain deductions, credits, or other tax benefits. The Joint Committee staff estimates that in 1998, 33.2 million taxpayers, or approximately one quarter of all taxpayers, will have an effective marginal tax rate different from their statutory tax rate. These deviations from the statutory marginal tax rate largely are the result of the provisions analyzed in this pamphlet. Chart 1, below, summarizes the provisions of the Code that give rise to deviations between effective marginal tax rates and statutory marginal tax rates and summarizes the income range over which the deviation will occur. Chart 1 also includes a calculation of the effective marginal tax rate that results from the provision and presents an estimate of the number of taxpayers for whom the effective marginal tax rate deviates from the statutory marginal tax rate as a result of the provision.

Efficiency

Economists argue that effective marginal tax rates create incentives, or disincentives, for taxpayers to work, save, donate to charity, and the like. These incentives may distort taxpayer choice. Distorted choice may promote an inefficient allocation of society's labor and capital resources. The magnitude of the inefficiencies potentially created by deviations of effective marginal tax rates from statutory marginal tax rates depends upon taxpayer behavioral response to tax changes. There is not consensus on the extent to

which taxpayers alter their labor supply or saving in response to tax changes. Additionally, increased effective marginal tax rates may encourage taxpayers to seek compensation in the form of tax-free fringe benefits rather than taxable compensation. Such distortions in consumption represent an efficiency loss to the economy. Increased effective marginal tax rates also may alter taxpayers' decisions regarding when to recognize income or claim expenses. Any such tax-motivated changes in the timing of income or expense generally require time and expense by the taxpayer. Such time and expense represents an efficiency loss to the economy. To put potential efficiency losses from the provisions analyzed in this pamphlet in context, one should compare them to the efficiency of an alternative tax system that did not include such provisions.

Equity

Higher marginal tax rates also lead to increased aggregate tax liabilities. A second question of tax policy is whether these increased aggregate tax liabilities are equitably distributed across taxpayers. The Federal individual income tax is a progressive tax. The existence of phaseouts and other provisions that create effective marginal tax rates that differ from statutory marginal tax rates do not make the Federal individual income tax a regressive or proportional tax. The phaseouts and other provisions identified in this pamphlet generally operate to increase the overall progressivity of the income tax. The majority of the provisions deny tax benefits to higher-income taxpayers, while preserving tax benefits to low-income and middle-income taxpayers. However, because the phaseouts and other provisions often relate to specific defined economic activities, two different taxpayers may have the same income and one can be subject to a phaseout provision while another is not. That is, these provisions may create horizontal inequities in the Code.

Complexity

The creation of phaseouts adds complexity to the Code. On the other hand, by limiting the number of taxpayers eligible to qualify for certain tax benefits, some of the provisions reduce computations, possibility of error, and record keeping. These provisions also may create a lack of clarity in taxpayers' minds regarding what precisely is the tax base and what sort of preferences exist in the Code. Complexity and lack of clarity may promote taxpayer disillusionment and a sense of unfairness regarding the Code, and may reduce compliance.

Chart 1.—Summary of Provisions Creating Effective Marginal Tax Rates Different From Statutory Marginal Tax Rates (1998)

Provision	Code section	Effective marginal tax rate	Applicable range of AGI	Estimated number of taxpayers affected (millions)
Phaseout of exclusion of social security benefits	Section 86	1.5 times the statutory rate for first tier	*Single:* $25,000–various [1] *Joint:* $32,000–various [1]	5.0
		1.85 times the statutory rate for second tier	*Single:* $34,000–various [1] *Joint:* $44,000–various [1]	
"Pease" limitation on itemized deductions	Section 68	1.03 times the statutory rate	$124,500–various	4.5
7.5-percent floor on medical deduction	Section 213	1.075 times the statutory rate	Any taxpayer itemizing medical deductions	4.5
2-percent floor on miscellaneous deductions	Section 67	1.02 times the statutory rate	Any taxpayer itemizing miscellaneous deductions	8.8
10-percent floor on casualty loss	Section 165(h)(2)	1.10 times the statutory rate	Any taxpayer itemizing deductions for casualty loss	0.2

Phaseout of personal exemption	Section 151	The statutory rate multiplied by 1.0 plus 0.0216 for each exemption, e.g., 1.0216 times the statutory rate for one personal exemption, 1.0432 times the statutory rate for two personal exemptions	*Single:* $124,500–$247,000 *H/H:* $155,650–$278,150 *Joint:* $186,800–$309,300	1.4
Phase-in of earned income credit	Section 32	*No children:* statutory rate minus 7.65 percentage points	$0–$4,460 [2]	4.4
		One child: statutory rate minus 34 percentage points	$0–$6,690 [2]	
		Two children: statutory rate minus 40 percentage points	$0–$9,390 [2]	
Phaseout of earned income credit	Section 32	*No children;* statutory rate plus 7.65 percentage points	$5,570–$10,030 [2,3]	11.7
		One child; statutory rate plus 15.98 percentage points	$12,260–$26,473 [2,3]	

Chart 1.—Summary of Provisions Creating Effective Marginal Tax Rates Different From Statutory Marginal Tax Rates (1998)—Continued

Provision	Code section	Effective marginal tax rate	Applicable range of AGI	Estimated number of taxpayers affected (millions)
		Two children; statutory rate plus 21.06 percentage points	$12,260–$30,095 [2,3]	
Phaseout of child credits	Section 24	Statutory rate plus 5 percentage points	*Single:* $75,000—various [3] *Joint:* $110,000 [3]	0.6
Partial phaseout of dependent care credit	Section 21	Statutory tax rate plus 2.4 percentage points (generally 17.4 percent)	$10,000–$28,001	1.6
Phaseout of eligibility for deductible IRA	Section 219	Between 1.0 and 1.2 times statutory rate [4]	*Single:* $30,000–$40,000 *Joint:* $50,000–$60,000	1.5
Phaseout of eligibility for Roth IRA	Section 408A	*Single:* between 1.0 and 1.133 times the statutory rate [4] *Joint:* between 1.0 and 1.2 times the statutory rate [4]	*Single:* $95,000–$110,000 *Joint:* $150,000–$160,000	Not available

Phaseout of eligibility for education IRA	Section 530	Greater than statutory rate by a percentage determined by the 5 percent or 3.3 percent phaseout rate and the interest rate	*Single:* $95,000–$110,000 *Joint:* $150,000–$160,000	Not available
Phaseout of HOPE credit	Section 25A	*Single:* statutory rate plus 15 percentage points for each $1,500 in credits *Joint:* statutory rate plus 7.5 percentage points for each $1,500 in credits	*Single:* $40,000–$50,000 [3] *Joint:* $80,000–$100,000 [3]	1.2 (includes lifetime learning credit)
Phaseout of Lifetime learning credit	Section 25A	*Single:* statutory rate plus 15 percentage points for each $1,500 in credits *Joint:* statutory rate plus 7.5 percentage points for each $1,500 in credits	*Single:* $40,000–$50,000 [3] *Joint:* $80,000–$100,000 [3]	Included in estimate of HOPE credit.
Phaseout of deductibility of interest on qualified student loans	Section 221	1.167 times statutory rate (for maximum deduction available in 2001)	*Single:* $40,000–$55,000 [3] *Joint:* $60,000–$75,000 [3]	0.3

Chart 1.—Summary of Provisions Creating Effective Marginal Tax Rates Different From Statutory Marginal Tax Rates (1998)—Continued

Provision	Code section	Effective marginal tax rate	Applicable range of AGI	Estimated number of taxpayers affected (millions)
Phaseout of exclusion of interest from education savings bonds	Section 135	*Single:* (1 + exclusion/$15,000) × statutory rate *Joint:* (1 + exclusion/$30,000) × statutory rate	*Single:* $52,250–$67,250 [3] *HH:* $52,250–$67,250 [3] *Joint:* $78,350–$108,350 [3]	Not available
Phaseout of credit for elderly and disabled	Section 22	Statutory rate plus 7.5 percentage points	*Single:* $7,500-maximum of $17,500 *Joint:* $10,000-maximum of $20,000	0.2
Phaseout of adoption credit and exclusion	Section 23	*Credit:* credit amount/$40,000 plus statutory rate *Exclusion:* (1 + exclusion amount/$40,000) × statutory rate	$75,000–$115,000 [3]	Not available
Phaseout of first-time homebuyer credit for D.C.	Section 1400C	Statutory rate plus 25 percentage points	*Single:* $70,000–$90,000 [3] *Joint:* $110,000–$130,000 [3]	Not available
Phaseout of rental real estate losses under passive loss rules	Section 469(i)	1.5 times statutory rate [5]	$100,000–$150,000	Not available

Phaseout of rehab tax credit under passive loss rules	Section 469(i)	1.5 times statutory rate	$200,000–$250,000	Not available
Income phase-in of recapture of subsidy of qualified mortgage bonds	Section 143	Statutory rate plus percentage points equal to the taxpayer's recapture amount divided by 5,000	Defined relative to area median income	Not available

Footnotes to Chart 1:

[1] Applicable range defined by reference to provisional income and modified AGI is used in lieu of AGI. See text Part II.B.

[2] Assumes all income is earned income.

[3] Income range measured by reference to modified AGI.

[4] Phaseout affects future year tax liability. Present value of effective marginal tax rate depends on length of time the account is maintained and the interest rate.

[5] Stated effective rate overstates lifetime effect as provision allows suspended losses in future years.

Source: Joint Committee on Taxation.

II. PROVISIONS FOR WHICH EFFECTIVE MARGINAL TAX RATES DIFFER FROM STATUTORY MARGINAL TAX RATES

A. Overview of Issues Relating to Marginal Tax Rates

Present Law

Regular income tax

The present-law Federal income tax system imposes tax on the income of individuals, corporations, and trusts and estates.[2] Under the individual income tax system, a United States citizen or resident alien generally is subject to the U.S. individual income tax on his or her worldwide taxable income.[3] Taxable income equals the taxpayer's total gross income[4] less certain exclusions, exemptions (e.g., personal exemptions for the taxpayer, his or her spouse, and any dependents), and deductions. A taxpayer may claim either a standard deduction or itemized deductions. A taxpayer may reduce his or her income tax liability by any applicable tax credits.

Tax liability is determined by applying the tax rate schedules (or the tax tables) to the taxpayer's taxable income. The rate schedules are divided into several ranges of income, known as income brackets, and the marginal tax rate increases as a taxpayer's income increases. The income bracket amounts are indexed for inflation.[5] Separate rate schedules apply based on an individual's filing status. The four filing status classifications are: (1) married individuals filing a joint return and certain surviving spouses; (2) heads of households; (3) single individuals; and (4) married individuals filing separately. In order to limit multiple uses of a graduated rate schedule within a family, unearned income of a child under age 14 in excess of approximately $1,400 (for 1998) is taxed at the parent's tax rate. The individual income tax rate schedules for 1998 are shown in Table 1. Different rates may apply to capital gains.

[2] Sections 1 and 11 of the Internal Revenue Code of 1986 ("the Code").

[3] Foreign tax credits generally are available to offset U.S. income tax imposed on foreign source income to the extent of foreign income taxes paid on that income.

[4] Under the Internal Revenue Code of 1986 (the "Code"), gross income means "income from whatever source derived" except for certain items specifically exempted or excluded by statute.

[5] "Indexed for inflation" generally refers to the present-law mechanism for inflation indexing. This measurement is made by reference to changes in the Consumer Price Index ("CPI") from September of two years prior to the current taxable year through August of the year prior to the current taxable year.

Table 1.—Federal Individual Income Tax Rates for 1998

If taxable income is	Then income tax equals
Single individuals	
$0–$25,350	15 percent of taxable income.
$25,351–$61,400	$3,803, plus 28% of the amount over $25,350.
$61,401–$128,100	$13,897, plus 31% of the amount over $61,400.
$128,101–$278,450	$34,574, plus 36% of the amount over $128,100.
Over $278,450	$88,700, plus 39.6% of the amount over $278,450.
Heads of households	
$0–$33,950	15 percent of taxable income.
$33,951–$87,700	$5,093, plus 28% of the amount over $33,950.
$87,701–$142,000	$20,143 plus 31% of the amount over $87,700.
$142,001–$278,450	$36,976, plus 36% of the amount over $142,000.
Over $278,450	$86,098, plus 39.6% of the amount over $278,450.
Married individuals filing joint returns	
$0–$42,350	15 percent of taxable income.
$42,351–$102,300	$6,353, plus 28% of the amount over $42,350.
$102,301–$155,950	$23,139, plus 31% of the amount over $102,300.
$155,951–$278,450	$39,770, plus 36% of the amount over $155,950.
Over $278,450	$83,870, plus 39.6% of the amount over $278,450.
Married individuals filing separate returns	
$0–$21,175	15 percent of taxable income.
$21,176–$51,150	$3,176, plus 28% of the amount over $21,175.
$51,151–$77,975	$11,569, plus 31% of the amount over $51,150.
$77,976–$139,225	$19,885, plus 36% of the amount over $77,975.
Over $139,225	$41,935 plus 39.6% of the amount over $139,225.

Alternative minimum tax

Present law also imposes a minimum tax on an individual to the extent the taxpayer's minimum tax liability exceeds his or her regular tax liability. This alternative minimum tax ("AMT") is imposed at rates of (1) 26 percent on the first $175,000 of alternative minimum taxable income in excess of a phased-out exemption amount and (2) 28 percent on the amount in excess of $175,000. The regular capital gains income tax rates still apply to capital gains under the AMT. The exemption amounts are $45,000 in the case of married individuals filing a joint return and surviving spouses; $33,750 in the case of other unmarried individuals; and $22,500 in the case of married individuals filing a separate return or an estate or a trust. These exemption amounts are phased out by an amount equal to 25 percent of the amount that the individual's alternative minimum taxable income exceeds a threshold amount. These threshold amounts are $150,000 in the case of married individuals filing a joint return and surviving spouses; $112,500 in the case of other unmarried individuals; and $75,000 in the case of married individuals filing a separate return, estates, and trusts. The exemption amounts, the threshold phaseout amounts, and the $175,000 break-point amount are not indexed for inflation.

Alternative minimum taxable income ("AMTI") is the taxpayer's taxable income increased by certain preference items and adjusted by determining the tax treatment of certain items in a manner that negates the deferral of income resulting from the regular tax treatment of those items. The major AMT preferences and adjustments applicable to individuals are: (1) miscellaneous itemized deductions; (2) State, local, and foreign real property, personal property and income taxes; (3) medical expenses except to the extent in excess of ten percent of the taxpayer's adjusted gross income; (4) standard deductions and personal exemptions; (5) the special rules relating to incentive stock options, and (6) certain business-related items.[6]

The various credits allowed under the regular tax generally are not allowed for purposes of the AMT. Thus, the AMT has the effect of limiting the amount of credits available to a taxpayer.

If an individual is subject to the AMT in one year, the amount of tax that is a result of preferences and adjustments that are timing in nature is allowed as a credit in a subsequent taxable year to the extent the taxpayer's regular tax liability exceeds the taxpayer's tentative minimum tax in the subsequent year. Most individual AMT preferences and adjustments are not timing in nature.

Legislative History

Regular income tax

The Tariff Act of 1913 which imposed the individual income tax had a tax rate structure with rates ranging between 1 percent and 7 percent. Subsequent legislation modified the rate structure numerous times over the next fifty years, the most progressive rate structure resulting in a maximum marginal statutory rate in ex-

[6] For a more complete discussion of the AMT, see Joint Committee on Taxation, *Present Law and Issues Relating to the Individual Alternative Minimum Tax ("AMT")* (JCX–3–98), February 2, 1998.

cess of 90 percent. Generally, between 1965 and 1982, the range of the individual income tax rates began at a rate of 14 percent and ended with a top tax rate of 70 percent. The Economic Recovery Tax Act of 1981 ("ERTA") reduced income tax rates in each tax bracket, indexed the tax brackets for inflation, and reduced the top tax rate from 70 percent to 50 percent. After ERTA, the 50–percent tax rate in 1982 applied to taxable income in excess of : (1) $85,600 for married individuals filing a joint return and certain surviving spouses; (2) $60,600 for heads of households; (3) $41,500 for single individuals; (4) $41,400 for trusts and estates; and (5) $42,800 for married individuals filing separately.

Immediately prior (i.e., 1986) to the Tax Reform Act of 1986 ("1986 Act"), there were 14 taxable income tax rate brackets (15 taxable income tax rate brackets for single individuals) in addition to the zero tax rate bracket ("zero bracket amount"). The zero bracket amount was provided in lieu of the standard deduction. The tax rates in each schedule started at 11 percent for amounts in the first taxable income tax bracket above the zero bracket amount. The 11-percent rate started at: (1) $3,400 for married individuals filing a joint return and certain surviving spouses; (2) $2,300 for heads of households and single individuals; and (3) $1,700 for married individuals filing separately. The 50–percent rate started at: (1) $162,400 for married individuals filing a joint return and certain surviving spouses; (2) $108,300 for heads of households; (3) $81,800 for single individuals; (4) $79,500 for trust and estates; and (5) $81,200 for married individuals filing separately.

There were two tax rates for individuals under the 1986 Act: 15 and 28 percent. The phaseout of the benefit of the lower rates and the personal exemption in effect created a third marginal rate of 33 percent.[7] The Omnibus Budget Reconciliation Act of 1990 ("OBRA 1990") added a 31-percent rate for taxable years beginning after December 31, 1990. (See also the discussion of the personal exemption phaseout in Part II.D., below.) OBRA 1990 also removed the phase out of the benefit of lower rates and the personal exemption. The Omnibus Budget Reconciliation Act of 1993 ("OBRA 1993") added the 36- and 39.6-percent tax rate brackets, generally effective for taxable years beginning after December 31, 1992.

Alternative minimum tax

The Tax Reform Act of 1969 imposed an "add on" minimum tax on individuals. The individual alternative minimum tax was first introduced in 1978. Prior to the 1986 Act, individuals were subject to an alternative minimum tax that resembled the AMT of present law. The tax was payable in addition to all other tax liabilities to the extent it exceeded the individual's regular tax liability. The tax was imposed at a flat rate of 20 percent on alternative minimum taxable income in excess of an exemption amount. A taxpayer's alternative minimum tax liability could be reduced by foreign tax credits and refundable credits. An individual's alternative minimum taxable income was his or her adjusted gross income, in-

[7] See discussion in Part II.D below.

creased by certain preferences and reduced by alternative tax itemized deductions.

The 1986 Act broadened the base of the pre-existing individual AMT. In addition, the 1986 Act increased the AMT rate to 21 percent, phased out the exemption amounts, provided the AMT credit, and changed the individual AMT from essentially an add-on system of preferences to a separate tax system of preferences and adjustments, the latter of which were deferral items that could "turnaround" (i.e., decrease AMTI) over the life of the related property. The individual AMT rate was raised from a flat 21 percent to a flat 24 percent by OBRA 1990. OBRA 1993 instituted the two-tier individual rate system (at 26 and 28 percent) of present law and increased the individual AMT exemption amounts.

Background Discussion of Tax Rate Analysis

Marginal tax rates

This section of the pamphlet primarily analyzes effective marginal income tax rates. The term "marginal tax rate" refers to the additional, or incremental, increase in tax liability that a taxpayer incurs under the income tax from a $1.00 increase in his or her income. For the purposes of this pamphlet, the term "statutory marginal tax rate" refers to the marginal tax rates for individuals as defined in section 1 of the Code and as indicated in Table 1 above. Thus, the basic rate structure of the Federal individual income tax is defined in terms of five marginal tax rates: 15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent. These statutory marginal tax rates are applied to a taxpayer's taxable income within a specified range; for example, the 28–percent marginal tax rate applies to taxable income between $42,350 and $102,300 for a married couple filing a joint return. In fact, the personal exemptions and standard deduction create a sixth marginal tax rate—a zero marginal tax rate. A taxpayer with an income less than the sum of the allowable standard deduction and personal exemptions owes no additional income tax if his or her income increases by $1.00. The statutory marginal income tax rates increase as the taxpayer's taxable income increases.

In general, if an additional $1.00 of income to the taxpayer resulted in the taxpayer's *taxable income* increasing by $1.00, then there would be no difference between *statutory* marginal tax rates and *effective* marginal tax rates. Because of the design of certain provisions of the Code, an "effective marginal tax rate" may not always correspond to the statutory marginal tax rate. There are numerous situations in which the effective marginal tax rate differs from those statutory marginal tax rates specified in Table 1. For example, the exclusion from income of the interest paid to a bondholder of qualified State and local debt implies that for an additional $1.00 of interest paid to the taxpayer, the taxpayer's taxable income does not increase at all. In this circumstance, the taxpayer's effective marginal tax rate on that interest income is zero, even though the taxpayer's effective marginal tax rate on an additional dollar of other income may equal the statutory marginal tax rate. The Code provides statutory marginal tax rates for income from the realization of capital gains that are different, and generally

lower, from those of Table 1. As this pamphlet will discuss, there are other provisions of the Code where an additional $1.00 of income to the taxpayer results in the taxpayer's taxable income increasing by more than $1.00. In such a circumstance, the taxpayer's effective marginal tax rate will exceed the statutory marginal tax rate. In other circumstances, an additional $1.00 of income to the taxpayer results in the taxpayer losing all or part of a credit against tax liability he or she could otherwise claim. In this circumstance, the taxpayer's effective marginal tax rate will exceed the statutory marginal tax rate. This pamphlet identifies and discusses provisions of the Code where a phaseout, phase-in, or floor creates a difference between the effective marginal tax rate and the statutory marginal tax rate.

As the subsequent description of provisions and their legislative history will attest, the number of provisions with a phaseout, phase-in, or floor has increased over the past 15 years. As a result, the Joint Committee staff estimates that a substantial number of taxpayers are subject to a provision where the taxpayer's effective marginal tax rate differs from the statutory marginal tax rate.

Table 2, below, presents the Joint Committee staff's estimate of the distribution of taxpayers by income for all taxpayers, for all taxpayers for whom their effective marginal tax rate equals their statutory marginal tax rate, and for taxpayers for whom their effective marginal tax rate is different from their statutory marginal tax rate. Table 2 also shows the average effective marginal tax rate of all taxpayers in each income category. For purposes of this table, the effective marginal tax rate was calculated as follows. The Joint Committee staff increased wage income by one dollar for those taxpayers who otherwise reported wage or salary income and increased other income by one dollar for those taxpayers who otherwise reported no wage or salary income.[8] The Joint Committee staff used its individual tax model to calculate the change in each taxpayer's total tax liability resulting from the one dollar increase in income. This change in tax liability is reported as the effective marginal tax rate.

[8] The calculations of effective marginal rates generally assume an additional dollar of income to the taxpayer would be taxed as ordinary income. If the additional, or incremental, dollar of income to the taxpayer were from capital gains, the provisions discussed below still would cause the taxpayer's effective marginal tax rate to deviate from the statutory marginal tax rate, but the calculation of effective marginal tax rate would have to made relative to the taxpayer's statutory marginal tax on income from capital gains.

Table 2.—Distribution by Income of Taxpayers for Whom Effective Marginal Tax Rates Equal Statutory Marginal Tax Rates and for Whom Effective Marginal Tax Rates Differ From Statutory Marginal Tax Rates

[Calendar year 1998]

Income category[1]	All taxpayers[2]		Taxpayers with effective MTR equaling statutory MTR		Taxpayers with effective MTR different from statutory MTR	
	Millions	Average marginal tax rate (percent)	Millions	Average marginal tax rate (percent)	Millions	Average marginal tax rate (percent)
Less than $10,000	19.8	−2.9	15.7	1.0	4.0	−18.0
10,000 to 20,000	25.1	6.9	20.1	6.2	5.0	10.1
20,000 to 30,000	20.3	14.4	14.6	11.0	5.7	23.3
30,000 to 40,000	16.3	16.2	12.9	14.1	3.4	24.5
40,000 to 50,000	12.4	18.0	10.4	17.5	2.0	20.5
50,000 to 75,000	19.6	19.5	15.4	19.1	4.2	20.9
75,000 to 100,000	10.0	27.0	7.3	26.9	2.7	27.4
100,000 to 200,000	8.5	29.5	4.3	28.2	4.2	30.7
200,000 and over	2.2	36.4	0.2	32.9	2.0	36.7
Total, all taxpayers	**134.1**	**14.1**	**100.9**	**12.8**	**33.2**	**18.1**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Includes filing and nonfiling units. Excludes individuals who are dependents of other taxpayers and taxpayers with income less than zero.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

Table 2 reports that in 1998, 33.2 million taxpayers, or approximately one quarter of all taxpayers, will have an effective marginal tax rate different from their statutory tax rate. The difference between the effective marginal tax rate and the statutory marginal tax rate generally results from the provisions discussed in the subsequent sections of this pamphlet.[9] Some of the differences are attributable to taxpayers subject to the alternative minimum tax, but for 1998 such taxpayers will number only approximately 850,000.[10] Table 2 shows that for taxpayers with incomes greater than $75,000 and for taxpayers with incomes between $20,000 and $30,000, more than 25 percent of taxpayers face effective marginal tax rates different from their statutory marginal tax rate. For no income category do fewer than 16 percent of taxpayers face effective marginal tax rates different from their statutory marginal tax rate.

Table 3 reports the same projections, but with taxpayers distributed by their statutory marginal tax rate as determined by their taxable income under the regular tax. Table 3 reports that three quarters of all taxpayers in the 31-, 36-, and 39.6-percent statutory marginal tax brackets are projected to face effective marginal tax rates different from their statutory marginal tax rate. Of taxpayers in the 28- and 15-percent statutory marginal tax rate brackets, the comparable percentages are 26 percent and 25 percent, respectively.

Another feature of Tables 2 and 3 is the negative average effective marginal tax rate estimated for some taxpayers. This is a consequence of taxpayers eligible for the Earned Income Credit ("EIC"). (See Part II.E., below for a detailed discussion.)

[9] Tables 2, above, and 3, below, may slightly undercount the number of taxpayers who are affected by the provisions analyzed in this pamphlet because of the manner in which the personal exemption phaseout operates. The personal exemption phaseout operates in steps of $2,500. Thus, a one dollar increment in income does not necessarily result in an effective marginal tax rate that differs from the taxpayer's statutory marginal tax rate. (See the discussion in Part II.D., below.)

[10] Eliminating taxpayers with positive tax liability under the AMT does not materially alter the results of Table 2, above, or Table 3, below.

Table 3.—Distribution of Taxpayers by Statutory Marginal Tax Rates for Whom Effective Marginal Tax Rates Equal and Differ From Statutory Marginal Tax Rates

[Calendar year 1998]

Marginal tax rate (percent)	All taxpayers[1]		Effective rate equals statutory rate		Effective rate does not equal statutory rate	
	Millions	Average marginal tax rate (percent)	Millions	Average marginal tax rate (percent)	Millions	Average marginal tax rate (percent)
0	40.5	−2.0	33.4	0.0	7.1	−11.2
15	62.2	16.8	46.8	15.0	15.5	22.4
28	26.6	28.4	19.7	28.0	6.9	29.4
31	3.0	31.7	0.9	31.0	2.0	32.0
36	1.1	37.1	0.1	36.0	1.0	37.2
39.6	0.7	40.2	0.1	39.6	0.6	40.3
Total, all taxpayers	**134.1**	**14.1**	**100.9**	**12.8**	**33.2**	**18.1**

[1] Includes filing and nonfiling units. Excludes individuals who are dependents of other taxpayers and taxpayers with income less than zero.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

Average tax rates

A taxpayer's *average* tax rate is the percentage represented by the total tax for which the taxpayer is liable divided by the taxpayer's total income. As a result, a taxpayer in the 28-percent *marginal* tax rate bracket does *not* pay 28 percent of his or her total income in Federal taxes. In fact, the taxpayer would pay less than 28 percent of his or her income in taxes because some of the income is taxed at the lower 15-percent marginal tax rate and some is taxed at a zero percent rate (because the taxpayer may claim the standard deduction). Some writers refer to the average tax rate as the "effective tax rate." This terminology naturally leads to confusion with the concept of effective marginal tax rate, described above.

A taxpayer's total tax liability is calculated by the sum of all of the taxpayer's marginal tax liabilities. That is, total tax liability equals the sum of marginal tax owed on each dollar of income, from the first dollar through the last dollar. Thus, a mathematical relationship exists between a taxpayer's effective marginal tax rate on each dollar of income and the taxpayer's average tax rate. Because of the personal exemptions and standard deduction, the taxpayer's effective marginal tax rate and average tax rate both equal zero at incomes up to the sum of the value of the taxpayer's standard deduction and personal exemptions. When the taxpayer first enters the 15-percent statutory marginal tax rate bracket, the taxpayer's effective marginal tax rate begins to deviate from the taxpayer's average tax rate.[11] Whenever the taxpayer's effective marginal tax rate is above the taxpayer's average tax rate, the taxpayer's average tax rate is rising. Whenever the taxpayer's effective marginal tax rate is below the taxpayer's average tax rate, the taxpayer's average tax rate is falling. Because the statutory marginal tax rates increase with income, few taxpayers are likely to have an effective marginal tax rate lower than their average tax rate.

Economists emphasize the difference between the effective marginal tax rate and the average tax rate because they argue effective marginal tax rates create incentives such as the incentive to work, to save, or to donate to charity. This pamphlet discusses these incentive effects in Part III, below. Analysts typically use the average tax rate as a measure of the fairness of the tax system and sometimes as a measure of the overall burden of taxation. The emphasis of the analysis of this pamphlet is on the examination of effective marginal tax rates. However, because effective marginal tax rates determine a taxpayer's average tax rate, Part III, below, also discusses fairness issues as well as incentive effects.

[11] When one accounts for the earned income credit ("EIC") the taxpayer's average tax rate may be negative while the taxpayer's effective marginal tax rate is zero or positive. (See the discussion relating to the EIC in Part II.E., below.)

B. Phaseout of the Exclusion of Social Security and Railroad Retirement Tier 1 Benefits

Present law

In general

Under present law, taxpayers receiving social security and railroad retirement tier 1 benefits are not required to include any portion of such benefits in gross income if their "provisional income" does not exceed $25,000, in the case of unmarried taxpayers, or $32,000, in the case of married taxpayers filing joint returns. For purposes of these computations, a taxpayer's provisional income is defined as adjusted gross income (AGI) plus tax-exempt interest plus certain foreign source income plus one-half of the taxpayer's social security or railroad retirement tier 1 benefit. A second-tier threshold for provisional income is $34,000, in the case of unmarried taxpayers, or $44,000, in the case of married taxpayers filing joint returns.

If the taxpayer's provisional income exceeds the lower threshold but does not exceed the second-tier threshold, then the amount required to be included in income is the lesser of (1) 50 percent of the taxpayer's social security or railroad retirement tier 1 benefit, or (2) 50 percent of the excess of the taxpayer's provisional income over the lower threshold.

If the amount of provisional income exceeds the second-tier threshold, then the amount required to be included in income is the lesser of:

(1) 85 percent of the taxpayer's social security or railroad retirement tier 1 benefit; or

(2) the sum of—

(a) 85 percent of the excess of the taxpayer's provisional income over the second-tier threshold, plus,

(b) the smaller of (i) the amount of benefits that would have been included if the 50-percent inclusion rule (the rule in the previous paragraph) were applied, or (ii) one-half of the difference between the taxpayer's second-tier threshold and lower threshold.

Earnings limit

Senior citizens age 70 and older, and disabled individuals, regardless of age, may be eligible to receive full social security benefits regardless of the amount of earnings they have from wages or self-employment. Those between the full retirement age (currently age 65) and age 70 receive full benefits only if their earnings are lower than an earnings limit amount determined by law. Those below full retirement age have a separate earnings limit. In 1998, the earnings limit for those below the full retirement age is $9,120. The earnings limit is indexed to the rise of average wages in the economy. Those below full retirement age (currently, age 65) lose $1 of benefits for every $2 in wages of self-employment income they earn over the limit. In 1998, the limit for those age 65 to 69 is $14,500. This earnings limit will increase to $15,500 in 1999, $17,000 in 2000, $25,000 in 2001 and $30,000 in 2002. Senior citizens between the age of full retirement (currently age 65) and 70

who earn more than the earnings limit lose $1 in benefits for every $3 in wages or self-employment income they earn over the limit.

Legislative History

The exclusion from gross income for social security benefits was not initially established by statute. Prior to the Social Security Amendments of 1983, the exclusion was based on a series of administrative rulings issued by the Internal Revenue Service in 1938 and 1941.[12]

Under the Social Security Amendments of 1983, a portion of the social security benefits paid to higher income taxpayers was included in gross income. Generally, if a taxpayer had provisional income in excess of the threshold amount of $25,000 ($32,000 in the case of married individuals filing a joint return), the amount included in a taxpayer's gross income was the lesser of (1) 50 percent of the taxpayer's social security or railroad retirement tier 1 benefit, or (2) 50 percent of the excess of the taxpayer's provisional income over the applicable threshold amount. The Omnibus Budget Reconciliation Act of 1993 increased the amount of benefits subject to tax and increased the rate of tax for higher-income individuals to the present-law levels.

The exclusion from gross income for certain benefits paid under the Railroad Retirement System was enacted in the Railroad Retirement Act of 1935. A portion of the benefits payable under the Railroad Retirement System (generally, tier 1 benefits) is equivalent to social security benefits. The tax treatment of tier 1 railroad retirement benefits was modified in the Social Security Amendments of 1983 to conform to the tax treatment of social security benefits. Other railroad retirement benefits are taxable in the same manner as employer-provided retirement benefits. The Consolidated Omnibus Budget Reconciliation Act of 1985 provided that tier 1 benefits are taxable in the same manner as social security benefits only to the extent that social security benefits otherwise would be payable. Other tier 1 benefits are taxable in the same manner as all other railroad retirement benefits.

Analysis

The inclusion of portions of Social Security benefits in taxable income as income rises above certain thresholds effectively increases the marginal tax rates of the affected taxpayers. For taxpayers affected by the provision, their marginal tax rate can be up to 185 percent of the statutory rate. For taxpayers whose income falls below the initial threshold, there is no inclusion of Social Security benefits in taxable income.

For taxpayers whose modified AGI plus one-half of their Social Security benefits exceeds $25,000 ($32,000 if married filing jointly), but is less than $34,000 ($44,000 if married filing jointly), up to one-half of the Social Security benefits are taxable. Specifically, once a taxpayer reaches the threshold, each additional dollar of income will cause an additional 50 cents of Social Security benefits to be included in taxable income. This effectively raises the Federal

[12] See I.T. 3194, 1938–1 C.B. 114; I.T. 3229, 1938–2 C.B. 136; and I.T. 3447, 1941–1 C.B. 191.

marginal tax rate to 150 percent of the statutory rate, as each dollar of income causes taxable income to rise $1.50. Thus, for example, if a taxpayer's statutory rate is 15 percent, the additional dollar of income will result in taxes of $0.15 on the income itself, plus 15 percent of the $0.50 in additional Social Security benefits included in taxable income, or $0.075. The total Federal income tax thus rises by $0.225, implying a 22.5-percent effective Federal marginal tax rate, which is 150 percent of the statutory rate of 15 percent.[13]

For taxpayers whose modified AGI plus one-half of their Social Security benefits exceeds $34,000 ($44,000 if married filing jointly), up to 85 percent of the Social Security benefits are taxable. When a taxpayer reaches this second threshold, each additional dollar of income will cause an additional 85 cents of Social Security benefits to be included in taxable income. This effectively raises the Federal marginal tax rate to 185 percent of the statutory rate, as each dollar of additional income causes taxable income to rise $1.85. If a taxpayer's statutory rate is 15 percent, the additional dollar of income will result in taxes of $0.15 on the income itself, plus 15 percent of $0.85 in additional Social Security benefits included in taxable income, or $0.1275. The total Federal income taxes thus rise by $0.2775 ($0.15 plus $0.1275) implying a 27.75-percent effective Federal marginal tax rate, or a rate that is 185 percent of the statutory rate.

Taxpayers who face some inclusion of Social Security benefits in taxable income will not necessarily experience a direct transition from effective marginal tax rates that are 150 percent of the statutory rate to effective marginal tax rates that are 185 percent of the statutory rate. Rather, for some taxpayers there will be some levels of income for which such taxpayers would face only the statutory marginal tax rate on additional income once they attain 50 percent inclusion of benefits in taxable income. That is, for income beyond a certain point, there will be no further inclusion of Social Security benefits in income until the next threshold is reached. Thus, the marginal tax rates will fall back to the statutory rate for additional income in this range. Two conditions must be met before this is the case. First, a taxpayer's income must at least equal $25,000 ($32,000 for married filing jointly) *plus* one-half of Social Security benefits in order for fully one-half of Social Security benefits to be included in income. To see this, recall that for each dollar that a taxpayer's non-Social Security income and one-half of Social Security income exceeds $25,000 ($32,000 if married filing jointly), an additional 50 cents of Social Security income is included in income. Hence, for one-half of total Social Security income to be included in income, a taxpayer's income plus one-half of Social Security benefits must exceed $25,000 ($32,000 if married filing jointly) by the full amount of Social Security benefits. The second condition that must be met is that the taxpayer's income plus one-half of Social Security benefits not exceed $34,000 ($44,000 if married filing

[13] Such a taxpayer would also pay $0.0765 in additional Social Security taxes (ignoring the employer share) on the income if it were labor income. Additionally, the taxpayer might face State or local income taxes, which, as a result of the inclusion of Social Security benefits in income, could also be 150 percent of the statutory rate for those States that piggy-back off Federal income tax definitions.

jointly), at which point the taxpayer would be subject to an inclusion of up to 85 percent of their Social Security benefits in income.[14] Thus, for example, if a taxpayer's Social Security benefits are $2,000, then once his other income reaches $26,000, his effective marginal tax rate will fall from 50 percent above the statutory rate to the statutory rate.[15] Single taxpayers whose Social Security benefits are at least $9,000, and whose income plus one-half of Social Security benefits exceeds $34,000, will experience an immediate transition from effective marginal tax rates that are 150 percent of the statutory rate to ones that are 185 percent of the statutory rate (i.e., without first dropping back to the statutory rate). For married filing jointly, the Social Security benefits must be at least $12,000 for this to occur, and their income plus one-half of social security benefits must exceed $44,000.

Taxpayers whose income plus one-half of Social Security benefits exceeds $34,000 ($44,00 if married filing jointly) will face marginal tax rates that are 185 percent of the statutory rate until that point at which 85 percent of the Social Security benefits will have been included in income, at which point the effective marginal tax rate falls back to the statutory rate. It should be noted these provisions will only affect taxpayers in the 15-percent or the 28-percent statutory brackets because of the relatively low level of the specified phase-in ranges and the limit on the maximum size of the Social Security benefits.[16] Thus, the maximum increase in effective marginal tax rates is 85 percent of 28 percent, or 23.8 percentage points, which would lead to an effective marginal tax rate of 28 percent plus 23.8 percent, or 51.8 percent.

As shown in table 4, the Joint Committee staff estimates that, in 1998, 5 million taxpayers, or 3.7 percent of all taxpayers, are in the phase-in ranges for the Social Security benefits, out of a total of 35.2 million taxpayers with Social Security benefits.[17] Because the phase-in ranges occur at relatively modest income levels, most taxpayers in the phase-in range will be in the 15 percent marginal tax rate bracket.

Earnings limit

In addition to the Federal income tax provisions that cause increasing amounts of Social Security benefits to be included in taxable income as income rises, the Social Security benefit rules cause benefits to decline for wage income above certain thresholds. The thresholds and rules vary by one's Social Security retirement status, but the rules can cause up to 50 cents in Social Security bene-

---

[14] Therefore, the taxpayer's effective marginal tax rate will fall from one that is 150 percent of the statutory rate to one that equals the statutory rate for the income levels Y that fall in the following range: $\$25{,}000 + \frac{1}{2}B < Y < \$34{,}000 - \frac{1}{2}B$, where B is the Social Security benefits. For married filing jointly, the corresponding range is $\$32{,}000 + \frac{1}{2}B < Y < \$44{,}000 - \frac{1}{2}B$.

[15] And for this taxpayer, the effective marginal tax rate would have exceeded the statutory rate once his income reached $24,000, as $24,000 plus one-half of the Social Security benefits equals $25,000, the point at which additional income would cause portions of the Social Security benefit to become taxable.

[16] Only single taxpayers can face statutory marginal tax rates as high as 28 percent and still be subject to the phase-in of Social Security benefits. Given the phase-in rules and the maximum amount of Social Security benefits that a married couple could receive, the full 85 percent of Social Security benefits will have been phased in prior to that couple having an income sufficient to bring their taxable income to the threshold where the 28-percent rate is effective.

[17] An additional 4.0 million taxpayers are subject to the inclusion, but have incomes sufficient to have caused them to already be subject to the maximum inclusion, and thus any additional income will not cause additional Social Security benefits to be taxable.

fits to be lost for an additional dollar of wage income. This Social Security provision alone, without regard to the Federal income tax, represents a marginal tax rate of up to 50 percent. The interaction of this provision with the Federal income tax provisions described above can push effective marginal tax rates for Social Security recipients that have some wage income into the vicinity of 100 percent.

Table 4.—Distribution of Taxpayers by Income Who Receive Social Security Benefits and Who Are in the Phase-In Range—Calendar year 1998

Income category [1]	Taxpayers with Social Security income (millions)	Taxpayers in Social Security phase-in range (millions)
Less than $10,000	3.0	0.0
10,000 to 20,000	10.3	0.0
20,000 to 30,000	6.3	(2)
30,000 to 40,000	4.7	0.7
40,000 to 50,000	3.6	1.3
50,000 to 75,000	4.3	2.7
75,000 to 100,000	1.5	0.3
100,000 to 200,000	1.3	(2)
200,000 and over	0.4	0.0
Total, all taxpayers	**35.2**	**5.0**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation, [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

ADetails may not add to total due to rounding.

ASource: Joint Committee on Taxation.

C. Limitations on Itemized Deductions ("Pease" Limitation; Floors on Deductions for Medical and Miscellaneous Expenses and Casualty Losses)

Present Law

Itemized deductions

Individuals who do not elect the standard deduction may claim itemized deductions (subject to certain limitations) for certain nonbusiness expenses incurred during the taxable year. Among these deductible expenses are unreimbursed medical expenses, casualty and theft losses, charitable contributions, qualified residence interest, State and local income and property taxes, certain moving expenses, unreimbursed employee business expenses, and certain other miscellaneous expenses.

Qualified residence interest may be deducted on total debt of up to $1 million. In addition, interest on up to $100,000 of other debt secured by a residence ("home equity loans") may be deducted.

Separate floors

Certain itemized deductions are allowed only to the extent that the amount of the expense incurred during the taxable year exceeds a specified percentage of the taxpayer's adjusted gross income (AGI). Unreimbursed medical expenses for care of the taxpayer and the taxpayer's spouse and dependents are deductible only to the extent that the total of such expenses exceeds 7.5 percent of the taxpayer's AGI. Nonbusiness casualty or theft losses are deductible only to the extent that the amount of the loss arising from each casualty or theft exceeds $100 and only to the extent that total casualty and theft losses exceed 10 percent of the taxpayer's AGI. Unreimbursed employee business expenses and certain other miscellaneous itemized deductions are deductible only to the extent that the total of such expenses and deductions exceeds 2 percent of the taxpayer's AGI.

General limitation on itemized deductions ("Pease" limitation)

Under present-law, the total amount of otherwise allowable itemized deductions (other than medical expenses, investment interest, and casualty, theft, or wagering losses) is reduced by 3 percent of the amount of the taxpayer's AGI in excess of $124,500 in 1998 (indexed for inflation).[18] Under this provision, otherwise allowable itemized deductions may not be reduced by more than 80 percent.[19] In computing the reduction under section 68 of total

[18] Code section 68. This general limitation on itemized deductions is commonly referred to as the "Pease" limitation after the Congressman who originally proposed the provision.

Under section 68, the threshold of $124,500 is the same for all taxpayers, except that the threshold is $62,250 for married taxpayers filing separately.

[19] Thus, for example, if a taxpayer's AGI for 1998 is $224,500 (i.e., the taxpayer has $100,000 of excess AGI *above* the $124,500 threshold), then total otherwise allowable itemized deductions are reduced under section 68 by $3,000 (i.e., 3 percent of the $100,000 excess AGI). However, if total otherwise allowable itemized deductions are, for example, $20,000, then, regardless of how much AGI the taxpayer has for the taxable year, itemized deductions can be reduced under section 68 by no more than $16,000 (i.e., 80 percent of $20,000). For some taxpayers, if the value of the standard deduction is greater than 20 percent of the value of the taxpayer's itemized de-

Continued

itemized deductions, all present-law limitations applicable to such deductions (such as the separate floors) are first applied and, then, the otherwise allowable total amount of itemized deductions is reduced in accordance with this provision.

Legislative History

The limitation on total itemized deductions was enacted on a temporary basis as part of the Omnibus Budget Reconciliation Act of 1990, effective for taxable years beginning after December 31, 1990, but prior to January 1, 1996. However, the Omnibus Budget Reconciliation Act of 1993 permanently extended this limitation on total itemized deductions.

With respect to medical expenses, prior to the Tax Equity and Fiscal Responsibility Act of 1982 ("1982 Act"), a deduction of up to $150 was allowed for one-half of health insurance premiums. A second deduction was allowed for all other unreimbursed medical expenses (including health insurance premiums not allowed in the first category) to the extent that these expenses exceeded 3 percent of the taxpayer's AGI. Drug and medicine expenditures (including non-prescription drugs) could be included in the second category only to the extent that the total of these expenditures exceeded 1 percent of the taxpayer's AGI. The 1982 Act increased the floor under the itemized medical expense deduction from 3 percent to 5 percent, eliminated the separate deduction for $150 of health insurance premiums and the separate 1-percent floor for drugs, and disallowed the deduction for non-prescription drugs. The Tax Reform Act of 1986 ("1986 Act") increased the floor under the itemized medical expense deduction from 5 to 7.5 percent of the taxpayer's AGI.

With respect to casualty and theft losses, prior to the 1982 Act, a deduction was allowed to the extent that the amount of loss arising from each casualty or theft exceeded $100, but there was no floor under the deduction of such losses based on the taxpayer's AGI. The present-law 10-percent AGI floor for casualty and theft losses was enacted as part of the 1982 Act.

With respect to unreimbursed employee business expenses and certain other miscellaneous itemized deductions, the 2-percent floor under such expenses and deductions was enacted as part of the 1986 Act.

Analysis

General limitation on itemized deductions ("Pease limitation")

The general limitation on itemized deductions increases the effective marginal tax rate for affected taxpayers. This limitation reduces (subject to the 80-percent limitation) the amount of certain itemized deductions that may be claimed by an amount equal to 3 percent of each dollar of income in excess of the threshold. Thus if a taxpayer who is above the threshold earns an additional $1.00 of income, the taxpayer's taxable income increases by $1.03 because

---

ductions, the value of the standard deduction might create a floor beyond which itemized deductions cannot be reduced as the taxpayer always has the option of electing the standard deduction.

the taxpayer's income goes up by $1.00 and the itemized deductions must be reduced by 3 cents. The statutory tax rates apply to taxable income. Thus, if the taxpayer is in the 36-percent tax bracket, the increase in tax liability resulting from the $1.00 increase in income will be $0.37 (the $1.03 in additional taxable income multiplied by 0.36). Generally, the effective marginal tax rate for taxpayers subject to the limitation on itemized deductions is 3 percent higher than the statutory tax rate. That is, the taxpayer's effective marginal tax rate equals 103 percent of the statutory marginal tax rate. Once the taxpayer's itemized deductions are reduced by 80 percent, the taxpayer's effective marginal tax rate again equals his or her statutory marginal tax rate.

Some argue that the limitation on itemized deductions diminishes a taxpayer's incentive to make charitable contributions. While there may be a psychological effect, there generally is little or no difference in the tax-motivated economic incentive to give to charity for a taxpayer subject to the limitation compared to a taxpayer not subject to the limitation. This is because while the limitation operates effectively to increase the marginal tax rate on the income of affected taxpayers, the value of the tax benefit of deductibility of the charitable deduction is determined by the statutory tax rate. For taxpayers beyond the threshold, a specified dollar amount of itemized deductions are denied. The specified dollar amount is determined by the taxpayer's income, not by the amount of itemized deductions the taxpayer claims. Hence, the value of an additional dollar contributed to charity increases by exactly one dollar times the total amount of itemized deductions that the taxpayer may claim. Because the statutory rates apply to taxable income (income after claiming permitted itemized deductions), the value of the additional contribution to charity is determined by the statutory tax rate. Economists would say that the "tax price" of giving is not altered by the limitation.[20]

The Joint Committee staff estimates that in 1998, 4.5 million taxpayers will be subject to general limitations on itemized deductions. This represents 12.4 percent of the 36.4 million taxpayers who itemize deductions, and 3.4 percent of all taxpayers. Because the limitation begins for taxpayers with AGI greater than $124,500, only rarely might taxpayers in the 15-percent statutory marginal tax rate bracket be subject to the Pease provision. Some taxpayers in the 28-percent statutory marginal tax rate bracket, and taxpayers in 31-, 36-, and 39.6-percent statutory marginal tax rate brackets would be subject to the provision. For those affected taxpayers, their effective marginal tax rates would be 28.84 percent, 31.93 percent, 37.08 percent, and 40.788 percent.

---

[20] This can be seen mathematically as follows. Let Y be the taxpayer's income and X be the threshold above which the limitation on itemized deductions applies. Let D be itemized deductions and t the taxpayer's marginal tax rate. Then the taxpayer's total tax liability, T, is:

$$T = [Y - \{D - (.03)(Y - X)\}]t$$

or

$$T = Y[1+(.03)]t - Dt - (.03)tX.$$

What this implies is that as the taxpayer's income, Y, increases by $1.00, his or her tax liability increases by $(1.03)t$, as noted in the text. However, if the taxpayer increases his or her itemized deductions, D, by $1.00, his or her reduction in tax liability is t dollars. Or, as stated in the text, the statutory tax rate determines the value of the deduction. This algebra assumes the taxpayer is not subject to the 80-percent limitation.

Limitation on deduction for medical expenses

The 7.5-percent of AGI floor applicable to those taxpayers claiming medical expense deductions creates an effective marginal tax rate higher than the statutory marginal tax rate for those taxpayers with large medical expenses. As the taxpayer's income increases by $1.00, the floor above which medical expenses may be claimed increases by 7.5 cents. That is, a $1.00 increase in AGI reduces medical expense deductions by 7.5 cents. A reduction of 7.5 cents in medical expenses claimed increases the taxpayer's taxable income by 7.5 cents. Thus, a $1.00 increase in AGI increases taxable income by $1.075. The taxpayer's tax liability increases by 1.075 times his or her statutory marginal tax rate. That is, the taxpayer's effective marginal tax rate equals 107.5 percent of the statutory marginal tax rate.[21] Thus, for example, a taxpayer in the 15-percent statutory marginal tax rate bracket who also has substantial out-of-pocket medical expenses would have an effective marginal tax rate of 16.125 percent. As is the case with the general limitation on itemized deductions, the value of the deduction for additional out of pocket medical expenses is determined by the statutory tax rate.

The Joint Committee staff estimates that in 1998, 4.5 million taxpayers will claim medical expense deductions above the 7.5 percent floor and thereby will have effective marginal tax rates equal to 107.5 percent of their statutory marginal tax rate. See Table 5, below. The affected taxpayers represent 12.4 percent of taxpayers who itemize deductions and 3.4 percent of all taxpayers. Because there is no income threshold, taxpayers in all of the statutory marginal tax rate brackets could be affected, producing effective marginal tax rates of 16.125 percent, 30.1 percent, 33.325 percent, 38.7 percent, and 42.57 percent. However, taxpayers who itemize deductions are more prevalent in the higher statutory marginal tax rate brackets than in the lower statutory marginal tax rate brackets.

Limitation on miscellaneous itemized deductions

The 2-percent of AGI floor applicable to those taxpayers claiming certain itemized deductions creates an effective marginal tax rate higher than the statutory marginal tax rate for those taxpayers with relatively large miscellaneous expenses. As the taxpayer's income increases by $1.00, the floor above which miscellaneous expenses may be claimed increases by 2 cents. That is, a $1.00 increase in AGI reduces miscellaneous itemized deductions by 2 cents. A reduction of 2 cents in miscellaneous itemized deductions claimed increases the taxpayer's taxable income by 2 cents. Thus, a $1.00 increase in AGI increases taxable income by $1.02. The taxpayer's tax liability increases by 1.02 times his or her statutory marginal tax rate. That is, the taxpayer's effective marginal tax

[21] Mathematically, let Y be the taxpayer's income, M medical expenses, and t the taxpayer's marginal tax rate. Then the taxpayer's total tax liability, T, is:

$$T = [Y - \{M - (.075)Y\}]t$$

or

$$T = Y[1+(.075)]t - Mt.$$

What this implies is that as the taxpayer's income, Y, increases by $1.00, his or her tax liability increases by $(1.075)t$, as noted in the text.

rate equals 102 percent of the statutory marginal tax rate.[22] Thus, for example, a taxpayer in the 36-percent statutory marginal tax rate bracket who also has substantial out-of-pocket miscellaneous itemized deductions would have an effective marginal tax rate of 36.72 percent. As is the case with the general limitation on itemized deductions, the value of the deduction for additional miscellaneous itemized deductions is determined by the statutory tax rate.

The Joint Committee staff estimates that in 1998, 8.8 million taxpayers will claim miscellaneous itemized deductions above the 2 percent of AGI floor and thereby will have effective marginal tax rates equal to 102 percent of their statutory marginal tax rates. See Table 5, below. The affected taxpayers represent 24.2 percent of all taxpayers who itemize deductions and 6.6 percent of all taxpayers. Because there is no income threshold, taxpayers in all of the statutory marginal tax rate brackets could be affected, producing effective marginal tax rates of 15.3 percent, 28.56 percent, 31.62 percent, 37.72 percent, and 40.392 percent. However, taxpayers who itemize deductions are more prevalent in the higher statutory marginal tax rate brackets than in the lower statutory marginal tax rate brackets.

Limitation on unreimbursed casualty loss deduction

The 10-percent of AGI floor applicable to those taxpayers claiming unreimbursed casualty losses deductions creates an effective marginal tax rate higher than the statutory marginal tax rate for those taxpayers with relatively large unreimbursed casualty losses. As the taxpayer's income increases by $1.00, the floor above which unreimbursed casualty loss deductions may be claimed increases by 10 cents. That is, a $1.00 increase in AGI reduces allowable casualty loss deductions by 10 cents. A reduction of 10 cents in miscellaneous itemized deductions claimed increases the taxpayer's taxable income by 10 cents. Thus, a $1.00 increase in AGI increases taxable income by $1.10. The taxpayer's tax liability increases by 1.10 times his or her statutory marginal tax rate. That is, the taxpayer's effective marginal tax rate equals 110 percent of the statutory marginal tax rate.[23] Thus, for example, a taxpayer in the 28-percent statutory marginal tax rate bracket who also has substantial out-of-pocket miscellaneous itemized deductions would have an effective marginal tax rate of 30.8 percent. Because there is no income threshold, taxpayers in all of the statutory marginal

---

[22] Mathematically, let Y be the taxpayer's income, M miscellaneous itemized deductions, and t the taxpayer's marginal tax rate. Then the taxpayer's total tax liability, T, is:

$$T = [Y - \{M - (.02)Y\}]t$$

or

$$T = Y[1+(.02)]t - Mt.$$

What this implies is that as the taxpayer's income, Y, increases by $1.00, his or her tax liability increases by $(1.02)t$, as noted in the text.

[23] Mathematically, let Y be the taxpayer's income, C unreimbursed casualty loss deductions, and t the taxpayer's marginal tax rate. Then the taxpayer's total tax liability, T, is:

$$T = [Y - \{C - (.10)Y\}]t$$

or

$$T = Y[1+(.10)]t - Ct.$$

What this implies is that as the taxpayer's income, Y, increases by $1.00, his or her tax liability increases by $(1.10)t$, as noted in the text.

tax rate brackets could be affected, producing effective marginal tax rates of 16.5 percent, 30.8 percent, 34.1 percent, 39.6 percent, and 43.56 percent. However, taxpayers who itemize deductions are more prevalent in the higher statutory marginal tax rate brackets than in the lower statutory marginal tax rate brackets. Relatively few taxpayers claim unreimbursed casualty loss deductions. The Joint Committee staff estimates that in 1998, approximately 200,000 taxpayers will claim unreimbursed casualty loss deductions. As is the case with the general limitation on itemized deductions, the value of the deduction for additional unreimbursed casualty losses is determined by the statutory tax rate.

Table 5.—Distribution of Taxpayers by Income of Those Who Itemize and Those Who Are Subject to Various Limitations on Itemized Deductions—Calendar Year 1998

Income category [1]	Taxpayers claiming itemized deductions (millions)	Taxpayers subject to Pease limitation (millions)	Taxpayers claiming medical deductions (millions)	Taxpayers claiming miscellaneous deductions (millions)
Less than $10,000	0.1	0.0	0.0	(2)
10,000 to 20,000	0.8	0.0	0.1	0.1
20,000 to 30,000	2.0	0.0	0.5	0.4
30,000 to 40,000	3.3	0.0	0.8	0.9
40,000 to 50,000	3.9	0.0	0.7	1.0
50,000 to 75,000	9.7	(2)	1.4	2.6
75,000 to 100,000	7.3	0.1	0.6	1.7
100,000 to 200,000	7.3	2.5	0.3	1.6
200,000 and over	2.0	1.9	(2)	0.4
Total, all taxpayers	**36.4**	**4.5**	**4.5**	**8.8**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation, [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

D. Personal Exemption Phaseout

Present Law

In order to determine taxable income, an individual reduces AGI by any personal exemptions, deductions, and either the applicable standard deduction or itemized deductions. Personal exemptions generally are allowed for the taxpayer, his or her spouse, and any dependents (sec. 151). For 1998, the amount deductible for each personal exemption is $2,700. This amount is indexed annually for inflation. The deduction for personal exemptions is phased out ratably (personal exemption phaseout, or "PEP") for taxpayers with AGI over certain thresholds. These thresholds of PEP are indexed annually for inflation. Specifically, the total amount of exemptions that may be claimed by a taxpayer is reduced by 2 percent for each $2,500 (or portion thereof) by which the taxpayer's AGI exceeds the applicable threshold. (The phaseout rate is 2 percent for each $1,250 for married taxpayers filing separate returns.) Thus, the personal exemptions claimed are phased out over a $122,500 range (which is not indexed for inflation), beginning at the applicable threshold. Under PEP, the applicable thresholds for 1998 are $124,500 for single individuals, $186,800 for married individuals filing a joint return, $155,650 for heads of households, and $92,400 for married individuals filing separate returns. For 1998, the point at which a taxpayer's personal exemptions are completely phased out is $247,000 for single individuals, $309,300 for married individuals filing a joint return, $278,150 for heads of households, and $214,900 for married individuals filing separate returns.

Legislative History

The Tax Reform Act of 1986 phased out the benefit of the 15-percent bracket[24] and the personal exemptions for an individual, the individual's spouse, and each dependent. This phaseout was accomplished by the imposition of an additional 5-percent tax for higher-income levels. This created, in effect, a 33-percent marginal tax rate. This 33–percent marginal tax rate terminated and the 28-percent bracket resumed after the benefits of the 15-percent bracket and the personal exemptions claimed by each taxpayer had been phased out.[25]

The Omnibus Budget Reconciliation Act of 1990 ("OBRA 1990") repealed the additional 5-percent tax and imposed an explicit 31-percent marginal tax rate after the 15- and 28-percent marginal tax rates. Also, OBRA 1990 provided that after 1990, the deduction for personal exemptions would be phased-out as the taxpayer's adjusted gross income exceeded a threshold amount. The threshold amount was $150,000 for joint returns, $125,000 for head of household, $100,000 for single taxpayers, and $75,000 for a married person filing a separate return. The length of the phaseout range for all tax returns was $122,500. The threshold amounts but not the length of the phaseout range were to be indexed for inflation beginning in 1992. Under OBRA 1990, PEP would have sunset for taxable years beginning on or after January 1, 1996.

---

[24] Under the Tax Reform Act of 1986, the individual income tax rates were 15 and 28 percent.
[25] This provision was commonly referred to as "the bubble'.

The Unemployment Compensation Amendments of 1992 delayed the sunset of the PEP so that the phaseout would not apply to taxpayers for taxable years beginning on or after January 1, 1997. The Omnibus Budget Reconciliation Act of 1993 ("OBRA 1993") repealed the PEP sunset.

Analysis

The personal exemption phaseout increases effective marginal tax rates for those affected taxpayers. The personal exemption phaseout operates by reducing the amount of each personal exemption that the taxpayer may claim by two percent for each $2,500 (or portion thereof) by which the taxpayer's income exceeds the designated threshold for his or her filing status. Thus, for a taxpayer who is subject to the personal exemption phaseout, earning an additional $2,500 will reduce the amount of each personal exemption he or she may claim by two percent, or by $54 in 1998 (0.02 times the $2,700 personal exemption). The taxpayer's additional taxable income is thus equal to the $2,500 plus the $54 in denied exemption for each personal exemption. For a taxpayer in the 36-percent statutory marginal tax rate bracket, the effective marginal tax rate on the additional $2,500 of income equals the statutory 36 percent plus an additional 0.78 percent ($54 times the statutory rate of 0.36, divided by the $2,500 in incremental income) for each personal exemption. Thus, if this taxpayer claims four personal exemptions, his or her effective marginal tax rate is 39.1 percent (the statutory 36-percent rate plus four times 0.78 percent). More generally, for 1998 the taxpayer's effective marginal tax rate equals the taxpayer's statutory marginal rate multiplied by one plus the product of 2.16 percentage points (the $54 in denied personal exemption divided by the incremental $2,500 in income) multiplied by the number of personal exemptions claimed by the taxpayer.[26] Thus, a taxpayer who claims five personal exemptions would have an effective marginal tax rate approximately 110.5 percent of the statutory marginal tax rate.

---

[26] Mathematically, let Y be income, T tax liability, t the taxpayer's statutory marginal tax rate, E the number of personal exemptions, and I the income threshold. In the absence of the phaseout, the taxpayer's tax liability may be represented as follows.

(1) $T = (Y - (2{,}700E)) \bullet t = Yt - (2{,}700E) \bullet t$

For a taxpayer with income over the threshold amount, I, the taxpayer's tax liability is

$T = (Y - ((2{,}700E) \bullet (1 - (Y - I)/2{,}500) \bullet .02)) \bullet t$

This simplifies to

(2) $T = Y \bullet t \bullet (1 + (.0216)E) - 54Et - (.0216)It$

Thus the effective marginal tax rate for a taxpayer in the phaseout range is one plus 2.16 percentage points multiplied by the number of personal exemptions claimed, all multiplied by the taxpayer's statutory marginal tax rate.

This formula simplifies present law by representing the phaseout as a linear function. The phaseout is actually a step function. That is, the first dollar of income in the phaseout range causes the taxpayer to lose two percent of his or her personal exemptions. That is, the first dollar causes the taxpayer's taxable income to increase by the $1.00 of additional income plus $54 times the number of personal exemptions. The second dollar of income in the phaseout range has no further incremental effect. Thus the effective marginal tax rate on the second dollar through the 2,500th dollar is the taxpayer's statutory marginal tax rate and the marginal tax rate on the first dollar generally is 5,500 percent of the taxpayer's statutory marginal tax rate for a taxpayer claiming one personal exemption, and 10,900 percent of the taxpayer's statutory marginal tax rate for a taxpayer claiming two personal exemptions. In general, the marginal tax rate on the first dollar is a percentage of statutory marginal tax rate equal to 100 + 540 times the number of personal exemptions claimed by the taxpayer. This same result occurs at the first dollar of income after each multiple of $2,500.

The Joint Committee staff estimates that in 1998, 1.4 million taxpayers will be subject to PEP. See Table 6. This represents 1.0 percent of all taxpayers. Because the phase-out is completed by an AGI of $247,000 for single taxpayers and $309,300 for joint filers, generally no taxpayers in the 39.6-percent statutory bracket would be affected. Because the phaseout-range begins at an AGI of $124,500 for single taxpayers, $155,650 for heads of households, and $186,800 for joint filers, generally few taxpayers in the 15- or 28-percent statutory marginal tax rate bracket would be expected to be subject to the phaseout. For single taxpayers (one personal exemption) the provisions would increase the 31-percent and 36-percent statutory marginal tax rate bracket to effective marginal tax rates of 31.67 percent and 36.78 percent. For heads of households and joint filers (assuming only two personal exemptions) the corresponding effective marginal tax rates would be 32.34 percent and 37.56 percent.

Table 6.—Distribution by Income of Taxpayers Claiming Personal Exemptions and Those Subject to the Personal Exemption Phaseout—Calendar Year 1998

Income category [1]	Taxpayers claiming personal exemptions (millions)	Taxpayers subject to the personal exemption phaseout (millions)
Less than $10,000	19.8	0.0
10,000 to 20,000	25.1	0.0
20,000 to 30,000	20.3	0.0
30,000 to 40,000	16.3	0.0
40,000 to 50,000	12.4	0.0
50,000 to 75,000	19.6	0.0
75,000 to 100,000	10.0	0.0
100,000 to 200,000	8.5	0.3
200,000 and over	2.2	1.1
Total, all taxpayers	**134.1**	**1.4**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation, [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

E. Phaseout of the Earned Income Credit

Present Law

The earned income credit ("EIC") is available to low-income working taxpayers. Three separate schedules apply.

Taxpayers with one qualifying child may claim a credit in 1998 of 34 percent of their earnings up to $6,680, resulting in a maximum credit of $2,271. The maximum credit is available for those with earnings between $6,680 and $12,260. At $12,260 of earnings (or modified AGI, if greater) the credit begins to phase down at a rate of 15.98 percent of the amount of earnings (or modified AGI, if greater) above that amount. The credit is phased down to $0 at $26,473 of earnings (or modified AGI, if greater).

Taxpayers with more than one qualifying child may claim a credit in 1998 of 40 percent of earnings up to $9,390, resulting in a maximum credit of $3,756. The maximum credit is available for those with earnings between $9,390 and $12,260. At $12,260 of earnings (or modified AGI, if greater) the credit begins to phase down at a rate of 21.06 percent of earnings (or modified AGI, if greater) above that amount. The credit is phased down to $0 at $30,095 of earnings (or modified AGI, if greater).

Taxpayers with no qualifying children may claim a credit if they are over age 24 and below age 65. The credit is 7.65 percent of earnings up to $4,460, resulting in a maximum credit of $341. The maximum is available for those with incomes between $4,460 and $5,570. At $5,570 of earnings (or modified AGI, if greater), the credit begins to phase down at rate of 7.65 percent of earnings (or modified AGI, if greater) above that amount, resulting in a $0 credit at $10,030.

All income thresholds are indexed for inflation annually.

In order to be a qualifying child, an individual must satisfy a relationship test, a residency test, and an age test. The relationship test requires that the individual be a child, a stepchild, a descendant of a child, or a foster or adopted child of the taxpayer. The residency test requires that the individual have the same place of abode as the taxpayer for more than half the taxable year. The household must be located in the United States. The age test requires that the individual be under 19 (24 for a full-time student) or be permanently and totally disabled.

An individual is not eligible for the earned income credit if the aggregate amount of "disqualified income" of the taxpayer for the taxable year exceeds $2,200. This threshold is indexed. Disqualified income is the sum of:

(1) Interest (taxable and tax-exempt);
(2) Dividends;
(3) Net rent and royalty income (if greater than zero);
(4) Capital gain net income; and
(5) Net passive income (if greater than zero) that is not self-employment income.

For taxpayers with earned income (or modified AGI, if greater) in excess of the beginning of the phaseout range, the maximum earned income credit amount is reduced by the phaseout rate multiplied by the amount of earned income (or modified AGI, if greater) in excess of the beginning of the phaseout range. For taxpayers

with earned income (or modified AGI, if greater) in excess of the end of the phaseout range, no credit is allowed.

The definition of modified AGI used for phasing out the earned income credit disregards certain losses. The losses disregarded are:

(1) Net capital losses (if greater than zero);

(2) Net losses from trusts and estates;

(3) Net losses from nonbusiness rents and royalties; and

(4) 75 percent of the net losses from businesses, computed separately with respect to sole proprietorships (other than in farming), sole proprietorships in farming, and other businesses.

The definition of modified AGI also includes:

(1) Tax-exempt interest; and

(2) Non-taxable distributions from pensions, annuities, and individual retirement accounts (but only if not rolled over into similar vehicles during the applicable rollover period).

Individuals are not eligible for the credit if they do not include their taxpayer identification number and their qualifying child's number (and, if married, their spouse's taxpayer identification number) on their tax return. Solely for these purposes and for purposes of the present-law identification test for a qualifying child, a taxpayer identification number is defined as a Social Security number issued to an individual by the Social Security Administration other than a number issued under section 205(c)(2)(B)(i)(II) (or that portion of sec. 205(c)(2)(B)(i)(III) relating to it) of the Social Security Act (regarding the issuance of a number to an individual applying for or receiving federally funded benefits).

If an individual fails to provide a correct taxpayer identification number, such omission will be treated as a mathematical or clerical error. If an individual who claims the credit with respect to net earnings from self-employment fails to pay the proper amount of self-employment tax on such net earnings, the failure will be treated as a mathematical or clerical error for purposes of the amount of credit allowed.

The EIC is a refundable tax credit; i.e., if the amount of the credit exceeds the taxpayer's Federal income tax liability, the excess is payable to the taxpayer as a direct transfer payment.

Under an advance payment system (available since 1979), eligible taxpayers may elect to receive the benefit of the credit in their periodic paychecks, rather than waiting to claim a refund on their return filed by April 15 of the following year. In 1993, Congress required that the IRS begin to notify eligible taxpayers of the advance payment option.

Legislative History

The EIC was enacted in 1975 as a means of targeting tax relief to working low-income taxpayers with children, providing relief from the Social Security payroll tax for these taxpayers, and improving incentives to work. As originally enacted, the credit equaled 10 percent of the first $4,000 of earned income (i.e., a maximum credit of $400). The credit began to be phased out for taxpayers with earned income (or AGI, if greater) above $4,000, and was entirely phased out for taxpayers with income of $8,000.

The Revenue Act of 1978 increased the maximum credit to $500 (10 percent of the first $5,000 of earned income). Also, the income

level at which the phaseout began was raised to $6,000, with a complete phaseout not occurring until an income level of $10,000. The Deficit Reduction Act of 1984 increased the maximum credit to $550 (11 percent of the first $5,000 of earned income) and the credit was phased out beginning at $6,500 of income and ending at $11,000.

The Tax Reform Act of 1986 increased the maximum credit to $800 (14 percent of the first $5,714 of earned income), beginning in 1987. The maximum credit was reduced by 10 cents for each dollar of earned income (or AGI, if greater) in excess of $9,000 ($6,500 in 1987). These $5,714 and $9,000 amounts (stated above in 1985 dollars) were indexed for inflation.

The Omnibus Budget Reconciliation Act of 1990 ("OBRA 1990") substantially increased the maximum amount of the basic credit and added an adjustment to reflect family size. OBRA 1990 also created two additional credits as part of the EIC: the supplemental young child credit and the supplemental health insurance credit. Both of these supplemental credits used the same base as the basic EIC.

OBRA 1990 also modified the definition of taxpayers eligible for the EIC. Under prior law, taxpayers were required to file a joint return or file as a head of household or surviving spouse in order to be eligible for the EIC. OBRA 1990 generally broadened the set of eligible taxpayers and set out uniform requirements for qualifying children. The definition of "qualifying child" enacted in OBRA 1990 is described in the present-law section.

The Omnibus Budget Reconciliation Act of 1993 ("OBRA 1993") expanded the EIC in several ways. For taxpayers with one qualifying child, the EIC was increased to 26.3 percent of the first $7,750 of earned income in 1994. For 1995 and thereafter, the credit rate was increased to 34 percent. In 1995, the maximum amount of earned income on which the credit could be claimed is $6,160 (this is a $6,000 base in 1994, adjusted for inflation). The phaseout rate for 1994 and thereafter is 15.98 percent.

For taxpayers with two or more qualifying children, the EIC was increased to 30 percent of the first $8,425 of earned income in 1994. The maximum credit for 1994 was $2,527 and was reduced by 17.68 percent of earned income (or AGI, if greater) in excess of $11,000. The credit rate increases over time and equals 36 percent for 1995 and 40 percent for 1996 and thereafter. The phaseout rate is 20.22 percent for 1995 and 21.06 percent for 1996 and thereafter.

OBRA 1993 also extended the EIC to taxpayers with no qualifying children. This credit for taxpayers with no qualifying children is available to taxpayers over age 24 and below age 65. Finally, OBRA 1993 repealed the supplemental young child credit and the supplemental health insurance credit.

The implementing legislation for the General Agreements on Tariffs and Trade, enacted in 1994, made a number of modifications to the EIC. First, it denied the EIC to inmates for any amount received for services provided by the inmate in a penal institution. Second, it generally made nonresident aliens ineligible to claim the EIC. Third, it deemed that a member of the Armed Forces stationed outside the United States while serving on extended active duty would satisfy the test that the principal place

of abode be within the United States. Fourth, it required that members of the Armed Forces receive annual reports from the Department of Defense of earned income (which includes nontaxable earned income such as amounts received as basic allowances for housing and subsistence). Fifth, it required a TIN for each qualifying child regardless of the dependent's age. Prior to the legislation, taxpayers had to provide a TIN only for qualifying children who attained the age of one before the close of the taxpayer's taxable year.

Under the Self-Employed Person's Health Care Reduction Extension Act of 1995, effective for taxable years beginning after December 31, 1995, a taxpayer is not eligible for the EIC if the aggregate amount of disqualified income (i.e., taxable and tax-exempt interest, dividends, and (if greater than zero) net rent and royalty income) of the taxpayer for the taxable year exceeds $2,350 ("the disqualified income test").

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 included several changes to the EIC. First, it modified the disqualified income test by adding capital gain net income and net passive income (if greater than zero) that is not self-employment income to the definition of disqualified income, and by reducing the threshold above which an individual is not eligible for the EIC from $2,350 to $2,200 (indexed for inflation). Second, it modified the definition of AGI used for phasing out the earned income credit by disregarding certain losses. The losses disregarded are: (1) net capital losses (if grater than zero); (2) net loses from trusts and estates; (3) net losses from nonbusiness rents and royalties; and (4) 50 percent of the net losses from businesses, computed separately with respect to sole proprietorships (other than in farming), sole proprietorships in farming, and other businesses. Third, it applied mathematical and clerical error treatment to the failure to provide a correct Social Security Number ("SSN") or to pay the proper amount of self-employment tax on net self-employment earnings on which an EIC is claimed. Finally, it denied the EIC to individuals whose SSNs were issued solely for purposes of the individual applying for or receiving Federally funded benefits.

The Taxpayer Relief Act of 1997 also included provisions to improve compliance. The provisions: (1) deny the EIC for 10 years to taxpayers who fraudulently claimed the EIC (2 years for EIC claims which are a result of reckless or intentional disregard of rules or regulations); (2) require EIC recertification for a taxpayer who is denied the EIC; (3) imposes due diligence requirements on paid preparers of returns involving the EIC, (4) requires information sharing between the Treasury Department and State and local governments regarding child support orders, and (5) allows expanded use of Social Security Administration records to enforce the tax laws including the EIC.

The Balanced Budget Act of 1997 also increased the IRS authorization to improve enforcement of the EIC.

Analysis

The earned income credit, though designed to encourage labor supply, also paradoxically increases the effective marginal tax rates of taxpayers in the phase-out range of the credit. Below the level

of earned income where a recipient would be eligible for the maximum credit—the phase-in range of the credit—the credit rate can be thought of as equivalent to a *negative* marginal tax rate of the same magnitude, because the taxpayer is entitled to a cash payment equal to the credit rate times earned income. In this phase-in range, each additional amount of earned income will cause the recipient to receive an increase in the credit. As discussed above, the credit is phased in at rates of 7.65 percent, 34 percent, or 40 percent of earnings, depending on whether the taxpayer has no qualifying children, one qualifying child, or two or more qualifying children. For taxpayers in the phase-in ranges, the EIC thus represents a negative marginal tax rate of 7.65 percent, 34 percent, or 40 percent, as each additional dollar of earnings will lead to an *increase* in the credit by the above percentages of additional earnings.

Once the maximum amount of the credit is fully phased in, there is a range of additional earnings where the credit will remain unchanged before the start of the phase-out range. Within this range, the taxpayer's marginal tax rate equals the statutory rate, which in all cases will be zero percent, since the top of this range is less than the sum of the standard deduction and the amount of personal exemptions that could be claimed. Once additional earnings cause the taxpayer's modified adjusted gross income to hit the phase-out range, the credit begins to phase out. Several phase-out ranges exist for the EIC, depending on whether the taxpayer has one, two, or no qualifying children. The phase-out rates and ranges are discussed above. For those in the phase-out ranges, the increase in the effective marginal tax rate is exactly equivalent to the phase-out rate, as the phaseout of a credit is the equivalent of a direct tax increase of the same magnitude. Thus, for taxpayers in the phase-out range, the increase in the effective marginal tax rates on additional increases in modified adjusted gross income are 15.98 percent, 21.06 percent, or 7.65 percent, depending on whether the taxpayer has one, two, or no qualifying children.

Taxpayers in the phase-out range would also be subject to the normal Federal income tax liability on any additional income itself. Because the phase-out range occurs at relatively low levels of income, the highest statutory marginal tax rate such taxpayers will face will be 15 percent. Some taxpayers affected by the phaseout might still face a 0 percent statutory Federal marginal tax rate if their total income is less than their standard deduction plus the value of their personal exemptions. Thus the maximum effective marginal tax rate faced by taxpayers in the phase-out range will be 15 percent plus the applicable phase-out rate of 7.65 percent, 15.98 percent or 21.06 percent, for effective marginal tax rates of 22.65 percent, 30.98 percent, or 36.06 percent.

The phaseout of the credit exists in order to target the credit to lower-income workers. Eliminating the phaseout would effectively give the credit to all workers, and would have a significant budgetary cost. Also, it would be easier to decrease Social Security taxes to accomplish the same result. Extending the phase-out ranges would lower the increase in effective marginal tax rates caused by the phaseout, but would correspondingly cause the program to become substantially more expensive.

In addition to the phaseout of the EIC discussed above, one can also lose eligibility for any credit if disqualified income (defined above) exceeds $2,200. This eligibility criterion represents an infinite marginal tax rate for taxpayers who are otherwise qualified for the EIC but who earn an additional dollar of disqualified income that pushes them into ineligibility. For example, a taxpayer with 2 qualifying children, $10,000 in wage income, and $2,200 in disqualified income is eligible for the maximum EIC of $3,756. If this taxpayer should earn an additional dollar of disqualified income, and thus have $2,201 in disqualified income, they would lose all their EIC benefits.[27]

As shown in table 7, the Joint Committee staff estimates that, in 1998, 19.1 million taxpayers will claim EIC benefits. Of those, 4.4 million, or 8.7 percent of all taxpayers, will be in the phase-in range of the benefits, and 11.7 million, or 3.2 percent of all taxpayers, will be in the phase-out ranges (the remaining 3.0 million will have incomes where an additional dollar of income will have no effect on their EIC). Due to the low levels of the phase-in ranges, no taxpayers in the phase-in ranges would have sufficient income to be in the 15-percent marginal tax rate bracket, but rather would be in the 0-percent bracket. In the phase-out ranges, taxpayers would be in either the 15-percent bracket or the 0-percent bracket. Figures 1–3 show the effective marginal tax rates (combining the federal rates with the EIC phase-in or phaseout) for EIC recipients of various qualifying circumstances and income levels.

[27] Technically, the rate is not infinite—earning an additional dollar and losing $3,756 of benefits represents a rate of 376,500 percent. Only if we measured incremental income in smaller amounts than a penny would the rate approach an infinite one, as the full credit could be lost for infinitesimally small increments to income.

Table 7.—Distribution by Income of Taxpayers Claiming the Earned Income Credit and Those in the Phase-In and Phaseout Range

[Calendar year 1998]

Income category [1]	Taxpayers claiming earned income credit (millions)	Taxpayers in earned income credit phase-in range (millions)	Taxpayers in earned income credit phaseout range (millions)
Less than $10,000	4.8	3.0	1.0
10,000 to 20,000	6.7	1.1	3.7
20,000 to 30,000	5.3	0.2	4.8
30,000 to 40,000	2.1	0.1	2.0
40,000 to 50,000	0.2	(2)	0.1
50,000 to 75,000	(2)	(2)	(2)
75,000 to 100,000	0.0	0.0	0.0
100,000 to 200,000	0.0	0.0	0.0
200,000 and over	0.0	0.0	0.0
Total, all taxpayers	**19.1**	**4.4**	**11.7**

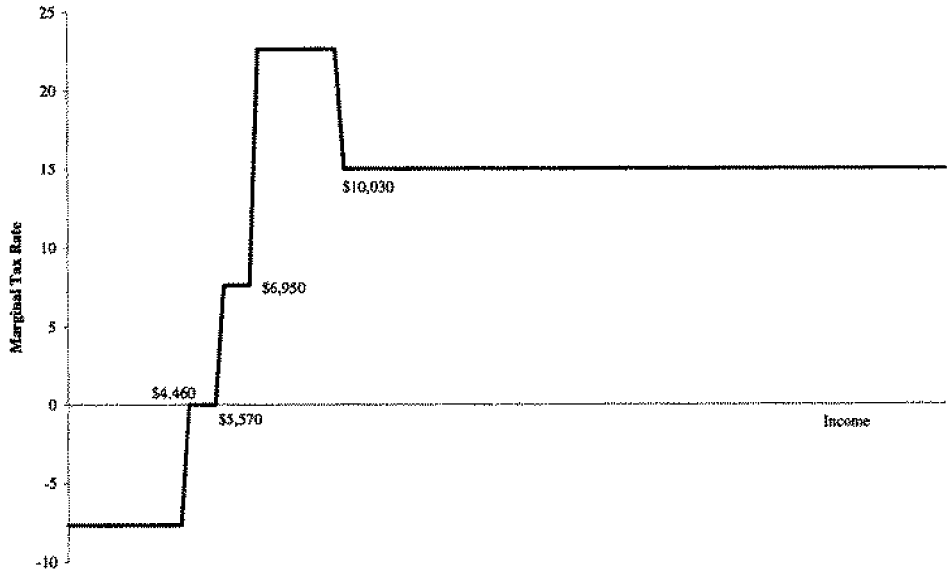
[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

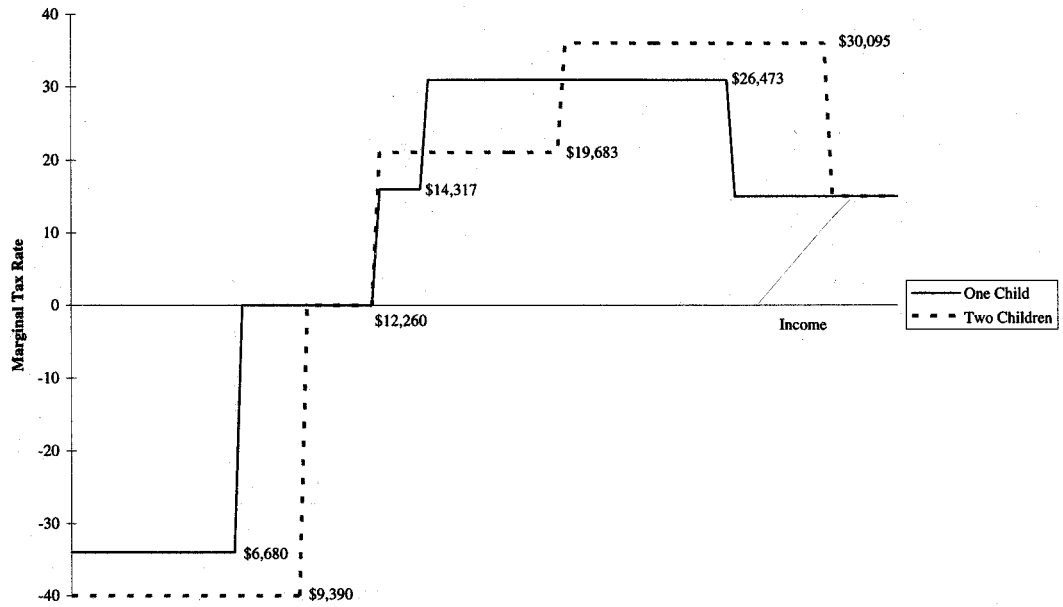
Source: Joint Committee on Taxation.

Figure 1.--Effective Marginal Tax Rates With Earned Income Credit (Single Taxpayers)



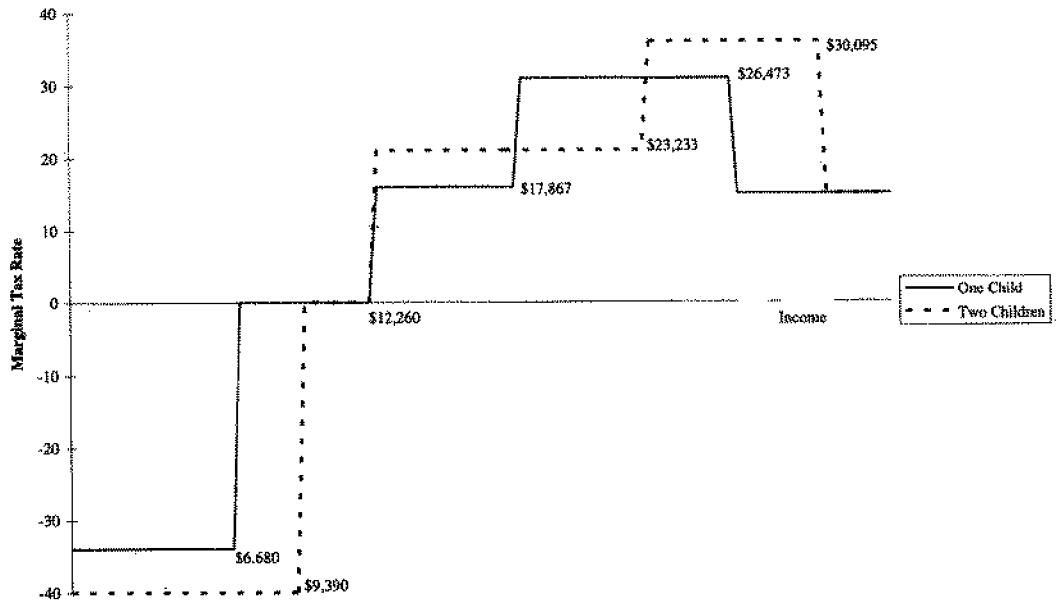
Assumes all income is earned income.

Figure 2.--Effective Marginal Tax Rates For Earned Income Credit Recipients (Head-of-Household)



Assumes all income is earned income.
Takes into account applicable child credits.

Figure 3.--Effective Marginal Tax Rates for Earned Income Credit Recipients (Married Taxpayers)



Assumes all income is earned income.
Takes into account applicable child credits.

F. Phaseout of Child Tax Credit

Present Law

In general

Present law provides a $500 ($400 for taxable year 1998) tax credit for each qualifying child under the age of 17. A qualifying child is defined as an individual for whom the taxpayer can claim a dependency exemption and who is a son or daughter of the taxpayer (or a descendent of either), a stepson or stepdaughter of the taxpayer or an eligible foster child of the taxpayer.

Phase-out range

For taxpayers with modified AGI in excess of certain thresholds, the otherwise allowable child credit is phased out. Specifically, the otherwise allowable child credit is reduced by $50 for each $1,000 of modified AGI (or fraction thereof) in excess of the threshold ("the modified AGI phase-out"). For these purposes modified AGI is computed by increasing the taxpayer's AGI by the amount otherwise excluded from gross income under Code sections 911, 931, or 933 (relating to the exclusion of income of U.S. citizens or residents living abroad; residents of Guam, American Samoa, and the Northern Mariana Islands; and residents of Puerto Rico, respectively). For married taxpayers filing joint returns, the threshold is $110,000. For taxpayers filing single or head of household returns, the threshold is $75,000. For married taxpayers filing separate returns, the threshold is $55,000. These thresholds are not indexed for inflation. The length of the phase-out range is affected by the number of the taxpayer's qualifying children. In 1998, the length of the phaseout range is $8,000[28] of modified AGI for each qualifying child. For example, in 1998 the phase-out range for a single person with one qualifying child will be between $75,000 and $83,000 of modified AGI. The phase-out range for a single person with two qualifying children will be between $75,000 and $91,000 of modified AGI in 1998.

Tax liability limitation; refundable credits

In general, the amount of the child credit, together with the other nonrefundable personal credits, is limited to the excess of the taxpayer's regular tax over the taxpayer's tentative minimum tax (determined without regard to the alternative minimum tax foreign tax credit) (sec. 26(a)).

In the case of an individual with three or more qualifying children, the taxpayer also may be allowed a refundable child credit (sec. 24(d)).[29] The amount of the refundable child credit is the amount that the nonrefundable personal credits would increase if the tax liability limitation of section 26(a) were increased by the excess of the taxpayer's social security taxes over the taxpayer's earned income credit (if any).[30] The amount of the refundable child credit is limited to the amount of the child credit allowable under

[28] $10,000 of modified AGI per qualifying child in 1999 and thereafter.

[29] The provision is described as set forth in the Tax Technical Corrections Act of 1997, Title VI (sec. 603(a)) of H.R. 2676, as passed by the House on November 5, 1997.

[30] For this purpose, the earned income credit is determined without regard to the supplemental earned income credit discussed below.

section 24, determined without regard to section 26(a). Social security taxes means the individual's share of FICA taxes and one-half of the SECA tax liability. The amount of the refundable child credit is reduced by the amount of the alternative minimum tax imposed by section 55 that did not result in a reduction of the earned income credit under section 32(h).

The amount of the refundable child credit under section 24(d) will reduce the amount of the nonrefundable child credit (determined without regard to section 26). This will result in the proper calculation of personal credit carryovers.

Supplemental child credit

Part or all of the child credit may be treated as a supplemental child credit under the earned income credit (sec. 32(n)).[31] The amount treated as a supplemental child credit under section 32(n) reduces the amount of the child credit under section 24, but does not change the total amount of child credits allowed and has no effect on determining the amount of any other credit for any taxable year.

The amount of the supplemental child credit is the amount by which the personal credits would be reduced if the section 26(a) tax liability limitation were reduced by an amount equal to the excess of the taxpayer's earned income credit (without regard to the supplemental child credit) over the taxpayer's social security taxes (as defined above). The amount of the supplemental child credit cannot exceed the amount of the nonrefundable child credit under section 24, determined without regard to the tax liability limitation of section 26. The eligibility provisions of section 32 are disregarded in determining the amount of supplemental child credit that is allowed to the taxpayer.

Legislative History

The child credit was enacted in the Taxpayer Relief Act of 1997.

Analysis

The phaseout of the child credit is structured in such a way that it has a fairly simple effect on effective marginal tax rates. Each dollar of credit lost represents an increase in the taxpayer's total tax liability. Because the credit itself is phased out at a rate of $50 per every $1,000 increase in modified adjusted gross income over the specified threshold, the phaseout adds 5 percentage points ($50/$1,000) to the statutory marginal tax rate for all taxpayers affected by the phaseout.[32] Thus a taxpayer in the 28 percent bracket who

---

[31] The provision is described as set forth in the Tax Technical Corrections Act of 1997, Title VI (sec. 603(b)) of H.R. 2676, as passed by the House on November 5, 1997.

[32] Mathematically, where Y denotes income, C denotes the size of the child credit (assumed to be $400 in this example), I denotes the beginning of the phaseout range, and t denotes the statutory marginal tax rate, the taxpayer's total tax liability, T, is given by the following expression:

$$(1)\ T = Y \bullet t - C, \text{ where}$$

$$C = \text{Max}(0, \$400 - \$50 \bullet (Y - I)/1000)$$

Substituting the expression for C into (1) for taxpayers in the phaseout range yields:

$$(2)\ T = Y \bullet t - 400 + .05\ (Y - I)$$

Hence, if Y goes up by $1, T rises by t + .05

is in the phaseout range faces an effective marginal tax rate of 33 percent. Because the phaseout range is flexible—only the starting threshold is specified—the total size of child credits does not affect the rate at which the credit is phased out, but only affects the length of the phaseout range. Hence the larger the total credit the longer is the phaseout range, but the rate of the phaseout remains at $50 per every $1,000 increase in modified adjusted gross income over the specified threshold until the entire credit is phased out. The total length of the phaseout range per eligible child is $8,000 for 1998 and $10,000 for 1999.

Technically, the phaseout of the credit works in steps, and the first dollar of income over the threshold will cause the credit to decline by $50. The next $999 in income would have no further effect on the credit, but the next dollar would cause the credit to fall by another $50. As income crosses the threshhold points, the effective marginal tax rate is infinite.[33] As income increases between the thresholds, the effective marginal tax rate is the statutory marginal tax rate. For changes in income that are larger than $1,000, the average effective marginal tax rate will be approximately 5 percentage points above the statutory rate.

As shown in table 8, below, the Joint Committee staff estimates that, in 1998, only 0.6 million taxpayers, or less than one-half of one percent of all taxpayers, are in the phase-out ranges for the child credit out of a total of 27.1 million taxpayers claiming the credit. Because the phase-out ranges occur at relatively high income levels, most taxpayers in the phase-out ranges will be in the 28 percent marginal tax rate bracket or higher.

[33] Technically, the rate is not infinite—earning an additional dollar and losing $50 in child credits represents a rate of 5,000 percent. Only if we measured incremental income in smaller amounts than a penny would the rate approach an infinite one, as $50 in credits could be lost for infinitesimally small increments to income if it caused total income to cross a threshold point.

Table 8.—Distribution by Income of Taxpayers Claiming Child Tax Credit and Those in Phaseout Range

[Calendar year 1998]

Income category [1]	Taxpayers claiming child tax credit (millions)	Taxpayers in phaseout Range (millions)
Less than $10,000	([2])	0.0
10,000 to 20,000	1.8	0.0
20,000 to 30,000	3.8	0.0
30,000 to 40,000	4.2	0.0
40,000 to 50,000	3.4	0.0
50,000 to 75,000	7.3	([2])
75,000 to 100,000	4.4	0.1
100,000 to 200,000	2.1	0.5
200,000 and over	([2])	([2])
Total, all taxpayers	**27.1**	**0.6**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

G. Partial Phaseout of the Dependent Care Tax Credit

Present Law

A taxpayer may claim a nonrefundable credit against income tax liability for up to 30 percent of a limited amount of employment-related dependent care expenses. Eligible employment-related expenses are limited to $2,400 if there is one qualifying dependent or $4,800 if there are two or more qualifying dependents. Generally, a qualifying individual is a dependent under the age of 13 or a physically or mentally incapacitated dependent or spouse. In addition, no credit is allowed for any qualifying individual unless a valid taxpayer identification number (TIN) has been provided for that individual.

Employment-related dependent care expenses are expenses for the care of a qualifying individual incurred to enable the taxpayer to be gainfully employed, other than expenses incurred for an overnight camp. For example, amounts paid for the services of a housekeeper generally qualify if such services are performed at least partly for the benefit of a qualifying individual; amounts paid for a chauffeur or gardener do not qualify.

Expenses that may be taken into account in computing the credit generally may not exceed an individual's earned income or, in the case of married taxpayers, the earned income of the spouse with the lesser earnings. Thus, if one spouse is not working, no credit generally is allowed. Also, the amount of expenses eligible for the dependent care credit is reduced, dollar for dollar, by the amount of expenses excludable from that taxpayer's income under the dependent care exclusion.

The 30-percent credit rate is reduced, but not below 20 percent, by 1 percentage point for each $2,000 (or fraction thereof) of adjusted gross income (AGI) above $10,000. Thus, the credit is never completely phased-out for higher-income individuals. Because married couples are required to file a joint return to claim the credit, a married couple's combined AGI is used for purposes of this computation.

Legislative History

The Internal Revenue Code of 1954 provided a deduction to gainfully employed women, widowers, and legally separated or divorced men for certain employment-related dependent care expenses. The deduction was limited to $600 per year and phased out for families with incomes between $4,500 and $5,100.

The Revenue Act of 1964 made husbands with incapacitated wives eligible for the dependent care deduction and raised the threshold for the income phaseout from $4,500 to $6,000.

The Revenue Act of 1971: (1) made any individual who maintained a household and was gainfully employed eligible for the deduction; (2) modified the definition of a dependent; (3) raised the deduction limit to $4,800 per year; (4) increased from $6,000 to $18,000 the income level at which the deduction began to phase out; (5) allowed the deduction for household services in addition to direct dependent care; and (6) limited the deduction with respect to services outside the taxpayer's household.

The Tax Reduction Act of 1975 increased from $18,000 to $35,000 the income level at which the deduction began to be phased out.

The Tax Reform Act of 1976 replaced the deduction with a nonrefundable credit. This change broadened eligibility to those who do not itemize deductions and provided relatively greater benefit to low-income taxpayers. In addition, the Act eased the rules related to family status and simplified the computation.

In the Economic Recovery Tax Act of 1981, Congress provided a higher ceiling on creditable expenses, a larger credit for low-income individuals, and modified rules relating to care provided outside the home.

The Family Support Act of 1988 reduced to 13 the age of a child for whom the dependent care credit may be claimed, reduced the amount of eligible expenses by the amount of expenses excludable from that taxpayer's income under the dependent care exclusion, lowered from 5 to 2 the age at which a TIN had to be submitted for children for whom the credit was claimed, and disallowed the credit unless the taxpayer reports on his or her tax return the correct name, address, and taxpayer identification number (generally, an employer identification number or a Social Security number) of the dependent care provider.

The Small Business Job Protection Act of 1996 extended the taxpayer identification number requirement to all children regardless of their age.

Analysis

The partial phaseout of the dependent care credit effectively increases marginal tax rates for taxpayers in the phase-out range. The initial credit rate of 30 percent of eligible expenses falls by 1 percentage point for each $2,000 in income (or fraction thereof) above $10,000, though it cannot fall below 20 percent. For a taxpayer with the maximum eligible expenses of $4,800, the credit rate of 30 percent yields a credit of $1,440. In this case, the credit falls by $48 for each $2,000 in income in excess of $10,000. Because the loss of a credit is equivalent to a direct increase in taxes owed, the taxpayer's tax rises by an additional $48 for each $2,000 in income beyond that which is owed as a result of the direct tax liability on the income itself. The additional $48 in tax on $2,000 in income represents a rate of 2.4 percent ($48 / $2,000).[34] Given the low income range of the phaseout of this credit, the taxpayers in the phase-out range will be exclusively in the 15 percent statutory

[34] Mathematically, where Y denotes income, E denotes the size of potential eligible expenses, C the actual credit, and t denotes the statutory marginal tax rate, the taxpayer's total tax liability, T, is given by the following expression:

(1) $T = Y \bullet t - C$, where

$C = E \bullet (.3 - .1 \bullet (Y - 10{,}000)/20{,}000)$ for taxpayers in the phase-out range.

Substituting the expression for C into (1) for taxpayers in the phase-out range yields:

(2) $T = Y \bullet t - E \bullet (.3 - Y/200{,}000 + .05)$

or

$T = Y \bullet t - .35E - Y \bullet E / 200{,}000$

Hence, if Y goes up by $1, T rises by t + E / 200,000. For the maximum E of $4,800, E/$200,000 equals .024.

rate bracket[35], and thus their true effective marginal tax rate will be increased by a maximum of 2.4 percentage points to an effective rate of 17.4 percent.

Because this credit actually phases out in steps instead of in a directly linear fashion, one could earn an additional amount of income that is much smaller than $2,000 and have this cause a loss of an additional $48 (at the maximum) in credits. For example, if a taxpayer were earning $21,999 dollars, additional earnings of $2 would cause the taxpayer to lose an additional amount of credit of up to $48 (1 percent of eligible expenses). Technically, this would represent a tax liability 24 times as great as the additional income (ignoring the 15-percent Federal tax due on the $2), or a 2,400 percent marginal tax rate. Similarly, however, one could be earning $22,001 and earn an additional $1,500 and face no further loss of the credit. On average, however, the phaseout will add an additional 2.4 percentage points to the marginal tax rate of a taxpayer with maximum eligible expenses.

As shown in Table 9, the Joint Committee staff estimates that, in 1998, 1.6 million taxpayers, or 1.2 percent of all taxpayers, are in the phase-out range for the dependent care credit out of a total of 6.1 million taxpayers claiming the credit. Because the phase-out range occurs at relatively low income levels, all taxpayers in the phase-out range will be in the 15-percent marginal tax rate bracket.

[35] In order to be eligible for the credit (a necessary condition to be affected by a phaseout), one must have positive regular tax liability since the credit is a non-refundable credit. Thus, despite the relatively low income range of the partial phaseout of this credit, one could not be in the 0 percent bracket and be affected by the partial phaseout.

Table 9.—Distribution by Income of Taxpayers Claiming Dependent Care Tax Credit and Those in Partial Phaseout Range

[Calendar year 1998]

Income category [1]	Taxpayers claiming dependent care tax credit (millions)	Taxpayers in phaseout range (millions)
Less than $10,000	(2)	0.0
10,000 to 20,000	0.3	0.3
20,000 to 30,000	0.7	0.7
30,000 to 40,000	0.9	0.6
40,000 to 50,000	0.7	(2)
50,000 to 75,000	1.5	(2)
75,000 to 100,000	1.1	0.0
100,000 to 200,000	0.8	0.0
200,000 and over	0.1	0.0
Total, all taxpayers	**6.1**	**1.6**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

H. Phaseout of Eligibility for Deductible and Roth IRA Contributions

Present Law

Deductible IRAs

Under present law, an individual may make deductible contributions to an individual retirement arrangement ("IRA") up to the lesser of $2,000 or the individual's compensation if the individual is not an active participant in an employer-sponsored retirement plan. In the case of a married couple, deductible IRA contributions of up to $2,000 can be made for each spouse (including, for example, a home maker who does not work outside the home) if the combined compensation of both spouses is at least equal to the contributed amount.

If the individual (or the individual's spouse) is an active participant in an employer-sponsored retirement plan, the $2,000 deduction limit is phased out for taxpayers with adjusted gross income ("AGI") over certain levels for the taxable year.

The phase-out limits for a single individual who is an active participant in an employer-sponsored retirement plan are as follows: for 1998, $30,000 to $40,000; for 1999, 2000, 2001 and 2002, the limits increase by $1,000 each year, so that the limits by 2002 are $34,000 to $44,000; for 2003, $40,000 to $50,000; for 2004, $45,000 to $55,000; and for 2005 and thereafter, $50,000 to $60,000.

The phase-out limits for a married individual filing a joint return who is an active participant in an employer-sponsored plan are as follows: for 1998, $50,000 to $60,000; for 1999, 2000, 2001 and 2002, the limits increase by $1,000 each year, so that the limits by 2002 are $54,000 to $64,000; for 2003, $60,000 to $70,000; for 2004, $65,000 to $75,000; for 2005, $70,000 to $80,000; for 2006, $75,000 to $85,000; and for 2007 and thereafter, $80,000 to $90,000.

In the case of a married taxpayer filing a separate return, the deduction is phased out between $0 and $10,000 of AGI.[36]

The maximum deductible IRA contribution for an individual who is not an active participant, but whose spouse is, is phased out for taxpayers with AGI between $150,000 and $160,000.

Amounts held in a deductible or nondeductible IRA are includible in income when withdrawn (except to the extent the withdrawal is a return of nondeductible contributions). Includible amounts withdrawn prior to attainment of age 59½ are subject to an additional 10-percent early withdrawal tax, unless the withdrawal is due to death or disability, is made in the form of certain periodic payments, is used to pay medical expenses in excess of 7.5 percent of AGI, is used to purchase health insurance of an unemployed individual, is used for education expenses, or is used for first-time homebuyer expenses of up to $10,000.

Roth IRAs

For years beginning in 1998, individuals with AGI below certain levels may make nondeductible contributions to a Roth IRA. The

[36] A couple is not considered married for purposes of the IRA deduction rules if the individuals file separate returns and live apart from one another at all times during the taxable year; each spouse is treated as a single individual in such a case.

maximum annual contribution that may be made to a Roth IRA is the lesser of $2,000 or the individual's compensation for the year. The contribution limit is reduced to the extent an individual makes contributions to any other IRA in the same taxable year. As under the rules relating to IRAs generally, a contribution of up to $2,000 for each spouse may be made to a Roth IRA provided the combined compensation of the spouses is at least equal to the contributed amount. The maximum annual contribution that can be made to a Roth IRA is phased out for single individuals with AGI between $95,000 and $110,000 and for joint filers with AGI between $150,000 and $160,000.[37]

Taxpayers with modified AGI of $100,000 or less may convert an IRA into an Roth IRA. The amount converted is includible in income as if a withdrawal had been made, except that if the conversion occurs in 1998, the income inclusion is spread over 4 years.

Amounts held in a Roth IRA that are withdrawn as a qualified distribution are not includible in income, nor subject to the additional 10-percent tax on early withdrawals. A qualified distribution is a distribution that (1) is made after the 5-taxable year period beginning with the first taxable year in which the individual made a contributions to a Roth IRA, and (2) which is made on attainment of age 59½, on account of death or disability, or is made for first-time homebuyer expenses of up to $10,000.

Distributions from a Roth IRA that are not qualified distributions are includible in income to the extent attributable to earnings, and subject to the 10-percent early withdrawal tax (unless an exception applies). The same exceptions to the early withdrawal tax that apply to IRAs apply to Roth IRAs.

Nondeductible IRAs

To the extent an individual cannot or does not make deductible contributions to an IRA or contributions to a Roth IRA, the individual may make nondeductible contributions to an IRA. Distributions from a nondeductible IRA are includible in income and subject to the 10-percent early withdrawal tax to the extent attributable to earnings.

Legislative History

The individual retirement savings provisions were originally enacted in the Employee Retirement Income Security Act of 1974 ("ERISA"). Individuals who were active participants in an employer-sponsored retirement plan were not permitted to make contributions to an IRA. The limit on the deduction for IRA contributions was generally the lesser of (1) 15 percent of the individual's compensation for the year, or (2) $1,500.

The Economic Recovery Tax Act of 1981 ("ERTA") increased the deduction limit for contributions to IRAs and removed the restriction on IRA contributions by active participants in employer-sponsored retirement plans. Beginning in 1982, the deduction for IRA contributions was generally the lesser of (1) 100 percent of the indi-

[37] It was intended that the phase-out range for married taxpayers filing separately be $0 to $10,000. A technical correction is necessary so that the statute reflects this intent. See the Tax Technical Corrections Act of 1997, Title VI (sec. 605) of H.R. 2676, as passed by the House on November 5, 1997.

vidual's compensation, or (2) $2,000. An individual was entitled to make a deductible contribution to an IRA even if the individual was an active participant in an employer-sponsored retirement plan.

The Tax Reform Act of 1986 ("1986 Act") added the restrictions on deductible IRA contributions for an individual (or the individual's spouse) who is an active participant in employer-sponsored retirement plan. For years 1987 through 1997, if a single taxpayer or either spouse (in the case of a married couple) was an active participant in an employer-sponsored retirement plan, the maximum IRA deduction was phased out between $25,000 and $35,000 of AGI. For married taxpayers, the maximum deduction was phased out between $40,000 and $50,000 of AGI. In the case of a married taxpayer filing a separate return, the deduction was phased out between $0 and $10,000 of AGI. In addition, the 1986 Act added the present-law rules permitting individuals to make nondeductible contributions to an IRA.

The Small Business Job Protection Act of 1996 ("1996 Act") modified the rule relating to the maximum deductible IRA contribution by permitting deductible IRA contributions of up to $2,000 to be made for each spouse (including a spouse who does not work outside the home) if the combined compensation of both spouses is at least equal to the contributed amount.

The Taxpayer Relief Act of 1997 ("1997 Act") (1) increased the AGI phase-out limits for deductible IRAs, (2) modified the AGI phase-out limits for an individual who is not an active participant in an employer-sponsored retirement plan but whose spouse is, (3) provided an exception from the early withdrawal tax for withdrawals for first-time home purchase (up to $10,000), and (4) created a new nondeductible IRA called the Roth IRA.

Analysis

In general

As explained above, the Code phases out taxpayer eligibility to make deductible contributions to an IRA or to make contributions of after-tax dollars to a Roth IRA. The phase-out rate for deductible IRAs is 20 percent ($2,000 of deductible contributions phased out over a $10,000 income range).[38] For Roth IRAs, the phase-out rate is 20 percent for joint filers and 13.3 percent for single filers ($2,000 of eligible contributions phased out over a $15,000 range).

Some analysts would interpret these phaseouts as having the effect of raising the taxpayer's effective marginal tax rate above the statutory marginal tax rate. However, these phaseout provisions alter effective marginal tax rates differently than most of the other provisions discussed in this pamphlet. While the provision phasing out the taxpayer's eligibility for deductible IRA contributions has the effect of raising the taxpayer's tax liability in the current year, it reduces the taxpayer's tax liability in the future. This same effect is observed in the phaseout of the exemption for real estate losses. See Part II.P., below. The provision phasing out the taxpayer's eli-

[38] In the case of married taxpayers who file jointly, the phase-out rate becomes 10 percent ($2,000 phased out over the income range of $80,000 to $100,000) for 2007 and subsequent years.

gibility to contribute to a Roth IRA does not create an effective marginal tax rate on current year income that is in excess of the statutory marginal tax rate, but rather subjects more income to income tax in a subsequent year.

Deductible IRAs

To understand the effects of these provisions, assume a taxpayer plans to set aside $2,000 in the current year and plans to use the principal and any earnings to provide for living expenses in his retirement.[39] If the taxpayer were to contemplate contributing the $2,000 to a deductible IRA and the taxpayer is in the income phaseout range, each dollar of additional income reduces the deduction he may claim in the current year by 20 cents. This means that for each dollar of additional income, the taxpayer's taxable income increases by $1.20. In the current year, the taxpayer's effective marginal tax rate would be 1.2 times his statutory marginal tax rate, or 120 percent of his statutory marginal tax rate.[40]

For example, consider a married taxpayer filing a joint return who intends to save $2,000 for retirement and whose AGI is $52,500, that is, $2,500 into the phase out range. Further assume this taxpayer is in the 15-percent statutory marginal tax bracket. The taxpayer's income is $2,500 above the $50,000 threshold. Therefore, the permitted $2,000 deductible contribution is proportionately reduced by the fraction 2,500 divided by 10,000, or by one quarter. He may contribute no more than $1,500 to a deductible IRA. A $1,500 deductible IRA contribution reduces his current year tax liability by $225 (0.15 times $1,500). Were he permitted to deduct the full $2,000 in retirement saving, his current year tax liability would have been reduced by $300. The taxpayer's incremental income in the phaseout range, $2,500, increases the taxpayer's current year tax liability by $2,500 times 15 percent, or $375, plus the increase in tax liability from the loss of full deductibility of the saving contribution, $75 (15 percent of $500). The total marginal increase in tax liability, $450, is 18 percent of $2,500. Thus, the taxpayer's effective marginal tax rate on current year income is 18 percent, which is 1.2 times his statutory marginal tax rate of 15 percent.

However, as noted above, whether contributions to retirement saving are deductible in the current year affects future tax liability.

---

[39] An IRA or Roth IRA also may be used as a saving vehicle for education, the first-time purchase of a home, or certain catastrophic medical expenses as noted in the description of present law above. The text will refer to retirement saving as a short hand designation of the enumerated purposes to which funds from an IRA or Roth IRA can be withdrawn penalty free.

[40] Mathematically, when Y denotes income, D denotes deductible IRA contributions, I denotes the beginning of the phaseout range, and t denotes the marginal tax rate, the taxpayer's total tax liability, T is given by the following expression:

(1) $T = (Y - D) \bullet t = (Y \bullet t) - (D \bullet t)$

If Y increases by $1.00, tax liability increases by t, the statutory tax rate.

Assume the taxpayer plans to make a $2,000 contribution to retirement saving. For taxpayers in the phaseout range, the amount of deductible IRA contributions, D is given by the equation (2).

(2) $D = \$2{,}000 - (.2)(Y - I)$

To determine the tax liability of taxpayers in the phaseout range, one must substitute equation (2) into equation (1). The result follows:

(3) $T = (Y - [2{,}000 - (.2)Y + (.2)I\} \bullet t$

(4) $T = [Y \bullet (1.2) \bullet t] - [2{,}000 \bullet t] - [(.2)It]$

If Y increases by $1.00, tax liability increases by $(1.2) \bullet t$.

Assume the $2,000 contributed to retirement saving earns interest at a rate of 10 percent per annum. After 10 years, the account balance would equal $5,187.48. Assume further that at that time the taxpayer is older than 59 and a half and remains in the 15-percent statutory marginal tax bracket. If the $2,000 had all been contributed to a deductible IRA, the entire balance would be subject to tax upon withdrawal, for a tax liability of $778.12. Because the taxpayer in this example was in the phaseout range at the time of contribution, he could only contribute $1,500 to a deductible IRA. Assume he contributed the remaining $500 to a non-deductible IRA.[41] The aggregate balance in the two accounts 10 years hence would remain at $5,187.48. Upon withdrawal, $3,890.61 would be attributable to the taxpayer's $1,500 deductible contribution and would be fully taxed at 15 percent for a tax liability of $583.59. The remaining balance in the account, $1,296.87 is attributable to the $500 nondeductible contribution. Therefore, only $796.87 ($1,296.87 less the $500 nondeductible contribution) is subject to tax, for a tax liability of $119.53. In this example, the total tax liability of the taxpayer upon withdrawal of his savings in retirement is $703.12, or $75 less than if the entire $2,000 had been deductible at the time of contribution. Thus, the taxpayer's higher tax liability at the time of contribution is returned to him as a lower liability at the time of withdrawal. However, ten years have intervened between the initial higher tax payment of $75 and the subsequent tax saving of $75. The taxpayer's true economic increase in effective marginal tax rate due to the phaseout is the taxpayer's loss of the time value of his funds. In this example, with a discount rate of 10 percent and a time horizon of 10 years, the present value of the net increase in tax due to the phaseout is $46.08.[42] Thus, in this example, the taxpayer's incremental income of $2,500 increases the net present value of his lifetime tax liability by $46.08, or by 1.8 percentage points. That is, the taxpayer's effective marginal tax rate from being subject to the phaseout is 16.8 percent rather than the statutory marginal tax rate of 15 percent. Because the effective marginal tax rate depends upon the length of time retirement savings are held prior to withdrawal and the taxpayer's discount rate, it is not possible to detail precisely the effective marginal tax rate.[43] However, generally one can conclude that the effective mar-

---

[41] Because the nondeductible $500 gives rise to a $75 liability, an alternative assumption would be that $425 is contributed to the non-deductible IRA. The initial premise, however, was that the taxpayer intended to commit $2,000 to retirement savings regardless of the type of account. Some argue that a non-deductible IRA may not be the wisest choice for such a taxpayer. For a recent analysis of strategies for saving see, John B. Shoven, "The Allocation of Assets in Pension and Conventional Savings Accounts," presented at "*Economists' Views on Pension Regulations and Taxation,*" a conference sponsored by Stanford University Center for Economic Policy Research and TIAA–CREF, Washington, D.C., September 30, 1997.

[42] The net present value of the increased tax due to the taxpayer being subject to the phaseout is calculated as $75 today less $75 divided by 1.1 to the tenth power.

[43] Mathematically, the right-hand term, $(.2)(Y–I)$, in equation (2) of footnote 40 is the amount of retirement funds the taxpayer contributes to a nondeductible IRA. This basis amount in the nondeductible IRA, multiplied by the taxpayer's statutory marginal tax rate, is the reduction in tax liability the taxpayer attains upon withdrawal of funds in retirement. Let r be the discount rate and n the number of years between contribution and withdrawal. Equation (5), below modifies equation (4) of footnote 40 to reflect the reduction in future taxes.

(5) $T = Y\bullet(1.2)\bullet t - \{(.2)(Y-I)/(1+r)^n\}\bullet t - 2{,}000\bullet t - (1.2)I\bullet t$

This simplifies to

(6) $T = Y\bullet(1.2 - \{(.2/(1+r)^n\})\bullet t - 2{,}000t - (.2)(1+1/(1+r)^n)\bullet I\bullet t$

ginal tax rate is greater than the statutory marginal tax rate and less than 1.2 times the statutory marginal tax rate. The higher the discount rate and the longer the retirement savings are held before withdrawal, the closer the effective rate comes to 1.2 times the statutory marginal tax rate.

Roth IRAs

If one maintains the assumption that the taxpayer plans to set aside $2,000 in the current year and plans to use the principal and any earnings to provide for living expenses in his retirement, then the phaseout of the eligibility to contribute to a Roth IRA also may be said to create an increase in the effective marginal tax rate on those taxpayers in the phaseout range. To see this, assume a married taxpayer who files a joint return has an AGI of $152,500, that is, $2,500 into the phase-out range. Further assume the taxpayer is in the 31-percent statutory marginal rate bracket. As computed in the prior example, of the $2,000 the taxpayer plans to set aside for retirement, only $1,500 may be contributed to a Roth IRA because of the phaseout. As before, assume the remaining $500 is contributed to a nondeductible, non-Roth IRA. Assuming a 10-percent return per annum, the aggregate account balance in 10 years is $5,187.48, of which $3,890.61 is attributable to the Roth IRA and may be withdrawn tax-free. The remaining balance in the account, $1,296.87 is attributable to the $500 nondeductible contribution. Of this amount, $796.87 ($1,296.87 less the $500 nondeductible contribution) is subject to tax, for a tax liability of $247.03. However, this tax liability is due ten years in the future. The present value of the future tax liability, discounted at 10 percent, is $95.24. Thus, because the phaseout of eligibility causes the taxpayer to deposit $500 in a nondeductible IRA, the present value of the taxpayer's future tax liability increases by $95.24. The additional $2,500 of income that pushed the taxpayer into the phaseout increases her current year tax liability by $775 ($2,500 times 31 percent) and increases her future tax liability by a present value of $95.24, for a total increase of $870.24. The effective marginal tax rate in this example is 34.8 percent. In general, the effective tax rate will be closer to 1.2 times the statutory marginal tax rate the larger is the discount rate and the longer the retirement savings are held before withdrawal.[44]

If Y increased by $1.00, the present value of tax liability increases by $(1.2-\{(.2/(1+r)^n\})t$. This presentation assumes the taxpayer's statutory marginal tax rate is the same in retirement as when the saving contribution was made. If the taxpayer's marginal rate is higher in retirement than when the contribution is made, the effective marginal tax rate will be lower than that calculated here. If the taxpayer's marginal tax rate is lower in retirement than when the contribution is made, the effective marginal tax rate will be higher than that calculated here.

[44] Mathematically, as explained in footnote 43, above, the amount contributed to the nondeductible IRA is $(.2)(Y-I)$. Amounts contributed to a nondeductible IRA create a future tax liability given by expression (7), where t is the taxpayer's marginal tax rate at the time of withdrawal.

(7) $\{(.2)(Y-I)(1-r)^n-(.2)(Y-I)\}t$

Because this tax liability occurs n years in the future, it must be discounted by $(1+r)^n$.

Simplifying and looking only at the part of the expression that varies with income, Y, the present value of the future tax liability created by an additional dollar of income in the phaseout range is

(8) $Y\{((1+r)^n-1)(.2)(t)\}/(1+r)^n$.

Summary

Both the phaseout of the eligibility for deductible IRAs and Roth IRAs increase the effective marginal rate of tax for taxpayers subject to the phaseout range. In each case the effective marginal tax rate depends, in part, on future rates of returns and holding periods, because the phaseout may affect not only tax payments at the time the IRA contribution is made, but also future tax payments. Moreover, the effective marginal tax rate does not differ from the statutory marginal tax rate unless the phaseout's limitation on eligible contributions is binding on the taxpayer. For example, if in both of the examples above the taxpayer had only planned to set aside $1,000 in an account for retirement, the incremental $2,500 of income putting the taxpayer in the phase-out range would not have altered the taxpayer's current or future tax liability beyond the effect of the statutory rate on the additional $2,500 in income.

The Joint Committee staff estimates that in 1998, 1.5 million taxpayers will be subject to the phaseout of eligibility to make deductible contributions to an IRA. See Table 10. This represents 21 percent of all taxpayers making deductible contributions to IRAs and 1.1 percent of all taxpayers. Because the phaseout ranges in between AGI of $30,000 to $40,000 for a single taxpayers and $50,000 to $60,000 for a joint filer, only taxpayers in the 15- and 28-percent statutory marginal tax rate brackets would be affected. As explained above, the maximum effective marginal tax rate is 120 percent of the statutory rate, so the maximum effective marginal tax rates for taxpayers affected by the provision would be 18-percent and 33.6-percent.

Eligibility for a Roth IRA is phased out at higher income levels. Generally taxpayers in the 15-percent statutory marginal tax rate bracket and those in the 36- and 39.6-percent statutory marginal tax rate brackets would be unaffected. For those affected taxpayers in the 28- or 31-percent statutory marginal tax rate brackets, the maximum effective marginal tax rates would be 31.7 percent and 35.1 percent for single taxpayers (phase-out rate of 13.3 percent) and 33.6 percent and 37.2 percent for joint filers (phase-out rate of 20 percent).

Table 10.—Distribution by Income of Taxpayers Making Contributions to Deductible IRAs and Those in the Contribution Phaseout Range

[Calendar year 1998]

Income category[1]	Taxpayers making contribution to deductible IRAs (millions)	Taxpayers in the contribution range (millions)
Less than $10,000	(2)	0.0
10,000 to 20,000	0.3	0.0
20,000 to 30,000	0.8	(2)
30,000 to 40,000	1.1	0.5
40,000 to 50,000	1.0	0.2
50,000 to 75,000	1.9	0.8
75,000 to 100,000	0.7	(2)
100,000 to 200,000	1.1	0.1
200,000 and over	0.2	0.0
Total, all taxpayers	**7.2**	**1.5**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

I. Phaseout of Eligibility to Make Contributions to Education Savings Accounts ("Education IRAs")

Present Law

Under present law, an education individual retirement arrangement ("education IRA") may be established for the purpose of paying the qualified higher education expenses of a named beneficiary. Nondeductible contributions of up to $500 may be made each year on behalf of the beneficiary for whom the education IRA was established. Contributions to an education IRA may be made only in cash and may not be made after the named beneficiary reaches age 18.

A penalty excise tax may be imposed to the extent that excess contributions above the $500 annual limit are made to the education IRA. In addition, a penalty excise may be imposed if a contribution is made by any person to an education IRA established on behalf of a beneficiary during any taxable year in which any contributions are made by anyone to a qualified State tuition program (defined in sec. 529) on behalf of the same beneficiary.

The $500 annual contribution limit for education IRAs is phased out ratable for contributors with modified AGI between $95,000 and $110,000 ($150,000 and $160,000 for joint returns). Individuals with modified AGI above the phase-out range are not allowed to make contributions to an education IRA established on behalf of any other individual.

Amounts distributed from education IRAs are excludable from gross income to the extent that the amounts distributed do not exceed qualified higher education expenses (defined in sec. 529(e)(3), and reduced as provided in sec. 25A(g)(2)) of an eligible student incurred during the year the distribution is made (provided that a HOPE credit or Lifetime Learning credit (defined in sec. 25A) is not claimed with respect to the beneficiary for the same taxable year). If a HOPE credit or Lifetime Learning credit is claimed with respect to a student for a taxable year, then a distribution from an education IRA may (at the option of the taxpayer) be made on behalf of that student during the taxable year, but an exclusion is not available for the earnings portion of such distribution.

Distributions from an education IRA generally will be deemed to consist of distributions of principal (which, under all circumstances, are excludable from gross income) and earnings (which may be excludable from gross income) by applying the ratio that the aggregate amount of contributions to the account for the beneficiary bears to the total balance of the account. Distributions from an education IRA that exceed qualified higher education expenses of the designated beneficiary during the year of the distribution are includible in the distributee's gross income. An additional 10-percent is imposed on any distribution from an education IRA to the extent the distribution exceeds qualified higher education expenses of the designated beneficiary unless the withdrawal is due to death or disability or scholarship received by the beneficiary.[45]

[45] A technical correction is needed to clarify that the 10-percent additional tax should not be imposed in cases where a distribution (although used to pay for qualified higher education expenses) is includible in gross income because the taxpayer elects the HOPE or Lifetime Learning credit on behalf of the student for the same taxable year.

Under present law, tax-free (and penalty-free) transfers or rollovers of account balances from one education IRA benefiting one beneficiary to another education IRA benefiting another beneficiary (as well as redesignations of the named beneficiary) are permitted provided that the new beneficiary is a member of the family of the old beneficiary.

The legislative history to the Taxpayer Relief Act of 1997 provides that any balance remaining in an education IRA will be deemed to be distributed within 30 days after the date that the named beneficiary reaches age 30 (or, if earlier, within 30 days of the date that the beneficiary dies).[46]

Legislative History

Education IRAs were enacted in the Taxpayer Relief Act of 1997.

Analysis

As explained above, the Code phases out taxpayer eligibility to make contributions of after-tax dollars to an "education IRA." For education IRAs, the phase out rate is 5 percent for joint filers ($500 of eligible contributions phased out over a $10,000 range) and 3.3 percent for single filers ($500 of eligible contributions phased out over a $15,000 range).

Some analysts would interpret these phaseouts as having the effect of raising the taxpayer's effective marginal tax rate above the statutory marginal tax rate. However, these phaseout provisions alter effective marginal tax rates differently than most of the other provisions discussed in this pamphlet. The phaseout does not increase a taxpayer's current year tax liability. Like the phaseout for eligibility to contribute to a Roth IRA, the provision phasing out the taxpayer's eligibility to contribute to an education IRA subjects more income to income tax in each subsequent year.

If one assumes that a taxpayer plans to set aside $500 in the current year and plans to use the principal and any earnings to provide for future qualified education expenses, then the phaseout of the eligibility to contribute to an education IRA also may be said to create an increase in the effective marginal tax rate on those taxpayers in the phaseout range. To see this, assume a married taxpayer who files a joint return has an income of $152,500, that is, $2,500 into the phaseout range. Further assume the taxpayer is in the 31-percent statutory marginal rate bracket. Because of the phaseout, of the $500 the taxpayer plans to set aside for future education expenses, only $375 may be contributed to an education IRA.[47] Assume the remaining $125 is contributed to another savings vehicle. Assume a 10-percent return per annum on both investments and the proceeds of both accounts are used for qualified education expenses. The balance of the education IRA is permitted to grow tax-free. The balance in the non-educational IRA account generates taxable interest income annually. If the taxpayer re-

[46] A technical correction providing that any balance remaining in an education IRA will be deemed distributed within 30 days after the date that the designated beneficiary reaches age 30 is included in the Tax Technical Corrections Act of 1997, Title VI of H.R. 2676, as passed by the House on November 5, 1997.

[47] An income of $152,500 is $2,500 above the phase-out threshold. At a 5-percent phase out rate, the $500 contribution to an Education IRA is reduced by $125.

mains in the 31-percent statutory marginal tax rate bracket, the taxpayer will pay $3.88 in tax in the first year on the earnings on the $125 of principle. If the net, after-tax, earnings are reinvested in the account, in the tenth year the taxpayer will pay $7.06 in tax on the earnings on the accumulated balance. That is, because an increase in income has moved the taxpayer into the phaseout range, the taxpayer loses part of the advantage of tax-free accumulation and must pay additional taxes on her designated education saving for each year until the account is liquidated to pay qualified education expenses. The present value of the future tax liabilities in this example, discounted at 10 percent, is $31.08. That is, because the phaseout of eligibility causes the taxpayer to deposit $125 in a fully taxable account, the present value of the taxpayer's future tax liability increases by $31.08. The additional $2,500 of income that pushed the taxpayer into the phaseout increases her current year tax liability by $775 ($2,500 times 31 percent) and increases her future tax liability by a present value of $31.08, for a total increase of $806.08. The effective marginal tax rate in this example is 32.2 percent. If the investment were held in the taxable account longer than 10 years, the present value of the future tax liabilities would be larger and likewise the effective marginal tax rate would be larger. If the earnings rate is smaller, the present value of the future tax liabilities is smaller. In general, the effective marginal tax rate is greater than the taxpayer's statutory marginal tax rate by an amount determined, in part, by the phase-out rate, the prevailing interest rate, and length of time the investment is held before withdrawal.[48]

Because the phaseout does not affect taxpayers filing joint returns with AGI in excess of $160,000 or single taxpayers with AGI in excess of $110,000, the phaseout provision does not affect taxpayers in the 36- or 39.6-percent statutory marginal tax bracket. Because the phaseouts begin at AGI of $150,000 for joint filers and $95,000 for single filers, taxpayers in the 15-percent statutory marginal tax bracket are unlikely to be affected by the phaseout provision. Generally, the phaseout provision will increase the effective marginal tax rate, as described above, for taxpayers in the 28- and 31-percent statutory marginal tax bracket.

---

[48] Mathematically, the amount contributed to the non-qualified account is $(.05)(Y-I)$, where Y is the taxpayer's income and I is beginning of phaseout threshold. Amounts contributed to a non-qualified account create a tax liability, T_i, in each future year, i, until the account is liquidated given by equation (1), where t is the taxpayer's marginal tax rate.

(1) $T_i = \{(.05)(Y-I)(1+r(1-t))^{i-1}\}\bullet r\bullet t$

Because this tax liability occurs i years in the future, it must be discounted by $(1+r)^i$.

The taxpayer's total tax liability, T, is the tax liability on current year income, $Y\bullet t$, plus the discounted sum of the T_i over all years, i, from the first year subsequent to opening the account until the account is liquidated. This is given by equation (2).

(2) $T = Y\bullet t+\Sigma(T_1/(1+r)^i)$

Substituting equation (1) into equation (2) produces equation (3).

(3) $T = Y\bullet t+(\Sigma(.05)(Y-I)(1+r(1-t))^{i-1}\}\bullet r\bullet t/(1+r)^i)$

Simplifying and looking only at the part of the expression that varies with income, Y, the present value of the future tax liability created by an additional dollar of income in the phaseout range is

(4) $Y\bullet t\bullet\{1+(.05)\bullet r\bullet\Sigma(\{(1+r(1-t))^{i-1}\}/(1+r)^i)\}$.

While the expression in (4) is not transparent, it does show, as the text explained by example, that as income, Y, increases the tax liability will increase by the statutory tax rate multiplied by one plus a fraction determined by the phase-out rate, (.05), (.033 in the case of a single filer) the interest rate, and the length of time until the account is liquidated.

In addition, the provision does not affect all taxpayers with incomes within the phaseout ranges, even if the taxpayers make contributions to education savings accounts. The phaseout provision does not deny eligible contributions to all taxpayers making contributions, but rather reduces the $500 contribution limit. Thus, if a married taxpayer has an AGI of $152,500 ($2,500 in the phaseout range) plans to contribute $250 to an education IRA, the reduction in the $500 contribution limit is not binding on the taxpayer.[49] As a result, this taxpayer, though in the phaseout range, would have an effective marginal tax rate equal to the statutory marginal tax rate.

[49] An income of $2,500 into the phaseout range reduces the maximum $500 eligible contribution by one quarter, or $125, making the taxpayer's maximum eligible contribution $375 ($500 less $125).

J. Phaseout of Education Tax Credits

(HOPE and Lifetime Learning Tax Credits)

Present Law

HOPE tax credit

Allowance of credit.—Individual taxpayers are allowed to claim a non-refundable HOPE credit against Federal income taxes up to $1,500 per student per year for qualified tuition and related expenses paid for the first two years of the student's post-secondary education in a degree or certificate program at a college, university, and certain vocational schools.[50] The HOPE credit rate is 100 percent on the first $1,000 of qualified tuition and related expenses, and 50 percent on the next $1,000 of qualified tuition and related expenses.[51] The maximum HOPE credit amount will be indexed for inflation occurring after the year 2000. The qualified tuition and related expenses must be incurred on behalf of the taxpayer, the taxpayer's spouse, or a dependent. The HOPE credit is available with respect to an individual student for two taxable years, provided that the student has not completed the first two years of post-secondary education before the beginning of the second taxable year. To be eligible for the HOPE credit, a student must pursue a course of study on at least a half-time basis and must not have been convicted of a Federal or State felony consisting of the possession or distribution of a controlled substance. The HOPE credit is available in the taxable year the expenses are paid, subject to the requirement that the education commence or continue during that year or during the first three months of the next year.

A taxpayer may claim the HOPE credit with respect to an eligible student who is not the taxpayer or the taxpayer's spouse (e.g., in cases where the student is the taxpayer's child) only if the taxpayer claims the student as a dependent for the taxable year for which the credit is claimed. If a student is claimed as a dependent by the parent or other taxpayer, the eligible student him- or herself is *not* entitled to claim a HOPE credit for that taxable year on the student's own tax return. If a parent (or other taxpayer) claims a student as a dependent, any qualified tuition and related expenses paid by the student are treated as paid by the parent (or other taxpayer). For each taxable year, a taxpayer may elect with respect to an eligible student the HOPE credit *or* the "Lifetime Learning" credit (described below), *or* an exclusion from gross income under section 530 for certain distributions from an education IRA. The

[50] Charges and fees associated with meals, lodging, student activities, athletics, insurance, transportation, and similar personal, living or family expenses are not eligible for the HOPE credit. Qualified tuition and related expenses eligible for the HOPE credit generally include only out-of-pocket expenses, and not expenses covered by educational assistance that is not required to be included in the gross income of either the student or the taxpayer claiming the credit (such as expenses covered by scholarships that are excludable from gross income under section 117 and any other tax-free educational benefits). No reduction of qualified tuition and related expenses is required for a gift, bequest, devise, or inheritance within the meaning of section 102(a). A HOPE credit is not allowed with respect to any education expense for which a deduction is claimed under section 162 or any other section of the Code.

[51] Thus, an eligible student who incurs $1,000 of qualified tuition and related expenses is eligible (subject to the AGI phaseout) for a $1,000 HOPE credit; and if such a student incurs $2,000 of qualified tuition and related expenses, then he or she is eligible for a $1,500 HOPE credit.

HOPE credit may not be claimed against a taxpayer's alternative minimum tax (AMT) liability.

Phase-out range.—The HOPE credit amount that a taxpayer may otherwise claim is phased out ratably for taxpayers with modified AGI between $40,000 and $50,000 ($80,000 and $100,000 for joint returns). Modified AGI includes amounts otherwise excluded with respect to income earned abroad (or income from Puerto Rico or U.S. possessions). The income phase-out ranges will be indexed for inflation occurring after the year 2000, rounded down to the closest multiple of $1,000. The first taxable year for which the inflation adjustment could be made to increase the income phase-out ranges will be 2002.[52]

Lifetime Learning tax credit

Allowance of credit.—For expenses paid after June 30, 1998, individual taxpayers will be allowed to claim a nonrefundable "Lifetime Learning" credit against Federal income taxes equal to 20 percent of qualified tuition and related expenses incurred during the taxable year on behalf of the taxpayer, the taxpayer's spouse, or any dependents.[53] For expenses paid after June 30, 1998, and prior to January 1, 2003, up to $5,000 of qualified tuition and related expenses per taxpayer return will be eligible for the 20-percent Lifetime Learning credit (i.e., the maximum credit per taxpayer return will be $1,000). For expenses paid after December 31, 2002, up to $10,000 of qualified tuition and related expenses per taxpayer return will be eligible for the 20-percent Lifetime Learning credit (i.e., the maximum credit per taxpayer return will be $2,000). In contrast to the HOPE credit, the Lifetime Learning credit is available with respect to any course of instruction at an eligible postsecondary educational institution, regardless of whether the student is enrolled on a full-time, half-time, or less than half-time basis.[54]

As with the HOPE credit, a taxpayer may claim the Lifetime Learning credit with respect to a student who is not the taxpayer or the taxpayer's spouse (e.g., in cases where the student is the taxpayer's child) only if the taxpayer claims the student as a dependent for the taxable year for which the credit is claimed. If a student is claimed as a dependent by the parent or other taxpayer, the student him- or herself is *not* entitled to claim the Lifetime Learning credit for that taxable year on the student's own tax return. If a parent (or other taxpayer) claims a student as a dependent, any qualified tuition and related expenses paid by the student are treated as paid by the parent (or other taxpayer). A taxpayer may claim the Lifetime Learning credit for a taxable year with respect to one or more students, even though the taxpayer also claims a HOPE credit (or claims the section-530 exclusion for distributions from an education IRA) for that same taxable year with respect to

[52] If a taxpayer is married (within the meaning of sec. 7703), the HOPE credit may be available only if the taxpayer and his or her spouse file a joint return for the taxable year.

[53] The term "qualified tuition and related expenses" for purposes of the Lifetime Learning credit generally has the same meaning as for purposes of the HOPE credit.

[54] In contrast to the HOPE credit, the eligibility of a student for the Lifetime Learning credit does not depend on whether or not the student has been convicted of a Federal or State felony consisting of the possession of distribution of a controlled substance.

other students. The Lifetime Learning credit may not be claimed against a taxpayer's alternative minimum tax (AMT) liability.

A taxpayer may claim the Lifetime Learning credit for an unlimited number of taxable years, including years when the student is enrolled in graduate-level courses. In contrast to the HOPE credit, the maximum amount of the Lifetime Learning credit that may be claimed on a taxpayer's return will not vary based on the number of students in the taxpayer's family—that is, the HOPE credit is computed on a per-student basis, while the Lifetime Learning credit is computed on a family-wide basis.

Phase-out range.—The Lifetime Learning credit is phased out ratably over the same phaseout range that applies for purposes of the HOPE credit—i.e., taxpayers with modified AGI between $40,000 and $50,000 ($80,000 and $100,000 for joint returns). As with the HOPE credit, the income phase-out ranges will be indexed for inflation occurring after the year 2000.[55]

Legislative History

The HOPE credit was enacted as part of the Taxpayer Relief Act of 1997, and is available for expenses paid after December 31, 1997, for education furnished in academic periods beginning after December 31, 1997. The Lifetime Learning credit also was enacted as part of the Taxpayer Relief Act of 1997, and is available for expenses paid after June 30, 1998, for education furnished in academic periods beginning after June 30, 1998.

Analysis

The phase out of the HOPE and lifetime learning credit are likely to sharply increase the effective marginal tax rate for taxpayers in the phaseout range due to the substantial size of the credits and the relatively small range over which the credits are phased out. Additionally, because the phase-out range for single or head of household filers spans an income range that is only half as great as that for married taxpayers, the same dollar amount of credit is phased out at a rate that is twice as fast for singles as for married taxpayers. This implies that the increase in effective marginal tax rates for singles in the phase-out range would be twice that for married taxpayers in the phase-out range for credits of the same magnitude.

For example, a head of household taxpayer who claims a $1,500 HOPE credit for a single child in her first year of college and who is in the phase-out range (modified adjusted gross income between $40,000 and $50,000), will have an effective marginal tax rate that is greater than the statutory marginal tax rate by a full 15 percentage points ($1,500/$10,000). If the same child were in a two-parent family filing jointly, and also in the phase-out range, the increase in the effective marginal tax rate would be only half as great since the credit would then be phased out over a $20,000 income range from $80,000 to $100,000. The phase-out rate would then be

[55] If a taxpayer is married (within the meaning of sec. 7703), the Lifetime Learning credit may be available only if the taxpayer and his or her spouse file a joint return for the taxable year.

$1,500/$20,000, or 7.5 percent, leading to an effective marginal tax rate that is 7.5 percentage points greater than the statutory rate.[56]

The effective marginal tax rate for taxpayers in the phase-out range increases as the total amount of credits claimed increases. For example, if the two examples above were each modified to allow for a second child receiving a $1,500 HOPE credit, then the head of household filer in the phase-out range would face an effective marginal tax rate that was 30 percentage points greater than the statutory marginal tax rate—a $3,000 credit phased out over a $10,000 income range ($3,000 / $10,000 = 30 percent). The married couple would face an effective marginal tax rate that was 15 percentage points greater than their statutory marginal tax rate—a $3,000 credit phased out over a $20,000 income range ($3,000 / $15.000 = 15 percent).

For taxpayers in the phase-out range, increasing amounts of HOPE or lifetime learning credit will cause the effective marginal tax rate to continue to rise increasingly higher relative to the statutory marginal tax rate. However, because the HOPE and lifetime learning credit are not refundable credits, the amount of the credit that can be claimed is limited by tax liability. A head of household filer with two college age dependent children who takes the standard deduction and has an income at the beginning of the phase-out range of $40,000 would have a 1998 tax liability of $3,847. Such filer could conceivably claim education credits of up to this amount if both children qualified for a HOPE credit of $1,500 and the parent were potentially eligible for a lifetime learning credit of at least $847. Under these circumstances, if the parent received an additional $100 dollars of income, the credit would decline by $38.47 ($3,847/$10,000). As the taxpayer's statutory rate would be 15 percent, their true effective marginal tax rate would be 15 percent plus 38.47 percent, or 53.47 percent.

A married couple filing a joint return would unlikely face as large an increase in the effective marginal tax rate as in the above example. A married couple that has an income at the beginning of the phase-out range of $80,000, files a joint return and claims the standard deduction, and has 6 dependent children would have a 1998 tax liability of $8,859 before credits. It is technically possible, albeit extremely unlikely, that each of these children could qualify for a HOPE credit totaling the full amount of the tax liability (recall that a recipient must be in the first or second year of college, and hence it is unlikely that one would have more than two children as recipients simultaneously). If this were the case, and the parents earn an additional 100 dollars of income, they would lose $44.30 in credits ($8,859/$20,000), raising their effective marginal

[56] Mathematically, where Y denotes income, C denotes the size of the full potential education credits, A denotes the actual credit, I denotes the beginning of the phaseout range, L denotes the length of the phaseout range, and t denotes the statutory marginal tax rate, the taxpayer's total tax liability, T, is given by the following expression:

(1) $T = Y \bullet t - A$, where
$A = \mathrm{Max}(0, C - \{(Y-I)/L\} \bullet C)$

Substituting the expression for A into (1) for taxpayers in the phaseout range yields:
(2) $T = Y \bullet t - C + C \bullet Y/L - I/L \bullet C$

Hence, if Y goes up by $1, T rises by t + C/L. Thus, because the phaseout length L for single taxpayers is half that for married taxpayers, the same potential credit C will result in an increase in the effective tax rate that is twice as large for single taxpayers as for married taxpayers.

tax rate from the 28 percent statutory rate to 28 percent plus 44.3 percent, or 62.3 percent. A more plausible family structure might lead to $4,000 in credits (two HOPE credits and a $1,000 lifetime learning credit—roughly the same amount of credits used in the previous example). Under these circumstances, the family would lose $20 in credits for an additional $100 in income ($4,000/$20,000), raising their effective marginal tax rate to 48 percent from 28 percent. This 20 percentage point rise in the marginal tax rate is roughly half that faced by the head of household filer in the previous example, who saw an increase in the effective marginal tax rate of nearly 40 percentage points for a similar amount of credits.

As shown in table 11, the Joint Committee staff estimates that, in 1998, 1.2 million taxpayers, or 0.9 percent of all taxpayers, are in the phase-out range for the HOPE or lifetime learning credits out of a total of 8.4 million taxpayers claiming the credits. Because the phase out occurs at varying but generally middle-income ranges, taxpayers in the phase out ranges will be in either the 15 or the 28 percent marginal tax rate bracket.

Table 11.—Distribution by Income of Taxpayers Claiming HOPE and Lifetime Learning Tax Credits and Those in Phaseout Range

[Calendar year 1998]

Income category [1]	Taxpayers claiming HOPE and lifetime learning credits (millions)	Taxpayers in phaseout range (millions)
Less than $10,000	0.1	0.0
10,000 to 20,000	0.6	0.0
20,000 to 30,000	1.1	0.0
30,000 to 40,000	1.3	0.0
40,000 to 50,000	1.1	0.1
50,000 to 75,000	2.3	0.1
75,000 to 100,000	1.5	0.4
100,000 to 200,000	0.4	0.4
200,000 and over	(2)	(2)
Total, all taxpayers	**8.4**	**1.2**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation, [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured at 1998 levels.

[2] Less than 50,000 taxpayers.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

K. Phaseout of Deductibility of Interest on Qualified Student Loans

Present Law

Under the 1997 Act, certain individuals who have paid interest on qualified education loans may claim an above-the-line deduction for such interest expenses, up to a maximum deduction of $2,500 per year. The deduction is allowed only with respect to interest paid on a qualified education loan during the first 60 months in which interest payments are required. The maximum deduction is phased in over 4 years, with a $1,000 maximum deduction in 1998, $1,500 in 1999, $2,000 in 2000, and $2,500 in 2001. The provision is effective for interest payments due and paid after December 31, 1997, on any qualified education loan.

The student loan interest deduction is phased out ratably for individual taxpayers with modified AGI of $40,000–$55,000 ($60,000–$75,000 for joint returns); such income ranges will be indexed for inflation occurring after the year 2002, rounded down to the closest multiple of $5,000. Thus, the first taxable year for which the inflation adjustment could be made will be 2003. Modified AGI includes amounts otherwise excluded with respect to income earned abroad (or income from Puerto Rico or U.S. possessions) as well as amounts excludable from gross income under section 137 (qualified adoption expenses), and is calculated after application of section 86 (income inclusion of certain Social Security benefits), section 219 (deductible IRA contributions), and section 469 (limitation on passive activity losses and credits).

Legislative History

For the 10 years prior to passage of the 1997 Act, student loan interest generally was not deductible because the Tax Reform Act of 1986 repealed the deduction for personal interest. Student loan interest generally is treated as personal interest and, thus, was not allowable as an itemized deduction from income. Prior to 1987, student loan interest was deductible as an itemized deduction.

Analysis

The phaseout of the deduction for interest on qualified student loans increases marginal tax rates for taxpayers taking advantage of the deduction and having an income in the phase-out range. The degree to which the phaseout will affect marginal tax rates depends on the amount of interest that is eligible for the deduction.

The effective marginal tax rate for taxpayers in the phase-out range is given by the statutory rate plus the potentially excludable interest divided by the length of the phaseout range.[57] The phase-

[57] Mathematically, where Y denotes income, E denotes the size of the full potential deduction, A denotes the actual deduction, I denotes the beginning of the phaseout range, L denotes the length of the phase-out range, and t denotes the statutory marginal tax rate, the taxpayer's total tax liability, T, is given by the following expression:

(1) $T = (Y - A) \bullet t$, where

$A = \mathrm{Max}(0, E - E \bullet (Y - I)/L)$

Substituting the expression for A into (1) for taxpayers in the phase-out range yields:

Continued

out range for the deduction spans an income range of $15,000 for all taxpayers. Because the maximum amount of student loan interest that is potentially excludable from income is $2,500 ($1,000 for 1998, rising to $2,500 by 2001), the maximum effect of the phase-out on marginal tax rates would be to raise them to 116.67 percent of statutory rate (statutory rate plus $2,500/$15,000). That is, for each additional $100 of income over the beginning of the phase-out range, an additional $16.67 would be included in taxable income, beyond the $100 itself. If the taxpayer were in the 28-percent tax bracket, the additional $16.67 that is included in income would bear a tax of $16.67 times 28 percent, or $4.67. The total additional federal income tax owed on the $100 would be $28 for the direct tax on the income itself, plus the $4.67 owed as a result of the denial of the deduction for $16.67 of the interest, for a total tax of $32.67, and hence an effective marginal tax rate of 32.67 percent (which, as noted above, is 116.67 percent of the statutory rate, or 28 percent times 1.1667). A taxpayer in the 15-percent bracket would see their effective marginal tax rate rise to 17.5 percent (15 percent times 1.1667) under the same circumstances. Once the taxpayer achieved an income level that was $15,000 above the beginning of the phase-out range, he or she would be at the end of the phaseout and his or her deduction would be fully eliminated.

---

(2) $T = Y \bullet t - E \bullet t + t \bullet E \bullet Y/L - t \bullet E \bullet I/L$

Hence, if Y goes up to $1, T rises by $t + t \bullet E/L$.

Table 12.—Distribution by Income of Taxpayers Claiming Deduction for Student Loan Interest and Those In Phaseout Range

[Calendar year 1998]

Income category [1]	Taxpayer claiming student loan interest (millions)	Taxpayers in phaseout range (millions)
Less than $10,000	0.3	0.0
10,000 to 20,000	0.4	0.0
20,000 to 30,000	0.4	0.0
30,000 to 40,000	0.4	0.0
40,000 to 50,000	0.3	0.1
50,000 to 75,000	0.5	0.2
75,000 to 100,000	0.1	0.1
100,000 to 200,000	0.0	0.0
200,000 to over	0.0	0.0
Total, all taxpayers	**2.3**	**0.3**

[1] The income concept used to place tax returns into income categories is adjusted gross income plus [1] tax exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation [5] nontaxable social security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, and [8] excluded income of U.S. citizens living abroad. Categories are measured in 1998 levels.

Detail may not add to total due to rounding.

Source: Joint Committee on Taxation.

L. Phaseout of Exclusion of Interest from Education Savings Bonds

Present Law

Section 135 provides that interest earned on a qualified U.S. Series EE savings bond issued after 1989 is excludable from gross income if the proceeds of the bond upon redemption do not exceed qualified higher education expenses paid by the taxpayer during the taxable year. If the aggregate redemption amount (i.e., principal plus interest) of all Series EE bonds redeemed by the taxpayer during the taxable year exceeds the qualified education expenses incurred, then the excludable portion of interest income is based on the ratio that the education expenses bears to the aggregate redemption amount (sec. 135(b)). "Qualified higher education expenses" include tuition and fees (but not room and board expenses) required for the enrollment or attendance of the taxpayer, the taxpayer's spouse, or a dependent of the taxpayer at certain colleges, universities, or vocational schools.[58]

The exclusion provided by section 135 is phased out for certain higher-income taxpayers, determined by the taxpayer's modified AGI during the year the bond is redeemed. For 1998, the exclusion is phased out for taxpayers with modified AGI between $52,250 and $67,250 ($78,350 and $108,350 for joint returns). To prevent taxpayers from effectively avoiding the income phaseout limitation through issuance of bonds directly in the child's name, section 135(c)(1)(B) provides that the interest exclusion is available only with respect to U.S. Series EE savings bonds issued to taxpayers who are at least 24 years old. If a taxpayer is a married individual (within the meaning of section 7703), the section 135 exclusion is available only if the taxpayer and his or her spouse file a joint return for the taxable year the bond is redeemed.

Legislative History

Section 135 was enacted as part of the Technical and Miscellaneous Revenue Act of 1988, effective for interest earned on United States Series EE savings bonds issued after December 31, 1989.

Analysis

The phaseout of the exclusion of interest on U.S. Saving Bonds used for qualified education expenses effectively increases marginal tax rates for taxpayers taking advantage of the exclusion and having an income in the phaseout range. The degree to which the phaseout will affect marginal tax rates depends on the amount of

[58] The Taxpayer Relief Act of 1997 amended section 135 to allow taxpayers to redeem U.S. Savings Bonds and be eligible for the exclusion under that section (as if the proceeds were used to pay qualified higher education expenses) provided that the proceeds from the redemption are contributed to a qualified State tuition program defined under section 529, or to an education IRA defined under section 530, on behalf of the taxpayer, the taxpayer's spouse, or a dependent. The Tax Technical Corrections Act of 1997 (Title VI of H.R. 2676), as passed by the House on November 5, 1997, includes a technical correction provision that conforms the definition of "eligible educational institution" under section 135 to the broader definition of that term under sections 529 and 530. The result of this technical correction would be that, for purposes of section 135, as under sections 529 and 530, the term "eligible educational institution" would be defined as an institution which is (1) described in section 481 of the Higher Education Act of 1965 (20 U.S.C. 1088) and (2) eligible to participate in Department of Education student aid programs.

interest that is eligible for the exclusion, which is a function both of the magnitude of education expenses and the fraction of Saving Bond redemptions that represents accrued interest. The latter in turn will be a function of when the savings bonds were purchased—bonds purchased longer ago (but no earlier than January 1, 1990 to be eligible for the exclusion) will have a higher fraction of accrued interest relative to original principal. Conversely, a bond purchased last year will have very little accrued interest relative to principal. Thus, if a taxpayer has $10,000 in qualified education expenses and redeems savings bonds purchased 8 years ago for $7,000 dollars whose current value is $10,000, then $3,000 of interest is eligible for the exclusion. A different taxpayer who redeems $10,000 in bond proceeds but who purchased such bonds for $9,000 three years ago, will only have $1,000 in interest to deduct.[59]

The effective marginal tax rate for taxpayers in the phase-out range is given by the statutory rate plus the potentially excludable interest divided by the length of the phase-out range. For a married taxpayer filing jointly, the length of the phase-out range is $30,000. If such a taxpayer has $3,000 in potentially excludable interest, then the effective marginal tax rate is 110 percent of the statutory rate (statutory rate plus $3,000/$30,000). If the taxpayer has only $1,000 in potentially excludable interest, then the effective marginal tax rate is 103.3 percent of the statutory rate (statutory rate plus $1,000/$30,000). For the single or head of household filer in the phase-out range, the percentage increases in the effective marginal tax rate would be twice as great for the same amounts of interest, as the length of the phase-out range is only half as large ($15,000). Hence, the $3,000 in potentially excludable interest would have to phase out over a $15,000 income range, leading to an effective marginal tax rate that is 120 percent of the statutory rate (statutory rate plus $3,000/$15,000). Similarly, if there were only $1,000 in potentially excludable interest, the effective marginal tax rates would be 106.7 percent of the statutory rate (statutory rate plus $1,000/$15,000).[60]

Without adjustments to the length of the phase-out ranges, the passage of time will likely lead to situations with increasingly higher effective marginal tax rates. The reasons for this are twofold: First, qualified education expenses are likely to rise as a result of the general rise in education costs. Thus, more bond proceeds will be redeemed for education expenses, and more interest will be po-

---

[59] For the purposes of the discussion herein, it is assumed that all savings bond proceeds are used for qualified education expenses. Recall that both the principal and interest of the saving bond proceeds must be used for qualified education expenses for the full amount of the interest to qualify for the exclusion. If more savings bonds are redeemed than is necessary to pay for education, only a pro-rata share of the interest will be potentially eligible for the exclusion.

[60] Mathematically, where Y denotes income, E denotes the size of the full potential exclusion, A denotes the actual exclusion, I denotes the beginning of the phaseout range, L denotes the length of the phaseout range, and t denotes the statutory marginal tax rate, the taxpayer's total tax liability, T, is given by the following expression:

$$(1)\ T = (Y - A) \bullet t, \text{ where}$$

$$A = \mathrm{Max}(0, E - E \bullet (Y - I)/L)$$

Substituting the expression for A into (1) for taxpayers in the phaseout range yields:

$$(2)\ T = Y \bullet t - E \bullet t + t \bullet E \bullet Y/L - t \bullet E \bullet I/L$$

Hence, if Y goes up by $1, T rises by $t + t \bullet E/L$. Thus, because the phaseout length L for single taxpayers is half that for married taxpayers, the same potential exclusion E will result in an increase in the effective tax rate that is twice as large for single taxpayers as for married taxpayers.

tentially excludable. Second, the profile of bonds redeemed for education expenses in the future will likely have a greater fraction of accrued interest to principal relative to today. The oldest redeemable bonds today that are eligible for the exclusion will be only 8 years old, as they must have been purchased after December 31, 1989. Ten years from now, the oldest bonds eligible will be 18 years old, and will thus have a larger fraction of accrued interest relative to principal. For example, an 8-year old bond with an original principal of $1,000 that has yielded an effective 5 percent annual return will be worth $1,477. Hence, 33 percent of the bond's value is represented by accrued interest ($477/$1,477). An 18–year old bond with $1,000 in original principal with the same yield would be worth $2,407, and hence 58 percent of its value is represented by accrued interest ($1,407/$2,407). Hence, 10 years from now it would not be unreasonable to expect a single or head of household filer to have $15,000 in potentially excludable interest. Since their phase-out range for the exclusion is only $15,000 in length, each additional dollar in income in the phaseout range will cause the loss of a dollar in the savings bond interest exclusion, making the effective marginal tax rate equal to twice the statutory rate.

The beginning of the phase-out ranges implies that most affected taxpayers are likely to be in the 28 percent statutory tax bracket.[61] Thus the single or head of household taxpayer in the phaseout range with $1,000 of potentially excludable interest (which, as previously discussed, produces an increase in the effective marginal tax rate of 6.7 percent) will have an effective marginal tax rate of 1.067 times 28 percent, or 29.9 percent. The corresponding married taxpayer would face an effective marginal tax rate of 1.033 times 28 percent, or 28.9 percent. If the potentially excludable interest were $3,000, the effective marginal tax rates would be 33.6 percent and 30.8 percent, respectively.

[61] For all filing statuses, the beginning of the phase-out ranges are well above the bracket break points at which the 28-percent statutory rate is effective. Thus, in most cases, unless the taxpayer has an unusual number of deductions or exemptions, their taxable income will not be reduced below the threshold of the 28-percent bracket. For example, for married taxpayers, the beginning of the phase-out range in 1998 is $78,350. The beginning of the 28-percent bracket is $42,350. Thus to be both in the 15-percent bracket and subject to the phaseout, the taxpayer would have to have a combination of deductions and exemptions of at least $36,000 ($78,350 – $42,350). Married taxpayers taking the standard deduction of $7,100 would need $28,900 in personal exemptions to place them in the 15-percent rate bracket. At $2,700 per exemption, this would require 11 personal exemptions. Alternatively, a family of four would have $10,800 in personal exemptions. Thus, they would need a total of $25,200 in itemized deductions ($36,000 – $10,800) to be in the 15-percent bracket.

M. Phaseout of Tax Credit for Elderly and Disabled

Present Law

Individuals who are age 65 or older may claim a nonrefundable income tax credit equal to 15 percent of a base amount. The credit also is available to an individual, regardless of age, who is retired on disability and who was permanently and totally disabled at retirement. For this purpose, an individual is considered permanently and totally disabled if he or she is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death, or that has lasted or can be expected to last for a continuous period of not less than 12 months. The individual must furnish proof of disability to the IRS.

The maximum base amount for the credit is $5,000 for unmarried elderly or disabled individuals and for married couples filing a joint return if only one spouse is eligible; $7,500 for married couples filing a joint return with both spouses eligible; or $3,750 for married couples filing separate returns. The maximum bases amounts are not indexed for inflation. For a nonelderly, disabled individual the initial base amount is the lesser of the applicable specified amount or the individual's disability income for the year. Consequently, the maximum credit available is $750 (15 percent of $5,000), $1,125 (15 percent of $7,500), or $562.50 (15 percent of $3,750).

The maximum base amount is reduced by the amount of certain nontaxable income of the taxpayer, such as nontaxable pension and annuity income or nontaxable Social Security, railroad retirement, or veterans' nonservice-related disability benefits. In addition, the base amount is reduced by one-half of the taxpayer's AGI in excess of certain limits: $7,500 for a single individual, $10,000 for married taxpayers filing a joint return, or $5,000 for married taxpayers filing separate returns. These are also not indexed for inflation. These computational rules reflect that the credit is designed to provide tax benefits to individuals who receive only taxable retirement or disability income, or who receive a combination of taxable retirement or disability income plus Social Security benefits that generally are comparable to the tax benefits provided to individuals who receive only Social Security benefits (including Social Security disability benefits).

Legislative History

The present tax credit for individuals who are age 65 or over, or who have retired on permanent and total disability, was enacted in the Social Security Amendments of 1983 (Code sec. 22). This credit replaced the previous credit for the elderly, which had been enacted in the Tax Reform Act of 1976. Prior to that provision, the tax law provided a retirement income credit, which initially was enacted in the Internal Revenue Code of 1954.

Analysis

The phaseout of the maximum base amount that determines the credit effectively raises marginal tax rates for the affected tax-

payers in the phase-out range. Because the base amount for the 15 percent credit is reduced by $1 for every $2 in AGI above certain thresholds, the effective marginal tax rate is increased for such individuals by 7.5 percentage points (one-half of 15 percent). Thus, if the affected taxpayer earns an additional dollar of income, the base amount of the credit falls by 50 percent. Because the credit is 15 percent of the base, the decline in the base by 50 cents causes the credit itself to decline by 15 percent of 50 cents, or 7.5 cents. The decline in the credit is identical to an increase in tax, and the taxpayer thus faces an effective marginal tax rate that is 7.5 percentage points higher than the statutory rate.[62] The taxpayers affected by this provision will exclusively be in the 15-percent statutory bracket as a result of the low income levels at which the credit is phased out ($7,500–$17,500 for singles and $10,000–$20,000 for married filing jointly).[63] Thus, the effective marginal tax rate for these taxpayers will be 15 percent plus 7.5 percent or 22.5 percent.

In addition to the phaseout of the maximum base amount due to increases in AGI above certain levels, the maximum base amount phases out dollar for dollar for each additional dollar of nontaxable income such as nontaxable pensions, annuity or social security income. This dollar for dollar phaseout, as opposed to the $1 phaseout for each $2 increase in AGI, would increase marginal tax rates by twice as much, or the full 15 percent, for any additional income in the nontaxable form. Unlike AGI, these forms of income tend to be predetermined and inflexible. As a result, it is probably incorrect to think of this provision as increasing effective marginal tax rates by 15 percentage points, because it is difficult for the taxpayer to marginally increase such income.

The Joint Committee staff estimates that approximately 200,000 taxpayers, or less than two-tenths of one percent of all taxpayers, are affected by the phaseout.

---

[62] Mathematically, where Y denotes income, M denotes the maximum base amount, B denotes the actual base amount, I denotes the beginning of the phaseout range, and t denotes the statutory marginal tax rate, the taxpayer's total liability, T, is given by the following expression:

(1) $T = Y \bullet t - .15 \bullet B$, where

$B = M - .5 \bullet (Y - I)$ for taxpayers in the phaseout range.

Substituting the expression for B into (1) for taxpayers in the phaseout range yields:

(2) $T = Y \bullet t - .15 \bullet M + .075 \bullet Y - .075 \bullet I$

Hence, if Y goes up by $1, T rises by $t + .075$.

[63] In order to be eligible for the credit (a necessary condition to be affected by a phaseout), one must have positive regular tax liability since the credit is a non-refundable credit. Thus, despite the relatively low income range of the phaseout of this credit, one could not be in the 0 percent bracket and be affected by the phaseout.

N. Phaseout of the Adoption Tax Credit and Exclusion for Adoption Expenses

Present Law

Tax credit

Present law provides taxpayers with a maximum nonrefundable tax credit against income tax liability of $5,000 per child for qualified adoption expenses paid or incurred by the taxpayer. In the case of a special needs adoption, the maximum credit amount is $6,000 ($5,000 in the case of a foreign special needs adoption). A special needs child is a child who the State has determined: (1) cannot or should not be returned to the home of the birth parents, and (2) has a specific factor or condition because of which the child cannot be placed with adoptive parents without adoption assistance[64]. Examples of factors or conditions are the child's ethnic background, age, membership in a minority or sibling group, medical conditions, or physical, mental, or emotional handicaps. To the extent the otherwise allowable credit exceeds the tax liability limitation of section 26 (reduced by other personal credits) the excess shall be carried forward as an adoption credit into the next taxable year, up to a maximum of five taxable years.

Qualified adoption expenses are reasonable and necessary adoption fees, court costs, attorneys' fees, and other expenses that are directly related to the legal adoption of an eligible child. All reasonable and necessary expenses required by a State as a condition of adoption are qualified adoption expenses. In the case of an adoption of a child who is not a citizen or a resident of the United States (foreign adoption), the credit is not available unless the adoption is finalized. In the case of otherwise qualified expenses that are incurred in an adoption that is not yet identified as either a domestic or a foreign adoption, the credit is not available until the expenses are identified as either relating to a domestic adoption (whether or not finalized) or to a finalized foreign adoption. In some instances that may require the filing of an amended tax return.

An eligible child is an individual (1) who has not attained age 18 or (2) who is physically or mentally incapable of caring for himself or herself. After December 31, 2001, the credit will be available only for domestic special needs adoptions. No credit is allowed for expenses incurred (1) in violation of State or Federal law, (2) in carrying out any surrogate parenting arrangement, (3) in connection with the adoption of a child of the taxpayer's spouse, or (4) that are reimbursed under an employer adoption assistance program or otherwise.

The credit is phased out ratably for taxpayers with modified adjusted gross income (AGI) above $75,000, and is fully phased out at $115,000 of modified AGI. For these purposes modified AGI is computed by increasing the taxpayer's AGI by the amount otherwise excluded from gross income under Code sections 911, 931, or 933 (relating to the exclusion of income of U.S. citizens or residents

[64] After December 31, 2001, for purposes of the credit, only domestic special needs adoptions will qualify as special needs adoptions.

living abroad; residents of Guam, American Samoa, and the Northern Mariana Islands, and residents of Puerto Rico, respectively).

The $5,000 limit is a per child limit, not an annual limitation. For example, if in the case of an attempt to adopt a child a taxpayer pays or incurs $3,000 of qualified adoption expenses in year one and $3,000 of qualified adoption expenses in year two, then the taxpayer would receive $5,000 not $6,000 of credit. To illustrate further, if a taxpayer pays or incurs $1,000 of otherwise qualified adoption expenses at each of three agencies in unsuccessful attempts to adopt a child before paying or incurring $4,000 of otherwise qualified adoption expenses in a successful domestic adoption, the taxpayer's maximum adoption credit is $5,000, not $7,000. The credit may be less than $5,000 because of other limitations. When more than one taxpayer (e.g., more than one unmarried individual) who are parties to an adoption pays or incurs qualified adoption expenses for the adoption of the same child, the total adoption credit claimed by all parties shall not exceed $5,000.

Otherwise qualified adoption expenses paid or incurred in one taxable year are not taken into account for purposes of the credit until the next taxable year unless the expenses are paid or incurred in the year the adoption becomes final or any year thereafter. To illustrate this rule, consider again the example of a taxpayer who pays or incurs $3,000 of qualified adoption expenses in year one and $3,000 of qualified adoption expenses in year two for a domestic adoption. Assume the adoption is not finalized until year three. Under this general rule, the $3,000 of qualified expenses paid or incurred in year one would be allowed in year two and $2,000 of the $3,000 paid or incurred in year two would be allowed in year three. Alternatively, if the adoption was finalized in year two, then $5,000 of qualified expenses would be allowed in year two.

To avoid a double benefit, the credit is denied to taxpayers to the extent the taxpayer may use otherwise qualified adoption expenses as the basis of another credit or deduction. Similarly, the credit is not allowed for any expenses for which a grant is received under any Federal, State, or local program. This denial of the credit also applies in the case of special needs adoptions. Also, when the adoption credit is allowed because the taxpayer expends amounts chargeable to a capital account (e.g., the costs of constructing a ramp at the taxpayer's house to accommodate a wheelchair that is required as a condition of the adoption), the taxpayer is not allowed additional basis in the house to the extent of the adoption credit allowed. Where the amount of qualified adoption expenses exceeds $5,000, (e.g., $5,000 of legal fees and $5,000 of ramp construction costs) it is intended that the amounts not chargeable to a capital account (the legal fees) are treated as the basis of the credit before any amounts that are chargeable to a capital account. In this way, for example, the taxpayer may satisfy the requirements of the adoption credit with the legal fees and may add the ramp construction costs to the basis in the house.

Individuals who are married at the end of the taxable year must file a joint return to receive the credit unless they lived apart from each other for the last six months of the taxable year and the individual claiming the credit (1) maintained as his or her home a

household for the child for more than one-half of the taxable year and (2) furnished over one-half of the cost of maintaining that household in that taxable year. An individual legally separated from his or her spouse under a decree of divorce or separate maintenance is not considered married for purposes of this provision.

Exclusion from income

Present law provides a maximum $5,000 exclusion from the gross income of an employee for qualified adoption expenses (as defined above) paid by the employer. The $5,000 limit is a per child limit, not an annual limitation. In the case of a special needs adoption, the maximum exclusion from income is $6,000 ($5,000 in the case of foreign special needs adoptions). No exclusion is allowed for amounts paid or incurred by an employer after December 31, 2001. In order for the exclusion to apply, the expenses would have to be paid under an adoption assistance program in connection with an adoption of an eligible child (as described above) by an employee.

An adoption assistance program is a nondiscriminatory plan of an employer under which the employer provides employees with adoption assistance. Also, not more than 5 percent of the benefits under the program for any year may benefit a class of individuals consisting of more than 5-percent owners of the employer and the spouses or dependents of such more than 5-percent owners. An adoption assistance program is not required to be funded but must provide reasonable notification of the availability and terms of the program to eligible employees. An adoption reimbursement program operated under section 1052 of title 10 of the U.S. Code (relating to the armed forces) or section 514 of title 14 of the U.S. Code (relating to members of the Coast Guard) is treated as an adoption assistance program for these purposes. Adoption assistance is a qualified benefit under a cafeteria plan. The exclusion is phased out ratably for taxpayers with modified AGI above $75,000 and is fully phased out at $115,000 of modified AGI (in the same manner as the adoption credit). Adoption expenses paid or reimbursed under an adoption assistance program may not be taken into account in determining the adoption credit. A taxpayer may, however, satisfy the requirements of the adoption credit and exclusion with different expenses paid or incurred by the taxpayer and employer respectively. For example, in the case of an adoption that costs $10,000 with $5,000 of expenses paid by the taxpayer and $5,000 paid by the taxpayer's employer under an adoption assistance program, the taxpayer may qualify for the adoption credit and the exclusion.

In the case of amounts paid or expenses incurred under an adoption assistance program that may otherwise be chargeable to a capital account, an ordering rule similar to the one for the adoption credit applies.

Legislative History

The adoption tax credit and the exclusion were enacted in the Small Business Job Protection Act of 1996.

Analysis

The phaseout of the adoption credit and exclusion affects marginal tax rates in the same manner as the previously discussed phaseouts of other credits and exclusions. Both the credit and the exclusion are phased out over the same income range for all taxpayers (beginning at $75,000 in modified adjusted gross income and ending at $115,000), or a range of $40,000. The operation of the phaseout implies that for each $1,000 of income over the phaseout range, 2.5 percent ($1,000 / $40,000) of the credit or exclusion is disallowed. Hence, the increment to effective marginal tax rates that the phaseout implies depends on the size of the credit or exclusion itself. For a $5,000 credit, 2.5 percent of the credit is $125. The loss of such amounts of credit for earning an additional $1,000 of income implies an effective marginal tax rate with respect to the phaseout alone of 12.5 percent ($125 / $1000). If the affected taxpayer is in the 28 percent rate bracket, which is likely given the phase-out range, the taxpayer's total effective marginal tax rate will be 28 percent plus 12.5 percent, or 40.5 percent. For a potential $5,000 exclusion, the loss of the exclusion is also $125, but the loss of an exclusion is not as harmful as the loss of a credit, because the exclusion is less valuable than the credit. The loss of $125 in exclusions, for a taxpayer in the 28 percent bracket, will cause taxes to rise by only 28 percent of the lost exclusion, whereas the taxes would rise by the full amount of a lost credit. The value of the lost exclusion of $125 for a taxpayer in the 28 percent bracket is $35 (28 percent of $125). The rise in taxes of $35 (from the lost exclusion alone) as a result of an increase in modified adjusted gross income of $1,000 implies an increase in the effective marginal tax rate of 3.5 percentage points ($35 / $1000). Of course, such taxpayer would also owe an additional $280 on the increase in income itself. In total, such taxpayer's effective marginal tax rate would be 31.5 percent (28 percent plus 3.5 percent). As noted above, the taxpayer that lost a credit of the same magnitude would face an effective marginal tax rate of 40.5 percent.[65]

If the taxpayer were eligible for both the credit and the exclusion, the increase in the effective marginal tax rate would be additive, since both the credit and exclusion are phased out over the same income range. Thus, if both a $5,000 credit and a $5,000 ex-

---

[65] With respect to the exclusion: Let Y denote income, E denote the size of the full potential exclusion, A denote the actual exclusion, I denote the beginning of the phaseout range, L denote the length of the phaseout range, and t denote the statutory marginal tax rate. The taxpayer's total tax liability, T, is given by the following expression:

(1) $T = (Y - A) \bullet t$, where

$A = \mathrm{Max}(0, E - E \bullet (Y - I)/L)$

Substituting the expression for A into (1) for taxpayers in the phaseout range yields:

(2) $T = Y \bullet t - E \bullet t + t \bullet E \bullet Y/L - t \bullet E \bullet I/L$

Hence, if Y goes up by $1, T rises by $t + t \bullet E/L$.

With respect to the credit: Let Y, I, L and t be as above. Also let C denote the size of the full potential credit and A denote the actual credit. The taxpayer's total tax liability, T, is given by the following expression:

(1) $T = T \bullet t - A$, where

$A = \mathrm{Max}(0, C - \{(Y - I)/L\} \bullet C)$

Substituting the expression for A into (1) for taxpayers in the phaseout range yields:

(2) $T = Y \bullet t - C + C \bullet Y/P - I/L \bullet C$

Hence, if Y goes up by $1, T rises by $t + C/L$.

clusion were applicable, the taxpayer's effective marginal tax rate in the phaseout range would be 28 percent plus the increment to the effective marginal tax rate due to the credit phaseout (12.5 percent) and that due to the phaseout of the exclusion (3.5 percent) for a total effective marginal tax rate of 44 percent, or 16 percentage points greater than the statutory rate. In theory, the effective marginal tax rate could rise substantially higher for a taxpayer who adopted multiple children in the same year. A doubling of the credit or exclusion in the above examples would double the increment to the effective marginal tax rate. The magnitude of the increment to the effective marginal tax rate is limited, however, by the fact that the credit is nonrefundable, and thus its maximum size is given by the taxpayer's tax liability before credits.

O. Phaseout of First-Time Homebuyer Tax Credit for the District of Columbia

Present Law

First-time homebuyers of a principal residence in the District of Columbia may be eligible for a tax credit of up to $5,000 of the amount of the purchase price. The $5,000 maximum credit amount applies both to individuals and married couples. Married individuals filing separately can claim a maximum credit of $2,500 each. The first-time homebuyer credit is available only for property purchased after August 4, 1997, and before January 1, 2001.

The credit phases out for individual taxpayers with modified AGI between $70,000 and $90,000 ($110,000–$130,000 for joint filers). For this purpose, modified AGI means adjusted gross income increased by any amount excluded under section 911 (certain foreign earned income), section 931 (income from sources within Guam, American Samoa, or the Northern Mariana Islands), or section 933 (income from sources within Puerto Rico).

Legislative History

The tax credit for first-time homebuyers in the District of Columbia was enacted as part of the Taxpayer Relief Act of 1997.

Analysis

The District of Columbia first-time home buyer credit phases out at a rate of 25 percent for taxpayers within the phase-out ranges.[66] For a taxpayer who would otherwise claim the maximum $5,000 credit, and whose income is within the phase-out range, an increase in income of $1,000 reduces the maximum amount of credit that he or she may claim by $250. Because this is a tax credit that is reduced, rather than a deduction, the taxpayer's tax liability increases by $250. This increase in tax liability is in addition to the tax liability that the taxpayer would incur by the application of the statutory marginal tax rates to the increase in income of $1,000. Thus, the phaseout of the District of Columbia first-time home buyer credit creates effective marginal tax rates that equal the taxpayer's statutory marginal tax rate *plus* 25 percentage points. For taxpayers in the 28-percent statutory marginal tax rate bracket, the effective marginal tax rate becomes 53 percent (28 percent plus 25 percent).[67]

---

[66] Because the income phase-out range of single taxpayers ranges from AGI of $70,000 through $90,000, while that of married taxpayers who file a joint return ranges from $110,000 through $130,000, a marriage penalty effectively exists on single individuals who might contemplate marrying and making a first-time purchase of a home in the District of Columbia. In addition, because the maximum credit is $5,000 for both single and married individuals, a separate marriage penalty may exist even for taxpayers whose income would place them below the phase-out range. See discussion in Joint Committee on Taxation, *Present Law and Background Relating to Proposals to Reduce the Marriage Tax Penalty* (JCX–1–98), January 27, 1998.

[67] Mathematically, let T be tax liability, t the taxpayer's statutory marginal tax rate, $5,000 the District of Columbia first-time homebuyer credit that the taxpayer intends to claim, and I the income threshold. If the taxpayer's income is less than the threshold level, one can write the taxpayer's tax liability as

$$(1)\ T = Y \bullet t - 5{,}000$$

If the taxpayer is in the phase-out range then the taxpayer's tax liability is

$$T = Y \bullet t - (5{,}000 - (Y - \mathrm{I}) \bullet (.25))$$

which simplifies to equation (2).

The increase in effective marginal tax rates that results from the phaseout of the District of Columbia first-time home buyer credit affects only those taxpayers who qualify as a first-time home buyer and who purchase a residence within the District of Columbia between August 5, 1997 and December 31, 2000. The increase in effective marginal tax rates would be expected to affect all qualifying buyers whose income places them in the phaseout, because all such buyers may claim the full $5,000 credit. Certain buyers may have insufficient income tax liability to claim this nonrefundable credit in the current year, but, as described above, unused credit may be carried forward indefinitely. By denying credit in a future year, there would be no effect on current year effective marginal tax rates, but the future year's effective marginal tax rate would equal the future year's statutory marginal tax rate plus 25 percentage points.[68] The credit also may not be claimed against alternative minimum tax liability. If a taxpayer were otherwise subject to the alternative minimum tax, the phaseout of the credit would have no effect on the taxpayer's effective marginal tax rate in that year.

Because the phaseout does not affect single taxpayers with AGI greater than $90,000, nor married taxpayers with AGI greater than $130,000, the provision generally does not affect taxpayers in the 36- or 39.6-percent statutory marginal tax rate brackets. Nor would the provision be expected to affect many eligible taxpayers in the 31-percent statutory marginal tax rate bracket. Because the phaseout does not affect single taxpayers with AGI less than $70,000, nor married taxpayers with AGI less than $110,000, the provision is not likely to affect taxpayers in the 15-percent marginal tax bracket. Taxpayers most likely to be affected are those in the 28-percent statutory marginal tax bracket. As the analysis above suggests, some of these taxpayers may face effective marginal tax rates of 53 percent (28 plus 25). However, the provision is limited to taxpayers who purchase a qualifying residence in the District of Columbia. The number of taxpayers who will face an effective marginal tax rate in excess of their statutory marginal tax rate due to this provision is likely to be small.

---

(2) $T = Y \bullet (t + .25) - 5{,}000 - I(.25)$

Thus, for every $1.00 increase in income, Y, the taxpayer's tax liability increases by his or her statutory marginal tax rate phases 25 percentage points, $t + .25$.

[68] Taxpayers who claim the credit must reduce their basis in the property by the amount of the credit claimed. This may increase their future tax liability when they sell the property because under Code sec. 121 gain on the sale of a principal residence, above certain amounts, is subject to tax. Most analysts believe that the number of sales of principal residences that will give rise to any income tax will be small. However, if a subsequent sale were taxable and the taxpayer had some of the credit denied by virtue of the phaseout, then the taxpayer's basis would be larger than it otherwise would have been and, consequently, his or her taxable gain would be reduced. Thus, to calculate the true effective marginal tax rate created by the phaseout, the calculation in the text should be reduced by the expected present value of reduced future tax liability upon sale of the residence. Accounting for this possible future effect, the taxpayer's effective marginal tax rate is greater than the statutory marginal tax rate, but less than the statutory marginal tax rate plus 25 percentage points.

P. Phaseout of Allowance of Certain Rental Real Estate Losses Under the Passive Loss Rules

Present Law

In general

The passive loss rules were enacted in 1986 to curb the expansion of tax sheltering. These rules limit deductions and credits from passive trade or business activities (Code sec. 469). Deductions attributable to passive activities, to the extent they exceed income from passive activities, generally may not be deducted against other income, such as wages, portfolio income, or business income that is not derived from a passive activity. A similar rule applies to credits.

Deductions and credits that are suspended under these rules are carried forward and treated as deductions and credits from passive activities in the next year. The suspended losses from a passive activity are allowed in full when a taxpayer disposes of his entire interest in the passive activity to an unrelated person.

The passive loss rules apply to individuals, estates and trusts, closely held C corporations, and personal service corporations. A special rule permits closely held C corporations to apply passive activity losses and credits against active business income (or tax liability allocable thereto) but not against portfolio income.

Passive activities are defined to include trade or business activities in which the taxpayer does not materially participate. Rental activities (generally including rental real estate activities) are also treated as passive activities, regardless of the level of the taxpayer's participation.[69]

$25,000 allowance of rental real estate losses and phaseout

A special rule permits the deduction of up to $25,000 of losses from rental real estate activities (even though such activities are generally considered passive), if the taxpayer actively participates in them. This $25,000 amount is allowed for taxpayers with adjusted gross incomes (AGI) of $100,000 or less. The $25,000 amount is phased out ratably as AGI increases from $100,000 to $150,000. The $100,000 and $150,000 amounts are not indexed.

In the case of the rehabilitation credit and the low-income housing credit, generally a $25,000 deduction-equivalent amount is allowed without regard to whether the taxpayer actively participates in the rental real estate activity. In the case of the rehabilitation credit, the $25,000 amount is phased out ratably as AGI increases from $200,000 to $250,000. The $25,000 deduction-equivalent amount is not phased out in the case of the low-income housing credit.

Legislative History

The passive loss rules were enacted in the Tax Reform Act of 1986. As originally enacted, the phaseout rule provided that the

[69] A special rule provides that a taxpayer's rental real estate activities in which he materially participates are not subject to limitation under the passive loss rules, if the taxpayer meets certain eligibility requirements relating to real property trades or businesses in which the taxpayer performs services.

$25,000 allowance generally was phased out for taxpayers with AGI between $100,000 and $150,000 (which is still present law). However, the AGI range for the phaseout was $200,000 to $250,000 for rehabilitation and low-income housing credits, as the rule was originally enacted. Present-law treatment for low-income housing credits was enacted in the Omnibus Budget Reconciliation Act of 1989, which repealed the phaseout for the low-income housing credit.

Analysis

As explained above, the allowance of up to $25,000 of passive losses accrued by individual taxpayers is phased out for taxpayers with AGI in excess of $100,000 ($200,000 in the case of the rehabilitation credit), regardless of whether the taxpayer's filing status is married filing jointly, single, or head of household.[70] The phaseout has the effect of increasing the taxpayer's effective marginal tax rate above his or her statutory marginal tax rate. However, the phaseout provisions alter effective marginal tax rates differently than most of the other provisions discussed in this pamphlet. First, not all taxpayers with AGI that is within the phaseout range are affected. Second, while the effect of the provisions phasing out the allowance of $25,000 of passive losses raises the taxpayer's tax liability in the current year, the phaseout does not permanently deny these deductions. It suspends the deductions. Allowing the suspended deductions in a future taxable year (when the taxpayer disposes of the passive activity) reduces the taxpayer's future tax liability. The analysis below discuses the current- and future-year effects in turn.

The phase-out rate of 50 percent has the effect of increasing the taxpayer's marginal tax in the current year to 150 percent of the statutory tax rate. The phase-out rate implies that for each dollar of additional income earned from any taxable source beyond $100,000, the $25,000 exemption is reduced by 50 cents. This means that the taxpayer's taxable income in the current year increases by $1.50. One dollar of the increase is from the additional dollar of income and 50 cents of the increase occurs because the taxpayer can no longer currently deduct 50 cents worth of otherwise deductible passive losses. Thus, if $1.00 of additional income increases taxable income by $1.50, the additional tax owed in the current year will be 1.50 times the statutory marginal tax rate. That is, the taxpayer's effective marginal tax rate is 150 percent of the statutory marginal tax rate.[71] Because the phaseout is at a

[70] The presence of an income threshold that is invariant across filing status creates a marriage penalty that is specific to that provision. See the discussion in Joint Committee on Taxation, *Present Law and Background Relating to Proposals to Reduce the Marriage Tax Penalty* (JCX–1–98), January 27, 1998. In addition, the present discussion will ignore taxpayers who are married, but choose to file separately. Because both the $25,000 amount and the income limitations are halved for married individuals filing separately, the effective marginal tax rates for such individuals generally are no different than for married taxpayers who choose to file jointly.

[71] Mathematically, when Y denotes income, D denotes deductible passive losses, and t denotes the marginal tax rate, the taxpayer's total tax liability, T is given by the following expression:

(1) $T = (Y - D) \bullet t = Y \bullet t - D \bullet t$

If Y increases by $1.00, tax liability increases by t.

Assume the taxpayer has $25,000 in passive losses. For taxpayers with AGI in excess of $100,000, the amount of deductible passive losses, D, is given by the equation (2).

Continued

50 percent rate, the $25,000 allowable amount is completely phased out at AGI of $150,000 ($250,000 in the case of the rehabilitation credit), above which point the effective marginal tax rate would again be the statutory marginal tax rate.

As noted above, denial of the deduction in the current year generally increases deductions in some future years. While $1,000 of additional income in the current year increases taxable income by $1,500 for a taxpayer in the phaseout range, the $500 of losses suspended (50 percent of $1,000) reduces taxable income by $500 in the future when the taxpayer disposes of the passive activity. Because of the time value of money, the tax benefit of a $500 reduction in income in the future is less than the tax cost of a $500 inclusion in income in the current year. For example, if the $500 loss is claimed 10 years from now and the discount rate is 10 percent,[72] the present value of the suspended loss is $192.77. If the taxpayer has the same marginal tax rate in the future as in the current year, the additional $1,000 of current year income increases the present value of the taxpayer's lifetime tax payments by $1,000 times the current year statutory marginal tax rate plus $307.23 ($500 minus $192.77) times the statutory marginal tax rate.[73] Thus, under these facts, the phaseout creates an effective marginal tax rate equal to 130.1 percent of the statutory marginal tax rate.

In general, the longer the losses remain suspended, or the higher the discount rate, the closer the effective marginal tax rate is to 150 percent of the current year statutory marginal tax rate. The shorter the suspense period or the smaller the discount rate, the closer the effective marginal tax rate is to the statutory marginal tax rate. If the taxpayer's statutory marginal tax rate in the future is greater than the taxpayer's current year statutory marginal tax rate, the taxpayer's effective marginal tax rate in the current year could be less than the taxpayer's current year statutory marginal tax rate.[74] If the taxpayer's statutory marginal tax rate in the future is less than the taxpayer's current year statutory marginal tax rate, the taxpayer's effective marginal tax rate in the current year will be closer to 150 percent of the current year statutory marginal tax rate.

The increase in effective marginal tax rates that results from the phaseout of the $25,000 allowance under the passive loss limitations may affect a more limited number of taxpayers than other phaseout provisions. Generally, taxpayers expecting to be above the

---

(2) $D = \$25{,}000 - (.5)(Y - \$100{,}000)$

To determine the tax liability of taxpayers with AGI in excess of $100,000, one must substitute equation (2) into equation (1). The result follows.

(3) $T = (Y - \{25{,}000 - (.5)Y + 50{,}000\} \bullet t$

(4) $T = Y \bullet (1.5) \bullet t - 75{,}000 \bullet t$

If Y increases by $1.00, tax liability increases by $(1.5) \bullet t$.

[72] The suspended $500 is a nominal dollar value. Nominal values should be discounted using a nominal interest rate. Ten percent was chosen for simplicity.

[73] Mathematically, let t_o be the taxpayer's current year statutory marginal tax rate and t_n the taxpayer's statutory marginal tax rate in year n in the future. Also let r be the discount rate. Then equation (4) of footnote 71 above should be modified to let T represent the present value of lifetime tax liability as follows:

(5) $T = Y \bullet (1.5t_o - ((.5t_n)/(1+r)^n)) - 75{,}000 \bullet t_o + 50{,}000 \bullet t_n/(1+r)^n$

[74] Using the first term of equation (5) of footnote 73, if the discount rate is 7 percent, the taxpayer's current year statutory marginal tax rate is 28 percent, the taxpayer's future statutory marginal tax rate is 36 percent, and the suspense period is three years, the taxpayer's effective marginal tax rate is 27.3 percent.

income levels at which the $25,000 of losses or the deduction-equivalent amount of rehabilitation credit is allowed will not invest in these projects rather than have the losses or credits limited by the passive loss rules.

Moreover, the provision does not affect all taxpayers with incomes between $100,000 and $150,000 even if they have qualifying passive losses, because the phaseout does not wholly deny passive loss deductions to all taxpayers claiming them, but rather reduces the $25,000 amount. Thus, if Taxpayer A and Taxpayer B each have an AGI of $130,000, but Taxpayer A has $5,000 of eligible passive losses and Taxpayer B has $20,000 of eligible passive losses, the phaseout affects only Taxpayer B. An AGI of $130,000 reduces the limit on deductible expenses from $25,000 to $10,000. Because the limitation is binding on the eligible passive losses of Taxpayer B, Taxpayer B will have an effective marginal tax rate equal to 1.5 times the statutory tax rate.[75] The limitation is not binding on Taxpayer A. Thus, Taxpayer A's effective marginal tax rate will equal the statutory marginal tax rate.

Because the phaseout does not affect taxpayers with AGI less than $100,000, the provision generally does not affect taxpayers in the 15-percent statutory marginal tax rate brackets. Some taxpayers in the 28- and 31-percent statutory marginal tax rate brackets may experience effective current year marginal tax rates of 42 percent and 46.5 percent (1.5 times 28 and 31). Some taxpayers who file single and head of household returns and who are in the 36- percent statutory marginal tax rate bracket may experience an effective marginal tax rate of 54 percent (1.5 times 36). Because the exemption is completely phased out for AGI in excess of $150,000, effective marginal tax rates do not differ from statutory marginal tax rates for any taxpayer in the 39.6–percent statutory marginal tax rate bracket or for married taxpayers in the 36–percent statutory marginal tax rate bracket.

In the case of the rehabilitation tax credit, for which the allowance is phased out for AGI between $200,000 and $250,000, generally taxpayers in the 15-, 28-, and 39.6–percent brackets do not have an effective marginal tax rate different from their statutory marginal tax rate. Taxpayers in the 31- and 36–percent statutory marginal tax rate bracket may experience effective marginal tax rates of 46.5 and 54 percent respectively.

[75] For simplicity, the discussion of this and the subsequent paragraph will ignore the effect of the suspended loss deductions on the effective marginal tax rate.

Q. Income Phasein of Recapture of Subsidy from the Use of Qualified Mortgage Bonds and Mortgage Credit Certificates

Present Law

Qualified mortgage bonds ("QMBs") generally are used to finance the purchase or qualifying rehabilitation or improvement of single family, owner-occupied homes. The recipients of QMB-financed loans must meet purchase price, income, and other restrictions.

Qualified governmental units may elect to exchange qualified mortgage bond authority for authority to issue mortgage credit certificates ("MCCs"). MCCs entitle homebuyers to nonrefundable income tax credits for a specified percentage of interest paid on mortgage loans on their principal residences. Once issued, an MCC generally remains in effect as long as the residence being financed continues to be the certificate-recipient's principal residence. MCCs generally are subject to the same borrower eligibility requirements as QMBs.

A portion of the QMB and MCC subsidy (other than qualified home improvement loans) is recaptured upon disposition of a house financed with an assisted loan within nine years if the borrower has experienced a substantial increase in income over that period of time. This recapture provision applies only with respect to loans originating after December 31, 1990. The amount of the recapture is phased out at a rate of 20 percent per year for each year over 5 years that the taxpayer resides in the home. The recapture is the lesser of 50 percent of the gain realized on disposition or 1.25 percent of the highest principal amount multiplied by the number of years (up to a maximum of 5 years) that the taxpayer has owned the home. Recapture only applies to those recipients whose income rises substantially (i.e., more than 5-percent compounded annually) after the financing is received relative to the applicable family income limit (adjusted for family size) in the year the financing was received.

Legislative History

The Mortgage Subsidy Bond Tax Act of 1980 first imposed restrictions on the ability of States and local governments to issue tax-exempt bonds to finance mortgage loans on single-family, owner-occupied residences. These restrictions included many of the rules applicable under present law.

The Deficit Reduction Act of 1984 enacted the MCC alternative to QMBs. The Tax Reform Act of 1986 imposed a State volume limitation on the issuance of QMBs and certain other private activity bonds. The Technical and Miscellaneous Revenue Act of 1988 ("TAMRA") enacted substantial modifications to the MCC and QMB programs, including imposition of the recapture provision described above. Under TAMRA, the recapture provision applied to dispositions within ten years after purchase (rather than nine years as under present law).

The Omnibus Budget Reconciliation Act of 1990 ("1990 Act") made three principal modifications to the recapture provision. First, the maximum recapture period was reduced from 10 years to

9 years. Second, the amount recaptured was adjusted annually throughout this 9-year period rather than monthly. Thus, the recapture amount is the lesser of: (1) 50 percent of the gain realized on disposition or (2) a percentage of the imputed MRB or MCC subsidy (other than qualified home improvement loans). The imputed subsidy limitation is 20 percent for dispositions within one year after a homebuyer receives the MRB or MCC financing. The percentage increases to 40 percent in year two, 60 percent in year three, 80 percent in year four, and 100 percent in year five. The imputed subsidy limitation then is reduced to 80 percent in year six, 60 percent in year seven, 40 percent in year eight, 20 percent in year nine and zero thereafter. Third, the recapture provision's income adjustment exception was liberalized to determine the 5-percent-per-year inflation adjustment with compounding. These modifications were effective as if enacted in the Technical and Miscellaneous Revenue Act of 1988 (the Act which originally enacted the recapture provisions). The Omnibus Budget Reconciliation Act of 1993 ("OBRA 1993") permanently extended the QMB and MCC programs including the recapture provision.

Analysis

Some of the benefits of the implicit subsidy provided to certain home buyers through mortgage financing supplied by mortgage revenue bonds or mortgage credit certificates is recaptured for certain taxpayers. As explained above, the Code defines the recapture amount by reference to three factors. The size of the initial subsidized mortgage determines the first factor, 6.25 multiplied by the size of the subsidized mortgage. The taxpayer's duration in the subsidized residence determines the second factor. The taxpayer's income determines the third factor. To qualify initially for the MRB-subsidized mortgage, the taxpayer's income must be lower than certain specified levels that vary by region of the country. If the taxpayer's income subsequently has grown relative to that initial qualifying income, the taxpayer will be partially or wholly subject to recapture. The taxpayer's income in the year of sale of the residence provides the basis of the phase-in to full recapture. This phase-in creates an increase in effective marginal tax rates.

The phase-in uses income to determine the magnitude of the recapture amount[76] for which the taxpayer is liable. In general, the recapture amount will be different for each taxpayer because each taxpayer will have a different size mortgage and a different holding period. In addition, the recapture amount is limited to 50 percent of any gain the taxpayer may realize on the sale of his or her residence. To simplify, assume the recapture amount is $3,000. The portion of the recapture amount for which the taxpayer is liable is the percentage by which the taxpayer's current modified AGI exceeds the adjusted qualifying income divided by $5,000. Thus, if the taxpayer's modified AGI exceeds the adjusted qualifying income by $1,000, the taxpayer is liable for 20 percent of the recapture

[76] The Code defines the "recapture amount" to be the product of the three factors, including the income factor, outlined in the preceding paragraph. Because the focus of this analysis is on the effect of the phase-in determined by the income factor, this analysis will refer to the "recapture amount" as the product of the Federally-subsidized amount with respect to the indebtedness and the holding period percentage.

amount. In this example, if the taxpayer earned an additional $1,000, the taxpayer would be liable for an additional 20 percent of $3,000 of the recapture amount, or $600, in addition to the tax liability that the taxpayer would otherwise incur from the application of the statutory marginal tax rates. Thus, in this example, if the taxpayer were in the 15-percent statutory marginal tax rate bracket and the additional $1,000 of modified AGI were from taxable sources, the taxpayer would owe $150 on the incremental $1,000-increase in income and would owe an additional $600 in recapture tax, for a combined incremental tax of $750. Thus, in this example, the taxpayer would have an effective marginal tax rate of 75 percent. If the recapture amount were $300, the effective marginal tax rate for the taxpayer would be 21 percent. If the recapture amount were $6,000, the effective marginal tax rate for the taxpayer would be 135 percent. In general, for a taxpayer whose modified AGI exceeds his or her adjusted qualifying income by less than $5,000, the effective marginal tax rate is equal to the taxpayer's marginal tax rate at the time of sale of property plus the percentage defined by the recapture amount divided by $5,000.[77] For taxpayers whose modified AGI exceeds their adjusted qualifying income by $5,000 or more, the recapture amount does not vary with income and their effective marginal tax rate equals their statutory marginal tax rate.

Because the taxpayer's effective marginal tax rate under this phase-in provision is determined by the individual taxpayer's financial situation, it is not possible to make generalizations about the effective marginal tax rates created by this provision. Most analysts do not anticipate that many taxpayers are subject to this recapture provision. First, taxpayers who might anticipate that their incomes will increase relative to income eligibility levels may elect to forgo mortgage revenue bond-based financing. Second, a taxpayer who might be subject to recapture may defer sale of the residence to avoid paying the recapture amount. In general, the larger the taxpayer's initial subsidized mortgage, the larger the taxpayer's effective marginal tax rate. The effective marginal tax rate increases as the taxpayer's duration in the home increases through the first five years and then decreases through years six through ten. The taxpayer's effective marginal tax rate increases the larger the capital gain the taxpayer realizes upon sale of the home. However, once the capital gain exceeds twice the amount of the recapture amount calculated under the three-factor computation, the size of the capital gain does not affect the effective marginal tax rate.

---

[77] Mathematically, let T be total tax liability, t be the taxpayer's statutory marginal tax rate, R be the taxpayer's "recapture amount," and AQI be the taxpayer's "adjusted qualifying income." Then for any taxpayer whose income exceeds his or her adjusted qualifying income by less than $5,000, the taxpayer's tax liability, including his or her recapture amount, can be given by the following equation:

$$T = Y \bullet t + R \bullet ((Y - AQI) / 5{,}000)$$

This simplifies to equation (1).

$$(1)\ T = Y \bullet (t + (R/5{,}000)) - (R \bullet AQI/5{,}000)$$

An increase in income, Y, by an additional $1.00, increases the taxpayer's tax liability by t, the statutory marginal tax rate, plus $R/5{,}000$ (the recapture amount divided by 5,000).

III. DISCUSSION OF ISSUES GENERALLY

In general

The preceding analysis establishes that numerous taxpayers face effective marginal tax rates that are different from the statutory marginal tax rates of the Code. This raises several tax policy questions. First, economists argue that effective marginal tax rates create incentives, or disincentives, for taxpayers to work, save, donate to charity, and engage in other types of activities. These incentives may distort taxpayer choice. Distorted choice may promote an inefficient allocation of society's labor and capital resources.

Higher marginal tax rates lead to increased aggregate tax liabilities. A second question of tax policy is whether these increased aggregate tax liabilities are equitably distributed across taxpayers.

A third issue relates to the complexity and lack of clarity created by these provisions. The creation of phaseouts adds complexity to the Code. Additional instructions are required and additional computations must be made. These provisions also may create a lack of clarity in taxpayers' minds regarding what precisely is the tax base and what sort of preferences exist in the Code. Complexity and lack of clarity may promote taxpayer disillusionment, a sense of unfairness regarding the Code, and reduce compliance.

The discussion below addresses each of these issues. It also discusses certain issues that refine the preceding calculations of effective marginal tax rates: the extent to which taxpayers may be subject to multiple provisions; the determination of effective marginal tax rates when one considers that many taxpayers also may be subject to the payroll tax; the determination of effective marginal tax rates when one considers interaction between the regular tax and the alternative minimum tax; and the determination of effective marginal tax rates when one considers interaction with State income taxes.

Issues of efficiency

While for the large majority of taxpayers the taxpayer's effective marginal tax rate equals the taxpayer's statutory marginal tax rate, the analysis of the preceding sections documents that there is a sizeable percentage and a large absolute number of taxpayers for whom the taxpayer's effective marginal tax rate is different from, and generally larger than, the taxpayer's statutory marginal tax rate. Economists often emphasize the importance of effective marginal tax rates because, they argue, it is effective marginal tax rates that create incentives, or disincentives, for taxpayers to work, to save, or to take advantage of various tax preferences. These incentives may distort taxpayer choice. Distorted choice may promote an inefficient allocation of society's labor and capital resources. A more efficient allocation of labor and capital resources would leave society with the same output of goods and services as it has today,

plus additional resources which could be devoted to satisfying private wants or providing additional public goods.

Some analysts have suggested that high effective marginal tax rates may alter taxpayers' decisions to work. For example, assume a married couple with two dependent children currently in the 31–percent tax bracket has an AGI of $186,800. This AGI would place the couple at the bottom of the phaseout range of the personal exemption phaseout. Further assume that one of the couple has an opportunity to take on an additional project at work that will increase the couple's net income by $2,500. As was established in Part II.D, above, the additional $2,500 in income to this couple will increase the couple's tax liability by $842, leaving the couple an after tax net addition to income of $1,648.[78] The taxpayer may feel net remuneration of $1,648 is insufficient to offset the loss of leisure time and the effort that would be expended to complete the project. If the taxpayer chooses not to work, society loses the benefit of his or her labor.

There is disagreement among economists on the extent to which labor supply decisions are affected by the effective marginal tax rate. Empirical evidence indicates that taxpayer response is likely to vary depending upon a number of taxpayer specific factors. In general, findings indicate that the labor supply of so-called "primary earners" tends to be less responsive to changes in effective marginal tax rates than is the labor supply of "secondary earners."[79] Some have suggested that the labor supply decision of the lower earner or "secondary earner" in married households may be quite sensitive to the household's effective marginal tax rate.[80] Other evidence suggests the decision to work additional hours may be less sensitive to changes in the effective marginal tax rate than the decision to enter the labor force.[81] That is, there may be more effect on an individual currently not in the labor force than on an individual already in the labor force.

However, the importance of the personal exemption phaseout to the labor supply decision in the example crafted above is not in the total effective marginal tax rate, but only in the incremental effect of the personal exemption phaseout provision. Because the couple is otherwise in the 31-percent statutory marginal tax bracket, in the absence of the personal exemption phaseout, an additional $2,500 of income would provide a net increase in after-tax income of $1,725 ($2,500 in gross income less $775 in income taxes that

---

[78] As explained in Part II.D, an additional $2,500 in income of this couple results in an effective marginal tax rate that is equal to the couple's statutory tax rate (31 percent) multiplied by one plus 0.0216 times the number of personal exemptions the couple many claim (four), or 31 percent multiplied by 1.0864, resulting in an effective marginal tax rate of 33.68 percent.

[79] The phrase "primary earner" refers to the individual in the household who is responsible for providing the largest portion of household income. "Secondary earners" are earners other then the primary earner.

[80] See, Charles L. Ballard, John B. Shoven, and John Whalley, "General Equilibrium Computations of the Marginal Welfare Costs of Taxes in the United States," *American Economic Review,* 75, March 1985, for a review of econometric studies on labor supply of so-called primary and secondary earners. United States Congress, Congressional Budget Office, *For Better or For Worse: Marriage and the Federal Income Tax,* June 1997, pp. 10–12, also reviews this literature.

[81] Robert K. Triest, "The Effect of Income Taxation on Labor Supply in the United States," *The Journal of Human Resources,* 25, 1990. More recently, Nada Eissa, "Tax Reforms and Labor Supply," in James M. Poterba, editor, *Tax Policy and the Economy,* 10, (Cambridge: The MIT press), 1996, reviews this literature with particular emphasis on the labor supply of women. Her evidence suggests that marginal tax rates may be an important determinant of labor force participation.

would result from the 31-percent statutory marginal tax rate). The personal exemption phaseout reduces the net after-tax income by an additional $127. One might conclude from this comparison that whatever marginal disincentive effect there might be is largely due to the statutory rate and that the incremental efficiency loss from the provisions by which the effective marginal tax rate deviates from the statutory marginal tax rate may be relatively small. That conclusion may not be correct in all circumstances. The efficiency loss increases as the effective marginal tax rate increases. That is, an increase in an effective marginal tax rate from 30 percent to 31 percent creates a greater efficiency loss per dollar of additional tax revenue than an increase in an effective marginal tax rate from 20 percent to 21 percent.[82] Without specific information regarding taxpayer behaviorial response, it is not possible to quantify the magnitude of the efficiency loss that might be created.

Economists have undertaken special study of the effect of effective marginal tax rates that are created by the earned income credit.[83] Because, as Figures 1–3 in Part II.E., above, show, the EIC creates varying effective marginal tax rates, the aggregate effect on the economy from the EIC's structure is difficult to determine. In theory, for a taxpayer in the phase-in range, the EIC may either increase or decrease his or her labor supply. While the higher net return to additional work made possible by the phase-in makes more work attractive, the taxpayer's greater total income as a result of the subsidy makes leisure time attractive as well. A taxpayer in the flat range has no marginal inducement to increase work and, by having increased the taxpayer's net income, the EIC may make leisure time more appealing. In the phaseout range, the higher effective marginal tax rate combined with the increase in net income provided by the EIC makes additional work less appealing than additional leisure time. With more taxpayers in the phaseout and flat ranges, one might expect the EIC has a negative aggregate effect on labor supply. The aggregate effect depends on the strength of the offsetting incentives. Using empirical data, analysts disagree regarding the aggregate effects.[84]

The distorted choices that may result from increased effective marginal tax rates are not limited to decisions to work. By reducing the after-tax return to saving, increased effective marginal tax rates may distort taxpayers' decisions to save. Substantial disagreement exists among economists as to the effect on saving of changes in the net return to saving. Empirical investigation of the responsiveness of personal saving to after-tax returns provides no

---

[82] In fact, the magnitude of the efficiency loss from taxation depends upon a measure of the taxpayer's behavioral response, or the elasticity, and the square of the total effective marginal tax rate. Hence, a small change in an effective tax rate can create an efficiency loss that is large in relation to the change in revenue. For a detailed discussion of this point, see Joint Committee on Taxation, *Methodology and Issues in Measuring Changes in the Distribution of Tax Burdens* (JCS–7–93) June 14, 1993, pp. 20–31 and Harvey S. Rosen, Public Finance, second edition, (Homewood, Illinois: Richard D. Irwin), 1988, pp. 291–314.

[83] For a review of this literature, see Stacy Dickert, Scott Houser, and John Karl Scholz, "The Earned Income Tax Credit and Transfer Programs: A Study of Labor Market and Program Participation," in James M. Poterba, editor, *Tax Policy and the Economy, 9,* Cambridge: The MIT Press), 1995. Eissa, "Tax Reforms and Labor Supply," also reviews the effects of the EIC on female labor supply.

[84] Dickert, Houser, and Scholz, "The Earned Income Tax Credit and Transfer Programs," estimated that the 1993 expansion of the EIC would have the effect of reducing hours worked by families already in the labor force, but that that loss would be more than offset by increased labor force participation by low-income individuals not previously in the labor force.

conclusive results. If saving is reduced, future productivity and income is lost to society. Additionally, increased effective marginal tax rates may encourage taxpayers to seek compensation in the form of tax-free fringe benefits rather than taxable compensation. Such distortions in consumption represent an efficiency loss to the economy. Increased effective marginal tax rates also may alter taxpayers' decisions regarding when to recognize income or claim expenses. Any such tax motivated changes in the timing of income or expense generally require time and expense by the taxpayer. Such time and expense represents an efficiency loss to the economy.[85] As noted above in the context of labor supply, it is difficult to determine the magnitude of potential efficiency loss that may arise from provisions that create an effective marginal tax rate that deviates from the statutory marginal tax rate without information regarding the taxpayers' responses to changes in tax rates.

For some provisions, the one-time or temporary nature of a provision may limit taxpayer behavioral response to the deviation in the effective marginal tax rate from the statutory marginal tax rate. If taxpayer behavioral response is limited, efficiency loss is limited. For example, itemized deductions for unusually large medical expenses, itemized deductions for unreimbursed casualty losses, the adoption credit or exclusion, the recapture of interest from a qualified mortgage bond, and the first-time purchase of a home in the District of Columbia tend to be events that happen once or infrequently. If a taxpayer is subject to the effective marginal tax rate created by these provisions for only one year, the taxpayer is less likely to reduce labor supply, change the type of compensation they receive, or reduce saving. On the other hand, if the taxpayer has the opportunity to plan in advance, the one-time nature of these events may induce the taxpayer to shift the timing of income or expense. Similarly, expenditures on college tuition and repayment of student loans are of limited duration. In such circumstances, the increase in effective marginal tax rates above the statutory tax rates may not lead to a reduction in the labor supply of the taxpayer. Other provisions such as the phaseout of personal exemptions and the general limitation on itemized deductions might be expected to affect the same taxpayers year after year. These provisions may be more likely to create efficiency loss.

Some observers note that a benefit of phaseout provisions is that they reduce the revenue cost of the tax benefit to the Federal government by limiting the number of taxpayers who can take advantage of the benefit. They note that reduction in revenue cost may be efficiency improving. In the absence of these provisions, if the Federal government were to maintain the same revenue, statutory marginal tax rates might be raised. An increase in marginal tax rates, whether by altering the rate table or by creating a phaseout, creates the potential for efficiency loss. As an alternative, statutory rates could be left unchanged and the income tax could yield less revenue. If this leads to deficits and borrowing, interest costs economy-wide could be increased, which may create a drag on future

[85] For a recent review of some of the economic literature relating to taxes and labor supply, consumption distortions, and the timing of income recognition see, John F. Navratil, *Essays on the Impact of Marginal Tax Rate Reductions on the Reporting of Taxable Income on Individual Income Tax Returns,* unpublished Harvard University Ph.D. Thesis, 1995.

economic growth. To put potential efficiency losses from the provisions analyzed in this pamphlet in context, one should compare them to the efficiency of the alternative tax system that did not include such provisions.

Other observers note that an alternative to phase-out ranges is to have a "cliff." That is, a tax benefit could be claimed by all taxpayers with incomes below some level, say $50,000, and the tax benefit would be denied to all taxpayers with income equal to or greater than $50,000. The effective marginal tax rate on the dollar earned that takes the taxpayer's income from $49,999 to $50,000 would be very large. A cliff creates all of the same issues of distorted taxpayer behavior as does a phase-out range. The advantage of the cliff is that the number of taxpayers who would have an effective marginal tax rate that deviates from the statutory marginal tax rate would be smaller. In simple terms, a cliff trades off higher effective marginal tax rates for fewer affected taxpayers. As explained above, the efficiency cost of the higher effective marginal tax rates may be quite high. However, if the efficiency loss results from the distorted behavior of relatively few taxpayers, the aggregate efficiency loss to the economy may be less. Some think that whatever the efficiency arguments, cliffs are unfair and serve as traps for unwary taxpayers. As is common in tax policy, policy design involves tradeoffs of efficiency, equity, and complexity. The next section discusses some of the equity issues related to provisions that cause effective marginal tax rates to deviate from statutory marginal rates.

Issues of equity

Analysts generally apply two concepts when assessing the equity, or fairness, of a tax system: vertical equity and horizontal equity. The concept of vertical equity compares the tax burdens of taxpayers at different levels of income and asks how the tax burdens of lower-income taxpayers compare to the tax burdens of higher-income taxpayers. There is no agreed upon standard as to what is the most fair distribution of tax burdens in comparison to the taxpayer's income. Vertical equity is usually discussed in terms of the progressivity or regressivity of the tax system. The concept of horizontal equity asks whether taxpayers who otherwise are similarly situated bear the same tax burden. A taxpayer's income usually is used as the measure to assess equality of economic circumstances.

Overall, the Federal individual income tax is a progressive tax. That is, the average tax rate increases as taxpayers' incomes increase. The existence of phaseouts and other provisions that create effective marginal tax rates that differ from statutory marginal tax rates do not make the Federal individual income tax a regressive or proportional tax. The phaseout and other provisions identified in this pamphlet generally operate to increase the overall progressivity of the income tax. The majority of the provisions deny tax benefits to higher-income taxpayers, while preserving tax benefits to low-income and middle-income taxpayers. Indeed, the legislative rationale underlying some of the phase-out provisions was to deny tax benefits to taxpayers with incomes above some specified level. For example, the earned income credit reduces the income tax liabilities of certain low-income taxpayers, and its phaseout denies

the same benefits to middle-income and higher-income taxpayers. As a result, the tax burden as a proportion of income rises as taxpayers' incomes increase. Similarly, the phaseout of the personal exemptions maintains the tax benefit of the personal exemptions for all taxpayers with incomes below the phaseout range, denies the tax benefit to all taxpayers with income above the phase-out range, and partially denies the tax benefit within the phase-out range. In this way, the phaseout increases the overall progressivity of the income tax.

As noted in Part II.A., above, the statutory marginal tax rate exceeds the average tax rate for almost all taxpayers. The preceding analysis of the various provisions shows that in most cases these provisions cause effective marginal tax rates to exceed statutory marginal tax rates. When a taxpayer's marginal tax rate exceeds the taxpayer's average tax rate, the taxpayer's average tax rate rises. Thus, by raising effective marginal tax rates these provisions cause average tax rates to rise as income rises. The result is a progressive tax system.

While the phaseouts and other provisions may help create a progressive individual income tax, they appear to fail the test of horizontal equity. Because the phaseouts and other provisions relate to specific provisions of the Code and specific defined economic activities, two different taxpayers may have the same income and one can be subject to a phase-out provision while another is not. For example, two married couples may have identical modified AGI of $85,000, the same number of children, and other identical economic characteristics. However, if the Smith family has a daughter in college while the Jones family daughter forgoes college, the Smiths and the Jones will have different Federal income tax liabilities. The Smiths will be able to claim a tax credit for a portion of their daughter's college expenses. The Jones family will not. The Smiths will have a smaller tax burden. However, the family income of $85,000 puts the Smith family in the phase-out range for the HOPE or Lifetime Learning credits, so the Smith family will have an effective marginal tax rate greater than that of the Jones family, but will be able to claim some education credits against their income tax liability. Some observers find it unfair that the Smith family has a higher effective marginal tax rate than does the Jones family, but, in fact, the Smith family has the lower aggregate tax burden. Other observers would find it unfair that the Jones family has a higher aggregate tax burden because they are not treated equally to the Smiths. This would appear to violate the concept of horizontal equity. However, the apparent horizontal inequity is not created by the phase-out provision. If, in the example above, Smith and Jones had each had incomes of $60,000, beneath the phase-out range, it would remain the case that Smith's tax liability is less than Jones's by reason of the credit.[86]

One rationale for creating the education credits was a belief that the burdens of paying for a college education imply that two families cannot be considered to be similarly situated if, though all else is equal, one is paying college expenses while the other is not. Advocates of this position would aver that horizontal equity is not vio-

[86] In this case, both Smith and Jones would have the same effective marginal tax rate.

lated. They would note that the education credits apply equally in the sense of horizontal equity to all taxpayers incurring college education expenses.

Almost all of the provisions reviewed in this pamphlet might be argued to create horizontal inequities similar to the example of the education credits. Only the phase-out of the personal exemptions clearly maintains horizontal equity as almost all taxpayers claim personal exemptions. The inclusion of social security benefits in the individual income tax, the general limitation on itemized deductions, and the earned income credit also may preserve horizontal equity as in practice almost all taxpayers over the age of 65 receive social security benefits, the vast majority of higher-income taxpayers itemize deductions, and the majority of lower-income taxpayers have wage income, so such provisions apply to all similarly situated taxpayers.

Complexity and clarity

Many of the provisions identified in this pamphlet require additional computations by taxpayers, marginally increasing both the time required of the taxpayer and the probability of making an error. Some provisions, such as the phase-out of deductibility of contributions to IRAs, may require additional record keeping by the taxpayer. Other provisions, such as the limitation on itemized deductions and the phase-out of personal exemptions, do not require additional record keeping. As reported in Table 2 in Part II.A., above, the Joint Committee staff estimates that approximately 33 million taxpayers are subject to these provisions.[87] The provisions affecting the most taxpayers are the phase-out of the EIC, the 2-percent floor on miscellaneous deductions, and the phaseout of the exclusion of social security benefits.

In addition to whatever additional complexity they create, such provisions may make the Code less clear and lead to taxpayer confusion regarding the nature of the individual income tax. As noted above, these provisions act like increases in marginal tax rates, but are not stated as statutory rates. Likewise, taxpayers generally understand that certain deductible expenditures are "favored" and reduce their tax liability or that certain credits may be claimed for specified expenditures. Because taxpayers do not always know what their annual income will be or do not always know all of the requirements of the Code, these provisions may make it harder for taxpayers to plan to take advantage of certain tax-favored activities.

On the other hand, by limiting the number of taxpayers eligible to qualify for certain tax benefits, some of the provisions reduce computations, possibility of error, and record keeping. For example, the 7.5-percent of AGI floor on deductible medical expenditures eliminates the need for record keeping and computation for the approximately 30 million taxpayers who claim itemized deductions other than for medical expenses. It also may induce some taxpayers to claim the standard deduction which provides significant simplification.

[87] The estimate in Table 2 does not include certain provisions.

Complexity and lack of clarity may promote taxpayer disillusionment and a sense of unfairness regarding the Code, and may reduce compliance. It probably is impossible to discern the extent, if any, to which compliance rates have been affected by the existence of the provisions described in this pamphlet.

Layering of provisions

It is possible for taxpayers to be subject to more than one of the phase-outs or phase-ins simultaneously. Certain of the phaseouts are mutually exclusive—for example, one could not simultaneously be subject to the personal exemptions phase-out and the phaseout for the deductibility of interest on qualified student loans, as the income ranges of the separate phaseouts do not overlap. However, other phaseouts can overlap. Chart 2 can be used as a general guide to the income levels where multiple phaseouts can overlap. Some care must be used in interpreting the chart, however. For example, the chart shows that taxpayers in the $20,000 to $30,000 AGI range could be subject to a combination of the EIC and dependent care credit phaseouts and the phase-in of Social Security benefits. However, one is unlikely to be subject to the Social Security inclusion and receive either the EIC or the dependent care credit, given the distinctly different demographics of the taxpayers that benefit from Social Security as compared to the other provisions. Additionally, not all phaseouts that could conceivably affect a given AGI class will necessarily have been listed; rather, the provisions were listed in the income classes that they would most commonly affect. For a more detailed and complete description of the effective marginal tax rates that are listed in the chart, refer to the specific section of this report that discusses that provision.

Taxpayers who are simultaneously subject to multiple phaseouts will face higher effective marginal tax rates than if subject to one or no phaseouts. For example, if a taxpayer with two qualifying children receives an EIC on $25,000 in wage income, that taxpayer will be subject to the phase-out of the EIC (phaseout range is $12,260–$30,095). If the taxpayer also claims the dependent care credit, he or she will also be in the phase-down range for that credit ($20,000–$30,000). As a result, on an additional $1,000 of income, this taxpayer would lose $210.60 in EIC benefits and $24 in the dependent care credit. Additionally, the taxpayer would owe $150 in Federal income taxes. The additional $1,000 would result in additional tax of $384.60, for a combined effective marginal rate of 38.5 percent.

Another example of overlapping credits could occur at higher income levels. For example, a married couple with an AGI of $125,000 and three children would be in the phase-out range of the child credit, which begins at $110,000. They would also be subject to the limitation on itemized deductions, which begins at $124,500. As previously discussed, the limitation on itemized deductions increases the effective marginal rate to 103 percent of the statutory rate, and the child credit adds 5 percentage points to the effective marginal tax rate. Because the couple will likely be in the 28-percent statutory tax rate bracket, their effective marginal tax rate from the itemized deduction limitation will be 28.84 percent (28 percent times 1.03). With the addition of the effect of the child

credit phaseout, their true effective marginal tax rate will be 33.84 (28.84 plus 5) percent. However, it should be pointed out that this couple would be completely phased out of their child credits when their AGI hit $134,000, and then they would only be affected by the itemized deduction limitation, implying their effective marginal tax rate would fall back to 28.84 percent.

It is possible for the interactions of the phaseouts to create marginal tax rates that many would think of as excessive. For example, consider the following conceivable scenario: A 62-year-old head of household retiree with two children in college who both would qualify for a HOPE credit, $10,000 in Social Security benefits, $10,000 in labor income, and $23,000 in taxable pensions, dividends, etc., could face an effective marginal tax rate as high as 90 percent. If this taxpayer were to earn an additional $100 in wage income, he would owe $7.65 in additional social security taxes.[88] Additionally, this taxpayer would have income and social security benefits that would place him in the situation of having an additional 85 cents of social security benefits included in taxable income for each dollar of additional non-social security income. Hence, the taxpayer would see his taxable income rise by $185 as a result of the additional $100 in wage income. This taxpayer would be in the 15 percent statutory bracket assuming they claimed the standard deduction. Hence, the additional income would imply additional federal income taxes of $27.75 (185 percent times 15 percent times $100). If the two children each qualified for the full $1,500 HOPE credit, the taxpayer would have $3,000 in potential credits. However, under the above income circumstances, the taxpayer would be in the phase-out range for the HOPE credit (AGI of $40,000–$50,000 for head of household filers). Because the length of the phase-out range is only $10,000, the $3,000 credit is phased out at a rate of 30 percent for each dollar increase in AGI in the phaseout range (see previous discussion of the phaseout of the HOPE credit in Part II.J). Ordinarily, then, this taxpayer would experience an additional 30 percentage point increase in his statutory marginal tax rate—the additional $100 in wage income would cause a loss of $30 in credits. However, the phaseout of HOPE credit is based on AGI, not the wage income itself, and because of the social security provision that also affects this taxpayer, AGI rises by $185 for each dollar of wage income. Hence, rather than lose $30 in HOPE credits, the taxpayer would lose $55.50 (30 percent of $185) in credits. In the end, this taxpayer would owe $90.90 in additional federal taxes for the additional $100 in wage income. It is possible that State and local income taxes could push this taxpayer into a situation where the taxes owed as a result of the additional income could exceed the full amount of the income.[89]

---

[88] The employer share of social security taxes is ignored for this example.

[89] The taxpayer of this example also would be subject to reduction in his actual social security benefits as a result of the social security earnings test, which would push his effective marginal tax rate over 100 percent. The taxpayer would lose $1 in social security benefits for each two dollars of earnings above a certain threshold ($9,120 in 1998) The $100 increase in wage income (setting aside the loss in Social Security benefits for the moment) causes AGI and taxable income to rise $185. The loss of $50 in Social Security benefits causes AGI and taxable income to fall by only $21.25 (this equals 85 percent of $25—since only one-half of SS is added to other income to determine the income level that establishes the share of SS that is taxable). On net then, the $100 in wages causes AGI to rise $185–$21.25=$163.75. The retiree's federal income

Continued

In general, the phase-out provisions that affect the greatest numbers of taxpayers do not have phaseouts that overlap. For example, a married couple in the phase-out range for the HOPE credit ($80,000–$100,000) could not be eligible for the EIC (phased out by $30,095), will have already have had any dependent care credit phased down (phase down is complete by $30,000), and would not yet be in the phase-out range for the child credit (phaseout starts at $110,000), the limitation on itemized deductions (limitation starts at $124,500), or the personal exemptions phaseout (phaseout starts at $186,800).

---

tax liability before credits thus rises 1.6375•15%•$100 or $24.56. His $100 of labor income causes his AGI to rise $163.75, and thus his credit declines by 1.6375•$30, or $49.13. The full Federal tax on the $100 in wage income is thus $7.65+$50+$24.56+$49.13=$131.34. For State income taxes that piggy-back on the Federal income tax, one should add the State marginal tax rate times 1.6375 to these figures.

Chart 2.—Potential Overlapping Provisions Creating Different Effective Marginal Tax Rates

AGI [1]	Provision creating effective marginal tax rate different from statutory rate	Effective marginal tax rate
$0–$10,000	Earned income credit	*No children:* Phasein—Statutory rate minus 7.65; phaseout—Statutory rate plus 7.65. *One child:* Phasein—Statutory rate minus 34 percentage points. *Two children:* Phasein—Statutory rate minus 40 percentage points.
$10,000–$20,000	Earned income credit	*One child:* Statutory rate plus 15.98 percentage points. *Two children:* Statutory rate plus 21.06 percentage points.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
	Elderly/disabled credit	Statutory rate plus 7.5 percentage points.
	Dependent care credit	Statutory rate plus 2.4 percentage points.
$20,000–$30,000	Earned income credit	*One child:* Statutory rate plus 15.98 percentage points. *Two children:* Statutory rate plus 21.06 percentage points.
	Social Security inclusion (single filer)	1.5 times statutory rate.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
	Dependent care credit	Statutory rate plus 2.4 percentage points.

Chart 2.—Potential Overlapping Provisions Creating Different Effective Marginal Tax Rates—Continued

AGI [1]	Provision creating effective marginal tax rate different from statutory rate	Effective marginal tax rate
$30,000–$40,000	Social Security inclusion	1.5 and 1.85 times statutory rate.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
	IRA deductibility (single filer)	Up to 1.2 times statutory rate.
$40,000–$50,000	Social Security inclusion	1.85 times statutory rate.
	HOPE credit (single filer)	Statutory rate plus 15 percentage points.
	Lifetime Learning credit (single filer)	Statutory rate plus 15 percentage points.
	Student loan interest	1.167 times statutory rate.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
$50,000–$75,000	IRA deductibility	Up to 1.2 times statutory rate.
	Student loan interest	1.167 times statutory rate.
	Exclusion of interest from education savings bond (single filer).	(1.0 + exclusion/$15,000) times statutory rate.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
	First time D.C. homebuyer credit (single filer).	Statutory rate plus 25 percentage points.
$75,000–$100,000	Child tax credit (single filer)	Statutory rate plus 5 percentage points.

	Eligibility for Roth IRA (single filer)	1.0 to 1.133 times statutory rate.
	Eligibility for education IRA (single filer)	Not precisely determinable.
	HOPE credit (joint filer)	Statutory rate plus 7.5 percentage points.
	Lifetime learning credit (joint filer)	Statutory rate plus 7.5 percentage points.
	Exclusion of interest from education savings bond (joint filer).	(1.0 + exclusion/$30,000) times statutory rate.
	Adoption credit/exclusion	Statutory rate plus (credit/$40,000), or (1.0 + exclusion/$40,000) times statutory rate.
	First time D.C. homebuyer credit (single filer).	Statutory rate plus 25 percentage points.
	7.50-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
$100,000–$150,000	Pease limitation on itemized deductions	1.03 times statutory rate.
	Personal exemption phaseout (single filer)	1.0216 times statutory rate.
	Child tax credit (joint filer)	Statutory rate plus 5 percentage points.
	Eligibility for Roth IRA (single filer)	1.0 to 1.133 times statutory rate.
	Eligibility for education IRA (single filer)	Not precisely determinable.
	Exclusion of interest from education savings bond (joint filer).	(1.0+exclusion/$30,000) times statutory rate.
	Adoption credit/exclusion	Statutory rate plus (credit/$40,000), or (1.0+exclusion/$40,000) times statutory rate.
	First time D.C. homebuyer (joint filer)	Statutory rate plus 25 percentage points.
	Rental real estate losses	1.0 to 1.5 times statutory rate.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
$150,000–$200,000	Pease limitation on itemized deductions	1.03 times statutory rate.

Chart 2.—Potential Overlapping Provisions Creating Different Effective Marginal Tax Rates—Continued

AGI [1]	Provision creating effective marginal tax rate different from statutory rate	Effective marginal tax rate
	Personal exemption phaseout (single)	1.0216 times statutory rate.
	Personal exemption phaseout (H/H)	Statutory rate multiplied by 1.0 plus 0.0216 for each exemption.
	Personal exemption phaseout (joint)	Statutory rate multiplied by 1.0 plus 0.0216 for each exemption.
	Eligibility for Roth IRA (joint)	1.0 to 1.2 times statutory rate.
	Eligibility for education IRA (joint)	Not precisely determinable.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.
Over $200,000	Rehabilitation tax credit	1.5 times statutory rate.
	Pease limitation on itemized deductions	1.03 times statutory rate.
	Personal exemption phaseout	Statutory rate multiplied by 1.0 plus 0.0216 for each exemption.
	7.5-percent floor on medical expense deductions.	1.075 times statutory rate.
	2-percent floor on miscellaneous deductions	1.02 times statutory rate.
	10-percent floor on casualty loss deduction	1.1 times statutory rate.

Footnote to chart 2:

[1] This column is based on AGI. Several of the phaseout provisions are based on "modified AGI." See chart 1 and the text for details.

Source: Joint Committee on Taxation.

Effective marginal tax rates, the Federal individual income tax and Federal payroll taxes

This pamphlet's analysis has discussed statutory and effective marginal tax rates in terms of the Federal individual income tax. The majority of taxpayers also are subject to the payroll tax either at a rate of 7.65 percent (OASDI and HI combined), at a rate of 1.45 percent (HI component only), or at a rate of 15.30 percent (self-employment tax[90]). For these taxpayers, an additional $1.00 of wage income generally will increase the taxpayer's *income* tax liability by the taxpayer's *effective marginal income tax rate* and, in addition, will increase the taxpayer's combined (income and payroll) tax liability by the sum of the taxpayer's effective marginal income tax rate and the taxpayer's applicable marginal payroll tax rate. For example, for the taxpayer with wage earnings less than $68,400 in 1998, an additional $1.00 of wages will increase his or her combined tax liability by his or her effective marginal income tax rate plus 7.65 percent.[91] Moreover, most analysts conclude that both the employee's and employer's share of the payroll tax is borne by the employee and that therefore the marginal payroll tax rate would include both the employee's and employer's share. However, such a computation is more subtle than merely adding the employer's share of 7.65 percent to the employee rate of 7.65 percent. If the employer's share is to be added, that amount also should be accounted as wage compensation to the employee, as it represents additional compensation paid that is taxed away at the employer level. Accordingly, an additional $1.00 of wage income paid to the employee actually represents gross compensation of $1.0765 when the employer's payroll tax share is taken into consideration. Thus, the effective marginal payroll tax rate would be 14.21 percent (the sum of the employee's 7.65 cents plus the employer's 7.65 cents divided by the employee's additional total wage compensation of $1.0765). In short, for those taxpayers subject to the payroll tax, the analysis of this pamphlet will understate their effective combined marginal tax rate.[92]

The alternative minimum tax and effective marginal tax rates

Thus far, the analysis of this pamphlet has considered only the effective marginal tax rates that arise for taxpayers subject to the regular individual income tax. The AMT presents several issues in trying to determine the marginal effective tax rate applicable to an individual. First, if an individual is subject to the AMT, the statu-

---

[90] The 15.3-percent self employment tax rate equals the sum of the employee's and employer's share of the payroll tax. One-half of a self-employed individual's self-employment tax for the taxable year is allowed as an above-the-line deduction for the individual's Federal individual income tax. A self-employed taxpayer with self-employment income in excess of $68,400 in 1998 would be subject to a 2.9-percent HI tax rate only.

[91] For employees with wages above $68,400, only the HI component of the payroll tax applies. The HI component is imposed at a rate of 1.45 percent on the employee's wages plus 1.45 percent on the employer. Analysis of effective marginal tax rates comparable to that of the subsequent text would apply to those taxpayers for whom additional wages are subject only to the HI component of the payroll tax.

[92] In calculating an effective combined marginal tax rate applicable to an additional $1.00 of wage income for a taxpayer subject to the payroll tax, not only should the effective marginal *payroll* tax rate be adjusted for the additional amount of compensation that is taxed away at the employer level, but the effective marginal *income* tax rate also should be adjusted for the additional amount of compensation that is taxed away at the employer level.

tory tax rates that one should focus on in determining the effective marginal tax rate generally are the AMT rates. However, if a taxpayer who otherwise would be subject to the AMT generates sufficient additional income, the taxpayer may become subject to the regular tax. In such a case, the regular tax rates would determine the taxpayer's effective marginal tax rate. For example, assume that a married couple filing a joint return have a large number of dependents and a large amount of State and local property and income taxes so that their taxable income for regular tax purposes is $42,520 (resulting in a regular tax liability of $6,400), but their AMTI (before their $45,000 exemption amount) is $70,000 (resulting in a tentative minimum tax of $6,500). Their marginal tax rates are 28 percent for regular tax purposes and 26 percent for AMT purposes. In this case, the taxpayers are subject to AMT ($6,500 being greater than $6,400). If the taxpayers generate an additional $6,000 of income, their regular tax liability becomes $8,080 and their tentative minimum tax becomes $8,060, and the taxpayers are no longer subject to the AMT. Their effective marginal tax rate for the additional $6,000 in taxable income is 26.33 percent ($1,580/$6,000), which is a blended rate comprised of both the 28–percent regular tax rate and the 26–percent AMT rate. Any additional marginal income in excess of this $6,000 will be subject to the 28–percent marginal rate.

In addition, to the extent that an individual's AMT liability gives rise to the AMT credit that may be used by the taxpayer in the future to reduce his or her regular tax liability, the effect of marginal income on the present value of such credit also must be taken into account.[93] Finally, because the AMT exemption amount is phased out as the taxpayer's AMTI increases, the marginal effective AMT rate for a taxpayer within the phaseout range is higher than the applicable statutory AMT rate. The effective marginal AMT rates are 32.5 percent at the beginning of the phaseout range and 35 percent at the end of the phaseout range.

The AMT may also provide an opportunity for an individual to experience what some may consider a zero or negative effective marginal tax rate. This occurs if the taxpayer's tentative minimum tax is less than the taxpayer's regular tax liability before credits, but more than the taxpayer's regular tax liability reduced by credits. In such case, under present law, the taxpayer may only claim an amount of tax credits that reduces his or her regular tax liability to an amount equal to his or her tentative minimum tax liability. A taxpayer confronted with this fact pattern may wish to recognize additional taxable income in order to increase his or her before-credit regular tax liability by an amount greater than his or her tentative minimum tax. This allows the individual to use more tax credits that would otherwise expire unutilized. The recognition of the additional income may increase current year tax liability as the additional income may increase both the taxpayer's regular tax liability before credits and the taxpayer's tentative minimum tax liability. However, to the extent that the additional taxable income is income that the taxpayer would otherwise recognize in a future

[93] The analysis would be similar to that presented above in the discussion of IRAs and education IRAs in Parts II. H. and I., respectively, and the passive loss exemption in Part II.P.

year, the taxpayer may be able to reduce future tax liability by an amount greater than the increase in current year tax liability. In present value terms, the taxpayer may be considered to have a negative effective marginal tax rate on the additional income. It is possible for a taxpayer to increase current-year regular tax liability and reduce future-year regular tax liability without changing his or her tentative minimum tax in either period.[94]

For example, assume a single individual is in the highest marginal tax rate bracket for both regular tax and AMT purposes (marginal tax rates of 39.6 and 28 percent, respectively). Further assume that the individual's regular tax liability before credits is $90,000, his tentative minimum tax is $89,000, and he has $2,200 of available credits that cannot be carried forward to a future taxable year. Under present law, the taxpayer can only use $1,000 of credits, resulting in a tax liability of $89,000. However, assume the taxpayer can accelerate $10,000 of additional taxable income otherwise recognizable next year into the current year. In such case, his regular tax liability before credits rises to $93,960, his tentative minimum tax rises to $91,800, and he can use $2,160 of available credits, resulting in a tax liability of $91,800. Even though the taxpayer's current year tax liability increases by $2,800 ($91,800 less $89,000), his future tax liability is reduced by $3,960 ($10,000 times 39.6 percent), assuming the taxpayer would be subject to the regular income tax next year at the highest marginal rate. If the discount rate were 10 percent, the present value of the $3,960 savings would equal $3,600 which is $800 greater than the $2,800 of increased current liability, resulting in an effective marginal tax on the $10,000 of additional income of −8.0 percent. Assuming a lower discount rate, the effective marginal tax rate would be more negative.[95] Assuming a longer period of deferral, the effective marginal tax rate would be less negative, or positive, but even if positive it would be below the taxpayer's current statutory marginal tax rate.[96]

Effective marginal tax rates and other taxes or programs

In addition to payroll taxes and the AMT, other taxes that the taxpayer may be obligated to pay increase the overall effective marginal tax rate. For example, as was noted above when the effect of inclusion of Social Security benefits in the income tax are combined with the effects of the Social Security earnings test applicable to certain retirees, effective marginal tax rates may be higher than those calculated in this pamphlet. For some retirees an additional consideration might be the Federal estate tax. If the senior citizen is contemplating working in part to leave a bequest, then the indi-

---

[94] For example, if the married couple in the preceding example postponed paying some of their State and local taxes, they would increase their current-year regular tax liability and reduce their future-year regular tax liability without changing their tentative minimum tax in either period because such taxes are deductible only for regular tax purposes.

[95] Assuming a discount rate of 5 percent, the effective marginal tax rate would be −9.7 percent.

[96] Assuming a discount rate of 10 percent, but a deferral period of ten years, the present value of $3,960 equals $1,527. Accelerating the $10,000 of income to the present year would lead to an increase in the present value of taxes on the income of $2,800 in the current year less the present value of $1,527 saved ten years from now, or a net present value increase of $1,273. This implies the effective marginal tax rate on the $10,000 of income is 12.7 percent, a rate substantially lower than the taxpayer's regular income statutory marginal tax rate.

vidual would consider the estate tax to increase the effective marginal tax rate applicable to additional dollars of income. Likewise, if a taxpayer sought to earn additional income to purchase a good that is taxable under a State sales tax or a Federal excise tax, the taxpayer might have an effective marginal tax rate on the additional earnings greater than that calculated here.

Most State individual income taxes adopt Federal individual income tax definitions of AGI and taxable income. As a result, the provisions analyzed above that change the taxpayer's effective marginal tax rate by increasing the taxpayer's taxable income subject to tax at the Federal statutory marginal tax rates generally will increase the taxpayer's taxable income subject to State statutory marginal income tax rates. This would create an effective State marginal tax rate in excess of State statutory marginal tax rates. Considering State income taxes would imply that this pamphlet's analysis of effective marginal income tax rates would understate the magnitude of effective marginal tax rates. However, some of the provisions analyzed above, such as the earned income credit, the dependent care credit, and the child tax credit do not alter the taxpayer's Federal taxable income, only the taxpayer's Federal tax liability. Consideration of State income taxes generally would not alter this pamphlet's analysis of effective marginal income tax rates created by those provisions.

The effective marginal tax rates calculated here also do not consider the effects of certain government programs that also implicitly create effective marginal tax rates that deviate from the statutory marginal tax rates in the Code. For example, beneficiaries of food stamp benefits, medicaid benefits, low-income housing subsidies, and subsidized student loans generally are subject to income or asset tests. The benefits of these programs generally are phased out as the individual crosses certain income or asset thresholds. These phaseouts create an implicit marginal tax on additional income earned by the individual.[97] These implicit taxes are in addition to those imposed by the Code and may overlap with some of the provisions analyzed in this pamphlet. To the extent there is overlap of this sort, the analysis here will understate the aggregate effective marginal tax rate.

○

[97] For a brief discussion of the implicit taxes created by the food stamp program and AFDC see, Dickert, Houser, and Scholz, "The Earned Income Tax Credit and Transfer Programs."