OVERVIEW OF PRESENT LAW AND ISSUES RELATING TO TAX AND SAVINGS INCENTIVES FOR EDUCATION

Scheduled for a Public Hearing

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CONTENTS

Page

INTRODUCTION 1

I. OVERVIEW OF PRESENT-LAW TAX INCENTIVES FOR EDUCATION 2

A. General Tax Treatment of Education Expenses 2

B. Exclusion for Employer-Provided Educational Assistance 2

C. Qualified Scholarships 3

D. HOPE and Lifetime Learning Credits 3

1. HOPE credit 3
2. Lifetime Learning credit 5

E. Provisions Relating to Student Loans 7

1. Deduction for student loan interest 7
2. Exclusion of income from student loan forgiveness 8

F. Education IRAs 8

1. In general 8
2. Coordination with HOPE and Lifetime Learning credits 10

G. Qualified State Tuition Programs 10

H. Exclusion of Interest Earned on Education Savings Bonds 11

I. Individual Retirement Arrangements ("IRAs") 12

1. In general 12
2. Deductible IRAs 12
3. Roth IRAs 13
4. Nondeductible IRAs 14

Page

J. Tax Benefits for Certain Types of Bonds for Educational Facilities and Activities 14

1. Tax-exempt bonds 14
2. Qualified zone academy bonds 18

II. BACKGROUND DATA ON COLLEGE ENROLLMENT AND COSTS . . 20

III. ECONOMIC ANALYSIS 24

A. The Economics of Subsidizing Education 24

B. Treatment of Education Expenses Under an Income Tax 26

INTRODUCTION

The Senate Committee on Finance has scheduled a public hearing on March 3,1999, on issues relating to education savings incentives, education financing, and school construction financing proposals. This document,[1] prepared by the staff of the Joint Committee on Taxation, describes present law and issues relating to tax incentives for education.

Part I of the pamphlet is an overview of present-law tax incentives for education. Part II provides background information with respect to college enrollment and costs. Part III is an analysis of certain economic issues relating to tax incentives for education.

[1] This pamphlet may be cited as follows: Joint Committee on Taxation, *Overview of Present Law and Issues Relating to Tax and Savings Incentives For Education* (JCX-12-99), March 2, 1999.

I. OVERVIEW OF PRESENT-LAW TAX INCENTIVES FOR EDUCATION

A. General Tax Treatment of Education Expenses

Individual taxpayers generally may not deduct their education and training expenses. However, a deduction for education expenses generally is allowed under section 162 if the education or training (1) maintains or improves a skill required in a trade or business currently engaged in by the taxpayer, or (2) meets the express requirements of the taxpayer's employer, or requirements of applicable law or regulations, imposed as a condition of continued employment (Treas. Reg. sec. 1.162-5). Education expenses are not deductible if they relate to certain minimum educational requirements or to education or training that enables a taxpayer to begin working in a new trade or business. In the case of an employee, education expenses (if not reimbursed by the employer) may be claimed as an itemized deduction only if such expenses meet the above-described criteria for deductibility under section 162 and only to the extent that the expenses, along with other miscellaneous deductions, exceed 2 percent of the taxpayer's adjusted gross income ("AGI").

B. Exclusion for Employer-Provided Educational Assistance

A special rule allows an employee to exclude from gross income for income tax purposes and from wages for employment tax purposes up to $5,250 annually paid by his or her employer for educational assistance (sec. 127). This exclusion does not apply to graduate-level courses. In order for the exclusion to apply certain requirements must be satisfied. The educational assistance must be provided pursuant to a separate written plan of the employer. The employer's educational assistance program must not discriminate in favor of highly compensated employees. In addition, not more than 5 percent of the amounts paid or incurred by the employer during the year for educational assistance under a qualified educational assistance program can be provided for the 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. This special exclusion for employer-provided educational assistance expires with respect to courses beginning after May 31, 2000.

For purposes of the special exclusion, educational assistance means the payment by an employer of expenses incurred by or on behalf of the employee for education of the employee including, but not limited to, tuition, fees, and similar payments, books, supplies, and equipment. Educational assistance also includes the provision by the employer of courses of instruction for the employee (including books, supplies, and equipment). Educational assistance does not include (1) tools or supplies that may be retained by the employee after completion of a course, (2) meals, lodging, or transportation, and (3) any education involving sports, games, or hobbies.

In the absence of the exclusion under section 127, employer-provided educational assistance is excludable from gross income and wages as a working condition fringe benefit (sec. 132(d)) only if the education expenses would have been deductible to the employee (if paid by the employee) under section 162. In determining the amount deductible for this purpose, the 2-percent floor on miscellaneous itemized deductions is disregarded.

C. Qualified Scholarships

Present law provides an exclusion from gross income for amounts received as a qualified scholarship by an individual who is a candidate for a degree and used for tuition and fees required for the enrollment or attendance (or for fees, books, supplies, and equipment required for courses of instruction) at a primary, secondary, or post-secondary educational institution (sec. 117). This tax-free treatment does not extend to scholarship amounts covering regular living expenses, such as room and board. In addition to the exclusion for qualified scholarships, present law provides an exclusion from gross income for qualified tuition reductions for certain education provided to employees (and their spouses and dependents) of certain educational organizations (sec. 117(d)).

The exclusion for qualified scholarships and qualified tuition reductions does not apply to any amount received by a student that represents payment for teaching, research, or other services by the student required as a condition for receiving the scholarship or tuition reduction.

D. HOPE and Lifetime Learning Credits

1. HOPE credit

Individual taxpayers are allowed to claim a nonrefundable credit, the "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. 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.[2] The qualified tuition and related expenses must be incurred on behalf of the taxpayer, the taxpayer's spouse, or a dependent of the taxpayer. 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.[3] 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). For

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[2] 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. If an eligible student incurs $2,000 of qualified tuition and related expenses, then he or she is eligible for a $1,500 HOPE credit.

[3] The HOPE credit may not be claimed against a taxpayer's alternative minimum tax liability.

taxable years beginning after 2001, the $1,500 maximum HOPE credit amount and the AGI phase-out range will be indexed for inflation.

The HOPE credit is available in the taxable year the expenses are paid, subject to the requirement that the education is furnished to the student during that year or during the first three months of the next year. Qualified tuition and related expenses paid with the proceeds of a loan generally are eligible for the HOPE credit. The repayment of a loan itself is not a qualified tuition or related expense.

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 in which 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, the student 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 purposes of determining the amount of qualified tuition and related expenses paid by such parent (or other taxpayer) under the provision. In addition, for each taxable year, a taxpayer may elect either the HOPE credit or the "Lifetime Learning" credit (described below) with respect to an eligible student.[4]

The HOPE credit is available for "qualified tuition and related expenses," which include tuition and fees required to be paid to an eligible educational institution as a condition of enrollment or attendance of an eligible student at the institution. Charges and fees associated with meals, lodging, insurance, transportation, and similar personal, living or family expenses are not eligible for the credit. The expenses of education involving sports, games, or hobbies are not qualified tuition and related expenses unless this education is part of the student's degree program.

Qualified tuition and related expenses generally include only out-of-pocket expenses. Qualified tuition and related expenses do not include expenses covered by employer-provided educational assistance and scholarships that are not required to be included in the gross income of either the student or the taxpayer claiming the credit. Thus, total qualified tuition and related expenses are reduced by any scholarship or fellowship grants excludable from gross income under section 117 and any other tax-free educational benefits received by the student (or the taxpayer claiming the credit) during the taxable year. The 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.

[4] The coordination between the HOPE credit, Lifetime Learning Credit, and education IRA provisions is discussed at I.F.2. below.

An eligible student for purposes of the HOPE credit is an individual who is enrolled in a degree, certificate, or other program (including a program of study abroad approved for credit by the institution at which such student is enrolled) leading to a recognized educational credential at an eligible educational institution. The student must pursue a course of study on at least a half-time basis. A student is considered to pursue a course of study on at least a half-time basis if the student carries at least one-half the normal full-time work load for the course of study the student is pursuing for at least one academic period which begins during the taxable year. To be eligible for the HOPE credit, a student must not have been convicted of a Federal or State felony consisting of the possession or distribution of a controlled substance.

Eligible educational institutions generally are accredited post-secondary educational institutions offering credit toward a bachelor's degree, an associate's degree, or another recognized post-secondary credential. Certain proprietary institutions and post-secondary vocational institutions also are eligible educational institutions. In order to qualify as an eligible educational institution, an institution must be eligible to participate in Department of Education student aid programs.

2. Lifetime Learning credit

Individual taxpayers are allowed to claim a nonrefundable credit, the "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. 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 are eligible for the Lifetime Learning credit (i.e., the maximum credit per taxpayer return is $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 Lifetime Learning credit (i.e., the maximum credit per taxpayer return will be $2,000).

In contrast to the HOPE credit, a taxpayer may claim the Lifetime Learning credit for an unlimited number of taxable years. Also 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. The Lifetime Learning 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).

The Lifetime Learning credit is available in the taxable year the expenses are paid, subject to the requirement that the education is furnished to the student during that year or during the first three months of the next year. Qualified tuition and related expenses paid with the proceeds of a loan generally are eligible for the Lifetime Learning credit (rather than repayment of the loan itself).

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 may not 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) for purposes of the provision.

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 for that same taxable year with respect to other students. If, for a taxable year, a taxpayer claims a HOPE credit with respect to a student, then the Lifetime Learning credit is not be available with respect to that same student for that year (although the Lifetime Learning credit may be available with respect to that same student for other taxable years).[5]

The Lifetime Learning credit is available for "qualified tuition and related expenses," which include tuition and fees required to be paid to an eligible educational institution as a condition of enrollment or attendance of a student at the institution. Charges and fees associated with meals, lodging, insurance, transportation, and similar personal, living or family expenses are not eligible for the credit. The expenses of education involving sports, games, or hobbies are not qualified tuition expenses unless this education is part of the student's degree program.

In contrast to the HOPE credit, qualified tuition and related expenses for purposes of the Lifetime Learning credit include tuition and fees incurred with respect to undergraduate or graduate-level (and professional degree) courses.[6]

As with the HOPE credit, qualified tuition and fees generally include only out-of-pocket expenses. Qualified tuition and fees do not include 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. Thus, total qualified tuition and fees are reduced by any scholarship or fellowship grants excludable from gross income under section 117 and any other tax-free educational benefits received by the student during the taxable year (such as employer-provided educational assistance excludable under section 127). The Lifetime Learning 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.

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[5] The coordination between the HOPE credit, Lifetime Learning Credit, and education IRA provisions is discussed at I.F.2. below.

[6] The HOPE credit is available only with respect to the first two years of a student's undergraduate education.

In addition to allowing a credit for the tuition and related expenses of a student who attends classes on at least a half-time basis as part of a degree or certificate program, the Lifetime Learning credit also is available with respect to any course of instruction at an eligible educational institution (whether enrolled in by the student on a full-time, half-time, or less than half-time basis) to acquire or improve job skills of the student.[7] Undergraduate and graduate students are eligible for the Lifetime Learning credit. Moreover, 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 or distribution of a controlled substance.

E. Provisions Relating to Student Loans

1. Deduction for student loan interest

Certain individuals who have paid interest on qualified education loans may claim an above-the-line deduction for such interest expenses, subject to a maximum annual deduction limit (sec. 221). 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. Required payments of interest generally do not include nonmandatory payments, such as interest payments made during a period of loan forbearance. Months during which interest payments are not required because the qualified education loan is in deferral or forbearance do not count against the 60-month period. No deduction is allowed to an individual if that individual is claimed as a dependent on another taxpayer's return for the taxable year.

A qualified education loan generally is defined as any indebtedness incurred solely to pay for the costs of attendance (including room and board) of the taxpayer, the taxpayer's spouse, or any dependent of the taxpayer as of the time the indebtedness was incurred in attending on at least a half-time basis (1) post-secondary educational institutions and certain vocational schools defined by reference to section 481 of the Higher Education Act of 1965, or (2) institutions conducting internship or residency programs leading to a degree or certificate from an institution of higher education, a hospital, or a health care facility conducting postgraduate training.

The maximum allowable deduction per taxpayer return is $1,500 in 1999, $2,000 in 2000, and $2,500 in 2001 and thereafter.[8] The deduction is phased out ratably for individual taxpayers with AGI of $40,000-$55,000 and $60,000-$75,000 for joint returns. The income ranges will be indexed for inflation after 2002.

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[7] Eligible higher educational institutions are defined in the same manner for purposes of both the HOPE and Lifetime Learning credits.

[8] The maximum allowable deduction for 1998 was $1,000.

2. Exclusion of income from student loan forgiveness

Gross income generally includes the discharge of indebtedness of the taxpayer. Under an exception to this general rule, gross income does not include any amount from the forgiveness (in whole or in part) of certain student loans, provided that the forgiveness is contingent on the student's working for a certain period of time in certain professions for any of a broad class of employers (sec. 108(f)).

Student loans eligible for this special rule must be made to an individual to assist the individual in attending an educational institution that normally maintains a regular faculty and curriculum and normally has a regularly enrolled body of students in attendance at the place where its education activities are regularly carried on. Loan proceeds may be used not only for tuition and required fees, but also to cover room and board expenses. The loan must be made by (1) the United States (or an instrumentality or agency thereof), (2) a State (or any political subdivision thereof), (3) certain tax-exempt public benefit corporations that control a State, county, or municipal hospital and whose employees have been deemed to be public employees under State law, or (4) an educational organization that originally received the funds from which the loan was made from the United States, a State, or a tax-exempt public benefit corporation.

In addition, an individual's gross income does not include amounts from the forgiveness of loans made by educational organizations (and certain tax-exempt organizations in the case of refinancing loans) out of private, nongovernmental funds if the proceeds of such loans are used to pay costs of attendance at an educational institution or to refinance any outstanding student loans (not just loans made by educational organizations) and the student is not employed by the lender organization. In the case of loans made or refinanced by educational organizations (as well as refinancing loans made by certain tax-exempt organizations) out of private funds, the student's work must fulfill a public service requirement. Cancellation of the student loan must be contingent upon the student working in an occupation or area with unmet needs and such work must be performed for or under the direction of a tax-exempt charitable organization or a governmental entity.

F. Education IRAs

1. In general

Taxpayers may establish certain trusts or custodial accounts created exclusively for the purpose of paying qualified higher education expenses of a named beneficiary ("education IRAs") (sec. 530). Annual contributions to education IRAs may not exceed $500 per designated beneficiary, and may not be made after the designated beneficiary reaches age 18. The contribution limit is phased out for taxpayers with modified AGI between $95,000 and $110,000 ($150,000 and $160,000 for taxpayers filing joint returns); the AGI of the contributor not the beneficiary controls whether a contribution is permitted by the taxpayer. No contribution may be made to an education IRA during any year in which any contributions are made by anyone to a qualified State tuition program on behalf of the same beneficiary.

Earnings on contributions to the account generally are subject to tax when withdrawn.[9] However, distributions from an education IRA are excludable from the gross income of the distributee (i.e., the student) to the extent that the distribution does not exceed the qualified higher education expenses incurred by the beneficiary during the year the distribution is made (provided that a HOPE credit or Lifetime Learning credit is not claimed with respect to the beneficiary for the same taxable year). The earnings portion of an education IRA distribution not used to pay qualified higher education expenses is includible in the gross income of the distributee and generally is subject to an additional 10-percent tax.[10]

Tax-free (and penalty-free) transfers or rollovers of account balances from one education IRA benefitting one beneficiary to another education IRA benefitting 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 term "qualified higher education expenses" includes tuition, fees, books, supplies, and equipment required for the enrollment or attendance of the designated beneficiary at an eligible education institution, regardless of whether the beneficiary is enrolled at an eligible educational institution on a full-time, half-time, or less than half-time basis. Moreover, qualified higher education expenses include certain room and board expenses for any period during which the beneficiary is at least a half-time student. Qualified higher education expenses include expenses with respect to undergraduate or graduate-level courses. In addition, section 530(b)(2)(B) specifically provides that qualified higher education expenses include amounts paid or incurred to purchase tuition credits (or to make contributions to an account) under a qualified State tuition program for the benefit of the beneficiary of the education IRA.

Qualified higher education expenses generally include only out-of-pocket expenses. Such qualified higher education expenses do not include expenses covered by educational assistance for the benefit of the beneficiary that is excludable from gross income. Thus, total qualified higher education expenses are reduced by scholarship or fellowship grants excludable from gross income under present-law section 117, as well as any other tax-free educational benefits, such as employer-provided educational assistance that is excludable from the employee's gross income under section 127.

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[9] In addition, education IRAs are subject to the unrelated business income tax ("UBIT") imposed by section 511.

[10] This 10-percent additional tax does not apply if a distribution from an education IRA is made on account of the death or disability of the designated beneficiary, or if made on account of a scholarship received by the designated beneficiary.

2. Coordination with HOPE and Lifetime Learning credits

If an exclusion from gross income under section 530 is allowed for a particular student, then neither the HOPE credit nor the Lifetime Learning credit will be available in the same taxable year with respect to the same student. However, if a student elects to waive the exclusion from gross income under section 530, then either the student or a parent (if the student is claimed as a dependent by the parent) may claim the HOPE credit or the Lifetime Learning credit.

G. Qualified State Tuition Programs

Present law provides tax-exempt status to "qualified State tuition programs," meaning certain programs established and maintained by a State (or agency or instrumentality thereof) under which persons may (1) purchase tuition credits or certificates on behalf of a designated beneficiary that entitle the beneficiary to a waiver or payment of qualified higher education expenses of the beneficiary, or (2) make contributions to an account that is established for the purpose of meeting qualified higher education expenses of the designated beneficiary of the account (sec. 529). The term "qualified higher education expenses" has the same meaning as does the term for purposes of education IRAs (as described above) and, thus, includes expenses for tuition, fees, books, supplies, and equipment required for the enrollment or attendance at an eligible educational institution[11], as well as certain room and board expenses (i.e., the minimum room and board allowance applicable to the student as determined by the institution in calculating costs of attendance for Federal financial aid programs under sec. 472 of the Higher Education Act of 1965) for any period during which the student is at least a half-time student.

Present law also provides that no amount shall be included in the gross income of a contributor to, or beneficiary of, a qualified State tuition program with respect to any distribution from, or earnings under, such program, except that (1) amounts distributed or educational benefits provided to a beneficiary (e.g., when the beneficiary attends college) will be included in the beneficiary's gross income (unless excludable under another Code section) to the extent such amounts or the value of the educational benefits exceed contributions made on behalf of the beneficiary, and (2) amounts distributed to a contributor or another distributee (e.g., when a parent receives a refund) will be included in the contributor's/distributee's gross income to the extent such amounts exceed contributions made on behalf of the beneficiary.

A qualified State tuition program is required to provide that purchases or contributions only be made in cash. Contributors and beneficiaries are not allowed to directly or indirectly direct the investment of contributions to the program (or earnings thereon). The program is required to maintain a separate accounting for each designated beneficiary. A specified individual must be designated as the beneficiary at the commencement of participation in a

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[11] "Eligible educational institutions" are defined the same for purposes of education IRAs (described in I.F., above) and qualified State tuition programs.

qualified State tuition program (i.e., when contributions are first made to purchase an interest in such a program), unless interests in such a program are purchased by a State or local government or a tax-exempt charity described in section 501(c)(3) as part of a scholarship program operated by such government or charity under which beneficiaries to be named in the future will receive such interests as scholarships. A transfer of credits (or other amounts) from one account benefitting one designated beneficiary to another account benefitting a different beneficiary will be considered a distribution (as will a change in the designated beneficiary of an interest in a qualified State tuition program), unless the beneficiaries are members of the same family.[12] Earnings on an account may be refunded to a contributor or beneficiary, but the State or instrumentality must impose a more than de minimis monetary penalty unless the refund is (1) used for qualified higher education expenses of the beneficiary, (2) made on account of the death or disability of the beneficiary, or (3) made on account of a scholarship received by the designated beneficiary to the extent the amount refunded does not exceed the amount of the scholarship used for qualified higher education expenses.

No amount is includible in the gross income of a contributor to, or beneficiary of, a qualified State tuition program with respect to any contribution to or earnings on such a program until a distribution is made from the program, at which time the earnings portion of the distribution (whether made in cash or in-kind) is includible in the gross income of the distributee. However, to the extent that a distribution from a qualified State tuition program is used to pay for qualified tuition and related expenses (as defined in sec. 25A(f))(1)), the distributee (or another taxpayer claiming the distributee as a dependent) will be able to claim the HOPE credit or Lifetime Learning credit under section 25A with respect to such tuition and related expenses (assuming that the other requirements for claiming the HOPE credit or Lifetime Learning credit are satisfied and the modified AGI phaseout for those credits does not apply).

H. Exclusion of Interest Earned on Education Savings Bonds

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 (sec. 135).[13] "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

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[12] For this purpose, the term "member of the family" means the spouse of the beneficiary and any persons described in paragraphs (1) through (8) of section 152(a)--e.g., sons, daughters, brothers, sisters, nephews and nieces, certain in-laws, etc--and any spouse of such persons.

[13] 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)).

certain eligible higher educational institutions (defined in the manner as for the HOPE and Lifetime Learning credits). The amount of qualified higher education expenses taken into account for purposes of the exclusion provided by section 135 is reduced by the amount of such expenses taken into account in determining the HOPE or Lifetime Learning credits claimed by any taxpayer, or an exclusion from gross income for a distribution from an education IRA, with respect to a particular student for the taxable year.

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 1999, the exclusion is phased out for single taxpayers with modified AGI between $53,100 and $68,100 ($79,650 and $109,650 for joint returns). To prevent taxpayers from effectively avoiding the income phaseout limitation through issuance of bonds directly in the child's name, present law 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.

I. Individual Retirement Arrangements ("IRAs")

1. In general

There are three types of IRAs under present law: deductible IRAs, Roth IRAs, and nondeductible IRAs. The economic benefits of deductible and Roth IRAs are similar,[14] although the rules applicable to each type of IRA vary. IRAs may generally be used to save for any purpose, including educational expenses. In addition, withdrawals used to pay for educational expenses are not subject to the 10-percent early withdrawal tax generally applicable to IRA withdrawals before age 59-1/2.

2. 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 and the individual's spouse are not active participants 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 homemaker 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 AGI over certain levels for the taxable year.

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[14] For a detailed comparison of Roth IRAs and deductible IRAs, see Joint Committee on Taxation *Description and Analysis of Tax Proposals Relating to Individual Savings and IRAs* (JCS-2-97), March 3, 1997.

The AGI phase-out limits for a single individual who is an active participant in an employer-sponsored retirement plan are as follows: for 1999, $31,000 to $41,000; for 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 AGI 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 1999, $51,000 to $61,000; for 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.

If the individual is not an active participant in an employer-sponsored retirement plan, but the individual's spouse is, the $2,000 deduction limit is phased out for taxpayers with AGI between $150,000 and $160,000.

Amounts held in a deductible 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 59-1/2 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. Education expenses that qualify for the exception to the early withdrawal tax are qualified higher education expenses (as defined under the rules relating to qualified State tuition programs) of the taxpayer, the taxpayer's spouse, or any child or grandchild of the taxpayer and his or her spouse, at an eligible educational institution. The amount of education expenses is reduced by certain scholarships and similar payments.

3. Roth IRAs

Beginning in 1998, individuals with AGI below certain levels may make nondeductible contributions to a Roth IRA. The 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 for 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.

Taxpayers with modified AGI of $100,000 or less generally may convert a deductible or nondeductible IRA into an Roth IRA. The amount converted is includible in income as if a withdrawal had been made, except that the 10-percent early withdrawal tax does not apply and, if the conversion occurred in 1998, the income inclusion may be spread ratably 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 for which the individual made a contribution to a Roth IRA, and (2) which is made after attainment of age 59-1/2, 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).[15] The same exceptions to the early withdrawal tax that apply to IRAs apply to Roth IRAs.

4. 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.

J. Tax Benefits for Certain Types of Bonds for Educational Facilities and Activities

1. Tax-exempt bonds

In general

Interest on debt[16] incurred by States or local governments is excluded from income if the proceeds of the borrowing are used to carry out governmental functions of those entities or the debt is repaid with governmental funds (sec. 103).[17] Like other activities carried out and paid for

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[15] Early distribution of converted amounts may also accelerate income inclusion of converted amounts that are taxable under the 4-year rule applicable to 1998 conversions.

[16] Hereinafter referred to as "State or local government bonds."

[17] Interest on this debt is included in calculating the "adjusted current earnings" preference of the corporate alternative minimum tax.

by States and local governments, the construction, renovation, and operation of public schools is an activity eligible for financing with the proceeds of tax-exempt bonds.

Interest on bonds that nominally are issued by States or local governments, but the proceeds of which are used (directly or indirectly) by a private person and payment of which is derived from funds of such a private person is taxable unless the purpose of the borrowing is approved specifically in the Internal Revenue Code (the "Code") or in a non-Code provision of a revenue Act.[18] These bonds are called "private activity bonds." The term "private person" includes the Federal Government and all other individuals and entities other than States or local governments. Present law provides two tests for determining whether a State or local government bond is in substance a private activity bond (sec. 141(b) and (c)).

Private business test.--Private business use and private payments result in State or local government bonds being private activity bonds if both parts of a two-part private business test are satisfied--

(1) More than 10 percent of the bond proceeds is to be used (directly or indirectly) by a private business (the "private business use test"); and

(2) More than 10 percent of the debt service on the bonds is secured by an interest in property to be used in a private business use or to be derived from payments in respect of such property (the "private payment test").[19]

Private loan test.--The second standard for determining whether a State or local government bond is a private activity bond is whether an amount exceeding the lesser of (1) 5 percent of the bond proceeds or (2) $5 million is used (directly or indirectly) to finance loans to private persons. Private loans include both business and other (e.g., personal) uses and payments by private persons; however, in the case of business uses and payments, all private loans also constitute private business uses and payments subject to the private business test. Present law provides that the substance of a transaction governs in determining whether a transaction gives rise to a private loan. In general, any transaction which transfers tax ownership of property to a private person is treated as a loan.

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[18] Interest on private activity bonds (other than qualified 501(c)(3) bonds) is a preference item in calculating the alternative minimum tax.

[19] The 10-percent private business use and payment threshold is reduced to 5 percent for private business uses that are unrelated to a governmental purpose also being financed with proceeds of the bond issue. For example, a privately operated cafeteria in a government office building financed as part of the building's construction could represent a related private business use. On the other hand, a separate, private manufacturing facility financed with proceeds of the same bond issue would constitute an unrelated private business use of bond proceeds.

Activities eligible for financing with tax-exempt private activity bonds

The Code includes several exceptions permitting States or local governments to act as conduits providing tax-exempt financing for certain private activities. In most cases, the aggregate volume of these private activity tax-exempt bonds is restricted by annual aggregate volume limits imposed on bonds issued by issuers within each State. These annual volume limits are equal to $150 per resident of the State, or $150 million if greater.[20]

Qualified 501(c)(3) bonds.--Both capital expenditures and limited working capital expenditures of charitable organizations described in section 501(c)(3) of the Code -- including elementary, secondary, and post-secondary schools -- may be financed with tax-exempt bonds ("qualified 501(c)(3) bonds"). Bonds to finance activities of these organizations are not subject to the annual aggregate State volume limits.

Qualified student loan bonds.--States and local governments may issue tax-exempt private activity bonds to finance certain student loans. Eligible student loans include Federally guaranteed loans under the Higher Education Act of 1965 ("GSL loans") and other loans financed as part of a program of general application approved by the State (sec. 144(b)(1)). Non-GSL student loans may be financed with tax-exempt bonds only if no loan under the program exceeds the difference between the total cost of attendance and other forms of student assistance for which the borrower may be eligible.

Other tax-exempt private activity bonds.--States or local governments may issue tax-exempt exempt-facility bonds to finance property for certain private businesses. Business uses generally eligible for this financing include transportation (airports, ports, local mass commuting, and high speed intercity rail facilities); privately owned and/or privately operated public works facilities (sewage, solid waste disposal, local district heating or cooling, and hazardous waste disposal facilities); privately-owned and/or operated low-income rental housing; and certain private facilities for the local furnishing of electricity or gas. A further provision allows tax-exempt financing for "environmental enhancements of hydro-electric generating facilities." Tax-exempt financing is authorized for capital expenditures for certain manufacturing facilities and land and equipment for first-time farmers ("qualified small-issue bonds"), certain local redevelopment activities ("qualified redevelopment bonds"), and eligible empowerment zone and enterprise community businesses.

Finally, in addition to student loans, certain non-business private housing may be financed with proceeds of these bonds: (1) mortgage loans for first-time home buyers satisfying

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[20] The annual State private activity bond volume limits are scheduled to increase to the greater of $75 per resident of the State or $225 million in calendar year 2007. The increase will be phased in ratably beginning in calendar year 2003. This increase was enacted by the Tax and Trade Relief Extension Act of 1998.

moderate income and home purchase price requirements, and (2) mortgage loans generally for certain pre-1977 veterans who purchase homes in any of the five States that historically have authorized issuance of these bonds.[21]

Private activity tax-exempt bonds may not be used to finance schools for private, for-profit businesses.

Arbitrage restrictions on tax-exempt bonds

The Federal income tax does not apply to the income of States and local governments that is derived from the exercise of an essential governmental function. To prevent these tax-exempt entities from issuing more Federally subsidized tax-exempt bonds than is necessary for the activity being financed or from issuing such bonds earlier than necessary, the Code includes arbitrage restrictions limiting the ability to profit from investment of tax-exempt bond proceeds. In general, arbitrage profits may be earned only during specified periods (e.g., defined "temporary periods" before funds are needed for the purpose of the borrowing) or on specified types of investments (e.g., "reasonably required reserve or replacement funds"). Subject to limited exceptions, profits that are earned during these periods or on such investments must be rebated to the Federal Government.

The Code includes three exceptions applicable to education-related bonds. First, issuers of all types of tax-exempt bonds are not required to rebate arbitrage profits if all of the proceeds of the bonds are spent for the purpose of the borrowing within six months after issuance.[22] Second, in the case of bonds to finance certain construction activities, including school construction and renovation, the six-month period is extended to 24 months. Arbitrage profits earned on construction proceeds are not required to be rebated if all such proceeds (other than certain retainage amounts) are spent by the end of the 24-month period and prescribed intermediate spending percentages are satisfied.[23] Third, governmental bonds issued by "small" governments are not subject to the rebate requirement. Small governments are defined as general

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[21]The five States are Alaska, California, Oregon, Texas, and Wisconsin.

[22]In the case of governmental bonds (including bonds to finance public schools) the six-month expenditure exception is treated as satisfied if at least 95 percent of the proceeds is spent within six months and the remaining five percent is spent within 12 months after the bonds are issued.

[23]Retainage amounts are limited to no more than 5 percent of the bond proceeds, and these amounts must be spent for the purpose of the borrowing no later than 36 months after the bonds are issued. Issuers qualifying for this "construction bond" exception may elect to be subject to a fixed penalty payment regime in lieu of rebate if they fail to satisfy the spending requirements.

purpose governmental units that issue no more than $5 million of tax-exempt governmental bonds in a calendar year. The $5 million limit is increased to $10 million if at least $5 million of the bonds are used to finance public schools.[24]

2. Qualified zone academy bonds

As an alternative to traditional tax-exempt bonds, certain States and local governments are given the authority to issue "qualified zone academy bonds." Under present law, a total of $400 million of qualified zone academy bonds may be issued in each of 1998 and 1999. The $400 million aggregate bond authority is allocated each year to the States according to their respective populations of individuals below the poverty line.[25] Each State, in turn, allocates the credit to qualified zone academies within such State. A State may carry over any unused allocation into subsequent years.

Certain financial institutions (i.e., banks, insurance companies, and corporations actively engaged in the business of lending money) that hold qualified zone academy bonds are entitled to a nonrefundable tax credit in an amount equal to a credit rate (set monthly by Treasury Department regulation at 110 percent of the applicable Federal rate for the month in which the bond is issued) multiplied by the face amount of the bond (sec. 1397E). The credit rate applies to all such bonds issued in each month. A taxpayer holding a qualified zone academy bond on the credit allowance date (i.e., each one-year anniversary of the issuance of the bond) is entitled to a credit. The credit amount is includible in gross income (as if it were a taxable interest payment on the bond), and credit may be claimed against regular income tax and alternative minimum tax liability.

The Treasury Department sets the credit rate each month at a rate estimated to allow issuance of qualified zone academy bonds without discount and without interest cost to the issuer. The maximum term of the bond issued in a given month also is determined by the Treasury Department, so that the present value of the obligation to repay the bond is 50 percent of the face value of the bond. Such present value is determined using as a discount rate of the average annual interest rate of tax-exempt obligations with a term of 10 years or more issued during the month.

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[24] The Small Business Job Protection Act of 1996 permitted issuance of the additional $5 million in public school bonds by small governments. Previously, small governments were defined as general purpose governments that issued no more than $5 million of governmental bonds, without regard to the purpose of the financing.

[25] See, Rev. Proc. 98-9, 1998-3 I.R.B. 56, which sets forth the maximum face amount of qualified zone academy bonds that was permitted to be issued for each State during 1998.

"Qualified zone academy bonds" are defined as bonds issued by a State or local government, provided that: (1) at least 95 percent of the proceeds is used for the purpose of renovating, providing equipment to, developing course materials for use at, or training teachers and other school personnel in a "qualified zone academy;" and (2) private entities have promised to contribute to the qualified zone academy certain equipment, technical assistance or training, employee services, or other property or services with a value equal to at least 10 percent of the bond proceeds.

A school is a "qualified zone academy" if (1) the school is a public school that provides education and training below the college level, (2) the school operates a special academic program in cooperation with businesses to enhance the academic curriculum and increase graduation and employment rates, and (3) either (a) the school is located in one of the 31 designated empowerment zones or one of the 95 designated enterprise communities,[26] or (b) it is reasonably expected that at least 35 percent of the students at the school will be eligible for free or reduced-cost lunches under the school lunch program established under the National School Lunch Act.

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[26] Pursuant to the Omnibus Budget Reconciliation Act of 1993 (OBRA 1993), the Secretaries of the Department of Housing and Urban Development and the Department of Agriculture designated a total of nine empowerment zones and 95 enterprise communities on December 21, 1994 (sec. 1391). In addition, the Taxpayer Relief Act of 1997 provided for the designation of 22 additional empowerment zones (secs. 1391(b)(2) and 1391(g)). Designated empowerment zones and enterprise communities were required to satisfy certain eligibility criteria, including specified poverty rates and population and geographic size limitations (sec. 1392). The Code provides special tax incentives for certain business activities conducted in empowerment zones and enterprise communities (secs. 1394, 1396, and 1397A).

II. BACKGROUND DATA ON COLLEGE ENROLLMENT AND COSTS

Since 1990, more than 14 million students have enrolled annually in post-secondary education or training programs, with approximately 75 percent enrolled in public institutions and 25 percent in private institutions in 1995. The full-time equivalent enrollment has exceeded 10 million in every year since 1991. Of all those enrolled in 1995, 61 percent were enrolled in four-year institutions. From the average high school sophomore class in 1980, 66.4 percent had enrolled in some form of post-secondary education or training program by 1992. During this period, 7.9 percent had attained an associate's degree, 20 percent had attained a bachelor's degree, 2.7 percent had attained a master's degree, and 1.1 percent had attained a doctorate or professional degree.[27]

In every year since 1981, the costs of attending a two- or four-year college have risen faster than the rate of inflation; by contrast, in the late 1970s, college costs lagged behind inflation. Table 1 below details average tuition and fees by type of college in both current and constant (inflation adjusted) dollars since 1986. Since 1976, college tuition and fees generally have risen 70 percent more than the economy's overall price level. For the 1976-77 academic year, the total cost[28] of attending a four-year private college averaged \$3,906 (tuition and fees of \$2,534) and the total cost of attending a four-year public college averaged \$1,935 (tuition and fees of \$617). For the 1986-87 academic year, the comparable total cost figure had risen to \$10,039 (tuition of \$6,658) for a four-year private college and to \$4,138 (tuition of \$1,414) for a four-year public college. By the 1996-97 academic year, the comparable total cost figure had risen to \$18,476 (tuition and fees of \$12,920) for a four-year private college and to \$7,331 (tuition and fees of \$2,986) for a four-year public college. For the 1996-97 academic year, the average cost of tuition and fees at a two-year public college was \$1,283.[29]

Over the past decade, governmental funding of higher education has declined as a share of total funding. Table 2 reports the revenues of all institutions of higher education by source. The table documents that, as a percentage of all revenues, Federal funds have remained relatively constant while State and local funding has declined. As a percentage of all revenues, tuition and fees have increased while other private funding has increased modestly. As Table 2 details, State and local contributions have not declined in dollar terms, though their total growth over the

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[27] Department of Education. National Center for Education Statistics, *Digest of Education Statistics 1997.*

[28] "Total cost" includes tuition and fees, and on-campus room and board costs.

[29] Department of Education. National Center for Education Statistics, *Digest of Education Statistics 1997.*

period 1986-87 to 1994-95 was only 7 percent more than would be accounted for by inflation, while full-time equivalent fall enrollment at public institutions increased 14.4 percent.

Table 1.–Average Undergraduate Tuition and Fees, 1986-87 Through 1996-97

Year	Current dollars				Constant 1996 dollars			
	Private four-year	Private two-year	Public four-year	Public two-year	Private four-year	Private two-year	Public four-year	Public two-year
1986-87	6,658	3,684	1,414	660	9,361	5,179	1,988	928
1987-88	7,116	4,161	1,537	706	9,629	5,630	2,080	955
1988-89	7,722	4,817	1,646	730	10,000	6,239	2,132	945
1989-90	8,396	5,196	1,780	756	10,345	6,402	2,193	931
1990-91	9,083	5,570	1,888	824	10,679	6,549	2,220	969
1991-92	9,775	5,752	2,119	937	11,094	6,528	2,405	1,063
1992-93	10,294	6,059	2,349	1,025	11,342	6,676	2,588	1,130
1993-94	10,952	6,370	2,537	1,125	11,742	6,829	2,719	1,206
1994-95	11,481	6,914	2,681	1,192	11,985	7,218	2,798	1,245
1995-96	12,243	7,094	2,848	1,239	12,421	7,198	2,889	1,257
1996-97	12,920	7,190	2,986	1,283	12,774	7,109	2,953	1,269

Notes: Current dollar figures are adjusted to constant dollars by reference to the average CPI of the calendar years spanned by the academic year for which the tuition is reported.

Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1997.*

Table 2.–Current Funds and Revenues of All Institutions of Higher Education by Source, Selected Years, 1986-1987 Through 1994-1995

[Amount in millions]

Year	Tuition and fees		State and local sources		Federal sources		Other sources		Total
	Dollar	Percent	Dollar	Percent	Dollar	Percent	Dollar	Percent	
1986-87	25,706	23.6	34,109	31.3	14,239	13.0	35,091	32.2	109,145
1990-91	37,434	25.0	43,412	29.0	18,236	12.2	50,684	33.8	149,766
1994-95	51,506	27.2	49,509	26.2	23,243	12.3	64,863	34.3	189,121

Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1997.*

III. ECONOMIC ANALYSIS

A. The Economics of Subsidizing Education

Overview of the goals of subsidies

All levels of government make substantial direct expenditures to subsidize post-secondary education. In addition, private educational organizations channel gifts from private persons into subsidies for the education of other persons. By exempting such organizations from income tax and permitting the gifts to such organizations to be deductible, additional implicit subsidies under the Internal Revenue Code are created for education. Other subsidies for education provided by the Internal Revenue Code permit students to receive tax-free qualified scholarships, tax-free employer-provided educational assistance, tax-free cancellation of certain governmental student loans, and a deduction for student loan interest. Students and parents also are provided the benefits of the HOPE and Lifetime Learning credits, the deferral of tax on the earnings of contributions to qualified State tuition programs, and the exclusion from income of earnings on education IRAs and of the interest on U.S. savings bonds used to pay for post-secondary education.[30] Analysts attempt to evaluate subsidies in terms of their efficiency, equity, and administrability. In this regard, subsidies to post-secondary education have been argued to improve both economic efficiency and to promote economic equity.

Efficiency as a goal of subsidies to education

Economists generally have a predilection for favoring the outcomes of the free market and have reasoned that taxes or subsidies in the market generally lead to inefficient outcomes. That is, taxes or subsidies distort choices and divert resources from their highest and best use. However, economists also recognize that sometimes markets do not work efficiently. Economists observe that the consumption or acquisition of certain goods may create spillover, or external, effects that benefit society at large as well as the individual consumer who purchases the good. An example of such a good is a vaccination. The individual who is vaccinated benefits by not contracting an infectious disease, but the rest of society benefits as well, because by not contracting the disease the vaccinated individual also slows the spread of the disease to those who are not vaccinated. Economists call such a spillover effect a "positive externality."[31] On his or her own, the individual

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[30] Certain income limits restrict some benefits. Part I, above, describes tax benefits under present law that subsidize education.

[31] For a more complete discussion of the notion of "positive externality," see Harvey S. Rosen, *Public Finance* (Homewood, Illinois: Irwin), 1988, pp. 142-146. Rosen discusses the notion of positive externality as applied to education. Rosen notes (pp. 144-145), "That college increases productivity may be true, but *as long as the earnings of college graduates reflect their higher productivity, there is no externality* [Rosen's emphasis]."

would weigh only his or her own reduced probability of contracting the disease against the cost of the vaccination. The individual would not account for the additional benefit the vaccination produces for society. As a result, the individual might choose not to be vaccinated, even though from society's perspective total reduction in the rate of infection throughout the population would be more than worth the cost of the vaccination. In this sense, the private market might produce too few of the vaccinations. The private market outcome is inefficiently small. Economists have suggested that the existence of positive externalities provides a rationale for the government to subsidize the acquisition of the good that produces the positive externalities. The subsidy will increase the acquisition of the good to its more efficient level.

While much evidence suggests that job skill acquisition and education benefit the private individual in terms of higher market wages,[32] many people have long believed that education also produces positive externalities. Commentators argue that society functions better with an educated populace and that markets function better with educated consumers. They observe that education promotes innovation and that, because ideas and innovations are easily copied in the market place, the market return (wage or profit) from ideas and innovations may not reflect the full value to society from the idea or innovation. Just as the single individual does not appreciate the full benefit of a vaccination, a single individual may not be able to reap the full benefit of an idea or innovation. Thus, it is argued, subsidies for education are needed to improve the efficiency of society.

On the other hand, recognizing that a subsidy might be justified does not identify the magnitude of the subsidy necessary to promote efficiency nor the best method for delivery of the subsidy. It is possible to create inefficient outcomes by over-subsidizing a good that produces positive externalities. Given that the United States already provides substantial subsidies to post-secondary education, without some empirical analysis of the social benefits that would arise from creating new subsidies, it is not possible to say whether such subsidies would increase or decrease economic efficiency.

Some observers note that, aside from potential spillover effects that education might create, the market for financing education may be inefficient. They observe that while investors in housing or other tangible assets have property that can be pledged to secure financing to procure the asset, an individual cannot generally pledge his or her future earnings as security for a loan to obtain education or training designed to increase the individual's future earning potential. This inability to provide security for education loans constrains borrowing as an alternative to finance

[32] Kevin Murphy and Finis Welch, "Wage Premiums for College Graduates: Recent Growth and Possible Explanations," *Education Researcher*, 18, May 1989, pp. 17-26. Murphy and Welch document that, between 1981 and 1986, the average wage of workers with 16 years of schooling was 58.4 percent higher than the average wage of workers with 12 years of schooling. This college wage premium represented the largest such premium during the period of their study, 1963 through 1986.

education for some taxpayers. Taxpayers who cannot borrow to finance education or training may forgo the education or training even though it would produce a high return for the investor. This inefficiency in the market for education finance may offer a justification for public subsidies. The inefficiency in the market for financing is likely most acute among lower-income taxpayers who generally do not have other assets that could be pledged as security for an education loan. This suggests that this potential source of market inefficiency also relates to the considerations of equity as a rationale for subsidies of education (discussed below).

Equity as a goal of subsidies to education

As noted above, there is evidence indicating that education and training are rewarded in the market place. Recognizing this market outcome, some argue that it is appropriate to subsidize education to ensure that educational opportunities are widely available, including to those less well off in society. Commentators argue that education can play an important role in reducing poverty and income inequality. They observe that even if there were no positive externalities from education, promoting economic equity within a market economy provides a basis for subsidizing education.[33] If equity is the goal of expanded subsidies to education, the cost of the subsidies should be weighed in terms of the private benefits received by the target groups, rather than the social benefits that might be generated by any possible spillovers.

B. Treatment of Education Expenses Under an Income Tax

Educational expenditures

Students and their families incur direct educational expenses when they pay tuition and fees. Federal, State, and local governments and private persons make expenditures on behalf of students by funding State and local and private educational institutions.[34] Such expenditures by governments or private persons are equivalent to the government or private person transferring funds to the student which the student subsequently pays over to the educational institution. Lastly, students incur implicit expenditures for education by choosing schooling over the alternative of taking a job and earning a wage. The time spent in school means forgone income. Alternatively viewed, it is as if the student worked, was paid, and used the wages to purchase

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[33] For a cautionary note on the importance of the subsidy given, see Dennis Zimmerman, "Expenditure-Tax Incidence Studies, Public Higher Education, and Equity,"*National Tax Journal*, 26, March 1973. Zimmerman finds that the subsidy structure can just as easily promote a less equal distribution of lifetime income.

[34] Table 2 in Part II reports that Federal, State and local, and private expenditures accounted for 72.8 percent of post-secondary educational revenues for the 1994-95 academic year. Tuition accounted for 27.2 percent.

education. Analysts have concluded that the largest cost of obtaining an education come from forgone wages.[35]

Post-secondary education helps individuals develop general analytic and reasoning skills (e.g., problem solving) and often job specific skills (e.g., nursing training) that enhance the student's ability to earn a future income. In this way, expenditures on education are like an investment in a capital good: an outlay is made in the present for a machine that will produce income over a number of years in the future. It is because of this similarity that economists often refer to expenditures on education as investment in "human capital." However, some part of expenditures on post-secondary education are not as obviously investments in human capital but are more like consumption. For example, the chemical engineering student who takes an elective course in the history of music probably would not find her future earning potential increased by that particular elective. It is difficult to determine for any given student what portion of post-secondary education represents consumption and what portion represents investment in human capital.

The distinction between education as investment and education as consumption is not important to the efficiency/externality rationale for providing a subsidy to education, as externalities can arise from either consumption or investment. However, the distinction between education as investment and education as consumption is important to the equity rationale for providing a subsidy to education, as the equity rationale generally is based upon education as an investment in future earning potential. The distinction between education as investment and education as consumption also is important for analysis of the income tax treatment of expenditures on education--that is, should education expenses be deductible to properly measure a taxpayer's net income?

Educational expenses under a theoretical income tax

Under a theoretical income tax, any expenditures undertaken in the present for returns that are expected in the future should be capitalized and recovered as the future returns are earned. Consumption expenditures are neither deductible nor amortizable under a theoretical income tax. Thus, certain expenditures on education should be capitalized by the taxpayer and recovered against future earnings. As discussed above, the relevant expenditures to be capitalized would only be those that represent investments in human capital,[36] not those related to consumption. Of

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[35] See Michael J. Boskin, "Notes on the Tax Treatment of Human Capital," in Department of the Treasury, *Conference on Tax Research, 1975* (Washington, D.C.: Department of the Treasury), 1977, pp. 185-195.

[36] For a discussion of government policy towards human capital investment, see C. Eugene Steuerle, "How Should Government Allocate Subsidies for Human Capital?" American Economic Review, 86, May 1996, pp. 353-357.

course, making such decisions would be quite difficult in practice. For example, the would-be chemical engineer of the example above may not know whether her future employment will be in the chemical industry or perhaps as a chanteuse, making it difficult to know how to account for the costs of the chemical engineering courses and the music course. Many educational expenses are paid by a parent on behalf of a student. In such case, the theoretical income tax would permit amortization only by the student.

Educational expenses under the present-law income tax

As discussed above, there are three types of expenditures made by students on their education: (1) payment via implicit or explicit transfers received from governments or private persons; (2) forgone wages; and (3) direct payment of tuition and other educational expenses by the student.

By not including the transfers from governments or private persons in the income of the student, present law offers the equivalent of expensing of those expenditures undertaken on behalf of the student by governments and private persons.[37] This treatment (the equivalent of expensing) also is provided for direct transfers to students in the form of qualified scholarships or employer-provided educational assistance, which are excludable from income. Similarly, because forgone wages are never earned, the implicit expenditure incurred by students forgoing present earnings also receives expensing under the present-law income tax.

The present-law treatment of direct payment of tuition and other educational expenses by the student is subject to various tax treatments. With certain exceptions, the present-law income tax treats direct payments of tuition and other educational expenses as consumption, neither deductible nor amortizable.[38] An important exception to this treatment is expenses that qualify for the HOPE credit or the Lifetime Learning credit. The HOPE credit provides income tax treatment that is the equivalent of an investment tax credit for educational expenditures that qualify for the credit. For the first $1,000 of qualified expenditures, a taxpayer receives a $1,000 credit, which is

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[37] Of course, the actual government expenditures themselves represent a wealth transfer to the student. It is only the income tax treatment of such expenditures (that is, not counting them as income to the student) that is the equivalent of expensing.

[38] Exceptions include the direct payment of education expenses with earnings from education IRAs or interest earned on U.S. savings bonds by low- and middle-income taxpayers. Such payments are permitted an exclusion from income tax. By not counting such interest or earnings in income, they (the earnings components, but not the principal) are afforded treatment equivalent to expensing. Other tax benefits for direct expenditures on education expenses, such as the deductibility of certain interest expense or penalty free withdrawals from IRAs, provide only minor benefits in comparison to expensing or amortization treatment of the full amount of education expenses.

the equivalent of a 100-percent investment tax credit. Such 100-percent investment tax credit is more generous tax treatment than is expensing. A 100-percent investment tax credit is, from the taxpayer's perspective, preferred to expensing because it permits a deduction from taxes owed, rather than a deduction from taxable income itself. Thus, a 100-percent credit allows a dollar-for-dollar credit against taxes owed, whereas the value of a deduction from taxable income depends on the taxpayer's marginal tax rate.[39] For the next $1,000 of expenditures, the taxpayer receives the equivalent of a 50-percent investment tax credit. The Lifetime Learning credit is the equivalent of a 20-percent investment tax credit on qualified expenditures.

The theoretical income tax would have all expenditures toward investment in human capital capitalized and recovered against the student's future earnings. By permitting the equivalent of expensing for the indirect expenditures related to a student's education (and direct expenditures made in the form of qualified scholarships or employer-provided education assistance), the present-law income tax subsidizes investment in human capital relative to investment in physical capital.[40] For direct expenditures by the student, for those that qualify for the HOPE credit, the treatment of the first $2,000 on qualified educational expenses in the first two years of post-secondary education provides greater subsidy than that provided for investment in physical capital.[41] Though certain educational expenses are thus afforded income tax treatment that is as favorable or more favorable than expensing, the present-law income tax generally permits no recovery of the direct tuition or other educational costs paid by the student that do not

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[39] Specifically, the cost to the taxpayer of a dollar of expenditure on education that is permitted to be deducted is (1-*t*) times the amount of the expenditure, where *t* is the taxpayer's marginal tax rate. For a taxpayer in the 28-percent tax bracket, a thousand dollar expenditure on education that is permitted to be deducted is only $720 (the tax benefit of the deduction is thus $280). If the taxpayer is allowed a credit for the thousand dollar expenditure, there is no cost to the taxpayer of the thousand dollar expenditure (that is, the tax benefit is the full $1,000). In general, a taxpayer will prefer expensing treatment if his or her marginal tax rate exceeds the percentage value of the credit.

[40] Expensing is more generous cost recovery than is capitalization and amortization. Under simplifying assumptions, the expensing of investment is economically equivalent to the nontaxation of the returns to that investment. Amortization attempts to measure, and tax annually, the return to the investment.

[41] Additionally, the Lifetime Learning credit provides a subsidy whose value in relation to expensing will vary depending on the marginal tax rate of the taxpayer. A taxpayer in a marginal rate bracket in excess of the value of the credit (20 percent under present law) would prefer expensing of such expenditures, whereas a taxpayer with a marginal rate bracket less than the value of the credit would prefer the present credit to expensing.

qualify for the HOPE or Lifetime Learning credits.[42] On balance, the variety and complexity of educational benefits afforded through the tax code, when coupled with expenditures that do not receive favorable tax treatment, make it difficult to determine the extent to which educational expenditures are subsidized by the tax code, relative to investments in physical capital.

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[42] As noted previously, exceptions include the direct payment of education expenses with earnings from education IRAs or interest earned on U.S. savings bonds by low- and middle-income taxpayers. Again, it is only the earnings from such accounts, not the principal, that is afforded the favorable tax treatment.