This report discusses eligibility for a new Federal income tax exclusion created by the Technical and Miscellaneous Revenue Act of 1988 for U.S. savings bonds used to pay qualified higher education expenses. The exclusion enables eligible taxpayers to leave out of their gross income the interest earned on series EE savings bonds that are used for tuition and required fees, net of scholarships, for themselves or their spouses or dependents. Taxpayers must be at least 24 years of age and the full exclusion is limited to taxpayers with modified adjusted gross incomes below $60,000 for married couples and $40,000 for single taxpayers or heads of households. As the exclusion will be available only for series EE bonds issued after 1989, it is not likely to be widely used during the next several years. Analysis of eligibility of current students, however, assuming that the exclusion had been previously available, suggests that more than half of all current students (more than 6 million graduate and undergraduate students) and their families would be eligible to use the full exclusion. The most significant restrictions are the purchaser's age limitation and the qualified expenses limitation, which would affect families of students who receive scholarships at public colleges and universities. (DB)
Education Savings Bonds: Eligibility for Tax Exclusion

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EDUCATION SAVINGS BONDS: ELIGIBILITY FOR TAX EXCLUSION

SUMMARY

This report discusses eligibility for a new Federal income tax exclusion created by the Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647) for U.S. savings bonds used to pay qualified higher education expenses. The report attempts to answer the questions of which families will be able to use the exclusion and which ones may not be. Answers to these questions are important for policy makers who are considering whether the Federal Government should do more to encourage families college saving. They direct attention to who currently has a special tax incentive to save for college and who does not. The answers also are important for families that might purchase savings bonds. For some, they may make it more difficult to decide whether the bonds should be owned by the parents or the children.

The new exclusion enables eligible taxpayers to leave out of their gross income the interest earned (the increase in redemption value) on series EE savings bonds issued after 1989 that are used for tuition and required fees, net of scholarships, for themselves or their spouses or their dependents. Taxpayers must be at least 24 years of age when they purchase the bonds, and they cannot be co-owners with anyone except a spouse. The full exclusion is limited to taxpayers with modified adjusted gross incomes below specified limits, indexed for inflation after 1990: $60,000 for married couples and $40,000 for single taxpayers and heads of households. For higher incomes the exclusion is gradually phased out.

As the exclusion will be available only for series EE bonds issued after 1989, it is not likely to be widely used during the next several years. After 10 or 15 years, however, it is possible that many families of college students can take advantage of it. While it is difficult to predict college attendance that far in advance, let alone what schools will cost and how much financial aid will be available, some understanding of future eligibility can be obtained by analyzing who could currently use the exclusion, were that hypothetically possible, assuming that bonds had been purchased earlier. Such analysis shows that more than half of all current students in higher education (more than 6 million graduate and undergraduate students) and their families would be eligible to use the full exclusion. For four and one-half million students, on the other hand, statutory restrictions would eliminate or reduce eligibility for the exclusion or otherwise make it less important. The most significant restrictions are the qualified expenses limitation, which would affect families of the many students who receive scholarships at public colleges and universities, and the purchaser's age limitation, which would affect students under the age of 29 who are financially independent of their parents. An upper income limitation would to a lesser extent affect families of some dependent students.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>SAVINGS BONDS</td>
<td>1</td>
</tr>
<tr>
<td>TAXATION OF SAVINGS BONDS</td>
<td>2</td>
</tr>
<tr>
<td>The New Exclusion</td>
<td>2</td>
</tr>
<tr>
<td>Other Tax Advantages</td>
<td>3</td>
</tr>
<tr>
<td>Federal Student Aid Need Analysis</td>
<td>5</td>
</tr>
<tr>
<td>ELIGIBILITY FOR HIGHER EDUCATION EXPENSE EXCLUSION</td>
<td>8</td>
</tr>
<tr>
<td>Predicting Eligibility</td>
<td>8</td>
</tr>
<tr>
<td>Upper Income Limitation</td>
<td>10</td>
</tr>
<tr>
<td>Qualified Expenses Limitation</td>
<td>11</td>
</tr>
<tr>
<td>Purchaser's Age Limitation</td>
<td>15</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>17</td>
</tr>
</tbody>
</table>
EDUCATION SAVINGS BONDS:
ELIGIBILITY FOR TAX EXCLUSION

INTRODUCTION

The Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647) created a new Federal income tax advantage for certain U.S. savings bonds that are used to pay higher education expenses. In brief, the legislation enables taxpayers to exclude from their gross income the interest earned on series EE savings bonds issued after 1989 that are used for tuition and required fees, net of scholarships, for themselves or their spouses or dependents. This report discusses eligibility for the new exclusion. It tries to answer the questions of which families will be eligible to use the exclusion and which ones may not be. Understanding the restrictions on eligibility is important for policy makers who are considering whether the Federal Government should do more to encourage families to save for college. It also is important for families that might purchase savings bonds.

SAVINGS BONDS

The U.S. Department of the Treasury currently offers two series of U.S. savings bonds, series EE and series HH. Series EE savings bonds are sold in varying denominations of $50 to $10,000 at an issue price equal to one-half their face value. In contrast, series HH bonds are issued only in exchange for series EE bonds or other U.S. savings bonds no longer sold (series E, series H, and savings notes); they are always issued at face value. For EE bonds, the difference between the issue price and the redemption value represents interest that is paid when the bond is redeemed; if a bond is held until its redemption value equals its face value, half of the proceeds would be principal and half interest. When the redemption values of series EE bonds reach face value depends on their interest rate: the higher the rate, the more rapid the increase in redemption value and the shorter the period of time until face value is attained. Bonds held at least 5 years pay the higher of a variable market rate equal to 85 percent of the average yield on 5-year Treasury securities or a minimum rate established when bonds are issued. In October 1989, the variable market rate for EE bonds was 7.81 percent and the

1The exclusion is authorized by sec. 6009 of the Technical and Miscellaneous Revenue Act of 1988, which created a new sec. 135 of the Internal Revenue Code.

2The variable rate is set twice a year for 6-month periods. Interest is compounded semiannually.
minimum rate was 6 percent; bonds issued that month would reach face value in about 9 years and 2 months if the variable rate remained at a constant 7.81 percent, and in 12 years at the minimum 6 percent.) For EE bonds held less than 5 years, the interest rate is based on a fixed, graduated schedule. (In October 1989, the rates ranged from 4.27 percent for bonds redeemed after 1 year to 5.5 percent for bonds redeemed after 4 years.) EE bonds held after they reach face value continue to earn the variable market rate of interest for 30 years from their issue date. The purchase price and minimum interest rate on savings bonds are guaranteed; even if market conditions change, minimum redemption values do not.3

TAXATION OF SAVINGS BONDS

The New Exclusion

The new higher education expense exclusion for series EE savings bonds enables taxpayers to exclude from their gross income the interest earned on bonds used to pay qualified expenses (tuition and required fees), net of scholarships, at colleges and universities.4 The expenses must be for enrollment or attendance of the taxpayer, the taxpayer's spouse, or dependents for whom the taxpayer may claim an exemption. The exclusion is available only for series EE bonds issued after December 31, 1989, to an individual who is 24 years of age by the date of purchase. Purchasers must be sole owners of the bonds, with the exception that they may own them jointly with their spouse.6 The full exclusion is limited to taxpayers with...

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4The higher education expense exclusion cannot be used by families of students attending proprietary schools, that is, for-profit trade and vocational schools. According to the conference report on the legislation, these schools are not to be considered eligible institutions for purposes of education savings bonds. In contrast, proprietary school students are eligible to receive Pell Grants, Stafford Loans, and some other forms of Federal student assistance.

6The requirement that bonds be solely owned by the original purchaser, with the exception of the spouse, is specified in the conference report on the legislation that became P.L. 100-647. U.S. Congress. House. Technical and (continued...
incomes below specified levels in the year the bonds are redeemed: married couples will get a progressively smaller exclusion as their modified adjusted gross income rises from $60,000 to $90,000, and none if it is above $90,000; for single taxpayers and heads of households, the equivalent phase-out range is $40,000 to $55,000. All these income limits are indexed for inflation after 1990.⁶

The new higher education expense exclusion provides a useful Federal tax advantage for eligible owners of series EE bonds. Without the exclusion, such taxpayers would otherwise have to include in their gross income whatever interest the bonds earn. For example, taxpayers who recognize $500 in interest when bonds are redeemed (which is one option for a $1,000 bond purchased for $500 and held until the redemption value equals the face value) generally must include that $500 in their gross income.⁷ If that $500 were fully taxable—if it were not offset by personal exemptions or by deductions and credits—taxpayers would have to pay $75 in taxes on it if their marginal tax rate were 15 percent, or $140 if their marginal tax rate were 28 percent. The higher education expense exclusion allows eligible taxpayers (for the most part parents who purchased bonds in their own names) to avoid this tax liability.

Other Tax Advantages

Series EE savings bonds continue to offer another Federal tax advantage that can help families saving for college. Regardless of how proceeds are used, taxpayers are allowed to choose between deferring recognition of bond interest until the bond is redeemed (as in the example in the previous paragraph) or recognizing interest annually as it accrues (that is, as redemption value increases). In contrast, for most other obligations issued at a discount, the annual additional interest must be included in gross income.

⁶(...continued)


⁷To be eligible for the exclusion, married couples must file a joint return. In this context, modified adjusted gross income is the taxpayer's adjusted gross income determined (1) without regard to the new higher education expense exclusion or the exclusions for U.S. citizens or residents living abroad or in Puerto Rico and certain U.S. possessions, and (2) after the application of tax provisions pertaining to social security and railroad retirement benefits, individual retirement accounts, and passive activity losses and credits.

⁸One exception to this rule allows taxpayers who exchange series EE bonds for series HH bonds to continue to defer recognition of the accumulated series EE bond interest until the series HH bonds are redeemed.
each year. Deferring recognition of bond interest is a tax advantage because the present value of a liability to be paid in a future year is less than the present value of the same liability that must be paid in the current year. For example, if $100 of interest income in a given year were taxed at 15 percent, the present value of the tax liability paid that year would be $15, while the present value of that tax liability deferred until the twelfth year (assuming a discount rate of 7 percent) would be $6.66, less than half as much.

Annual recognition of accrued savings bond interest might benefit many families that will not be eligible for the new higher education expense exclusion. By purchasing savings bonds in the children's names and recognizing interest annually, interest earnings of $500 a year (in 1989) can be offset by the children's standard deduction, assuming that the children have no other income. At current interest rates, some families could purchase more than $6,000 (face value) series EE savings bonds for each child and not pay taxes on the interest income, regardless of how the bond proceeds are used. While little is known about how much families currently save for college, most are not likely to save this much.

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Sec. 1272(a) of the Internal Revenue Code. Only cash basis taxpayers may defer the recognition of savings bond interest; accrual basis taxpayers must recognize it annually. Taxpayers must treat all series EE bonds in the same method, and they must receive permission from the Internal Revenue Service to change from one method to the other.

The example assumes that marginal tax rates do not change. If the applicable future marginal tax rate were lower, the advantage of deferral would be even greater; thus some people purchase savings bonds in anticipation of the lower marginal rates they will have upon retirement. On the other hand, if the applicable future marginal rate were higher, the advantage of deferral would be reduced.

For children who are claimed as exemptions on their parents' income tax returns, the standard deduction in 1989 is $500 or the amount of their employment income, whichever is greater, up to a limit of $3,100 (assuming they are single). Offsetting interest income by the standard deduction is most likely to be possible for younger children, as many teenagers have earned income that should be recognized for tax purposes.

The example assumes that the bonds are in the child's name and that the child has no other income. Bonds with a face value of $6,000 would pay $469 in interest the year their redemption value increased to equal their face value, assuming that bonds had always paid the current rate of interest, 7.81 percent. All of this increase could be offset by the child's standard deduction.

For a discussion of how much families currently save for college and whether the Federal Government should do more to encourage college saving,
Some families that will not be eligible for the exclusion might instead benefit by deferring recognition of savings bond interest. Families that are able to save substantial sums for college--$15,000 or $20,000 per child, for example--could purchase bonds in the children's names, defer recognition of interest, and take advantage of the lower marginal tax rates children generally have without paying the additional tax on children's unearned income that was included in the Tax Reform Act of 1986 (P.L. 99-514). This additional tax was intended to discourage parents from shifting savings to their children: it provides that for children under 14 years of age the tax on what is termed net unearned income (interest and investment income greater than a certain amount) is set equal to the additional tax their parents would pay if that amount were included in their taxable income. In 1989, for example, interest income in excess of $1,000 for children under 14 would be taxed at the parents' marginal tax rate (perhaps 28 percent, or even 33 percent), rather than the children's marginal tax rate (generally 15 percent). Deferring recognition of savings bond interest until children are 14 years or older enables families to circumvent this additional tax.

United States savings bonds, like other United States Government obligations, are always exempt from State and local income taxes. This exemption provides an additional benefit to bond owners who live in jurisdictions with such taxes.

Federal Student Aid Need Analysis

Savings bonds are "taxed" in another way that is important for families. When students apply for Federal financial assistance for college, family assets and income are taken into consideration in determining how much student aid they will receive, if any. U.S. savings bonds are counted among those assets, and recognized increases in their redemption value are counted as income. Other things equal, families having higher total savings (in savings bonds or otherwise) may find that the amount of student aid they later

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12(continued)


1331 USC 3124. For individuals, the prohibition against taxation extends to all forms of State and local taxation other than estate and inheritance taxes.
receive is reduced: need-based student assistance programs, like other need-based income transfer programs, penalize families for savings greater than certain levels.\(^{14}\)

How much family savings are assessed under Federal student aid need analysis depends upon several factors. One is whether the students are considered to be financially dependent or independent of their parents: with dependent students, parents' savings and income are taken into consideration, whereas with independent students they are not.\(^{15}\) Second, for dependent students it is important whether the assets are in the parents' or the students' names. Some parent savings are offset by allowances for an asset reserve, whereas no offsets are used in calculating available student savings. In addition, available parent savings are assessed at a lower rate than dependent student savings (for Pell Grants, the rates are 5 percent and 33 percent, respectively). Family income is a third important factor in how

\(^{14}\)"Savings" in this context generally means home equity (current market value less mortgages and other secured debt) and net value of cash, savings, investments, and other real estate. The levels above which savings are taken into consideration depend upon the student aid program. For example, for Pell Grants parents may exclude $30,000 in home equity and $25,000 in the net value of other assets; for College Work-Study, Supplemental Educational Opportunity Grants, Perkins Loans, and Stafford Loans, the amount depends upon the parents' age (if the older of two parents is 40, $32,400 may be excluded; if the older is 55, $48,700 may be excluded, etc.). U.S. Department of Education. The Pell Grant Formula, 1989-90; U.S. Department of Education. The Congressional Methodology, 1989-90.

\(^{15}\)For financial aid purposes, all students are automatically deemed to be independent if they are one of the following: 24 years of age or older, a veteran, a ward of court, a person with legal dependents other than a spouse, or a person with deceased parents and no adoptive parent or guardian. Single undergraduate students will also be considered independent if their parents did not claim a dependency exemption for them on their Federal income tax return and if they had more than $4,000 a year in income, student aid, and educational loan. Married and graduate or professional students will also be considered independent if their parents do not claim an income tax dependency exemption for them during the current year. For Federal income tax purposes, the criteria for being considered a dependent are different. With some exceptions, taxpayers' children under the age of 19 are considered dependents if the taxpayers furnish over one-half of their support (not counting nontaxable scholarship aid). If such support is provided, older children continue to be considered dependents if their gross income is less than the personal exemption amount ($2,000 in 1989) or if they are full-time students during 5 calendar months and under 24 years of age. (The special dependency exemption for full-time students was limited to students under 24 years of age by sec. 6010 of the Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647. Previously that provision had no age limit.)
family savings are assessed for dependent students. If parents' "discretionary income" (income minus offsets for family size, taxes, and so on) is negative, an additional savings offset is allowed. However, if total family income is $15,000 or less, students may be able to use a simplified financial aid formula that does not assess savings at all.16

The treatment of assets in Federal student aid need analysis complicates the decisions that families must make when buying savings bonds. Until now, the principal question has been whether the tax advantages of purchasing bonds in the children's names would later be offset by reductions in their financial aid. Would their benefits from lower marginal tax rates, for example, be overcome by the higher need analysis assessment rates applied to their savings? For families not likely to get aid, it generally has been advantageous for the children to own the bonds, whereas if aid were likely, it often has been better for the parents to own them.17 Whether families know of these choices is of course another matter: undoubtedly many are not aware of the alternatives or can figure out which is preferable.

With enactment of the new exclusion, eligible families will generally find it advantageous for the savings bonds to be owned by the parents. Not only will the bonds not be taxed if they are used to pay qualified expenses, but they will not be assessed as heavily in determining Federal student aid. Families not eligible for the exclusion will be in the same situation as before: for them, the question remains how likely it is they will get student aid. The most difficult choice confronts families that cannot predict whether they will be eligible for the exclusion. In these families, if the parents purchase bonds, they will lose the tax advantages available to children and risk not getting the exclusion as well; if the children buy them, the family will forgo the opportunity to use the exclusion at the outset.

16To be eligible to use the simplified formula, relevant family members must either file their Federal income taxes with form 1040A or 1040EZ or be non-filers.

17Exceptions are possible depending on how much difference there is between the parents' and the children's marginal tax rates, how old the children are when the bonds are purchased, and whether bond interest is deferred or recognized annually. Non-financial considerations may also be important, such as whether children are as likely as parents to use bond proceeds responsibly.
ELIGIBILITY FOR HIGHER EDUCATION EXPENSE EXCLUSION

Predicting Eligibility

Who will be eligible for the new higher education expense exclusion? Which families will be able to use the exclusion, and which ones ought not rely on it? As just described, answers to these questions are important for families considering purchasing savings bonds in order to save for college costs. The answers are also important for policy makers who are considering whether the Federal Government should do more to encourage college saving.

Few families will be eligible for the exclusion during the next several years. The requirement that the savings bonds be purchased after 1989 means that families of students enrolled in the early 1990s cannot use the exclusion for bonds bought earlier. Though newly issued bonds will qualify for the exclusion, it will be of negligible value if the bonds are redeemed within 3 or 4 years. As mentioned above, bonds held less than 5 years pay fixed rates of interest ranging from 4.27 percent to 5.5 percent, lower than the guaranteed long-term minimum rate. Families that need only short-term college savings plans often might find other safe investments with better rates of return, even considering the taxes that must be paid.18

Beyond the early 1990s, more families will own qualifying savings bonds they can redeem. By the time children born today are of college age, the restriction on date of purchase will have diminished importance.19 When looking that far ahead, however, it is difficult to predict how other restrictions might affect eligibility. In particular, it cannot be foreseen how many families will be affected by the three statutory provisions discussed below—the upper income limitation, the qualified expenses limitation, and the purchaser's age limitation. The impact of all three restrictions depends upon future circumstances that cannot be forecast with much precision: what family income will be, what colleges will cost, who will attend which schools, how long they will study, how much financial aid will be available, and so

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18EE bonds redeemed after 3 years, for example, currently earn 5.01 percent interest annually, or the equivalent of 6 percent in taxable interest for someone with a 15 percent marginal tax rate or 7.1 percent in taxable interest for someone with a 28 percent marginal rate. For illustrations of the impact of the higher education expense exclusion on the effective rate of return of savings bonds, see U.S. Library of Congress. Congressional Research Service. Saving for College with Education Savings Bonds. CRS Report for Congress No. 89-207 E, by Gerald Mayer. Washington, 1989.

19According to the U.S. Savings Bonds Division, savings bonds are held an average of 10-1/2 years.
Thus the question of who will be eligible for the higher education expense exclusion cannot be answered with any certainty.

Nonetheless, some understanding of future eligibility for the exclusion can be obtained by analyzing who could currently claim it, were that hypothetically possible, assuming that they were redeeming bonds purchased earlier. Analysis based on these assumptions suggests that today more than half of all students in higher education (more than 6 million graduate and undergraduate students) and their families could make full use of the exclusion if they had bonds to redeem. Taking account of the three

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20 The difficulties of prediction can be seen by looking at past trends in college costs and financial aid. U.S. Library of Congress. Congressional Research Service. College Costs: Analysis of Trends in Costs and Sources of Support. CRS Report for Congress No. 88-694 EPW, by Margot Schenet. Washington, 1988. It is also possible that the Internal Revenue Code provisions pertaining to the higher education expense exclusion will be changed.

21 Estimates of the number of students and their families who would currently be eligible for the higher education expense exclusion were drawn from two 1986 sources, the National Postsecondary Student Aid Study (a U.S. Department of Education survey conducted in the fall of 1986) and the U.S. Department of Commerce. Bureau of the Census. Current Population Survey for October, 1986. Although both sources are several years old and have other limitations, for present purposes useful estimates can still be drawn from them. (Two limitations with the data sets ought to be particularly noted: the definitions of income in the surveys are not directly comparable to income recognized for income tax purposes, and the criteria for defining independent and dependent students were changed by the Higher Education Amendments of 1986.) Altogether in the fall of 1986, there were more than 10 and 1/2 million undergraduate students of whom approximately 6 and 1/2 million were dependent and nearly 4 million were independent. There were also 1 and 1/3 million graduate and first-professional degree students, most of whom would now be classified as independent.
eligibility limitations discussed below, it appears that the exclusion would now most likely be of use to families of the following students:  

- dependent students from lower income and middle income families who do not receive scholarships, or only small ones relative to tuition and fees,

- and independent students in their late twenties and older.

In contrast, due to the same eligibility limitations, it appears that at least one-third of all dependent students (more than 2 and 1/2 million) and their families would currently get substantially diminished or no benefit from the exclusion. For independent students, an estimated one fifth (more than one million) would get no benefit, and an additional one-fifth (another million) could apply the exclusion only against interest earned at less than the variable market rate. The exclusion today would least likely be of use to families of the following kinds of students:

- dependent students from upper middle income and higher income families,

- dependent students from lower income and middle income families who receive scholarships covering most or all tuition and fees,

- and independent students not yet in their late twenties.

It should be emphasized that whatever the estimates of eligibility are now--the actual figures could be higher or lower--in 10 or 15 years they could be quite different.

Upper Income Limitation

One significant restriction on eligibility for the higher education expense exclusion applies to upper middle income families: as mentioned above, the exclusion is ratably reduced beginning at $60,000 modified adjusted gross income for married taxpayers and $40,000 for single taxpayers and heads of household. Above $90,000 and $55,000, respectively, the exclusion is eliminated. This restriction will principally affect families with dependent students; few independent students, graduate or undergraduate, have incomes

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22The references to families of different income levels are meant to be approximate. For a married couple family of four, a lower income might be $20,000 or less, for example, and a middle income between $20,000 and $60,000. Above $60,000 might be considered upper middle and higher incomes.
of their own in those ranges. (Among the exceptions may be married students in their thirties or forties who take part-time courses.) A rough estimate suggests that currently as many as one in five dependent students (approximately 1 and 1/2 million) may be in families with incomes within or higher than these ranges. For most, the exclusion would be reduced rather than eliminated.

Whether the income limitation will affect a similar proportion of students 10 or 15 years from now is difficult to say. The income limits are indexed for inflation after 1990, so arguably the proportion would be approximately the same. Yet no one knows whether family incomes, particularly those of upper middle income families, will increase at the same rate as general price inflation. Predicting future income may be especially challenging for parents of young children who are considering whether to purchase savings bonds. If such parents already have income over $60,000, they might reasonably expect to be ineligible for the exclusion when their children go to college. But what if parents have an income of $40,000? Discounting the effects of inflation, should they anticipate that a decade later it might be over $60,000? On average, family income increases until parents are in their fifties. Parents who think their incomes might approach the phase-out range might consider purchasing savings bonds in their children's names, forgoing the exclusion and taking advantage of the alternative tax benefits mentioned above.

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23The estimate is based upon Oct. 1986 Current Population Survey data which show that 28 percent of unmarried college students 18 to 24 years of age were in families with incomes of $50,000 or more. Department of Commerce. Bureau of the Census. Current Population Reports, series P-20, no. 429, School Enrollment: Social and Economic Characteristics of Students: Oct. 1986. Current Population Reports, series P-20, pp. 44-45. It was assumed that about three-quarters of such families will have incomes of $60,000 or more in 1990.


25Some parents may try to increase their income when their children enroll in college, perhaps by earning more or by selling investments and property that have appreciated. If such parents have income in or near the phase out ranges, part of their additional income would be offset by a reduction in the higher education expense exclusion.
Qualified Expenses Limitation

The higher education expense exclusion is limited a second significant way: the exclusion may be claimed only for tuition and required fees net of scholarships, fellowships, and other reductions in tuition.26 For students who attend public colleges and universities—as do three-quarters of all undergraduates and nearly half of all graduate and professional degree students—tuition and required fees generally are a minor portion of the total cost of attendance.27 In the 1988-1989 academic year, for example, undergraduate tuition and fee charges at 4-year in-State public institutions averaged $1,566, or about 27 percent of the total average cost of attendance ($5,823) for resident students. For 2-year in-State public institutions, tuition and fee charges averaged $767, or about 19 percent of the total average cost of attendance ($4,111) for commuter students. For students at these schools who receive scholarships (including fellowships, grants, and other tuition reductions), net tuition and required fees would be lower.28 If the scholarships were large relative to tuition and fee charges, there could be little or no qualified higher education expenses against which to claim the savings bond interest exclusion.

The qualified expenses limitation is particularly significant when the redemption value of the savings bonds exceeds tuition and required fees. In these circumstances, only a pro rata portion of the interest may be excluded. First consider the case of a student without a scholarship who attends a public 4-year college at which tuition and required fees are $1,500 and the total cost of attendance is $5,800. The student's parents intend to pay part of these costs with series EE savings bonds and pay the rest from current earnings (including the student's), other savings, loans, etc. If the parents

26Sec. 135(d)(1) of the Internal Revenue Code.

27Cost of attendance includes tuition and required fees, books and supplies, room and board expenses (board expenses only for commuter students), transportation, and an allowance for incidental expenses. Cost of attendance does not include foregone earnings.

28For Federal income tax purposes, and absent restrictions to the contrary, scholarships may be deemed as used first for tuition and course-related expenses, with the balance, if any, used for room, board, transportation, and other living expenses. This accounting treatment favors students receiving scholarships for which the uses are not explicitly designated, since otherwise they would have to trace whether the proceeds were spent on tuition and course-related expenses (and thus were excludable from taxable income) or on room and board, etc. (and thus must be included in taxable income). U.S. Congress. House. Tax Reform Act of 1986. Conference Report. House Report 99-841. p. II-18. 99th Cong. 2d Sess. Washington, U.S. Govt. Print. Off., 1986. See also the proposed Internal Revenue Service regulation 1.117-O(c)(1) and (e). Federal Register, June 9, 1988, p. 21691-21693.
used savings bonds with a redemption value equal to the tuition and required fees ($1,500), they could exclude whatever portion of that sum represented interest, perhaps $750. (The examples here assume that the redemption value of the bonds equals their face value.) If the bonds had a redemption value of less than the tuition and required fees, the parents could also exclude whatever proportion represented interest. However, if the bonds had a redemption value of more than the $1,500 tuition and fee charges they could exclude only a pro rata share of the interest, for example, $750 on bonds of $2,000 (1,500/2,000, or three-quarters of the $1,000 interest) or $750 on bonds of $3,000 (1,500/3,000, one-half of the $1,500 interest). All interest would be included in the parents' gross income.

Now consider what would occur if the same student receives a $1,200 scholarship, reducing the cost the family must pay from $5,800 (the total cost of attendance, as assumed above) to $4,600 and the qualified educational expenses from $1,500 (the portion representing tuition and required fees) to $300. If the parents used savings bonds with a redemption value of $1,500, of which $750 represented interest, they could exclude $150 of the interest (300/1,500, or one-fifth of total interest) but would have to include the other $600 in their gross income. If the bonds had redemption values greater than $1,500, an even smaller proportion of the interest could be excluded: $150 on bonds of $2,000 (300/2,000, or 15 percent of the interest) or $150 on bonds of $3,000 (300/3,000, or 10 percent of the interest). All interest could be excluded only if total redemption value of the bonds were $300 or less. For this family, the qualified expenses limitation almost eliminates the value of the exclusion.

A rough estimate suggests that about one in six dependent undergraduate students (more than 1,100,000) would currently lose most or all of their eligibility for the exclusion (assuming it were available now) due

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29 If the redemption value of $1,500 were less than the face value, the proportion of the $1,500 that represents interest would be less than $750; alternatively, if the redemption value of $1,500 were greater than the face value, the proportion representing interest would be greater than $750.


31 Families could maximize their eligibility for the exclusion by spreading the redemption of savings bonds across all years for which they have qualified higher education expenses. In order to do so, however, they would have to have other types of savings with which to pay the non-qualified expenses.
to scholarship reductions in qualified expenses. Whether this proportion would also be affected 10 or 15 years from now is hard to say. Not only is it difficult to predict changes in family incomes and college costs, but student aid policies could be considerably different. If more aid were provided through loans (as has occurred during the 1980s), qualified education expenses might increase, even for low income students. Alternatively, if more aid were provided through scholarships (as some urge, particularly for low income students), qualified education expenses could decline, further restricting eligibility for the exclusion.

Parents whose children are likely to attend public colleges with scholarships might consider purchasing savings bonds in their children's names, forgoing the exclusion and taking advantage of the alternative tax benefits described above. If scholarship aid is as widespread in the future as it is today, many families might find this approach to their advantage. Yet there could be risks with this strategy as well. Scholarships are not guaranteed. Moreover, in some cases Federal student assistance may be reduced if the children own the bonds, since student assets are "taxed" much more heavily than parent assets in calculating need-based financial aid. (See the discussion on pages 6-7.) In these cases, families might be better off keeping the bonds in the parents' names even though they would not benefit from the exclusion.

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32The estimate is based on unpublished National Center for Education Statistics cross-tabulations from the NPSAS survey showing that more than 1,100,000 dependent students attending "low cost schools" (total costs of less than $4,523) who received scholarships (grants) in 1986. For dependent students received scholarships but no other aid, the average award was $2,064 for those from families with annual incomes less than $18,641, $1,380 for those from families with incomes between $18,641 and $38,076, and $1,280 for those from families with incomes higher than $38,076. Not included in the estimate are any of the 1,500,000 dependent students receiving scholarships who attended "high cost schools" (total costs more $4,522), though it is likely that some of them also received scholarships exceeding tuition and required fees.

33Since the simplified financial aid formula for low income families does not take assets into account, the only consideration for them (assuming they are able to purchase savings bonds in the first place) is whether the parents or the children are more likely to have taxable income. If they do not have taxable income (for example, if their personal exemptions and standard deduction exceed their income), they would not be taxed on savings bond interest in any case. However, these families would receive no benefit from the higher education expense exclusion.
Purchaser's Age Limitation

The higher education expense exclusion is available only to original purchasers of series EE bonds who are 24 years old or older when the bonds are issued. The age limitation will prevent independent students from using the exclusion for bonds they own until they are 25 years old, which is the earliest that bonds purchased at age 24 would increase in redemption value. At the present time, more than one in five independent students (approximately 1,100,000) is under 25 years of age. The age limitation will also prevent independent students under the age of 29 from using the exclusion for bonds earning the variable market rate (since bonds held less than 5 years earn lower, fixed rates); for these students, tax savings from the exclusion may not compensate for the lower rate of return. At the present time, an additional one in five independent students (another 1,100,000) is at least 25 but not yet 29 years old.

In general, parents of independent students will not be able to use the exclusion for their own savings bonds that they redeem to help pay the students' higher education expenses. (Parents currently provide financial assistance to about one in five independent undergraduate students and about two in five graduate students.) With some exceptions, independent students are not claimed as dependency exemptions on their parents' Federal income tax returns, for if they were they almost always would be classified as

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36 U.S. Department of Education. National Center for Education Statistics. Undergraduate Financing of Postsecondary Education, p. 81; Student Financing of Graduate and Professional Education, p. 54. These estimates in these reports are based upon the NPSAS survey conducted in 1986; the rules for determining independent and dependent student status were subsequently changed.
dependent students. If independent students cannot be claimed as dependents for tax purposes, however, their parents cannot use the exclusion for their college expenses.

In contrast, although the age limitation will also prevent dependent students from using the exclusion for their own bonds until they are 25 years old, their parents will not be barred from using it on their behalf. Most dependent students are included as dependency exemptions on their parents' tax returns. The only condition is that the bonds must be used before the children lose their status as dependents for tax purposes.

Whether the purchaser's age limitation will affect the same proportions of students in the future is difficult to predict. While it is possible to make projections of the number of people by age, it is not known whether the age distribution of college students will continue to change. Between 1970 and 1985 the proportion of all students in higher education over the age of 24 rose from 21 percent to 34 percent; arguably the shift toward older students will continue if more people study for advanced degrees or enroll in continuing education programs. Moreover, it is not known whether the ratio of independent to dependent students will be different. Even if student aid and tax rules for dependency remain the same, more students could be classified as independent if more elect to work and attend part time, for example, or choose to get married or have children.

The higher education expense exclusion could make savings bonds an attractive way for older students to save for advanced or continuing education. For people who anticipate attending college after they reach 30 years of age (currently one in four of all students in higher education is over 30) the exclusion offers a useful tax benefit. Many students over 30 are employed or have spouses who are, so they may have difficulty qualifying for need-based financial aid. Due to the age limitation, though, the exclusion does nothing to make savings bonds more attractive for younger people who are saving for their own education. Some of them might instead benefit from the alternative tax advantages described previously.

See the rules for determining independent and dependent student status in footnote 15 on page 6. Some students might be considered as independent for student aid purposes but remain as dependency exemptions on their parents' tax returns. For example, students 24 years of age and older are automatically deemed to be independent for student aid, but they could also be classified as tax dependents if their income were less than the personal exemption amount.

CONCLUSION

This report has analyzed eligibility for the U.S. savings bonds higher education expense exclusion created by the Technical and Miscellaneous Revenue Act of 1988. To summarize, the exclusion offers a new tax advantage in addition to the option to defer recognition of interest until bonds are redeemed and exemption from State and local taxes. As the exclusion will be available only for series EE bonds issued after December 31, 1989, it is not likely to be widely used during the next several years. After 10 or 15 years, however, it is possible that many families of college students can take advantage of it. While it is difficult to predict college attendance that far in advance, let alone what schools will cost and how much financial aid will be available, some understanding of future eligibility can be obtained by analyzing who could currently use the exclusion, were that possible, assuming that bonds had been purchased earlier. Such analysis shows that more than half of all current students in higher education (more than 6 million graduate and undergraduate students) and their families could use the exclusion. The analysis also shows that eligibility for the exclusion would be eliminated, reduced, or otherwise made less important for four and one-half million students affected by statutory restrictions. The most significant restrictions are the qualified expenses limitation, which would affect families of the many students who receive scholarships at public colleges and universities, and the purchaser's age limitation, which would affect students under the age of 29 who are financially independent of their parents. An upper income limitation would to a lesser extent affect families of numerous dependent students.

The findings about eligibility for the higher education expense exclusion raise two immediate issues. The first is whether families will be able to anticipate if they can use the exclusion. While many families might reasonably expect to be eligible for it, and some not to be, others will find prediction one way or the other difficult. Families are not skilled at estimating what their income will be a decade in advance, let alone tax rates, nor can they foresee whether their children will attend a private or public college or receive scholarships. If it is not clear if the exclusion will be available, families may have trouble deciding whether to purchase savings bonds in the parents' or the children's names. Families choosing the former would lose the tax advantages available to children (ability to offset unearned income against the standard deduction; lower marginal tax rates) and risk

Using tax incentives to encourage families to save for college raises a number of other issues as well, such as whether the incentives would actually result in more saving, whether they would be equitable, and whether they would have any effect on enrollment decisions. For a discussion of these and other issues, see U.S. Library of Congress. Congressional Research Service. Saving for College. Issue Brief No. 89078, by Robert M. Lyke. Regularly updated.
losing the exclusion as well; families choosing the latter automatically forgo the exclusion at the time of purchase.

It might be argued that the difficulties in predicting eligibility are a risk that families must bear. All investments entail risks of some sort, and lost opportunities for tax savings do not diminish the other attractions that savings bonds have. On the other hand, it may not be appropriate for the Federal Government to encourage families to use savings bonds for college expenses when the principal incentive for doing so is uncertain. If nothing else, the difficulty families have predicting eligibility may complicate how savings bonds are marketed.

Difficulties in predicting eligibility are unavoidable if the limitations for the exclusion are applied at the time bonds are redeemed. Whether similar limitations could instead be applied when the bonds were purchased is another approach that might be considered. Conceivably the exclusion could be restricted to families with incomes below certain levels when the bonds were bought. (The income limits might be lower to reflect the reduced earning levels of younger families.) Similarly, the exclusion might be guaranteed for some families, even if their children later received scholarships or were no longer dependents for tax purposes. The advantage of this alternative is that families would know from the beginning whether they would receive a future tax benefit. (They would not know the amount of the benefit, for that would depend upon their future income and marginal tax rate.) A disadvantage of the alternative is that purchasing the bonds would be more complicated.

A second issue raised by the findings is whether the eligibility limitations appropriately focus the exclusion on those families the Federal Government ought to help save for college. The upper income limitation perhaps would be least questioned in this respect, in part because most affected families may not lose the exclusion entirely (currently, relatively few families of college students have incomes in excess of the phase out range). Upper income restrictions have been common in legislation introduced to provide tax advantages for education expenses. Such restrictions are consistent with the aim of student aid need analysis to direct assistance to students with the greatest need.

The qualified expenses limitation may be more debatable. Under present student aid policies, the limitation is likely to affect families of public college students who receive scholarships for much of their tuition and fees. As explained above, such families would have little or no qualified expenses left

40For example, of the six bills introduced in the 100th Congress for a savings bond higher education expense exclusion, four had an upper income limitation. One of the others limited purchases to $1,000 a year for each dependent. Tuition tax credit bills introduced in the early 1980s generally had an upper income limitation.
against which to apply the exclusion. The principal argument for this limitation is that families with scholarship assistance ought not also benefit from the tax exclusion. Scholarships used for tuition and fees, it could be added, have tax advantages of their own. However, tuition scholarships typically cover only a portion of college costs, and families still may need encouragement to save what they can for the rest. A $1,500 grant for full tuition and fees at a 4-year public institution, for example, on average leaves more than $4,000 a year to be paid from other sources. From this perspective, it would be better that incentives to save for college be based on the total costs families will face.

The justification for the effects of the purchaser's age limitation is not clear. As shown above, the limitation prevents independent students from using the exclusion until they are 25 years of age and from receiving the variable market rate of interest until they are 29. One possible argument might be that the exclusion is aimed at encouraging parents to purchase savings bonds for their children's education, not people who finance their own. In addition, the limitation might balance the additional student assistance that some independent students can receive because their parents' income and assets are not taken into consideration during need analysis. However, the limitation does not bar all independent students from using the exclusion, but only younger ones. These students, it could be argued, are the ones who need the most encouragement to save for their education. In addition, not all independent students can receive additional student assistance: those who work full time and take only one or two courses may not qualify for aid at all.

Removing any of the three limitations discussed above would increase the revenue loss attributable to the higher education expense exclusion. Even though most revenue loss would not occur for a number of years, since qualifying bonds cannot be issued until 1990, any additional loss may be inappropriate in light of concerns about Federal budget deficits. It may be difficult in the future to restrict college saving tax advantages that are created now. On the other hand, if families and students were to save more for college, it is possible that future Federal outlays for student assistance could be reduced. In the long run, savings on scholarships and loan subsidies might counterbalance revenue losses for savings incentives.