



Options to Change Interest Rates and Other Terms on Student Loans

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Summary

The Federal Direct Student Loan Program offers loans to students and their parents to help pay for postsecondary education. Under current law, about \$1.4 trillion in new direct loans will be made to students between 2013 and 2023, the Congressional Budget Office (CBO) projects. Analysts and policymakers have raised concerns about various features of the program, including a jump in the interest rate on what are known as subsidized loans—which account for about one-quarter of all new student loans—that is scheduled to occur on July 1, 2013.

This report provides information about the direct student loan program and its effects on the federal budget under current law. It also presents an analysis of the expected budgetary effects of options for changing the terms on new subsidized student loans and of options for changing the overall approach to setting interest rates on all new direct student loans.

What Are the Budgetary Effects of the Federal Direct Student Loan Program?

CBO projects that the total cost to the federal government of student loans disbursed between 2013 and 2023 will be negative; that is, the student loan program will produce savings that reduce the deficit. Under rules established by the Federal Credit Reform Act of 1990 (FCRA), the cost of a student loan is recorded in the federal budget during the year the loan is disbursed, taking into account the amount of the loan, expected payments to the government over the life of the loan, and other cash flows—all discounted to a present value using interest rates on U.S. Treasury securities. Under

Notes: Interest rates for the Federal Direct Student Loan Program are set for the academic year in which loans are approved. Academic years run from July 1 through June 30. The figures and tables in this report reflect calculations of budgetary cost and subsidy rates on the basis of federal fiscal years, which run from October 1 through September 30.

Numbers in the text and tables may not add up to totals because of rounding.

FCRA's rules, CBO estimates, savings from the program will be \$184 billion for loans made between 2013 and 2023. The estimated savings are \$37 billion in 2013 but will diminish over time to fall below \$10 billion per year from 2018 through 2023. (That \$37 billion in savings for loans originated in 2013 excludes savings of \$15 billion that CBO expects to be recorded in the budget this year as a result of the Administration's reassessment of the cost of student loans made in previous years.)

Because FCRA requires the discounting of future cash flows using rates on Treasury securities, the effect of the student loan program on the federal budget depends in part on the difference between two sets of interest rates: those paid by borrowers and those paid by the federal government on Treasury securities. Beginning in July 2013, the interest rates charged for all student loans will be 6.8 percent or 7.9 percent, depending on the type of loan. The government currently borrows at much lower rates; CBO expects the average for 10-year Treasury notes, for example, to be 2.1 percent during 2013. The large gap between the rates paid by student loan borrowers and those paid by the federal government is the source of the savings attributable to the program in 2013. The rates the government pays are expected to rise in coming years, however, thereby reducing the annual budgetary savings from the student loan program.

FCRA accounting does not consider some costs borne by the government. In particular, it omits the risk taxpayers face because federal receipts from interest and principal payments on student loans tend to be low when economic and financial conditions are poor and resources therefore are more valuable. Fair-value accounting methods account for such risk and, as a result, the program's savings are less (or its costs are greater) under fair-value accounting than they are under FCRA's rules. On a fair-value basis, CBO projects that the student loan program will yield \$6 billion in savings in 2013 and will have a cost of \$95 billion for the 2013–2023 period as a whole, compared with projected savings of \$37 billion this year and \$184 billion for the entire period on a FCRA basis.

How Would Setting Different Interest Rates Affect the Student Loan Program?

The federal government's three main types of direct loans—subsidized, unsubsidized, and PLUS loans—are offered to different kinds of borrowers on different terms. The interest rate for subsidized loans is currently scheduled to double from 3.4 percent to 6.8 percent on July 1, 2013. Rates are currently higher for the other two types of loans—6.8 percent for unsubsidized loans and 7.9 percent for PLUS loans—and those rates are not scheduled to change. Analysts and policymakers have expressed concerns about the upcoming change in the rate on subsidized loans, the student loan program's effect on the federal budget, year-to-year fluctuations in the cost of the program both to the government and to borrowers, and other issues.

CBO has assessed a range of potential ways that policymakers could alter the terms of subsidized loans:

- Keep the current rate of 3.4 percent on subsidized loans rather than allowing it to double as scheduled under current law. That option would increase the cost of the student loan program to the government by \$41 billion between 2013 and 2023.
- Restrict access to subsidized loans to students who are eligible to receive Pell grants while allowing the interest rate to rise to 6.8 percent, or eliminate the subsidized loan program altogether. Those alternatives would increase the government's savings during the 2013–2023 period by \$21 billion and \$49 billion, respectively.
- Keep the rate on subsidized loans at 3.4 percent and restrict access to subsidized loans to students who are eligible to receive Pell grants. That option would increase the cost of the student loan program to the government by \$1 billion between 2013 and 2023.

CBO also considered options that would change the overall approach to setting interest rates on all new direct student loans. All of those options would link interest rates on direct student loans to the rates paid on Treasury securities. One set of options would link rates on student loans to the rate for 10-year Treasury notes in the year a loan is disbursed—much like a fixed-rate home mortgage. Another set of options would reset the interest rate annually—much like a variable-rate home mortgage—for student loans made on or after July 1, 2013. In those options, the rate would be linked to the current rate on the 1-year Treasury note.

Any of those options for changing the way that student loan interest rates are set would reduce year-to-year fluctuations in the amount the program costs the government. Whether that cost increased or decreased overall for the next decade would depend on which changes were made. Those options also would generate year-to-year changes in the interest rates that borrowers paid and could lead to high interest rates on student loans if rates on Treasury securities rose sharply. Costs to borrowers could be contained if caps were set for interest rates on student loans, although such caps also would increase the cost of the program to the federal government.

Federal Direct Student Loans

The Federal Direct Student Loan Program (also known as the William D. Ford Direct Student Loan Program) lends money directly to students and their parents to help finance postsecondary education.¹ To qualify for a loan, a borrower must be an undergraduate, a graduate student, or the parent of a dependent undergraduate

1. The Federal Family Education Loan Program (under which the government guaranteed loans from private lenders) ended in June 2010; this report does not discuss that program even though many of its loans are still outstanding, nor does it consider the Federal Perkins Loan Program, a much smaller program administered by participating postsecondary institutions. For more information on federal lending for postsecondary education, see Department of Education, "Federal Student Aid," <http://studentaid.ed.gov/types/loans>.

(generally, an undergraduate who is under age 24, is unmarried, and has no dependents of his or her own). Borrowers repay their loans through loan servicers.

The federal government offers three types of direct loans—subsidized, unsubsidized, and PLUS loans.² Eligibility for each type depends on whether the borrower is a student or parent, whether a student is enrolled in an undergraduate or graduate program, whether the student is financially independent or not, and whether the borrower demonstrates financial need. The terms of the loans also differ in the amounts that can be borrowed, their interest rates, and the periods during which interest accrues.

Subsidized loans are available only to undergraduate students who demonstrate financial need as determined by program rules.³ Financial need depends in part on student and family income and in part on education costs. The amount that can be borrowed through subsidized loans is limited, depending on the student's year in school, whether the borrower is financially independent or not, and the amount of other student financial aid received. Interest does not accrue on subsidized loans while a borrower is enrolled or for certain other periods; in contrast, interest does accrue on unsubsidized and PLUS loans from the date of origination. Unsubsidized loans are available to undergraduate and graduate students (including students in professional degree programs) and are made without regard to financial need, although they too are subject to borrowing limits. Because of the borrowing limits on subsidized loans, many borrowers take out both kinds of loans—subsidized and unsubsidized—which are expected to account for about 26 percent and 56 percent, respectively, of new direct lending (by dollar volume) in 2013 (see [Table 1](#)).

PLUS loans, the third category, are available to parents of dependent students and to graduate students who have reached borrowing limits for other federal direct loans. Those loans are expected to account for about 18 percent of direct student loans in 2013.⁴

Direct student loans carry either variable or fixed interest rates, depending on the date of origination. All subsidized, unsubsidized, and PLUS loans originated before July 1, 2006, had and continue to have variable interest rates that are indexed each July to

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2. The labels *subsidized* and *unsubsidized* do not indicate whether loans are provided at rates that are below the government's cost or below the rates that borrowers would face in the private market; rather, they refer to differences in the terms of loans that are described below.
 3. Subsidized loans have been restricted to undergraduate students since July 2012. Before then, graduate students also could take out subsidized loans.
 4. Borrowers with more than one loan can consolidate them into a single obligation with a fixed interest rate that is a weighted average of the underlying loans' interest rates and that is capped at 8.25 percent. FCRA requires CBO to treat consolidations as modifications to the terms of existing loans, not as new loans. For more information about consolidation loans, see Congressional Budget Office, *The Cost of the Consolidation Option for Student Loans* (May 2006), www.cbo.gov/publication/17767.

the yield on the 3-month Treasury bill. However, those rates are capped at 8.25 percent for subsidized and unsubsidized loans and at 9.0 percent for PLUS loans. Loans originated on or after July 1, 2006, carry fixed interest rates that range from 3.4 percent to 7.9 percent; most have an interest rate of 6.8 percent. Rates on existing variable-rate loans have fluctuated considerably over time in response to changes in the Treasury's borrowing rate, but the caps have dampened the variability that would have occurred in their absence. Because the Treasury's borrowing rates are currently low, the rates on existing variable-rate loans are below the rates on new fixed-rate loans.

For most of the program's history, interest rates were the same for subsidized and unsubsidized loans. In July 2008, however, rates for new subsidized loans were set below those for new unsubsidized loans, and, in July 2011, the rate for new subsidized loans was set at 3.4 percent. That rate is scheduled to remain in effect until July 1, 2013, when current law would return the rate to 6.8 percent, thus again matching the interest rate on new unsubsidized loans. No further rate changes are scheduled under current law: New subsidized and unsubsidized loans will carry a rate of 6.8 percent, and the rate on new PLUS loans will remain at 7.9 percent.

The Cost to the Federal Government of the Direct Student Loan Program

The cost of the Federal Direct Student Loan Program is recorded in the budget according to rules specified in FCRA.⁵ However, the FCRA methodology does not account for costs to taxpayers that stem from certain risks involved in lending—risks that private investors would require compensation to bear. Fair-value accounting includes those costs and therefore generates a higher estimated cost of the program. Under either method, the cost to the federal government of student loans varies according to the type of loan: Unsubsidized loans cost the government less (per dollar lent) than subsidized loans do, and PLUS loans cost the government less than unsubsidized loans.

Budgetary Cost

Under FCRA, the cost of federal loans—known as a credit subsidy—is recorded in the budget in the year the loans are disbursed. The credit subsidy is the net present value of the federal government's expected cash flows over the life of a loan, using interest rates on Treasury securities of comparable maturity to discount the cash flows.⁶ According to

5. For a discussion of the FCRA methodology, see Congressional Budget Office, letter to the Honorable Judd Gregg providing an analysis of the subsidy costs of direct and guaranteed student loans (July 27, 2009), www.cbo.gov/publication/20774.

6. Net present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (the discount rate) used in the calculation.

procedures established by FCRA, CBO projects that student loans issued between 2013 and 2023 will save the government a total of \$184 billion (see [Table 2](#)).⁷

The cost of the student loan program is projected to be negative in each year of the coming decade because of the difference between interest rates on government borrowing and those on student loans. Specifically, the gap between those sets of rates is expected to be large enough to produce enough savings to more than offset the anticipated cost to the government arising from delayed payments and defaults by some borrowers. However, the cost of the program is projected to become less negative—that is, the federal government’s savings are projected to decrease—each year between 2013 and 2018 before leveling off thereafter. That pattern arises because interest rates on student loans will be constant throughout the period under current law while the rates on Treasury securities will rise. For example, CBO projects that the rate on 10-year Treasury notes will rise from 2.1 percent in 2013 to 5.2 percent in 2018 as the economy strengthens. As a result, annual savings for the student loan program are projected to fall from \$37 billion in 2013 to \$8 billion in 2018. (The amount for 2013 is the budgetary cost of loans disbursed in 2013. CBO expects that the budget will also record savings of \$15 billion this year as a result of reestimates of the cost of student loans disbursed in earlier years; such credit reestimates for federal loans are made annually by the Office of Management and Budget and the federal agencies responsible for lending programs.)

Fair-Value Cost

Although the FCRA methodology accounts for expected losses from defaults, it does not account for the fact that losses from defaults tend to be highest when economic and financial conditions are poor—which is when resources are scarcer and hence more valuable. The cost of that “market risk” is excluded from FCRA estimates because the FCRA methodology discounts expected future cash flows at Treasury borrowing rates rather than at higher interest rates that incorporate the cost of such risk.

Credit subsidies estimated using the fair-value methodology represent a broader measure of cost that includes the cost of market risk.⁸ The fair value of a student loan approximates its value in a competitive private market, and a fair-value subsidy occurs whenever the government accepts less stringent terms than private-sector lenders would require to make comparable loans.

7. Credit subsidies do not include administrative costs, which CBO projects will be about \$15 billion for direct student loans between 2013 and 2023.

8. See Congressional Budget Office, *Costs and Policy Options for Federal Student Loan Programs* (March 2010), www.cbo.gov/publication/21018. Because FCRA estimates do not include administrative expenses, and because such expenses are appropriated separately and recorded in the budget on a cash basis, CBO’s fair-value estimates in this report exclude those expenses as well.

Taking account of the cost of market risk significantly reduces or eliminates the savings estimated for student loans under the FCRA approach, making student loans costly to the federal government in most years during the coming decade. CBO projects that direct student loans issued between 2013 and 2023 would cost \$95 billion on a fair-value basis, in contrast with the projected savings of \$184 billion under FCRA accounting. Under either accounting method, the program will be much less financially advantageous to the federal government in 2018 and beyond than in 2013 (see [Figure 1](#)).⁹

On a fair-value basis, CBO estimates, the student loan program will have a negative credit subsidy in 2013 and 2014; that is, it will produce net budgetary savings. That negative estimated subsidy might appear to imply that private financial institutions could make a profit by offering student loans on the same terms or on better terms than will be offered by the federal program under current law. However, the federal government has tools that private lenders do not have for collecting repayments from borrowers who have defaulted: The government can, for example, deduct loan payments from the wages, federal tax refunds, and Social Security benefits of such borrowers. As a result, private firms might not find it profitable to offer student loans on the same terms as the federal government, despite the negative estimated fair-value subsidies.¹⁰

Credit Subsidy Rates for Different Types of Loans

As noted, the credit subsidy for a federal loan program is the dollar *amount* the government disburses minus what borrowers are expected to repay, expressed in present-value terms. The related measure of a credit subsidy *rate* is the ratio of the credit subsidy to the amount disbursed; it measures the cost of the program as a share of the amounts disbursed. As a simple example, if the program lent \$10 and was repaid \$8 in present-value terms, the credit subsidy rate would be 20 percent. Because the amount disbursed is always positive, the credit subsidy rate will be positive or negative depending on whether the credit subsidy itself is positive or negative.

The federal credit subsidy rates vary among the three types of loans. In each year between 2013 and 2023, CBO projects, subsidies will be substantially higher for subsidized than for unsubsidized loans (for estimates under FCRA accounting, see [Table 3](#)). Although under current law interest rates on new loans of both types will be

9. The gap between FCRA and fair-value estimates of outlays for direct student loans narrows during the 2013–2018 period because the risk premium for interest rates that are incorporated in fair-value estimates is projected to fall over that period as economic conditions improve. The risk premium is projected to remain constant after 2018, but the gap between outlays on fair-value and FCRA bases is expected to widen slightly because the constant projected difference in discount rates is applied to an amount of new lending that is projected to grow as more students take out loans.

10. For additional discussion of possible explanations for negative fair-value subsidy estimates, see Congressional Budget Office, *Fair-Value Estimates of the Cost of Federal Credit Programs in 2013* (June 2012), pp. 6–7, www.cbo.gov/publication/43352.

the same starting July 1, 2013, subsidized loans will continue to have higher subsidy rates because they do not accrue interest while students are in school and during certain other periods.¹¹

Subsidy rates are substantially lower for PLUS loans than for unsubsidized loans primarily because PLUS loans have higher interest rates, although PLUS loans' lower projected rates of delinquency and default and higher origination fees also contribute to the lower subsidy rates for those loans.

Options for Changing Interest Rates and Other Terms on Student Loans

The interest rates and other terms of federal direct student loans could be changed in various ways that would affect the cost of the program to the federal government, the cost of loans to students, and the year-to-year fluctuations in the rates paid by borrowers and the subsidy provided to them. The policy options considered in this report fall into two basic categories:

- Those that would change the terms of subsidized student loans, and
- Those that would change the overall approach to setting interest rates for all direct student loans.

Depending on the details of the changes made, costs would be shifted between the federal government and different groups of borrowers. The second group of options also would lead to greater variability in the interest rates charged to students from year to year but would reduce the variability in subsidy rates.¹²

CBO estimated the budgetary effect of policy changes on a FCRA basis. The estimated budgetary effect of those changes on a fair-value basis could be more or less than the estimates reported here (see [Box 1](#)).

11. Borrowers can defer payments under a variety of circumstances. For example, deferments are available to borrowers who are enrolled in school at least half-time, are receiving unemployment compensation, are in the military, or are in a disability rehabilitation program. No interest is charged for subsidized loans during such deferments.

12. The House of Representatives passed a bill on May 23, 2013, that would change the terms of the federal direct student loan program. That bill would set the interest rate on new subsidized and unsubsidized loans as the rate on 10-year Treasury notes plus 2.5 percentage points, with a cap of 8.5 percent, and the rate on new PLUS loans as the rate on 10-year Treasury notes plus 4.5 percentage points, with a cap of 10.5 percent. For more information, see Congressional Budget Office, cost estimate for H.R. 1911, Smarter Solutions for Students Act (May 20, 2013), www.cbo.gov/publication/44255.

Potential Nonbudgetary Consequences of Changing Interest Rates on Student Loans

The financial benefit to individuals of receiving postsecondary education has increased in recent decades, as seen in the widened gap between the earnings of those with and without a college education.¹³ Moreover, postsecondary education also generates benefits for society at large.¹⁴ But the cost of postsecondary education also has risen markedly, presenting a significant hurdle for many students from low- and middle-income families. As a result, borrowing to pay tuition and other expenses has become increasingly important. By offering loans to students and their parents, the federal government encourages and facilitates investment in postsecondary education.

Raising interest rates on federal student loans would have various consequences beyond the effects on the federal budget. If students faced a higher cost of borrowing for education, they might cut back on spending for education, for example by deciding not to attend college, by leaving college before completing a degree, or by applying to schools on the basis of tuition. Those decisions eventually could lead to lower earnings. For any given amount borrowed, raising interest rates also would require a borrower to devote a larger amount of his or her future income to paying interest on student loans. That, in turn, could strain borrowers' ability to make other financial commitments, such as buying a home. However, some analysts suggest that postsecondary institutions may respond to increased federal financial support by raising tuition.¹⁵ If institutions respond in that way, then the effect of raising interest rates would be offset at least partially by lower tuition than would otherwise be charged. Raising interest rates also might encourage students to pay closer attention to the economic value, particularly in the form of increased earnings, that they would obtain from a degree and to increase the speed with which they complete a postsecondary program.

Lowering interest rates on federal student loans would, in general, have the opposite effects. For example, lower interest rates might encourage some students to complete more school than they otherwise would, leading to higher income earned after they leave school. Students who borrowed at lower interest rates also would be able to devote a smaller fraction of their income to repaying student loans. Some of those

13. For additional discussion of changes in the economic return on postsecondary education, see Congressional Budget Office, *Changes in the Distribution of Workers' Hourly Wages Between 1979 and 2009* (February 2011), www.cbo.gov/publication/22010. Also see, for example, David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, "Trends in U.S. Wage Inequality: Revising the Revisionists," *Review of Economics and Statistics* (May 2008), vol. 90, no. 2, pp. 300–323, www.mitpressjournals.org/doi/abs/10.1162/rest.90.2.300.

14. See, for example, Enrico Moretti, "Estimating the Social Return to Higher Education: Evidence From Longitudinal and Repeated Cross-Sectional Data," *Journal of Econometrics* (July–August 2004), vol. 121, nos. 1–2, pp. 175–212, <http://dx.doi.org/10.1016/j.jeconom.2003.10.015>.

15. For a recent study, see Stephanie Riegg Cellini and Claudia Goldin, *Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges*, Working Paper 17827 (National Bureau of Economic Research, February 2012), www.nber.org/papers/w17827. For a review of previous research, see Bridget Terry Long, *What Is Known About the Impact of Financial Aid? Implications for Policy*, Working Paper (National Center for Postsecondary Research, April 2008), <http://tinyurl.com/mp7eexe> (pdf, 374 KB).

benefits of lower interest rates might be reduced, however, if schools responded by raising tuition or if students were less careful about the types of programs they enrolled in.

Changing the Terms of Subsidized Loans

CBO assessed several options for changing the terms of subsidized loans—by reducing interest rates (which would reduce federal savings from the program), by tightening the rules of eligibility to reduce the number of borrowers (which would increase federal savings), or by combining those two types of changes.

Keep the Interest Rate on Subsidized Loans at 3.4 Percent. Lawmakers could reduce some students' future borrowing costs by freezing the interest rate on new subsidized loans at 3.4 percent. Under current law, the rate on those loans will double to 6.8 percent on July 1, 2013. Subsidized loans account for about one-quarter of new direct loans (by dollar volume) and, CBO projects, holding the interest rate on those loans at 3.4 percent would cost the federal government \$41 billion over the 2013–2023 period (see [Table 4](#)).

If the interest rate was held at 3.4 percent, future borrowing costs would be lower than they would be under current law for students who are eligible for subsidized loans. For example, a student who needed to repay \$23,000 (the lifetime borrowing limit) in subsidized loans over a typical 10-year repayment period would owe about \$38 less per month than if the interest rate was 6.8 percent (\$226 per month rather than \$265 per month).¹⁶

Restrict Eligibility for Subsidized Loans. Lawmakers could, in contrast, generate federal savings by restricting eligibility for subsidized loans to students who are eligible for the Federal Pell Grant Program while allowing the interest rate on subsidized loans to rise to 6.8 percent as scheduled. Under current law, fewer students are eligible for Pell grants than are eligible for subsidized loans, so this option would reduce the number of students who could take out subsidized loans. Specifically, about 45 percent of students who are currently eligible for subsidized loans would lose that eligibility under this option because their expected family contribution would be too high.¹⁷ CBO projects that affected students would instead borrow almost as much in unsubsidized loans.

16. The 50 percent decrease in interest rates from 6.8 percent to 3.4 percent does not reduce monthly payments by 50 percent because a portion of each payment goes to principal reduction and the total amount of principal that must be repaid is not affected by a change in the interest rate.

17. A student's eligibility for Pell grants and subsidized loans is determined on the basis of the relationship between his or her family's ability to pay and the cost of the student's education. In particular, the Department of Education calculates each student's expected family contribution (EFC), which depends on the family's income and assets, and postsecondary institutions calculate each student's cost of attendance (COA), which includes estimated tuition, fees, books, room, board, transportation, and other costs. A student is eligible for a Pell grant if the COA is greater than the EFC and the EFC is less than 90 percent of the maximum Pell grant (\$5,550 in 2012–2013). A student is eligible for a subsidized loan, up to the annual borrowing limit, if the COA minus other financial aid is greater than the EFC.

Under this option, federal costs would be reduced by \$21 billion over the 2013–2023 period, CBO estimates. The costs to borrowers would rise because borrowers pay interest on unsubsidized loans from the date of origination; by contrast, no interest accrues on subsidized loans while a student is enrolled in school or during certain other periods. A student who borrowed \$23,000 over five years in unsubsidized loans would leave school with debt of \$27,500 (including \$4,500 in accrued interest); over a typical 10-year repayment period, the monthly payment would be \$52 higher than it would be if the student had borrowed that same amount in subsidized loans.

Policymakers could reduce federal costs even more if they eliminated the subsidized loan program altogether. In such a case, and if students borrowed almost as much as in unsubsidized loans as they would in subsidized loans, federal costs would be reduced by \$49 billion over the 2013–2023 period, CBO estimates.

Keep the Interest Rate on Subsidized Loans at 3.4 Percent and Restrict Eligibility for Those Loans to Students Who Are Eligible for Pell Grants. Alternatively, policymakers could combine aspects of the preceding options by keeping the interest rate on subsidized loans at 3.4 percent while also restricting eligibility for such loans to students who qualify for the Pell Grant Program. Limiting the number of people who could receive subsidized loans to those who are eligible for Pell grants would reduce the cost of the student loan program by \$21 billion over the 2013–2023 period. But keeping the interest rate at 3.4 percent for those loans would cost the federal government \$22 billion over the same period.¹⁸ The net effect would be nearly budget neutral, with an increase in federal costs of \$1 billion, CBO estimates.

Under this approach, costs would decrease for about 5 million borrowers each year who would receive a lower interest rate than under current law, but costs would increase for roughly 4 million borrowers each year who would lose eligibility for subsidized loans. In particular, costs would be lower for students who were eligible for Pell grants and higher for the somewhat better-off students and families who were not.

Alternative Approaches to Setting Interest Rates for Student Loans

CBO analyzed two sets of options that would replace the current-law approach to rate setting with approaches that would link student loan rates to market interest rates. The two sets of options are analogous to the fixed- and variable-rate loans that are common in the home mortgage market. Both sets of options would reduce the sensitivity of federal costs (and credit subsidy rates) to changes in market interest rates—but they would do so by making borrowers' costs more sensitive to market rates.

The options that CBO considered would link student loan interest rates to rates on Treasury securities either in the year in which the loan was originated (resulting in a

18. The \$41 billion in cost for the first option above provides benefits for all subsidized loan borrowers, including borrowers who are eligible for Pell grants and those who are not.

fixed-rate loan) or in each year in which payments are made (resulting in a variable-rate loan). The options also differ from one another in three other ways:

- The gap between the rate students pay and the rate paid by the government—often referred to as the add-on;
- Whether the interest rates for subsidized, unsubsidized, and PLUS loans are the same, or, as under current law, the interest rate on PLUS loans is higher; and
- Whether interest rates are capped (as in the past for variable-rate loans) or uncapped.

Link Interest Rates to Market Rates at Origination. Policymakers could make credit subsidy rates more similar from year to year by setting the rate on new loans at the prevailing rate on 10-year Treasury notes with an add-on of some fixed number of percentage points. The interest rate could be capped, although doing so would increase the amount of the subsidy in years when the cap was reached. The interest rate on loans originated in any given year would be fixed for the life of a loan, but the rate on new loans—even to the same student—would change from one year to the next if rates on Treasury notes changed. Compared with the constant interest rates set in current law for July 1, 2013, and beyond, this approach would tend to lower interest rates on student loans during the next few years and raise them in later years because Treasury rates are currently quite low and CBO projects that they will rise as economic conditions improve.

Under this approach, potential borrowers would not know what interest rates would be throughout their time in school; however, once each loan was disbursed, borrowers would face fixed monthly payments that they would know in advance. Using CBO's projections for the interest rate on 10-year Treasury notes, and assuming a 3.0 percentage-point add-on, in 2013 a first-year student would receive a loan with an interest rate of about 5 percent, but by 2016, that same student would receive a loan with an interest rate of about 7 percent.

CBO considered a few specific options for such fixed-rate loans (see the first and second panels of [Table 5](#)). In particular, it estimated the budgetary effect of linking student loan interest rates to the rate on 10-year Treasury notes at origination plus three different sets of add-ons: 3.0 percentage points for subsidized, unsubsidized, and PLUS loans; 3.0 percentage points for subsidized and unsubsidized loans and 4.0 percentage points for PLUS loans; and 4.0 percentage points for subsidized, unsubsidized, and PLUS loans. Rates on student loans would be high in years when rates for Treasury notes were high, and some analysts and lawmakers have expressed concern that students who borrowed during those years would be disadvantaged. To avert similar situations in the past, interest rates have been capped, and so CBO also estimated the budgetary cost of those same specifications incorporating caps of

8.25 percent for the first set of add-ons, 8.25 percent and 9.0 percent for the second set of add-ons, and 9.0 percent for the third set of add-ons.

According to CBO's estimates, the first of the three options without caps would decrease federal costs by \$16 billion over the 2013–2023 period, the second would decrease federal costs by \$31 billion, and the third would decrease federal costs by \$90 billion. If interest rates were capped, projected federal costs would be higher than without the caps because interest rates on the loans would be lower, on average, than for uncapped loans with the same add-ons.¹⁹ According to CBO's estimates, the first of the three capped options would increase federal costs by \$23 billion over the 2013–2023 period, the second would increase federal costs by \$5 billion, and the third would decrease federal costs by \$39 billion.

Link Interest Rates to Market Rates Each Year in Which Payments Are Made. Under another sort of option for making subsidy rates more similar from year to year, the program would offer variable-rate loans with interest rates each year in which a payment is made that were linked to the rate for 1-year Treasury notes in that year with a fixed-percentage-point add-on. As with the previous sort of option, the interest rates for such loans could be capped.

CBO analyzed the same combinations of add-ons and caps for variable-rate options that it considered for fixed-rate loans (see the third and fourth panels of [Table 5](#)). Because the yields on 1-year Treasury notes typically are lower than are those for 10-year Treasury notes (in 2018, for example, CBO expects that yields on 1-year notes will be 0.9 percentage points lower than yields on 10-year notes), the interest rates under the variable-rate options presented in this section would be lower, on average, than the rates under the fixed-rate options presented above. The result is that the options in this section would be more costly to the federal government than the corresponding options presented above. However, if policymakers favored the variable-rate approach but wanted to reduce federal costs, they could achieve that goal in a straightforward way by choosing larger add-ons.

Under the variable-rate approach, potential borrowers would not know what interest rates would be either during the period of enrollment or during the period of repayment. If market interest rates rose, borrowers would face higher monthly payments under the standard 10-year repayment plan, and they might have difficulty adjusting to that extra burden.²⁰ To address that concern, one set of options would cap interest rates to constrain the range of potential increases.

19. CBO estimated the probabilities of different future paths for interest rates; all of CBO's estimates for options with capped interest rates are weighted averages of the projected budgetary cost for all interest rate paths, with the weight attached to each path in proportion to its estimated likelihood of occurring.

20. The Federal Direct Student Loan Program currently offers other repayment plans that cap payments at a fixed percentage of income above a certain amount. Those plans help make monthly payments affordable for students with high debt or low income. The proportion of students choosing those plans is factored into CBO's estimates.

According to CBO's estimates, the first of the three options without caps would increase federal costs by \$21 billion over the 2013–2023 period, the second would increase federal costs by \$3 billion, and the third would decrease federal costs by \$58 billion. From 2013 through 2023, the first of the three options with interest rate caps would increase federal costs by \$75 billion, the second would increase federal costs by \$54 billion, and the third would decrease federal costs by \$3 billion.²¹

Effects of Possible Policy Changes on Year-to-Year Differences in Subsidy Rates

There would be less yearly variability in subsidy rates under options that linked student loan interest rates to market rates than there is under current law. For example, consider subsidy rates for loans originating in 2013 and 2018, estimated on a FCRA basis. Under current law, CBO estimates, the average subsidy rate will be 30 percentage points lower in 2013 than in 2018 (-36 percent rather than -6 percent; see the bottom row in [Table 6](#), which repeats certain figures from [Table 3](#)). Under the option that links interest rates for all types of loans to the 10-year Treasury note at origination and with a 3.0 percentage-point add-on for all loans and no cap, the average subsidy rate would be 13 percentage points lower in 2013 than in 2018 (-25 percent versus -12 percent; see the top row in [Table 6](#)).²² Similarly, under the variable-rate option with a 3.0 percentage-point add-on for all loans, the average subsidy rate would be 15 percentage points lower for loans made in 2013 than for loans made in 2018 (-22 percent versus -7 percent).

Imposing interest rate caps would increase the yearly variation in subsidy rates relative to options without caps. If a cap is binding—as would occur when rates on Treasury notes are high—interest rates on loans would be lower and the loans would receive a higher subsidy than they would without a cap. How much higher the average subsidy would be with a cap depends on how often the cap took effect and how much lower rates would be in those times than they would be without the cap. When interest rates are low (as they are now), the cap is unlikely to be triggered and subsidy rates would be only slightly higher for options with caps than for those without. However, when interest rates are higher (as CBO projects for 2018 and beyond), a cap is more likely to be triggered and subsidy rates would be significantly higher for options with caps than for those without.

21. The federal government currently allows students to consolidate loans into a single obligation with a fixed interest rate calculated as a weighted average of the interest rates of the underlying loans, including the current interest rate on variable-rate loans. The option to convert variable-rate to fixed-rate loans is valuable for borrowers and costly to the government because borrowers tend to convert when they believe interest rates will increase in the future. By contrast, when all loans carry fixed rates, there is no such timing incentive for consolidation. CBO factored the cost of such opportunistic refinancing into its cost estimates for variable-rate loan options.

22. Because the interest rates on student loans would be set as fixed add-ons relative to Treasury rates, one might expect the subsidy rates to be identical over time under this approach. However, subsidy rates depend on the rates charged on student loans relative to the entire stream of future Treasury rates during the entire repayment period for those loans, and the 10-year Treasury rate at any point in time does not perfectly capture that stream.

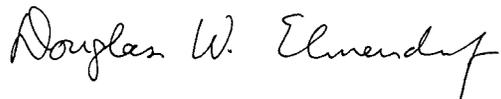
About This Document

This Congressional Budget Office (CBO) report was prepared at the request of the Ranking Member of the Senate Committee on the Budget. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Nabeel Alsalam and William Carrington of CBO's Microeconomic Studies Division prepared the report in collaboration with Justin Humphrey, Deborah Kalcevic, and Sam Papenfuss of CBO's Budget Analysis Division and with guidance from Joseph Kile and Chad Shirley. Molly Dahl, Peter Fontaine, Wendy Kiska, and Damien Moore provided comments. Vi Nguyen provided research assistance.

Daniel Madzelan, formerly of the Department of Education, Neal McCluskey of the Cato Institute, and David Smole of the Congressional Research Service commented on earlier versions of the report. The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.

Kate Kelly edited the report, and Maureen Costantino and Jeanine Rees prepared it for publication. An electronic version is available on CBO's website (www.cbo.gov).



Douglas W. Elmendorf
Director

June 2013

Table 1.

[Return to Reference](#)

Characteristics of Various Types of Federal Direct Student Loans

Loan Type	Who Is Eligible?	Student Loan Originations in 2013 (Estimate)		Interest Rate on Newly Originated Loans (Percent)		Does Interest Accrue During Enrollment or During Certain Other Periods?	Lifetime Borrowing Limit
		Billions of Dollars	Percentage of Total	July 2011– June 2013	July 2013 and Later		
Subsidized	Undergraduates with financial need ^a	28	26	3.4	6.8	No	\$23,000
Unsubsidized	Undergraduates and graduate and professional degree students, regardless of financial need	59	56	6.8	6.8	Yes	\$31,000 for dependent undergraduate students, \$57,500 for independent undergraduates and \$138,500 for graduate and professional students, minus any borrowing in unsubsidized loans ^b
PLUS	Graduate and professional degree students and parents of dependent undergraduates, regardless of financial need ^b	19	18	7.9	7.9	Yes	No limit ^c

Source: Congressional Budget Office.

Note: Excluded from this table are data for Federal Direct Consolidation Loans, which allow borrowers to combine two or more federal student loans for repayment as a single loan. The Federal Credit Reform Act of 1990 requires CBO to treat consolidation loans as modifications to the terms of the existing loans, not as new loans.

- a. A student’s eligibility for subsidized loans is determined on the basis of the relationship between his or her family’s ability to pay and the cost of the student’s education. In particular, the Department of Education calculates each student’s expected family contribution (EFC), which depends on a family’s income and assets, and postsecondary institutions calculate each student’s cost of attendance (COA), which includes estimated tuition, fees, books, room, board, transportation, and other costs. A student is eligible for a subsidized loan, up to the annual borrowing limit, if the COA minus other financial aid is greater than the EFC.
- b. Dependent students generally are undergraduate students under the age of 24, unmarried, and with no dependents of their own.
- c. Borrowing is limited annually to the COA minus other financial aid.

Table 2.

[Return to Reference](#)

Projected Outlays and Net New Lending Under the Federal Direct Student Loan Program, by Fiscal Year

(Billions of dollars)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2013-2023
Outlays ^a	-37 ^b	-36	-29	-20	-13	-8	-8	-8	-8	-8	-9	-184
Net New Lending ^c	106	109	113	117	121	124	128	132	136	140	145	1,371
Memorandum:												
Outlays Estimated Using Fair-Value Accounting ^a	-6	-4	*	6	11	14	14	15	15	15	16	95

Source: Congressional Budget Office.

Notes: Negative values indicate budgetary savings.

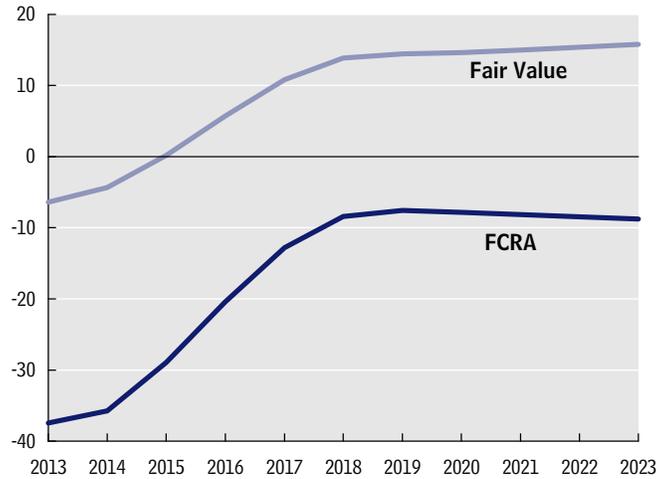
Outlays and net new lending are from Congressional Budget Office, "Student Loan Programs—May 2013 Baseline" (May 14, 2013), www.cbo.gov/publication/44198.

* = between -\$500 million and \$500 million.

- a. Outlays are credit subsidies calculated according to the procedures specified in the Federal Credit Reform Act of 1990 (FCRA), except that the procedure to calculate fair-value credit subsidies adds an amount to the discount rates specified by FCRA to account for certain risks that the FCRA approach does not account for. Credit subsidies exclude administrative costs (including payments to Department of Education contractors and certain statutory payments for collection costs).
- b. Does not include -\$15 billion in outlays attributable to credit subsidy reestimates on existing federal student loans that were disbursed in prior fiscal years.
- c. Net new lending excludes Federal Direct Consolidation Loans, which allow borrowers to combine two or more federal student loans for repayment as a single loan. FCRA requires CBO to treat consolidation loans as modifications to the terms of the existing loans, not as new loans. Net new lending includes only those loan obligations for which at least one disbursement occurs. (Some students are approved for a loan but do not enroll in school.)

Figure 1. **Return to Reference**
Projected Outlays for Federal Direct Student Loans, Calculated Using FCRA and Fair-Value Methodologies, by Fiscal Year

(Billions of dollars)



Source: Congressional Budget Office.

Notes: Outlays are credit subsidies calculated according to the procedures specified in FCRA, except that the procedure to calculate fair-value credit subsidies adds an amount to the discount rates specified by FCRA to account for certain risks that the FCRA approach does not account for. Credit subsidies exclude administrative costs (including payments to Department of Education contractors and certain statutory payments for collection costs).

FCRA = Federal Credit Reform Act of 1990.

Table 3.

[Return to Reference 1, 2](#)

Projected Credit Subsidy Rates and Net New Lending for Various Loans Under the Federal Direct Student Loan Program, by Fiscal Year

Type of Loan	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2013-2023
Credit Subsidy Rate (Percent)^a												
Subsidized	-14	-12	-5	2	7	10	10	10	10	10	10	n.a.
Unsubsidized	-40	-33	-25	-16	-10	-7	-7	-7	-7	-7	-7	n.a.
PLUS	-59	-52	-42	-32	-25	-22	-22	-22	-22	-22	-22	n.a.
Overall	-36	-31	-23	-15	-9	-6	-6	-6	-6	-6	-6	n.a.
Net New Lending (Billions of dollars)^b												
Subsidized	28	28	29	30	31	31	32	33	34	35	36	347
Unsubsidized	59	61	62	64	66	68	70	72	73	75	77	747
PLUS	19	20	22	23	24	25	27	28	29	30	32	278
Total	106	109	113	117	121	124	128	132	136	140	145	1,371

Source: Congressional Budget Office.

Notes: Negative values indicate budgetary savings.

Credit subsidy rates and net new lending are from Congressional Budget Office, "Student Loan Programs—May 2013 Baseline" (May 14, 2013), www.cbo.gov/publication/44198.

- a. The credit subsidy rate for a group of loans is the credit subsidy as a percentage of the amount of those loans. Credit subsidies are calculated according to the procedures specified in the Federal Credit Reform Act of 1990 (FCRA); they exclude administrative costs (including payments to Department of Education contractors and certain statutory payments for collection costs).
- b. Net new lending excludes Federal Direct Consolidation Loans, which allow borrowers to combine two or more federal student loans for repayment as a single loan. FCRA requires CBO to treat consolidation loans as modifications to the terms of the existing loans, not as new loans. Net new lending includes only those loan obligations for which at least one disbursement occurs. (Some students are approved for a loan but do not enroll in school.)

Box 1.**Return to Reference****Fair-Value Estimates of the Effects of Policy Changes**

The cost of the student loan program to the federal government is higher (or the savings are lower) under fair-value accounting than they are under the accounting rules established by the Federal Credit Reform Act of 1990 (FCRA) because the interest rates used to discount borrower repayments are higher under fair-value methods. Those higher discount rates reflect the “market risk” that arises because cash flows from loan repayments are lowest when economic conditions are weak—when resources are scarcer and hence more valuable. That does not mean, however, that establishing more favorable terms for borrowers would have costs that are uniformly greater under fair-value accounting or that establishing less favorable terms for borrowers would have savings that are uniformly greater. Rather, the budgetary effect of a change to the program on a fair-value basis compared with a FCRA basis depends on the nature of the change under consideration.

Policy changes that alter the total amount, but not the time pattern, of loan repayments generally have less effect on cost (or savings) under fair-value accounting than under FCRA accounting because the higher discount rates used under the fair-value method render any future cash flows—or changes in cash flows—less valuable. As an illustration, increasing an amount repaid in 20 years by \$10 would reduce a loan subsidy by \$3.77 if the future payment is discounted at 5 percent per year and by \$5.53 if the payment is discounted at 3 percent per year.

In contrast, policy changes that alter the time pattern, but not the total amount, of loan repayments generally have more effect on cost (or savings) under fair-value accounting than under FCRA accounting, provided that the change does not alter the fair-value discount rate. That occurs because the higher discount rate used in fair-value estimates makes the present value of a stream of payments more sensitive to the timing of those payments. As an illustration, moving the repayment of \$10 from 20 years in the future to 10 years in the future would reduce a loan subsidy by \$2.37 if the future payment is discounted at 5 percent per year and by \$1.90 if the payment is discounted at 3 percent per year.

Those patterns hold for policy options that do not change the fair-value discount rate. However, some policy changes would affect that rate—particularly those that alter the extent to which loan repayments rise or fall with the business cycle, such as an income-based repayment proposal offering greater loan forgiveness when incomes are lower (as they tend to be in recessions). The difference between the FCRA and fair-value costs (or savings) of such policy changes must be assessed on a case-by-case basis.

Table 4.

[Return to Reference](#)

Budgetary Cost of Options to Maintain the Current Interest Rate and to Restrict Eligibility for Subsidized Loans, by Fiscal Year

(Billions of dollars)

Option	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2013-2013-		
												2018	2023	
Keep the Interest Rate at 3.4 Percent	2	4	4	4	4	4	4	4	4	4	4	4	21	41
Restrict Eligibility for Subsidized Loans														
Restrict eligibility to students who are eligible for Pell grants ^a	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-11	-21
Eliminate subsidized loans	-1	-4	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-25	-49
Keep the Interest Rate at 3.4 Percent and Restrict Eligibility to Students Who Are Eligible for Pell Grants ^a	*	*	*	*	*	*	*	*	*	*	*	*	*	1

Source: Congressional Budget Office.

Notes: Negative values indicate budgetary savings.

Estimates are relative to CBO’s May 2013 baseline. See Congressional Budget Office, “Student Loan Programs—May 2013 Baseline” (May 14, 2013), www.cbo.gov/publication/44198.

* = between zero and \$500 million.

- a. A student’s eligibility for Pell grants and subsidized loans is determined on the basis of the relationship between his or her family’s ability to pay and the cost of the student’s education. In particular, the Department of Education calculates each student’s expected family contribution (EFC), which depends on a family’s income and assets. Postsecondary institutions calculate each student’s cost of attendance (COA), which includes estimated tuition, fees, books, room, board, transportation, and other costs. A student is eligible for a Pell grant if the COA is greater than the EFC and the EFC is less than 90 percent of the maximum Pell grant (\$5,550 in 2012–2013). A student is eligible for a subsidized loan, up to the annual borrowing limit, if the COA minus other student financial aid is greater than the EFC.

Table 5. Return to Reference 1, 2

Budgetary Cost Relative to Current Law of Options to Link Interest Rates on Federal Direct Student Loans to Market Rates, by Fiscal Year

(Billions of dollars)

Option	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2013-2018	2013-2023
Link Interest Rates to 10-Year Treasury Note at Origination, Uncapped													
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans	8	13	10	3	-3	-6	-8	-8	-8	-9	-9	26	-16
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans and 4.0 percentage points for PLUS loans	7	11	8	2	-4	-7	-9	-9	-10	-10	-10	17	-31
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans	4	6	2	-4	-9	-13	-14	-15	-15	-16	-16	-14	-90
Link Interest Rates to 10-Year Treasury Note at Origination, Capped													
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 8.25 percent)	8	13	10	4	*	-2	-3	-2	-2	-2	-1	33	23
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans (capped at 8.25 percent) and 4.0 percentage points for PLUS loans (capped at 9.0 percent)	7	11	8	2	-2	-4	-4	-4	-4	-3	-3	23	5
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 9.0 percent)	5	7	3	-2	-6	-7	-8	-8	-8	-8	-8	-1	-39
Link Interest Rates to 1-Year Treasury Note Each Year, Uncapped													
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans	10	12	5	*	-1	-1	-1	-1	-1	-1	-1	25	21
Add-on of 3.0 percentage points for subsidized and unsubsidized loans and 4.0 percentage points for PLUS loans	9	10	3	-1	-2	-2	-2	-3	-3	-3	-3	16	3
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans	5	4	-3	-7	-8	-8	-8	-8	-8	-9	-9	-16	-58
Link Interest Rates to 1-Year Treasury Note Each Year, Capped													
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 8.25 percent)	11	14	8	4	4	4	5	5	6	6	7	46	75
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans (capped at 8.25 percent) and 4.0 percentage points for PLUS loans (capped at 9.0 percent)	10	12	6	3	2	3	3	3	4	4	4	36	54
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 9.0 percent)	6	6	*	-3	-3	-2	-2	-2	-2	-1	-1	5	-3
Memorandum:													
Budgetary Cost Under Current Law ^a	-37	-36	-29	-20	-13	-8	-8	-8	-8	-8	-9	-144	-184

Source: Congressional Budget Office.

Notes: Negative values indicate budgetary savings.

Estimates are relative to CBO's May 2013 baseline (see Congressional Budget Office, "Student Loan Programs—May 2013 Baseline" (May 14, 2013), www.cbo.gov/publication/44198) and are made under the assumption that interest rates for consolidation loans would be uncapped.

* = between -\$500 million and \$500 million.

a. After June 30, 2013, under current law, the fixed rate for subsidized and unsubsidized loans will be 6.8 percent; for PLUS loans, the rate will remain at 7.9 percent.

Table 6.

[Return to Reference 1, 2](#)

Credit Subsidy Rates for Options to Link Interest Rates on Federal Direct Student Loans to Market Rates, for Selected Fiscal Years

Option	2013	2018	2023
Link Interest Rates to 10-Year Treasury Note at Origination, Uncapped			
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans	-25	-12	-12
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans and 4.0 percentage points for PLUS loans	-26	-13	-14
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans	-30	-18	-18
Link Interest Rates to 10-Year Treasury Note at Origination, Capped			
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 8.25 percent)	-25	-8	-7
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans (capped at 8.25 percent) and 4.0 percentage points for PLUS loans (capped at 9.0 percent)	-26	-9	-9
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 9.0 percent)	-29	-12	-12
Link Interest Rates to 1-Year Treasury Note Each Year, Uncapped			
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans	-22	-7	-7
Add-on of 3.0 percentage points for subsidized and unsubsidized loans and 4.0 percentage points for PLUS loans	-24	-8	-8
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans	-29	-12	-13
Link Interest Rates to 1-Year Treasury Note Each Year, Capped			
Add-on of 3.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 8.25 percent)	-20	-2	-1
Add-ons of 3.0 percentage points for subsidized and unsubsidized loans (capped at 8.25 percent) and 4.0 percentage points for PLUS loans (capped at 9.0 percent)	-22	-4	-3
Add-on of 4.0 percentage points for subsidized, unsubsidized, and PLUS loans (capped at 9.0 percent)	-27	-8	-7
Fixed Rate on Subsidized, Unsubsidized, and PLUS Loans			
6.8 percent for subsidized and unsubsidized loans and 7.9 percent for PLUS loans ^a	-36	-6	-6

Source: Congressional Budget Office.

Notes: Negative values indicate budgetary savings.

The credit subsidy rate is the baseline credit subsidy plus the change that is attributable to the option. The credit subsidy rate for a group of loans is the credit subsidy as a percentage of the amount of those loans. Credit subsidies are calculated according to the procedures specified in the Federal Credit Reform Act of 1990; they exclude administrative costs (including payments to Department of Education contractors, certain statutory payments for collection costs, and statutory payments to guaranty agencies). Estimates of these options are made under the assumption that interest rates for consolidation loans would be uncapped.

a. After June 30, 2013, under current law.