The Heritage Foundation
LEADERSHIP FOR AMERICA

ISSUE BRIEF

No. 3923 | APRIL 24, 2013

The Unknown Cost of Federal Student Loans

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As Congress again considers preventing the interest rate on federal student loans from doubling, the cost to taxpayers should be a central issue. However, the federal government's accounting practices systematically understate the cost of student loans by failing to account for market risk. A superior method called "fair value accounting," which is the strong preference of academic economists and the Congressional Budget Office (CBO), would show considerably greater costs due to the risk associated with expecting loan repayments.

The CBO has demonstrated how fair value accounting can dramatically change the reported costs of federal student loans.[1] This *Issue Brief* summarizes the CBO's work and considers how Congress could determine the true costs of student loans. From a policy perspective, it is unwise for Congress to expand the student loan program without a better understanding of the costs.

Legislative Background. In 2007, Congress temporarily halved the interest rate on new student loans, from 6.8 percent to 3.4 percent. Congress later extended the lower rate for one year, but without further action the current 3.4 percent rate will revert to 6.8 percent on July 1. Preventing the increase would come at a direct cost in the form of less interest paid to the government, and it also comes with the potential indirect cost of incentivizing more students to participate in the program.

How Congress Budgets for Student Loans. With student loans, the government incurs a large up-front cost (the loan given to the student) and then receives revenues (the student's gradual repayments of the loan) over a period of several years. The government budgets for these transactions through "accrual-based" accounting, taking the initial cost of the loan and subtracting all the projected repayments to create a single cost figure in the origination year.

To illustrate, imagine that the federal government grants a $300 loan this year, and the receiving student pays back the loan in $100 increments over three years. The loan would be entered on this year's fiscal ledgers as –$300 + $100 + $100 + $100 = $0.

Three major issues complicate this cost calculation. First, not all students will pay back their loans in full, so the government projects how much it will actually receive in loan repayments. If the government expects only 95 cents of every loaned dollar to be repaid, then the new calculation would be –300 + $95 + $95 + $95 = –$15.

Second, the government charges students interest to reduce its costs. At 6 percent annual interest, the federal government's projected income stream would be roughly –$300 + $106.62 + $106.62 + $106.62 = $19.86.[2]

Third, the government must "discount" (reduce the value of) future revenue based on the time value of money. A dollar paid next year is worth less than

This paper, in its entirety, can be found at
http://report.heritage.org/ib3923

Produced by the Domestic Policy Studies Department

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a $1 paid today, but how much less? The government answers that question by referencing the yield on Treasury bonds. Since the government could invest a dollar today in U.S. Treasuries and have $1.03 next year (assuming a 3 percent yield), the government reasons that $1.03 next year is really like having a $1 today.[3]

So the government applies a 3 percent annual discount rate (or whatever the appropriate Treasury yield is) to the expected payments.[4] Now the income stream would be: –$300 + $103.52 + $100.50 + $97.57 = $1.59.

The "Fair Value" Accounting Critique. In the example above, student loans have a positive impact on the budget. In fact, the CBO estimates that federal student loans would create $36.3 billion in revenue in fiscal year (FY) 2013, *according to government accounting practices*.[5]

However, almost all economists believe that the way the federal government accounts for student loan costs is simply wrong. Under the principles of "fair value" accounting, which the CBO endorses, the discount rate applied to the revenue from students' repayments should be much higher than the rate on U.S. Treasuries. A higher discount rate would reduce the present value of those repayments, thus increasing the cost of the student loan program to the government.

The reason the discount rate is higher is because it incorporates the price of market risk into cost estimates, while current accounting practices ignore that risk. Students *might* pay back what the government predicts they will, but taxpayers must cover the full cost of the loan regardless. Since defaults tend to occur when the economy is weak, taxpayers face the risk of losing expected funds at a time when budgets are least flexible.

Thus, the government's budgetary estimate reflects only part of the fair value cost of offering a student loan. Additional cost comes from the risk that loan repayments will be lower than expected.[6] The federal government should use a higher discount rate to reflect the risk that expected loan repayments will not materialize.[7]

Costs Are Still Unknown. The CBO has applied a risk-appropriate discount rate to student loans based on what private lenders would offer for a similar level of risk.[8] In contrast to the government's current accounting practices, which show student loans making a "profit" for the government of 9 percent, the CBO's alternate—but more accurate—analysis found that between 2010 and 2020 the program would cost 12 percent more than it brought in.

A similar analysis conducted by the CBO, just for FY 2013, also shows a large difference between current accounting practices and the fair value approach.[9] Interestingly, however, the CBO still found a small net budgetary gain in 2013 from student loans even with the fair value approach.

If the federal government is truly able to turn a profit from its student loans in 2013, that raises the question of why private lenders have not offered

1. Congressional Budget Office (CBO), "Fair-Value Estimates of the Cost of Federal Credit Programs in 2013," June 2012, http://www.cbo.gov/publication/43352 (accessed April 18, 2013).
2. This figure comes from a formula similar to that used for home mortgages.
3. Similarly, reducing the budget deficit by one dollar today would lower debt one year from now by $1.03.
4. To apply a 3 percent discount rate, the expected payment of $106.62 is divided by 1.03 in the first year, then by 1.03 twice in the second year, and then three times in the third year.
5. Ibid., p. 5.
6. Public-sector pensions also ignore risk when it comes to valuing their liabilities, creating a parallel to the student loan problem. Whereas the federal government treats its student loan assets (the expected loan repayments) as guaranteed even though they are risky, state and local pensions treat their liabilities (the future pension payments they must make) as risky even though they are guaranteed. The result is that the federal government discounts its student loan assets at a rate that is too low, and states discount their pension *liabilities* at a rate that is too high. Both errors have the effect of making costs to the government appear lower than they really are. For more on pensions, see Jason Richwine, "The Real Cost of Public Pensions," Heritage Foundation *Backgrounder* No. 2694, May 31, 2012, http://www.heritage.org/research/reports/2012/05/the-real-cost-of-public-pensions.
7. The cost of market risk is easily observed in private markets, where investors must pay a premium if they want to insure a risky asset against losses that tend to occur during an economic downturn.
8. CBO, "Costs and Policy Options for Federal Student Loan Programs," March 2010, http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/110xx/doc11043/03-25-studentloans.pdf (accessed April 18, 2013).
9. CBO, "Fair-Value Estimates."

similar loans to students.[10] The lack of private competition suggests (but does not prove) that the CBO is using a fair value discount rate that is still too low, not fully reflecting the risk that private lenders perceive. Given the generous terms of federal student loans—flexible repayment periods, no credit check, no cosigner, the possibility of loan forgiveness, etc.—this would not be surprising.

It may be useful to query private lenders about the interest rate they would need to charge if they were to offer student loans on the same terms that the federal government does. That rate may be higher than even the CBO's fair value discount rate, but it is likely the more appropriate rate to apply.[11]

Do Not Expand a Program with an Unknown Cost. The federal government claims that student loans make money for taxpayers, but there is a strong possibility that they actually cost the government money. The hidden cost comes from the market risk taxpayers incur from expecting loan repayments that may not materialize. Current government accounting methods do not account for this risk, but "fair value accounting" properly incorporates the risk into cost estimates.

The lack of fair value accounting raises doubts about expanding student loans. If Congress again acts to prevent interest rates from rising to 6.8 percent, the extended subsidy would likely increase participation in the program, creating even more unknown costs.[12] Congress should not expand the student loan program before the cost to taxpayers is fully understood.

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10. Ibid., p. 7.
11. The interest rate charged by private lenders may need to be adjusted based on expected profits that it incorporates.
12. Congress should not repeat its previous attempt to offset the cost of lower interest rates. As part of an elaborate plan to "pay for" the one-year extension of the 3.4 percent rate last year, Congress allowed corporations to take more risk with their employee pension funds, thereby transferring contingent costs to the taxpayers. The cost of that added risk for taxpayers appears to have been kept off the books. For more, see Lindsey M. Burke and Jason Richwine, "Bad Deal on Student Loans," *National Review Online*, June 28, 2012, http://www.heritage.org/research/commentary/2012/07/bad-deal-on-student-loans (accessed April 24, 2013).