This is an informative and inventive paper on an important topic. Good evidence on the incidence and effects of federal tax credits for college is hard to come by, in part because the programs are still pretty new and in part because it is hard to get adequate evidence about the characteristics of recipients of the tax credits. I will organize my comments around three elements of Long's paper: the incidence (or distributional impact) of the tax credits; their effects on students; and their effects on institutions.

Incidence of the federal higher education tax credits

Long finds that the two tax credits are an effective mechanism for delivering benefits to middle-class families, which was presumably a major goal of the programs. At least for now, the take-up rate on the credits is rather low, but will probably rise as people (including tax advisors) get a better handle on the opportunities offered by the cedits. The addition in the Bush tax cuts of 2001 of a deduction for college costs as an alternative to the Hope or Lifetime Learning Credits will certainly extend the learning curve for families figuring out how to take best advantage of these tax opportunities.

It's frustrating that, so far at least, available data make it difficult to sort out the income profile of families with dependent students who receive the credits from the income profile of independent students. It is clearly very different for a middle-aged familry with children of college age to receive a credit than it is for, say, two married thirty year old graduate students. Unfortunately at this point the distributional data available from the IRS combine these two groups of recipients.

Presumably the IRS micro data that will become available will help sort out the income profiles of these two groups. The National Postsecondary Student Aid Study, whose 1999-2000 data have recently become available, may be helpful on this question as well

Of course, beyond recognizing that the tax credit programs do indeed reach middle-income families, it is also of interest to track who within these populations benefits. Among middle-aged families, clearly these credits favor families with children and with children who attend college. Among younger, independent students, benefits accure to those who pursue college education and particularly (for the Lifetime Learning Credit) those who pursue graduate or professional education.

Effects on students

Long rightly points out that one publicly declared purpose of the tax credits was to raise college enrollments. It's not clear, though, how serious an aim this was. The legislative history indicates that the Clinton administration's main purpose was to offer an alternative to capital gains tax cuts that would be more favorable to the middle class. It is instructive that the early estimates by the Treasury department of the cost of the tax credits assumed there would be no enrollment effects.

Long indeed offers several good reasons for expecting the credits to have at best a small effect on enrollments. In addition to the points she makes, it may be worth adding that. Since postsecondary attendance is already pretty high for young high school graduates from middle-income families, there isn't much room for increases in attendance among that population.

If one tries to think about who has the strongest incentive to change behavior in response to the credits, it may well be those adults who have HOPE eligibility and the right income levels to qualify for the benefit, plus the ability to go more than half-time in order to qualify. Empirically, however, as Turner shows in her piece in this volume, it is rare for adults who have never started college to begin after the age of 20 - and only people in their first or second year of college are eligible for the HOPE credit.

The other place to look for behavioral effects, then, might be among adults who attend part-time and who qualify for the Lifetime Learning Credit. The partial federal subsidy for additional credits might induce adults to take more courses than otherwise. Detecting these effects would require very good data.

Effects on institutions

It is in a sense reassuring to see Long's evidence that state institutions respond rationally to the incentives to raise prices created by the tax credits. When the federal government introduced what are now called Pell grants, it was obvious that public institutions with zero tuition could gain revenue by introducing tuition – a point that was made, controversially, in 1972 when the Keppel Taskforce recommended introducing tuition at the City University of New York. The Task Force observed that "New York state students and institutions will fail to some degree to qualify for Federal funds under the new statutes unless the public institutions charge higher tuitions than they do at present. ... [We] consider it extremely important that the State take maximum advantage of Federal funding in order to reduce the burden on State taxpayers." (Task Force on Financing Higher Education, 1972, p. 5 and 15, as reported in McPherson and Schapiro, 1991, p. 198). The same logic plainly applies in states with tuition low enough that students can gain additional tax credit dollars from higher tuition.

Long's evidence that states respond to tax credits reminds us that her estimates of the effects of the tax credits on students are reduced form estimates. To the extent that schools raise prices in response to the credits, the observed enrollment response will be attenuated, compared to an analysis that focused on the impact of the credits holding tuition constant. In principle, some kind of multiple equation, structural analysis of these relationships would be desirable, but to attempt this with available data would be a huge stretch.

There is a second kind of institutional effect that might be anticipated from the tax credits. To the extent that colleges award financial aid to students in the form of price

discounts, the availability of the tax credits gives institutions an incentive to reduce those discounts. Indeed, schools employing standard need analysis normally recognize that the receipt of tax credits expands a family's ability to pay and therefore reduces their need for student aid. There is heavy political pressure on colleges not to "capture" gains from the college tuition tax credits through this device (and indeed it is illegal to reduce eligibility for federal student aid grant awards on the basis of such an analysis.) Nonetheless, dollars going to student aid are fairly fungible, and financial aid officers have significant discretion in determining need, so it is quite possible that substitution of tax credits for institution-based student aid occurs. It would be interesting to try to estimate such effects.

Concluding comments

I will conclude with two broader comments, one on theoretical public finance and a second on political economy.

Ted Schultz, an architect of human capital theory, observed long ago that, to the degree that spending on education is an investment in future earnings, there is an argument for making the spending tax deductible. Analytically, it is certainly interesting to ask what would be the optimal tax treatment of higher education investments in a general equilibrium framework. Under conditions of perfect competition, without externalities, and assuming that college is strictly an investment in future earning power, it is plausible on efficiency grounds that such investments should be fully tax deductible (a point I have heard Bill Gale make in conversation). Clearly in practice higher education is a mix of consumption and investment activity and is subsidized in a variety of ways, so it is far from obvious what practical consequences might flow from this theoretical point.

Finally, regarding political economy, it is of interest to note that during the 1990's the share of state government expenditures going to higher education fell, and in many states the real level of state appropriations to higher education fell. This came about because of tax limitation movements in many states and the ascendance of other budget priorities including Medicaid, elementary and secondary education and prisons. Many states permitted tuitions in public higher education to rise pretty rapidly in percentage terms to offset the fall-off in state support. Not surprisingly, these tuition increases produced unhappiness among middle-class voters, and surely that unhappiness was one significant motivation for President Clinton's enthusiasm for tuition tax credits. Viewed in that light, this entire episode can be viewed as a kind of weird reverse federalism, with tax credits for college tuition helping to offset increases in public tuition occasioned by state budget pressures. Unfortunately, though not surprisingly, the losers in this shifting fiscal picture are poor families, who get hit with the tuition increases but who, as Long shows, do not receive the full benefit of the tax credits.

References

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