



# Issue Backgrounder

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## Reforming Higher Education in Colorado

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## Executive Summary

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Several proposals have been put forth to ‘reform’ higher education in Colorado. Some of these proposals are in fact not ‘reforms’, but rather proposals that would increase public subsidies and strengthen the monopoly position of public institutions in higher education.

The only ‘reform’ that would increase efficiency and equity is ‘privatization’, in which direct subsidies are replaced by vouchers that students could use to offset tuition at either private or public higher education institutions.

‘Privatization’ would create a level playing field in which public higher education institutions would have to compete directly with private institutions. Only then would public higher education institutions have an incentive to improve quality and reduce costs of higher education. Colorado citizens would then have the choice to use their voucher to get the best education for the money.

### Why Should We Subsidize Higher Education

There is now substantial economics literature on reforming higher education in the U.S.<sup>1</sup> Several arguments for state support for higher education are grounded in economic theory. If capital markets for financing higher education are imperfect, then individuals may not have access to the funds necessary to make optimal investments in higher education. State subsidies through loans and grants can provide individuals with the financial resources to make optimal investment decisions in their education. Further, if there are societal benefits to higher education, beyond the higher incomes that individuals capture in lifetime earnings, then state support may increase investment in education to socially optimal levels.

While economic theory suggests that state support to higher education can increase public welfare, the way in which that support is provided is crucial. Most state support for higher education is in

the form of direct subsidies to public institutions. In a recent study completed for the Independence Institute, I estimated that total state and local government subsidies to post secondary schools in Colorado equaled \$490 million dollars.<sup>2</sup> Ninety-seven percent of the subsidy went to public schools, which accounted for 28% of their total expenditures. Only 3% of the subsidy went to private schools, accounting for only 4% of their total expenditures. Private schools must rely primarily on tuition as their major source of revenue. This difference in sources of revenue is reflected in wide disparities in tuition cost in public and private colleges. Last year in the U.S., the average tuition charged by private four-year colleges was \$18,273, while that for public four-year colleges was \$4,081.<sup>3</sup>

### How the System of Direct Subsidies to Public Colleges and Universities Biases Individual Choice

Economic analysis shows that tuition costs significantly affect whether or not individuals will choose higher education, and also the kind of college or university they choose to attend.<sup>4</sup>

Students are attracted to public colleges and universities by direct state subsidies that enable these institutions to charge lower tuition than their private counterparts. The larger the subsidy, the more likely students will choose public institutions over private colleges and universities. This is true even when the private colleges and universities allocate more resources to their education.

The system of direct subsidies not only influences students to choose public over private institutions, it influences the kind of public colleges and universities they choose. Students prefer public four-year colleges to public two-year colleges. They also prefer public colleges that are more selective in terms of the quality of students admitted, compared to public colleges that are less

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selective.

## How the System of Direct Subsidies to Public Colleges and Universities Results in Inefficiencies and Inequities

Providing aid to higher education in the form of direct subsidies to public institutions can result in both inefficiencies and inequities. Direct subsidy to public colleges creates a privileged position in which they do not have to compete directly with private colleges. As a result, public colleges have less incentive to maximize educational quality while minimizing cost. If private colleges are more efficient,

inducing students to attend subsidized public colleges could result in losses in public welfare.

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Direct subsidies to public schools may discourage some students from investing in their education beyond what is offered at the subsidized school. If such students choose public colleges that allocate fewer resources to their education than private colleges, the effect of direct subsidies could cause

these students to invest less in higher education than they would have in the absence of the subsidy.<sup>5</sup>

To the extent that direct subsidies to public colleges shift the cost of higher education from individuals to the society, this creates the wrong incentives. Some individuals have an incentive to consume more of the subsidized education, but have no intent to repay the cost of these subsidies, e.g. through higher taxes on their increased earnings.

Many also challenge direct subsidies to public colleges on equity grounds. Evidence for California reveals that college attendance at highly subsidized colleges is primarily a middle-to-upper income activity.<sup>6</sup> Because all income groups pay taxes, direct subsidies to public colleges could, in effect, transfer income from low income families to middle and higher income families.

These distortions have led many states, most notably Colorado, to consider reforms that would replace direct subsidies with college vouchers for students. The goal is to give students a wider range of choice, and force public colleges to be more responsive to student needs.

## Taking Tuition Out of the TABOR Revenue Limit

Some proposed 'reforms' of higher education in Colorado would actually strengthen the monopoly position of public institutions. One proposal would retain the current system of direct subsidy, but allow at least some of these institutions, such as the University of Colorado, the freedom to increase tuition charges, i.e. their tuition charges would not count as TABOR revenue. Economic analysis suggests that this piecemeal reform could actually result in more inefficiency and inequity in higher education. It would retain the privileged position of these institutions created by direct subsidies, and at the same time allow them to exercise even more monopoly power in their tuition charges.

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If higher education cannot enact this legislation to exempt college tuition from the TABOR limit, they will attempt to do so through the initiative process. This is higher education's equivalent to Amendment 23. The goal is to earmark a revenue source, in this case tuition, which is exempt from the TABOR limit and can only be used to fund higher education. An important difference with Amendment 23 is that higher education is in a position to capture even more revenue through higher tuition prices.

This proposal would, in effect, shift spending for higher education outside the control of the legislature. Indeed, we must ask what is left for the legislature to decide. Less than one-third of the budget is now outside of mandated spending and subject to the control of the legislature, and this proposal would reduce that share even further. The problem for the legislature is that, in the long run, these mandated expenditures create a structural deficit which

is precluded by our constitution.

## Replacing Direct Subsidies with Vouchers to Offset Tuition at Public Colleges

At the center of the debate on reforming higher education is the question of how individuals would respond if this system of direct state subsidies were replaced by a voucher system. A number of economic studies, using data from states with different private and public colleges and universities, have simulated what would happen if the current system of direct subsidies is replaced with a voucher system.<sup>7</sup>

One approach in these simulation studies is to assume that direct subsidies to public colleges are replaced by a voucher system that could only be used at public institutions. The analysis is simplified if we assume that the voucher is the same, regardless of the level of the public institutions, i.e. two-year, or four-year institution. This is the voucher

system that some have proposed for Colorado, in which the voucher can only be used at a public institution, and the voucher is the same for two-year and four-year public colleges.

In effect, this voucher system would equalize the amount of state aid among public colleges in the state on a student per capita basis. Because two-year public colleges currently receive less than half of what four-

year public colleges receive, replacing the direct subsidies with this voucher system would enable two-year public colleges to significantly reduce tuition charges. On the other hand, more selective public colleges and universities that currently receive a larger share of direct state subsidies, such as the University of Colorado, would respond to the proposed voucher system by significantly increasing tuition.<sup>8</sup>

As two-year public colleges lower their tuition charges, and more selective four-year public colleges

and universities raise their tuition charges, more students would enroll in the two-year public colleges. Not only would the two-year colleges enroll more students, they would attract a larger share of high ability students.<sup>9</sup>

Not surprisingly, under this proposed voucher system in which the voucher could only be used at public institutions, about the same proportion of students would choose public colleges over private colleges.<sup>10</sup>

## Replacing Direct Subsidies with Vouchers to Offset Tuition in Both Private and Public Colleges

An alternative to the voucher system that has been proposed for Colorado is one in which the system of direct subsidies to public colleges and universities is replaced by a voucher that could be used to offset tuition charges at either private or public institutions.

Simulation studies show that the impact of this voucher system would be to significantly reduce tuition charges at private colleges, and significantly increase tuition charges at public colleges. The most dramatic reduction in tuition would be at private two-year colleges. The result would be to significantly reduce the difference in tuition charges at private and public colleges and universities.<sup>11</sup>

When direct state subsidies are replaced by a voucher that could be used to offset tuition charges at either private or public colleges, total enrollment in higher education would be about the same. However, many more students would opt out of public institutions into private colleges and universities. One study estimates that enrollment in U.S. public four-year colleges would fall 24% while students enrolled in private four-year colleges would increase 20% to 29%. Under such a voucher system, an additional 80,000 to 120,000

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freshman would enroll in private four-year colleges. The total number of students attending private four-year colleges in the U.S. would increase by 575,000 to 830,000 students.<sup>12</sup>

With this voucher system, the number of students enrolled in U.S. two-year colleges would increase as more students would choose inexpensive two-year colleges over more expensive four-year colleges. However, the increase in public two-year colleges would be only 16%, compared to a 69% increase in private two-year colleges.<sup>13</sup>

The response of low-income students to these tuition changes under a voucher system is predicted to be far greater than that for middle and higher-income students. This suggests that the distortions created by the current system of direct subsidies to public colleges, is greatest for low-income students.<sup>14</sup>

## Conclusion

This year the Colorado legislature will consider various proposals to ‘reform’ education. Some of these proposals are, in fact, not ‘reforms’, but rather proposals to increase public subsidies and strengthen the monopoly position of public institutions in higher education. This is clearly the case with proposals that would take tuition out of the TABOR revenue limit and allow public universities and colleges to set tuition rates.

Other proposals would replace direct subsidies to public colleges and universities with vouchers that could be used to offset tuition only at public institutions. These proposals would also preserve the monopoly power of public institutions in higher education. When aid to higher education is biased toward public institutions, either through direct subsidies or through vouchers that can only be applied toward tuition in public institutions, this creates a privileged position for public institutions. Because these public institutions do not have to compete directly with private colleges and universities they would have less incentive to improve the quality of education or reduce the cost.

Current proposals for a voucher system are viewed by some as a two-stage process of privatization in which direct subsidies to public colleges and universities are ultimately replaced by a voucher that could be used to offset tuition in either private or public institutions. However, the two-stage approach to privatization would add another level of distortion by allowing public institutions, but not private institutions, to adapt to a voucher system. Private institutions could end up at an even greater disadvantage in competing with public institutions as a result of this two-stage approach to privatization than they are under the current system of direct subsidy.

The only ‘reform’ that would increase efficiency and equity is ‘privatization’, in which direct subsidies are replaced by vouchers that students could use to offset tuition at either private or public higher education institutions. Clearly, there would need to be a transition period in which both private and public institutions have an opportunity to respond as the voucher system replaces the system of direct subsidy to public colleges and universities. The optimal policy would be a gradual period of privatization of higher education in which a voucher system is introduced that could be applied to offset tuition charges at either private or public institutions.

‘Privatization’ would create a level playing field in which public higher education institutions would have to compete directly with private institutions. Only then would public higher education institutions have an incentive to improve quality and reduce costs of higher education. Colorado citizens would then have the choice to use their voucher to get the best education for the money. The major beneficiaries of this reform would be low-income students.

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## Footnotes

<sup>1</sup> For a review of this literature see Robert F. Allen and Jianshou Shen, "Some New Evidence of the Character of Competition among Higher Education Institutions," *Economics of Education Review*, vol.18, no. 4, 1999.

<sup>2</sup> Barry W. Poulson, "Reforming Post-Secondary Education in Colorado" Issue Paper, 9-1997, Independence Institute, Golden, Colorado, Dec. 1997.

<sup>3</sup> College Board, *Trends in College Pricing*, Washington: The College Entrance Examination Board, 2002.

<sup>4</sup> Op. Cit. Allen.

<sup>5</sup> Sam Peltzman, "The Effect of Government Subsidies-in-Kind on Private Expenditures: The Case of Higher Education," *Journal of Political Economy*, vol. 81, no. 1, 1973.

<sup>6</sup> Lee W. Hansen and Burton Weisbrod, "The Distribution of Costs and Direct Benefits of Public Higher Education: The Case of California," *Journal of Human Resources*, vol. 4, no.2, 1969.

<sup>7</sup> The most recent of these studies is by Bridget Terry Long, "Does the Format of a Financial Aid Program Matter? The Effect of State In-Kind Tuition Subsidies," Working Paper 9720, National Bureau of Economic Research, Cambridge MA, May 2003.

<sup>8</sup> Ibid, pp. 26-30.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> *ibid.*

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