Education Policy Studies Laboratory
Division of Educational Leadership and Policy Studies
College of Education, Arizona State University
P.O. Box 872411, Tempe, AZ 85287-2411

Education Tax Credits: No Net Benefit to Arizona's Impoverished Students

© Kevin G. Welner, J.D., Ph.D.
University of Colorado at Boulder

Executive Summary

of the greatest demand and need (e.g., in neighborhoods with overcrowded schools); and (3) increased competition will drive greater efficiency and quality in all schools, including public schools.

The Arizona tuition grants, however, are too small to promote much movement from public to private schools. Instead, they primarily appear to subsidize tuition payments for families who would choose private school even without the tax credit. As a consequence they are less likely to save the state money, from the transfer of students from public to private schools, on the scale that proponents suggest. In instances in which tax credits lead to transfers from public to private schools, savings are likely to be limited.

Private schools that may be constructed in poorer neighborhoods as a result of the tax credit's stimulus can be expected to target students who are easier and less costly to educate, forgoing populations who are more difficult and more expensive, and therefore not benefiting the state's most impoverished students.

The tax credit program has already increased stratification of educational opportunities by disproportionately benefiting wealthier residents. That effect is likely to accelerate in a number of ways. At the same time, if the tax credit succeeds in encouraging poor families to leave public schools for private ones, it will effectively move them from a system that covers the entire cost of their education into one in which they must bear a third e cos crew(e.which 5]TJw(it will effecttc-0.0fa)-6.3(m)7.7(ilies to leave puoln,1(fron switch from public to private schools. They do not, and cannot, effectively save the state the cost of expanding school capacity in a uniform manner. Instead, they seem certain to stratify the market for education, creating a multi-tiered system in which private companies will profit from educating wealthier, and generally less costly to educate, populations while public systems will bear the cost of teaching poorer, more costly ones.

By financing a migration of wealthier, higher-scoring students from public schools to private ones, the tax credits also are likely to undermine public schools' efforts to show improvement in compliance with new federal standards under *No Child Left Behind*, regardless of whether those schools actually improve their performance. While possible changes in the tax credit programs may make them marginally more equitable, reforms cannot rescue them from their inherent inability to accomplish the stated goal of their architects: improving education for impoverished students. Only policies that improve all public schools – where the vast majority of those students will continue to be enrolled – can do so.

Education Tax Credits: No Net Benefit to Arizona's Impoverished Students

© Kevin G. Welner, J.D., Ph.D
University of Colorado at Boulder

Introduction

When adopted in 1997, Arizona's private school tax credit law was described by its sponsors as a means to enable impoverished children to choose private education.[1] The law allows couples a state income tax credit of $625 for donations to school tuition organizations (STOs) that in turn allocate voucher-like grants to students attending private schools (A.R.S. § 43-1089). Arizona also provides a $250 tax credit for donations to public schools to support extracurricular activities (A.R.S. § 43-1089.01). The present versions of these statutes are contained in Appendices A and B.[2]

In the years since the laws were adopted, the private school tax credit has drawn most of the attention from media and attorneys. Three main objections have been raised to this credit: (1) it shifts state financial support from public schools to private schools; (2) it violates the Constitution by establishing state support of religious institutions; and (3) it allocates state educational resources in a way that primarily benefits wealthy schools and families.

Litigation challenging private school tax credits has focused primarily on the issue of whether the law constitutes support for religious schools. In 1999 the state supreme court upheld the law's constitutionality (*Kotterman v. Killian*, 972 P.2d 606

(1999)).[3] A federal suit was brought the same year (*Winn v. Killian*), however, it appears unlikely to succeed given the U.S. Supreme Court's recent voucher decision loosening the strictures of the Establishment Clause (*Zelman v. Simmons-Harris*, 536 U.S. 639 (2002)).[4]

Structure of Arizona's Tax Credits

Arizona's private and public school tax credits are "nonrefundable." A "refundable" credit would allow low-income families who do not pay enough taxes to receive a tax refund from the state, giving them – in theory, at least – the same economic benefits as those in higher tax brackets. The Arizona law forecloses this possibility.[5]

The credits are also dollar-for-dollar. In essence, they invite those who owe state taxes to reallocate money from the state general fund to a tuition-granting organization or to support specific activities of a public school.[6] Such a mechanism requires no financial sacrifice, and therefore cannot be considered "charity" in the usual sense. Rather, it amounts to a policy decision to transfer the direct authority to allocate a portion of the state budget from state legislators to those taxpayers who itemize their tax returns.

The Private School Tuition Tax Credit.

As initially adopted in 1997, A.R.S. § 43-1089 allowed a credit of up to $500 per taxpaying couple for donations to an STO. Voters in 2000 raised this limit to $625.[7] Although called "scholarships," the grants the STOs are not tied to either need or merit. Grants are not means-tested (in contrast to similar programs and proposals in other states); a family may receive a tuition grant regardless of wealth.[8] Arizona's legislation thus often benefits families who would have no trouble making tuition payments without it. Similarly, Arizona's scheme is not limited to children moving from public to private school. Families whose children have always attended private schools can receive the grants.

The implementation of this law has been closely followed by Arizona State University researcher Glen Wilson. He notes that the Arizona law gives the state no authority to collect the data necessary to accurately monitor such important consequences. Notwithstanding this data limitation, Wilson's research finds that the state's wealthiest students are likely receiving most of the tuition tax credit money.[9] This is true for the public school donations as well as the private school funds.

Although Arizona's system places no cap on the number of taxpayers who can take advantage of the tax credit, it places two notable limitations on the system. Subsection (D) provides that a taxpayer cannot receive a credit for a donation that directly benefits his or her dependent. Also, subsection (E)(2) prohibits the recipient schools from discriminating "on the basis of race, color, handicap, familial status or national origin." Each of these limitations has a major loophole. For instance, the second limitation does not include a prohibition against religious discrimination. Moreover, the first limitation does not include a prohibition against designating the schoolmate or neighbor of one's child. In fact, according to an article in the *Arizona Republic*, "parents are writing…checks for their friends' kids and asking them to do the same for theirs."[10] The newspaper identified one fund for which 96 percent of all donations were earmarked for specific private school students.

The Public School Tax Credit.

As initially adopted in 1997, the public school donation program (A.R.S. § 43-1089.01) allowed a credit of up to $200 per taxpaying couple. Voters in 2000 raised this limit to $250. Donations into the public school tax credit system are made directly to the school (rather than an STO) to support extracurricular activities or character education programs.[11] The statute defines "extracurricular activities" as "school sponsored activities that require enrolled students to pay a fee in order to participate" (A.R.S. § 43-1089.01(D)(2)).

As with private school tuition tax credits, wealthy families have received the lion's share of extracurricular donation tax credit dollars. Unlike the private school program, the public school program does not limit donations that benefit dependents; schools have accepted donations targeted at a specific activity fee for the donor's child (e.g., a senior trip).[12]

The Fiscal Impact of Arizona's Educational Tax Credit Laws

The actual cost of Arizona's tax credit laws is impossible to calculate except within broad limits. Arizona's general fund expenditures total approximately $6.4 billion annually, $3.9 billion of that going to education (including the universities).[13] Approximately $2.6 billion is allocated through the state's Department of Education to k-12 schools. Public and private school tax credits each totaled $17 million in FY 2000.

If every Arizona taxpayer filing an itemized return took the $250 public school tax credit, the total cost to the state budget would be $200 million.[14] The comparable calculation for private school credits yields $500 million.[15] The theoretical upper limit on the cost of Arizona's tuition tax credit is thus approximately $700 million per year. The Cato Institute's prediction of a "high-growth" scenario for donations to Arizona's private school STOs concludes, however, that only 9 percent of all taxpayers (approximately 167,000 taxpayers, using 2000 figures) would be donors by 2015.[16] This amounts to $82 million in tax credit expenditures or a little less than 5 percent of the state's education allocations. This projection for the future is, of course, highly speculative, and the amount of credits taken in any given year cannot be known until income tax returns have been filed, meaning that the state assumes a budget liability it cannot predict in advance. Moreover, should policy makers choose to raise the tax credit donation limits, the result would likely be an increase in participation rates, in addition to an increase in the amount of the credit taken by each taxpayer.

The Private School Tax Credit's Optimistic Assumptions

Advocates of tuition tax credits argue that they benefit the educational system through two main market effects: (1) the subsidy provided by tax credits will promote switching from public to private schools and save the state money because families will pay a greater portion of each child's education; (2) in response to enhanced competition fueled by the tax credits, efficiency and quality will increase in all schools, including public schools, and private school capacity will grow in areas of greatest need (e.g., in neighborhoods with overcrowded schools). Both of these contentions are explored below.

Savings from Switchers.

The degree of shifting from public to private schools is unknown and largely unpredictable. Yet advocates of tuition tax credits assert that since the credits encourage private schooling, they effectively shift to parents some of the financial burden of educating children, relieving the state of the expense.

To illustrate the argument, imagine a public elementary school with 100 children. Each child costs $5,000 per year to educate, with the cost paid through federal, state, and local taxes. If the state institutes a tuition tax credit plan offering a $2,500 credit per student, and if 25 of the school's students decide to transfer to a private school, the cost to the state in foregone tax revenues is $62,500. The state reduces its allocation to the public school by $125,000 (25 students multiplied by $5,000). The parents of children who transferred pay the $62,500 difference – half the cost of each child's education – out of their own pockets.

This scenario, however, assumes that the 25 students were enrolled in public schools and would only have enrolled in private schools as a consequence of receiving the tax credit grants. The state would not see these savings if families receiving the STO grants would have chosen private schools without them, or were already enrolled in private schools – which Wilson documents is the overwhelming pattern in Arizona.[17]

In fact, Wilson argues that tax credit funded tuition grants in Arizona are of insufficient size to promote a great deal of movement from public to private schools.[18] He contends that the policy's main effect is – and barring substantial change in the policy, will continue to be – to subsidize tuition payments for families who would choose private school even without the tax credit. Indeed, basic market logic dictates that the more successful the policy becomes in creating demand for private schools, the *less* affordable these schools will become for those families who are *not* able to secure an STO grant. That is, as the state subsidy increases demand, it will likely drive up the price of private schooling. A school charging tuition of $4,000 before a tax credit policy is enacted may be able to charge $5,000 after the tax credit plan is in place.

Competition Enhancing Quality, Efficiency and School Capacity.

To understand the possible impact of tax credits on school capacity it is necessary to consider two assumptions made by tax credit proponents: (1) that a market approach to education will increase educational excellence for all students; and (2) that tax credits will expand the market for private schools, encourage an increase in private school capacity, and thus save the state money that would be spent on new public schools.

Market pressures will, according to advocates of tuition tax credits, drive public and private schools to compete for students and to increase their efficiency, giving parents meaningful educational choices. However, since private schools need to compete, they cannot be weighed down with students who pay little, cost too much, detract from other students' educational experiences, and make the school look bad in published reports about students' academic success. It is true that some schools (sometimes subsidized by religious groups) specialize in serving expensive or difficult student populations. For the most part, however, private schools that don't use selective criteria to compete will risk failure in the form of bankruptcy or closure. As a result, competition is likely to exist in some areas, and for some students, but many will be left out.

Tax-credit supporters also argue that school districts and states will save money because private school capacity will reduce the need to build new public schools. As public school enrollments expand, states must increase capacity, using temporary measures (portable classrooms and year-round scheduling, for instance) or permanent ones – building new schools.

Enter tuition tax credits. As demand for school capacity rises, tax credits in theory will encourage *private* schools to build new facilities in communities with the greatest need. When growth trends reverse and enrollments drop, capacity will contract, and private schools will go out of business. Thus, the argument runs, tax credits encourage shifting the *risk* and the *cost* of school expansion to the private sector from the public one.

Yet the cost of running a school does not rise or fall in linear fashion with enrollment, however. Consider again an elementary school serving 100 children. Assume it has two administrators, one custodian, and four teachers. If 25 students leave for private schools, the public school can lay off one teacher and conceivably one administrator, but the other building maintenance costs will likely remain in place.

Even with a population boom, moreover, there is no guarantee that enrollments will shift efficiently from overcrowded public schools to new or expanded private ones. Private school entrepreneurs can be expected to respond to a variety of incentives, only one of which is overcrowding at nearby public schools. Other incentives include:

(a) overall supply of children (i.e., rural areas would be less attractive);

(b) supply of students with access (transportation) to the facility;

(c) supply of families with sufficient wealth to take advantage of a nonrefundable tax credit;

(d) supply of families with the financial means to afford the tuition payment above the tax credit amount, plus other expenses associated with private school education;

(e) supply of families with the ability to offer the school so-called “sweat-equity” (e.g., volunteering in the classroom);

(f) supply of students likely to achieve high scores on standardized achievement tests;

(g) supply of students who are less costly to educate;

(h) supply of students whose interests, beliefs, and background are consistent with the school’s mission; and

(i) supply of students whose behavior is consistent with the school’s curriculum and pedagogical approach.

One other point needs to be considered in light of the suggestion that tax credits will encourage the private sector to assume the financial risks of alleviating public school overcrowding. Arizona has already implemented the most unrestricted charter school law in the nation. This is market-based school choice. Publicly funded charter schools must comply with a limited number of state and federal laws (primarily with regard to safety and admissions),[19] but they otherwise operate free of most legal requirements concerning curriculum or teacher qualifications. They are responsive to market pressures in their location, growth, curriculum, and pedagogy. They therefore supply a mechanism that, if successful, should be capable of responding to

overcrowded or otherwise undesirable local public schools. By no means elite schools, this latter group would nonetheless appeal to a neighborhood's elite families – those with the most education, wealth, and involvement in their children's education. As such, they would draw away a subpopulation of the best-behaved and highest-scoring students.[21]

Superficially, this may seem like an attractive scenario. Some local public schools in low-income urban areas get some relief from overcrowding. Neighborhood families could exercise a choice offering some students improved (potentially, at least) educational opportunities. There are drawbacks, however.

First, those who live in the poorest communities have little ability to take advantage of the tax credit. The few families who pay state taxes at all owe much less than the $625 covered by the credit and in any case probably take the standard deduction, disqualifying them.

Second, inner-city private school opportunities tend to fall well short of those available in suburban private and public schools. The tuition that could be charged at such an urban private school is effectively restrained to no more than $1,000-$2,000 above the subsidy granted by the STOs (and any other subsidies available). With limited revenue, these inner-city private schools (relative to their suburban counterparts) would feel pressure to increase class size, reduce educational resources (e.g., textbooks and computers), hire inexperienced or uncertified teachers, and so on.

Third, to survive financially, many of these private schools can be expected to limit admission of the most costly and difficult students, including those with disabilities.[22] Private schools, unlike most public schools, can also select based on students' academic achievement, behavior, and parental involvement; unlike all public

Each school must demonstrate AYP for its total enrollment as well as for student

understand this issue, imagine a six-student elementary school in a low-income neighborhood enrolling Albert, Betty, Cindy, Doug, Ernie, and Francie. The parents of Albert and Betty are employed and are very involved in their children's education. Not surprisingly, Albert and Betty are the school's star students. After the tuition tax credit law is enacted, the parents of Cindy, Doug, Ernie and Francie never consider moving their children to a private school; in fact, these parents are never meaningfully aware of the law or how they might be able to use it. Albert's parents, however, learn about the law from some of their colleagues at work, and Betty's parents hear about it through their church. They each decide to apply to STOs for grants to help Albert and Betty leave the public school and enroll in local private schools. As a result, the public school loses at least three things: (1) the per capita funding for these students; (2) the higher average student achievement generated by these students; and (3) the political support of these two families.

If Albert and Betty and their families are asked whether they like the new law and whether they like their new private school, we might hear heartwarming anecdotes about how the law has made a real and positive difference in their lives. But the overall effect for the six students at this school may be negative if the public school education was harmed by the two students' loss. This is not to criticize the decision of the parents of Albert and Betty. Nor is it to argue that their public school was adequate or that they should be forced to remain in an inadequate public school. If their public school was not of comparable quality to surrounding suburban schools, good public policy demands intervention designed to ensure that all students presently enrolled in that school receive better educational opportunities.

Yet if the overall effect of this policy is negative, then the public policy – the tax credit plan – has failed to achieve its goal. Exacerbating educational woes for four children is poor policy, even if the education of two children is improved in the process. The policy can only be successful if the four children remaining in the public school also benefit because the public school itself improves as a result of the market competition – a hoped-for phenomenon that is supported by little empirical evidence.

Possible Remedies

In response to this possible trade-off between winner- and loser-children, some approaches to using Arizona's tax credit laws more equitably, or amending them to that same end can be considered. One possibility for achieving the first goal (more equitable use of the present laws) is the idea of an organized donation campaign aimed at assisting needy public schools.

An organized campaign would likely have to focus on the public school, and not the private school tuition, aspect of the Arizona policy. The two educational tax credit provisions in the Arizona code are consistent with the state's philosophic dedication to the free market. Although proponents of the tuition tax credit legislation argued that it would benefit low-income families otherwise unable to afford private school tuition, relatively few of the grants have gone to such families. This market-driven trend is likely to continue since, under the present statutory structure, the state is unable to intervene.

As compared to section 43-1089 (the private-school, STO provision), section 43-1089.01 (providing for donations to extracurricular activities in public schools) offers more options for enhancing benefits to impoverished students. An organized campaign could seek a large number of tax-credit-eligible donations to public schools that serve poor children.

While donor distribution will always be heavily skewed toward higher income brackets, and donors are most likely to contribute to schools in their neighborhoods – particularly those serving family members – many of the state's taxpayers have no personal interest in particular schools. One can imagine an organized campaign designed to induce such potential contributions and channel those contributions to the state's neediest schools.

There are drawbacks to this proposal. More than half the state's taxpayers are effectively barred from participating in the tax credit system because they do not itemize deductions. The economic downturn may push a substantial number of middle-income taxpayers into the use of standardized deduction (non-itemizable) state income tax forms, taking them out of the pool of possible donors.

Figure 1: Number of deduction itemizers compared to total number of tax returns filed in Arizona, 2002.

Source: Arizona State Department of Revenue

A likely target group for a donation campaign is taxpayers falling into the $20,000 to $200,000 range – a group that contained 42% of returns but 66% of all itemizers for tax year 2000. One can assume the middle-income itemizers are more likely to participate than the lower-income itemizers (30.9% of all itemizers) and less likely than the highest income itemizers (3.1% of all itemizers). A

Accordingly, one option for targeting the remaining potential contributors would be to seek out younger taxpayers who have not yet started a family. Another option would be to seek out older taxpayers, particularly those who emigrated from other states, with no family in Arizona. Thirteen percent of Arizona's population in 2000 (667,839 persons) were 65 years old or older.[31] Because such older taxpayers tend to live in geographic clusters (e.g., in Sun City), a campaign aimed at them has logistic advantages. Before targeting this latter group, however, one would want to investigate the likelihood that they itemize their taxes. Among taxpayers who are 65+, two-thirds (66%) have a taxable income of less than $20,000, effectively disqualifying them from itemizing and therefore from receiving the tax credit.[32] Older taxpayers thus appear less likely to be in a position to make a §1089.01 donation. But this is only a general rule; one can imagine a subset (e.g., those living in Sun City) where itemizers are over-represented.

Demographics also factor into the selection of donor schools themselves. A campaign might be designed to target a subset of Arizona's public schools, selected primarily on the basis of need, identifying target schools by such measures as their enrollment of students qualifying for a free or reduced-price lunch.[33]

Modifications to the Law to Enhance Equity.

Finally, there is the question of whether Arizona's tax credit program can be amended to be made more equitable. It can. Below is a series of suggestions for such possible improvements. These improvements, however, cannot fully address the laws' shortcomings, and each improvement comes with policy costs and financial costs.

Suggestions Regarding the Private School Tax Credit:

- **Ban earmarked, and particularly quid pro quo, donations to STOs.**

  Earmarked donations only reinforce the absence of charity in the tax credit plan. This is particularly true of quid pro quo donations, whereby two taxpayers earmark donations for each other's dependents. Given that Arizona's policy makers already decided to prohibit donations for the benefit of one's own dependent, there should be no hesitation in closing this loophole. Although doing so will leave intact the basic structure allowing Arizona's wealthiest taxpayers to reallocate potential state revenues to favored private schools, it will help move the system in a more equitable direction.

- **Require means-testing of STO g0.ng so wuescir basiIfysxp42 0 T080.0004 Tc-0.0016Tw21Re**

Americans overwhelmingly favor requiring schools receiving vouchers to meet a variety of requirements, such as following state curriculum standards (88%) and hiring only certified teachers (86%).[34] But many or most private schools appear unwilling to accept such conditions.[35] This unwillingness is undoubtedly grounded, in part, on legitimate concerns about independence and about the wisdom of the rigid state policies.

Suggestion Regarding the Public School Tax Credit:

- **Ban earmarked donations to public schools, including elimination of the tax credit for fees paid for activities of one's dependents**.

  Given that Arizona's policy makers forbid STO donations for the benefit of one's own dependents, a similar prohibition should be imposed with regard to public school donations. In addition, this ban should be extended to all earmarking. This change would prevent the most egregious abuses of the tax credit, although it would do nothing to address to the basic policy structure leading to most donated money assisting schools with the least need.

Suggestions Regarding Both Types of Tax Credits:

- **Limit the value of tax credits for higher-income taxpayers.**

  Tax credits are designed to provide incentives for taxpayers to engage in spending or investing behavior deemed beneficial by policy makers. A credit of 10 – 50 percent is usually deemed sufficient to accomplish this goal. A 100 percent credit isn't charity; it simply gives to taxpayers the authority, otherwise invested in elected officials, to determine how putative tax revenues will be spent. Effectively, this is an attack on the one-person, one-vote principle, since only wealthy taxpayers have an effectual vote in these spending decisions. The state could redress this transfer of political power by limiting the tax credit's value to, say, 30 – 50 percent of the donated amount, for taxpayers whose incomes are above a certain level.

- **Make the tax credits refundable, with no itemization requirement.**

  A refundable tax credit allows a qualifying taxpayer who owes no taxes, or who owes less than the amount of the credit allowed, to receive a refund from the state. Making the tax credits refundable would move the policy in a more equitable direction. It would not, however, remove other barriers that continue to prevent less wealthy Arizonans from shifting to private schooling

- **Place a statewide cap on the total amount of tax credits allowed each year, perhaps tied to the state's budgetary health**.

  Unlike the current Arizona program, the Pennsylvania and Florida corporate income education tax credits have caps, as do many similar bills that have been introduced in other states. Such a provision should be connected to a mechanism requiring the granting organizations to inform potential donors when the accumulated credit is reaching a statewide cap on total credits.

of wealthier, higher-scoring students from public schools to private ones, the tax credits also are likely to undermine public schools' efforts to show improvement in compliance with new federal standards under *No Child Left Behind*, regardless of whether those schools actually improve their performance.

The conclusion is inescapable: As a means of providing equity and improving achievement for impoverished students currently enrolled in the state's public education systems, Arizona's educational tax credit laws are fundamentally flawed.

APPENDIX A:

A.R.S. § 43-1 – Credit for contributions to school tuition organizations; definitions

the requirements prescribed by law for private schools in this state on January 1, 1997.

3. "School tuition organization" means a charitable organization in this state that is exempt from federal taxation under section 501(c)(3) of the internal revenue code and that allocates at least ninety per cent of its annual revenue for educational scholarships or tuition grants to children to allow them to attend any qualified school of their parents' choice. In addition, to qualify as a school tuition organization the charitable organization shall provide educational scholarships or tuition grants to students without limiting availability to only students of one school.

APPENDIX B:

A.R.S. 43-1089.01 – Tax credit; public school fees and contributions; definitions

A. A credit is allowed against the taxes imposed by this title for the amount of any fees or cash contributions paid by a taxpayer during the taxable year to a public school located in this state for the support of extracurricular activities or character education programs of the public school, but not exceeding:

1. Two hundred dollars for a single individual or a head of household.

2. Two hundred fifty dollars for a married couple filing a joint return. A husband and wife who file separate returns for a taxable year in which they could have filed a joint return may each claim only one-half of the tax credit that would have been allowed for a joint return.

B. The credit allowed by this section is in lieu of any deduction pursuant to section 170 of the internal revenue code and taken for state tax purposes.

Notes and References

[1] See Bland, K. (2000, April 9). School tax credits wide open to abuse. The Arizona Republic, pp. A1, A22; see also Keegan, L. G. (2001). Tuition tax credits. Education Leaders Council [On-line]. Available: http://www.educationleaders.org/issues/010401keegan.htm.

[2] SB 1263, introduced in the Arizona Senate in 2003, seeks to expand the tuition tax credit policy to add a corporate income tax credit (of up to $100,000 per donor) to the present credit available only to individual taxpayers. Arizona's 'Goldwater Institute' began promoting such an ex andochsuitio

[12] My research has uncovered no legal challenges to A.R.S. § 43-1089.01.

[13] For FY 2002, Arizona's general fund revenues were generated as follows: 47% from sales and use taxes; 38% from individual income tax; 7% from corporate income tax; and 8% from other sources.

[14] Only taxpayers filing as couples are entitled to take a credit of $250. The limit for individual filers is $200.

[26] According to Jorge Frank of the state department of revenue, which supplied this data set, the large numbers in the first (lowest) cell do accurately represent the (many) taxpayers who had negative or zero income. Because many of these taxpayers elected not to itemize or take a standard deduction, however, this cell offers less insight into the broader trends.

[27] Meyer, G., and Smith, E. (1999, September 23). Arizona's individual income tax credits for schools. Phoenix: Arizona Department of Revenue.

[28] This calculation used data for tax year 2000. One would expect that the figure would be lower for two years earlier.

[29] Epidemiologists often use this type of comparison, called an "odds ratio," which is the ratio of the odds of an occurrence for the first group relative to the odds of occurrence for the second group.

[30] A Cato Institute analysis showed a similarly exaggerated skew for taxpayers utilizing Arizona's private school tuition tax credit. Lips, C. and Jacoby, J. (2001). *The Arizona education tax credit: Giving parents choices, saving taxpayers money*. No. 414. Cato Institute. p.13, Table 4.

[31] U.S. Department of Health and Human Services, *A Profile of Older Americans: 2001*, p. 8, Figure 6.

[32] The Dept. of Revenue provided only a non-linked database (Excel file) with no category for taxpayers who both itemized and were retirees or were 65 years old or older (65+). The resulting calculations therefore allow only for general comparisons.

[33] According to the U.S. Census Bureau (using data gathered in 1997), 23.2% of Arizona's children live below the poverty line (compared to 19.9% nationally). See "Arizona QuickFacts," available on-line at http://quickfacts.census.gov/qfd/states/04000.html.

[34] Peter D. Hart Research Associates. (1998). *Public Attitudes on School Choice and Vouchers*. Commissioned by the American Federation of Teachers. Available on-line at http://www.aft.org/vouchers/dilemma/page3.htm.

[35] Muraskin, L. (1998). *Barriers, Benefits, and Costs of Using Private Schools to Alleviate Overcrowding in Public Schools*. U.S. Department of Education. Planning and Evaluation Service, p. 49, exhibit 32.

[36] Wilson, G. Y. (2002). *The Equity Impact Of Arizona's Education Tax Credit Program: A Review Of The First Three Years (1998-2000)*. [On-line]. Available: http://www.asu.edu/educ/epsl/EPRU/documents/EPRU%202002-110/epru-0203-110.htm, pp. 8-9.