DOCUMENT RESUME

ED 228 701 EA 015 549

AUTHOR Catterall, James S.
TITLE Tuition Tax Credits: Issues of Equity.
INSTITUTION Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
REPORT NO IFG-TTC-13
PUB DATE Dec 82
GRANT OB-NIE-G-80-0111
NOTE 38p.; Prepared for the Tuition Tax Credit Seminar (Washington, DC, October 22, 1981).
AVAILABLE FROM Publications, Institute for Research on Educational Finance and Governance, School of Education CERAS Building, Stanford University, Stanford, CA 94503 ($2.00).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Educational Equity (Finance); Elementary Secondary Education; Family Financial Resources; Family Income; Geographic Regions; Private Schools; Public Schools; Race; Sex; Special Education; Tables (Data); *Tax Credits; Tax Rates; *Tuition; Urban Education

ABSTRACT

To examine equity issues involving proposed Federal income tax credits for private school tuition, the author uses data from the Bureau of the Census and other governmental sources to estimate the effects of tuition tax credit (TTC) plans. After discussing equity and educational policy, he compares would-be TTC recipients--private school families with TTC eligibility--with all families of school-age children. Comparisons are based on type of school (public or private), school religious affiliation, educational level, geographical region of the United States, urban or nonurban location, family income, race, sex, and need for special or compensatory educational services. Using a hypothetical, typical TTC plan, the author analyzes the potential effects of TTCs if families shifted from public to private schools or from low- to high-tuition schools, or if private schools altered their fees or scholarship policies. The relationship of family tax liability to TTC plans is discussed, as are the adequacy of family resources for taking advantage of TTCs and the incentives for private schools to raise tuitions or reduce scholarships under TTCs. In his conclusion the author looks at the policy implications of his findings. (RW)

IFG

Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

TTC-13

TUITION TAX CREDITS: ISSUES OF EQUITY

James S. Catterall

December 1982

James S. Catterall is a professor in the Graduate School of Education at the University of California, Los Angeles.

This paper was prepared for the Tuition Tax Credit Seminar, Washington, D.C., October 22, 1981. The research for this report was supported by funds from the National Institute of Education (Grant No. OB-NIE-G-80-0111). The analysis and conclusions do not necessarily reflect the views or policies of this organization.

INSTITUTE FOR RESEARCH ON EDUCATIONAL
FINANCE AND GOVERNANCE

The Institute for Research on Educational Finance and Governance is a Research and Development Center of the National Institute of Education (NIE) and is authorized and funded under authority of Section 405 of the General Education Provisions Act as amended by Section 403 of the Education Amendments of 1976 (P.L. 94-482). The Institute is administered through the School of Education at Stanford University and is located in the Center for Educational Research at Stanford (CERAS).

The research activity of the Institute is divided into the following program areas: Finance and Economics; Politics; Law; Organizations; and History. In addition, there are a number of other projects and programs in the finance and governance area that are sponsored by private foundations and government agencies which are outside of the special R&D Center relationship with NIE.

Abstract

This paper examines issues of equity in public educational policy surrounding proposed federal income tax credits for private school tuition expenses. The central question asked is just who will benefit from tuition tax credit proposals. Such questions of equity are common to policy debates in every arena; in education, equity standards commonly hold that public schooling resources should be distributed independently of a child's race, or sex, or parental income, or place of residence. There is an implied definition of equity--that children should benefit from equal educational resources unless there is a justifiable reason for some departure. While there is little information about what changes in behavior might be brought about by a tuition tax credit, certain qualities of the federal tax system and the financial realities of private school attendance combine to suggest which families might be more likely to respond to such a program.

Acknowledgment

The author wishes to acknowledge the contribution of Henry M. Levin to this chapter, and the editors of Sociology of Education.

This chapter examines issues of equity in public educational policy surrounding proposed federal income tax credits for private school tuition expenses. The central question asked is just who will benefit from tuition tax credit proposals such as the one now sponsored in 1982 by the Reagan Administration, or from similar plans recently advanced with some success in Congress by Senators Packwood (R--Oregon) and Moynihan (D--New York). The framework for the discussion is a comparison of would-be recipient families on the one hand, with all families with school-age children in the United States on the other. The analysis probes how private school families with tax credit eligibility compare to all school families and further suggests some implications of allocating public funds to private schoolers rather than to all typical school children and their families. The dimensions of the comparisons--race, sex, family income, geographical location, educational "need," and level--are common to discussions of equity in public policy, but nevertheless a defense of the perspectives adopted for this treatment is offered to the reader; and the fundamental value foundation of most equity arguments is acknowledged.

The heart of the discussion is a set of descriptions of the effects of a typical tuition tax credit plan in a static sense, i.e., estimates of impact are provided according to current patterns of private and public school attendance. This type of analysis is only recently achievable, since most of the needed data describing private school families were not collected by the United States Bureau of the Census nor by anyone else prior to 1978. The static comparisons are followed by a brief discussion of potential dynamic consequences which have equity implications and which could result from implementation of tuition tax credits, namely such events as increased demand for private schools because of the credit, and possible induced changes in tuition and scholarship policies of those schools. While research has yet to tell us much about the behavioral changes that tuition tax credits might cause, certain qualities of the federal tax system and the financial realities of private school attendance combine to suggest which families might be more likely to respond to such a program. Finally, public policy implications of this analysis are suggested.

Equity, Education Policy, and the Analysis

Equity refers by definition and custom to qualities of fairness or justice. In public policy-making, equity discussions are usually concerned with who receives the benefits of a program or law, and subsequent conclusions hinge on whether anticipated or measured distributions to beneficiaries are just. We need not search widely to convince ourselves that most assessments of equity in policy debates create some controversy. Such controversies in education policies have three sources--distributional interests, competing views of justice, and the inscrutibility of the educational process. To the extent that an equity argument implies alteration of existing funding distributions as a remedy, the winners and losers are likely to respond automatically with incompatible pleas for what is socially just. In addition, views of social justice driven by notions as sharply competitive as freedom and equality[1] can lead to irreconciliable "equity-based" arguments on both sides of an issue. And finally, we usually find precise and comprehensive assessments of benefits and resources tied to education to be beyond our analytical grasp; and so at their most fundamental level our arguments for educational justice can lack grounding in what really should matter--the ultimate results for our children.

An analysis of equity and tuition tax credits faces all of these problems. Tax credits would allocate federal dollars to private school families, perhaps at the expense of existing programs for public schools; therefore, a primary set of battle lines is naturally drawn. Supporters advance claims of liberty (freedom to choose among schools) and basic rights to what one has earned (i.e., their school taxes) in support of tuition tax credits. Detractors argue that the fundamental redistribution implied by proposed tax credit schemes is discriminatory in favor of the nation's elite. These two arguments do not negate each other; they rather speak to different values sought in public policy which are maintained in varying balances through our governmental actions. And finally, the tuition tax credit controversy includes perceptions of what public versus private schools in fact accomplish and how they achieve their ends--matters that are only beginning to be treated rigorously by researchers, and which have yielded more turmoil than facts so far.[2]

The following analysis is based on a view of equity in education that is dominated by the idea that equal treatment of all children is an inherently just state, and that departures from equal treatment should be made only when justified by the presence of particular educational "need." Current educational policy at all levels pays considerable attention to this view even though the ideal implied in the standard remains a distant goal. As one example, there is a firm Constitutional mandate for equal protection under the law which applies to individual state systems of education. This has meant that differential treatment of pupils according to their race is generally illegal under state law, and illegal under federal law if deriving from direct actions of governing bodies. As another example, several state constitutional decisions have further held that the level of public funding of schools may not be primarily a function of the property wealth of school districts. These challenges were spawned by observations that wide per-pupil spending disparities across districts exist as a general pattern in our school system.

So we seem to possess some social concerns for non-discrimination in education on the basis of race or wealth. A complementary strain in our current policies and their underlying philosophies is that we do single out certain types of children for special educational treatment, often in the name of equity. At least two dozen federal educational programs and like numbers of state initiatives have been established to meet the needs of special pupil populations who "merit" additional or special services, ranging from Title I programs for the educationally disadvantaged to the special education provisions of Public Law 94-142. "Equality of educational opportunity" probably best expresses our demonstrated social interest in helping to redress various pupil disadvantages--we extend extra resources to groups who seem to start out behind or whose special talents or limitations demand unique interventions.

This leads to the structure of this equity discussion. If we favor a world in which public authorities are blind to the race, sex, wealth, and geographical situation of their children when it comes to providing them with an education, will tuition tax credits support or hinder this preference? And if special pupil needs should receive some priority in public educational finance, will tuition tax credits contribute to or detract from this end? The following analyses pose and attempt to answer these two questions. We begin with a sketch of a typical tax credit proposal, and proceed to the discussions.

A Typical Tuition Tax Credit Plan

Each of the comparisons presented below refers, where specificity is needed, to a plan similar to current and recently considered Congressional proposals. The critical ingredients of the hypothetical plan are:

1. It provides for a credit against federal personal income taxes of one-half of private school tuition paid up to a maximum credit of $500.
2. The credit cannot exceed tax liability, i.e., the credit is not a refundable credit.
3. Families sending children to any state approved non-public elementary or secondary school, including those affiliated with religious institutions, are eligible to claim a credit.
4. The credit applies to tuition payments only, and not to other fees which a school might charge for such things as books, laboratories, or uniforms.

A specific proposal may vary from this model, but recent serious contenders in the Congress have incorporated this basic design.

The Equity of Tax Credits: A Static Analysis

The following analyses trace the effects of a typical tax credit plan to the existing clientele of the nation's private schools, and do not address the possibilities that new families will be attracted to private schools because of the credit or that schools might alter tuition or scholarship policies in response. These topics are considered later. The credits are assumed to be distributed according to the present distributions of pupils in private schools, and also according to estimates of tuitions paid and to the degree to which their parents are likely to have tax liability from which to subtract a credit. For many family characteristics of interest, we now have relevant information about enrollment in private schools. Our ability to match tax liability with pupils is not as precise due to data limitations, and the analysis here employs approximations inferred from income distributions of school-going families.

Benefit Patterns by Type of School and Level

The broadest equity question related to tuition tax credits, and one not often raised in these terms, is the allocation of public education funds between children in public versus non-public schools. Independent of the size of the credits granted in an actual plan, and assuming no net enrollment shifts between sectors, the rebate will be available only to the slightly more than 10 percent of the nation's school children who attend private schools. Public school children are non-recipients.

In addition to the obvious distinction between public and non-public school children as beneficiaries, tuition tax credits would affect grade levels within schools differentially. As shown in Table 1, Americans send their elementary school children to private schools in greater proportions than their children at higher grade levels. In grades one through six, 11.5% of total enrollments nationally are in private schools, while only 7.4% of high school students are in the private sector. So, a plan which does not distinguish among grade levels generally favors the parents of elementary school children as a matter of policy.

The distribution of beneficiaries between the lower and upper grades on the basis of their private school attendence rates masks the fact that the parents of high school children will each qualify for larger credits since

Table 1

Enrollment by Type of School and Level in Thousands

	K	1-6	7-8	9-12	Total
Public	2593	18306	6450	13994	41343
Private	432	2374	735	1122	4663
Private %	14.3	11.5	10.2	7.4	10.1

Source: Current Population Reports, series P-20 #360, Table 14, October 1979

they pay more in tuition. As Table 2 shows, estimates of median tuition payments for high school and elementary school were $901 and $356 respectively for 1978. This means that high school parents would qualify for credits averaging as much as $451, whereas elementary school parents would typically receive only $178. These estimates overstate expected average credits, since some parents will not receive a full credit because they have insufficient tax liability. It is further likely that the parents of elementary private school pupils will have lower average tax liabilities, since they generally

Table 2

TTC Benefits: Elementary vs. High School

	Private Enrollment	Share	Median Tuition	Credit	Total Credit	Share
K-8	3109	73%	$356	$178	$533 mil.	52%
9-12	1122	27%	901	451	506 mil.	48%

Source: CPR, op.cit., tuitions from unpublished Census Bureau tapes October, 1978 survey of school enrollments cited in Jacobs, M.J., "Tuition Tax Credits for Elementary and Secondary Education: Some New Evidence on Who Would Benefit," Journal of Educational Finance 5 (Winter 1980):233-245.

have lower incomes than the parents of private high school children.[3] The net result is that of the total credits granted under a typical plan, nearly equal total dollar amounts will go to both the relatively small group of private high school parents and the relatively large group of private elementary school parents.

Within the private school sector, enrollments are distributed among various school types shown in Table 3. A large majority of non-public school enrollments are in schools which are affiliated with religious institutions or orders. Enrollments in Roman Catholic schools are the largest single category and account for nearly three out of every four children in private

Table 3

Private Enrollments and Schools by School Type

School Type	# of Schools	Share	# of Pupils	Share
Total	14,757	100.0%	4,234,000	100.0%
Non-affil.	2,210	15.0%	475,901	11.2%
NAIS	(750)	(5.1%)	(300,000)	(7.1%)
Other	(1,460)	(9.9%)	(176,000)	(4.1%)
Church affil.	12,547	85.0%	3,578,099	88.8%
Roman Catholic	(8,986)	(60.9%)	(3,110,972)	(73.5%)
Lutheran	(1,366)	(9.3%)	(201,257)	(4.8%)
Other	(2,195)	(14.9%)	(266,000)	(10.5%)

Source: National Center for Education Statistics, 78-107a, Nonpublic School Statistics, 1976-77, Advance Report.

schools. The National Association of Independent Schools (NAIS) members are the second largest classification, accounting for about 7% of all private enrollments and for nearly two thirds of enrollments in non-affiliated schools.

The distribution of credits among these families enrolling children in these types of schools will be similar to the displayed enrollment distribution with two necessary adjustments in favor of the non-affiliated schools. Non-affiliated schools charge much higher tuitions on average (Sullivan, 1974) and the families attending these schools will tend to incur higher annual tax liabilities because of their higher incomes. These factors would enable fuller use of tuition tax credit by families of non-affiliated school children.

Benefit Patterns by Region

Private school youngsters are not distributed across the United States directly in the way school children are more generally. For example, while the northeast region of the nation accounts for less than a fourth of total elementary and high school enrollments, it encompasses 31 percent of private elementary school children and just over a third of private high school students. Table 4 presents this information plus additional figures pertaining to regional distributions.

These pupil distributions suggest that a tax credit plan would favor the northeast and north central regions of the country. But the fact that tuitions reported in the south and west are higher, dramatically so for elementary schools, causes an adjustment in this assessment. As the last column of Table 4 shows, the south and west are comparative winners in the overall distribution of tax credits to elementary schoolers. The high school pattern still favors the northeast and north central states.

Table 4

Regional School Enrollments, Tuitions, Credit Benefits

Region		Total Enrollment Share	Private Enrollment Share	Median Tuition	Median Credit	Credit Share
NE	(elem)	23%	31%	$250	$125	20%
NC		27%	30%	238	119	19%
South		33%	25%	636	318	41%
West		17%	14%	510	255	19%
NE	(HS)	23%	34%	$917	$459	35%
NC		28%	28%	819	410	25%
South		31%	25%	959	480	26%
West		18%	13%	948	474	14%

Sources: CPR, op. cit.; Jacobs, op. cit. Figures are for October 1978.

Benefit Patterns by Location

Table 5 shows not surprisingly that enrollments in private schools are concentrated in urban areas of the United States and are relatively less common in non-metropolitan, or rural regions. Central cities account for 26% of the nation's total children in grades 1-12, while they enroll 42% of all private school children. Metropolitan areas outside of central cities, the more suburban areas, enroll a representative share of their children in non-public schools and account for about 40% of both types of school enrollment. Rural areas account for only 17% of private enrollments while schooling 34% of all of the nation's youngsters. The share of central city enrollments in private schools are 17.6% and 12.9% (elementary and high school, respectively), while comparable figures in suburban areas are 11.9% and 7.5%, and in rural areas, 6.2% and 3.2%.

Table 5

Enrollments by Type of Community

	Central City	Metropolitan/ Non-Central City	Non-Metropolitan	Total	
Elementary Enrollment Share	26%	40%	34%	100%	(distribution of all pupils)
High School Enrollment Share	25%	41%	33%	100%	
Elementary Attendance Rate	17.6%	11.9%	6.2%		(percent of total in private schools)
High School Attendance Rate	12.9%	7.5%	3.2%		
Total Private Enrollment Share	42%	40%	17%		(distribution of all private pupils)

Source: Author's calculations from CPR, op. cit., various tables. Figures are for October 1979.

These data indicate that a tax credit for tuition expenses would generally benefit children in central cities far in excess of their proportion in the overall pupil population. At the opposite extreme, the tax rebate would benefit children in rural areas at a level approximating one-half of their total presence in the population. Suburban children would simply benefit proportionately.

Benefit Patterns by Family Income Level

Personal income is a nearly universal consideration in discussions of equity and public policy. This derives directly from the fact that public programs distribute resources in one form or another, and in the interests of both equity and fiscal economy, programs often account for the ability of recipients to provide resources for themselves. People of different income levels are frequently treated differently in the interests of equity in the provision of public services.

The rich and the poor participate very differently in American private schools. In a public system where an education is universally provided at no direct cost, the decision to enroll a child in a private school is voluntary and requires money. The degree to which families opt for private schools appears to be a direct function of their personal income, as shown in Table 6.

Table 6

Private School Attendance Rates by Personal Income

	Percentage Attendance by Income (in $1000s)						
	Total	$0-5	$5-10	$10-15	$15-20	$20-25	$25+
Elem.	11.0	3.5	4.8	8.4	11.8	13.4	19.1
HS	7.7	2.2	2.9	4.8	6.9	7.3	12.6
Both	9.9	3.2	4.3	7.4	10.2	11.4	16.5

Source: CPR, op.cit. Figures are for October, 1979. Median family income, all families: $17,000.

About 10% of all children attend private elementary and secondary schools. The percentage of children who attend private schools ranges from 3.2% at the lowest reported income level to 16.5% at the highest level. The attendence rates are higher for elementary schools at all income levels. The benefits of tuition credits would thus go to higher proportions of high income parents than low income parents due to their utilization of private schools to educate their children. This effect is even more pronounced if higher income parents select more expensive schools and have greater tax liabilities to take advantage of tax credits.

Another view of income equity of tuition tax credits is obtained from an analysis of the distributions of families across all income categories in both types of schools. These are displayed in Table 7 for both elementary and high schools, and also for their combined enrollments. Overall, higher proportions of private school families occupy higher income classes than do the families of public school children. For instance, about 54% of private school families reported incomes in excess of $20,000 per year. About 36% of public school families reported such income levels. At the lower end of the income distribution, about eight percent of private school families had incomes under $10,000 while about 22 percent of public school families reported this level.

Table 7

Percentage Distribution of Families by Income in Public and Private Schools

Type	$0-5	$5-10	$10-15	$15-20	$20-25	$25+	No Report	Total
Elem Pub	9.6	15.5	19.2	15.1	14.6	18.4	7.6	100%
Elem Pvt	2.9	6.1	13.5	16.0	17.8	35.0	8.6	100%
HS Pub	6.9	12.7	15.4	15.1	15.8	25.3	8.8	100%
HS Pvt	1.9	4.6	9.4	13.5	15.0	43.9	11.5	100%
Tot Pub	8.7	14.5	17.8	15.1	15.0	20.7	8.0	100%
Tot Pvt	2.6	5.7	12.5	15.4	17.1	37.3	9.3	100%

Source: CPR, op. cit., author's calculations. Figures are for October 1979.

These patterns are generally duplicated at both the elementary and secondary levels when the figures are examined separately. The distribution of high school family incomes is generally skewed toward higher levels of income for reasons discussed earlier. Private high school attendance shows extreme responsiveness to high levels of income. Nearly 60% of all families sending children to private secondary schools (grades 9-12) reported incomes in excess of $20,000 as compared to 40% of public school families. Similarly, only about 6% of private high school families had incomes under $10,000 compared to about 19% of public school families.

The exact distribution of benefits of tuition tax credits across families of differing incomes depends on the amounts that they pay in tuition and their tax liability in addition to the degree to which they enroll their children in private schools. Median tuition figures obtained from the October 1978 CPR survey are incorporated in Table 8 which presents estimates of benefit distributions for elementary and secondary school families. The table presents calculations of the actual share of tax credit benefits going to families in each income category by weighting the enrollment shares at the two levels (rows 3 and 7) by a factor reflecting the amount of tuition typically paid at each income level (rows 2 and 5, which are calculated from rows 1 and 4).

Elementary school tuitions paid by families at different income levels are lowest and highest at the two extreme income categories, and relatively close to the median tuition value of $338 at incomes in between. This has the effect of enlarging the proportion of benefits going to the highest income families to more than half of all benefits while, at the same time, it diminishes the already small portion that would have gone to families having low incomes. High school benefit patterns are similar. More than two thirds

Table 8

TTC Benefit Distribution by Income

	$0-5	$5-10	$10-15	$15-20	$20-25	$25+		
High School								
tuition	$687	833	777	810	876	994	(1)	(median =$830)
weighting factor	.83	1.0	.94	.98	1.1	1.2	(2)	
private enrollment distribution	.019	.046	.094	.135	.150	.439	(3)	
benefit distribution	.016	.046	.088	.132	.159	.527	(4)	100%
Elementary								
tuition	$242	334	271	343	323	514	(5)	(median =$338)
weighting factor	.72	.99	.80	1.0	.96	1.52	(6)	
private enrollment distributions	.029	.061	.135	.160	.178	.350	(7)	
benefit distribution	021	.060	.110	.160	.170	.530	(8)	100%

Sources: CPR, op. cit for enrollment by income; Jacobs, op. cit for tuitions by income; author's calculations.

of the benefits at both the elementary and secondary levels will accrue to families whose incomes are more than $20,000. About 20% of the benefits from tuition tax credits to elementary school families would go to those families reporting less than $15,000 in income, and about 15% to a similar class of high school families.

Benefit Patterns by Race

The relationship between a program of tuition tax credits and the race of beneficiaries has been a subject of enduring controversy. On the one hand, opponents of tax credits point to figures which show lower attendance rates in private schools for black and other miniority families as evidence that they will fail to secure a fair share of benefits under these plans. This has been countered by the observation that private schools, particularly central city Catholic schools, have traditionally served minority populations and have undergone recent increases in enrollments of blacks and Hispanics. The 1978 hearings in the U.S. Senate surrounding a Packwood-Moynihan tax credit proposal are laced with conflicting testimony on the subject of minority involvement in private schools.

Table 9 shows the distribution of non-public school enrollments by level, race, and sex. (Information regarding sex will be drawn upon subsequently.) The total enrollments for each level shown in the table overstate the actual estimates of school attendance since persons of Spanish origin are sometimes included in one of the other two race classifications. Minority attendance patterns for the nation as a whole reveal underrepresentation of both black children and children of Spanish origin in private schools. Blacks account for about 15% of all elementary enrollments and for only about 8% of private elementary school enrollments. Comparable figures for blacks in high schools are 13.5% of total enrollments and 6% of private enrollments. Families of Spanish origin are more closely represented in the public and private schools. Hispanics account for 7% and 6% of total and private elementary enrollments respectively. At the high school level, they account for 6% of all enrollments and 4% of private enrollments.

An assessment of the equity of tuition tax credits made on the basis of these enrollment data would conclude that white families would benefit in excess of their representation among families enrolling children in school, blacks would benefit at about one half the level suggested by their

Table 9

School Enrollments by Race, Origin, Sex

Total		White		Black		Spanish Origin	
Total HS (9-12) Distribution							
14,364	M	5865		969		406	
	F	5749		977		398	
		11614	(81%)	1946	(13.3%)	804	(6%)
Private HS Distribution							
1,085	M	481		37		23	
	F	502		26		16	
		983	(91%)	63	(6%)	39	(4%)
Total Elem (1-8) Distribution							
29,225	M	11830		2202		987	
	F	11173		2092		941	
		23003	(79%)	4294	(15%)	1928	(7%)
Private Elem Distribution							
3,214	M	1413		119		96	
	F	1369		124		93	
		2782	(87%)	243	(8%)	189	(6%)

Source: CPR, op. cit. Enrollments are in 1000s, M = male, F = female. Percentages are portions within each type for each race/origin.

representation in total enrollments, and that persons of Spanish origin would receive about a fair share on the basis of racial representation.

These patterns of benefits across families by origin would be affected by their relative levels of earnings (and tax liabilities) in the case of a non-refundable credit. As Table 10 indicates, white families earn more and pay more taxes than either of the other groups. The utility of a tax credit may be curtailed for families with insufficient tax liability. While only 24% of white families with elementary and secondary school children had earnings below $10,000 in 1980, 37% of Spanish origin and 46.2% of black families reported these low income levels. These families pay average taxes of $313 per year or less, and in many cases no taxes at all. These families will be limited or non-participants in a tax credit plan for school tuitions.

Table 10

Income and Taxes Paid by Families, by Origin, Shares by Level of Income

Total Money Income	White	Black	Spanish Origin	Average Tax Paid
under $3000	2.6	9.0	5.2	$ 0
3000-5000	3.9	13.4	9.4	0
5000-7000	5.6	9.8	9.2	
7000-10,000	9.3	14.0	14.0	313
10-12,000	6.6	7.7	9.6	
12-15,000	10.0	10.0	11.6	895
15-25,000	32.5	22.7	27.5	2000+
25,000+	29.5	13.4	13.5	7000
total	100 %	100 %	100 %	

Sources: Income figures from CPR, Population Profile of the United States, 1979 Series P-20 #350, May 1980. Taxes paid figures from extract of FY 1980 March CPS for families with elementary and secondary school children, courtesy to author from U.S. Congressional Budget Office.

Benefit Patterns by Educational Need

Another important issue of equity in the delivery of education to our children is how programs impact children of differing educational needs. Table 11 presents data which reflect the degree to which children are offered both special and compensatory education services in private schools. The data must be qualified at the outset: the numbers of children in the U.S. requiring special education is an elusive figure due to inconsistent reporting and definitions across the fifty states.

Table 12

Private Schools and Special Services

Affiliation	# Schools	Special Education		Compensatory Education	
		#	%	#	%
All Schools	14,757	849	5.8	644	4.4
Non-Affiliated	2,210	512	23.2	145	6.6
Affiliated	12,547	337	2.7	499	4.0
Est. Share of all Pupils Requiring Services:		12.7% [a]		18.8% [b]	
Est. Share of Total Private School Pupils Receiving Service:		0-1%		0-1%	

Sources: Nonpublic School Statistics, 1976-77, NCES op. cit.

[a] IFG Policy Notes, V 2, No. 1, page 6. Imputed estimate.

[b] Kirst, M., & Jung, R. "The Utility of a Longitudinal Approach in Assessing Implementation: A Thirteen Year View of Title I, ESEA," IFG Stanford University, p. 16.

The percentage of all children with special needs shown here (12.7%) is a median figure developed by Hartman in his recent research into the costs of special education in the United States (see reference in table).

The data reveal that 5.8% of all private schools offer special education services and 4.4% offer compensatory education services. Special education is offered in a higher percentage of non-church-affiliated schools than affiliated schools. This undoubtedly reflects the fact that some private schools, mostly non-affiliated, are established for the sole purpose of providing a particular type of special education service.

We know little about the extent of these services offered to children by these private schools, and so the overall numbers of special needs children who might benefit from tax credits cannot be gauged very precisely. The figures do suggest that a much smaller share of special needs children will benefit from tax credits than would be warranted by their overall presence in the school population. Since only about 5% of private schools even offer these services, we might guess that 5% of tax credits is a good beginning estimate of the share going to special needs children. But since some of these schools undoubtedly educate a regular clientele as well, and since their average size is probably small in comparison to all private schools (due to the presence of small specialized special education schools), the actual share of tax credits going to special needs children would be less than 5%. And since they constitute between about 13 and 19% of the population, they are relative losers in a tuition tax credit program.

Benefit Patterns by Sex

Table 9 presented enrollment figures for both public and private schools which include designation by sex. The balance of the actual numbers between males and females for all categories of origin and level indicate that there are no appreciable differences between the participation of males and females in private schools at either the elementary or the high school level, nor for families of specific origins. Therefore, a tuition tax credit would not benefit either boys or girls disproportionately.

The Equity of Tax Credits in a Dynamic World[4]

The first part of this chapter discussed the distributions of benefits resulting from a tax credit plan according to the known patterns of enrollment in private schools. The critical elements of these analyses were the nature of these distributions and the degree to which the families in each would be eligible for a credit. Two dynamic contingencies are now raised. The first is that families might be induced to shift from public to private schools or from lower to higher tuition private schools in response to the tax credit. The second is that the schools might alter their fee and/or scholarship policies in response to the plan. In addition to having obvious implications for the balance between public and private enrollments nationally, these possibilities will probably affect various portions of the population differently. Particularly, since people differ by income and tax status, we would expect subsequent consequences for equity under the proposed plan, and these consequences will be most profound for the poor and for minorities.

Dynamic changes may result from tuition tax credits because the rebate acts as a <u>reduction in the price</u> of private education for those who have school-age children and have adequate tax liability to take advantage of the credit--a tax credit has a "price effect" in the classic economic framework. In general, when the price of a good is reduced to the consumer, more of it is purchased while expenditures on substitutes decline. So, when the price of private education is reduced by a tax credit, we expect that parents would purchase more private schooling and private enrollments would grow at the expense of public enrollments. Thus, a critical component in deciphering the dynamic effects of tuition tax credits and their equity consequences is to understand how families would react to price changes. In addition, private schools may raise their tuition fees as a result of a tax credit, and thereby dampen the potential expansionary effects of such a policy.

Since a tuition tax credit is essentially a reduction in the price of private schooling, the best way to understand the response of different income and ethnic groups, and therefore the equity of tuition tax credits in reaching additional families, is to evaluate the degree to which they are able to take advantage of that reduction in price. Two major questions must be considered in addressing this issue: How large is the reduction in price for different income and ethnic groups? And, what is the adequacy of the additional family resources that are required to take advantage of tuition tax credits?

Size of Price Reduction for Private Schools

Families will differ in their abilities to take advantage of a program of tuition tax credits, and family income is clearly of paramount importance. Level of income is directly related to a family's tax liability and it is from this liability that a credit would be subtracted. Also, attendance at private schools places financial burdens on families with or without a credit--burdens more easily discharged by those families which have more income.

Table 10 presented total income distributions for families of differing origin in the United States and the average tax paid by families with school children at each level of income. Families with incomes below $10,000 pay relatively little in taxes. Those families with incomes below $5000 pay no taxes and would simply have no use for a tuition tax credit. Those between $5000 and $10,000 average $313 in taxes paid. If a plan such as the Reagan proposal were to prevail, these families would not be able to take advantage of the full $500 allowable credit. So on the basis of tax liability alone, the poorest families would be barred from participation in tuition tax credits, and the poor as a group would be less likely to respond to tax credits.

The consequences of income disparities are more serious when we consider race and ethnic origin. White families generally have the highest incomes, followed by families of Spanish origin and blacks. Because of limited tax liability, about 6% of white families could not participate in tuition tax credits at all (no taxes paid) and more than 20% of all white families lack the tax liability to assure full participation. The disenfranchised families constitute much larger proportions of Hispanics and blacks. Nearly 15% of Hispanics have no tax liability, and a total of nearly 40% would be confined to limited or no participation. Blacks would be the least likely participants, since over 22% have no tax liability and nearly 50% have tax liabilities below the $500 needed to assure full participation in such a tax credit. And these data further reveal that larger tax credits would result in more families from all three groups being unable to claim a full tax credit because of insufficient tax liability. For example, a $1000 credit could not be fully used by most families with incomes under $15,000 since their tax liabilities average only $895 or less. About 38% of white families, 64% of blacks, and 59% of Hispanics would then be ineligible for the full allowable credit.

This analysis suggests that rather than becoming singular beneficiaries of tax credits, poor and minority families with school children will be very unlikely to participate in such a plan with the frequency of more advantaged and whiter families--substantial fractions of minority and poor families simply lack the tax bills from which to subtract credits. So if these families are the target population of public policies to increase enrollments in private schools such as tuition tax credits, the simple criterion of eligibility to participate suggests that the tax credit mechanism is poorly aimed.

One way to get around this problem is to provide a "refundable" credit, one that would refund any eligible amount above the limited tax liability of the poor. This would extend eligibility for credits to all families with school children and would correct the targeting problems with tax credits discussed above. Refundability would especially boost assistance for minorities who have particularly low tax liabilities. Refundability has been proposed in tuition tax credit bills before the Congress, including bills by Senators Packwood and Moynihan, but it is now probably the least viable aspect of tax credit proposals because it is expensive and the Reagan Administration proposal does not include it.

Given their lower eligibility to take full advantage of tuition tax credits, it is clear that low income and minority families will be far less likely to respond to tuition tax credits than their more advantaged counterparts. And even if refundability is incorporated to redress this problem, there are additional dynamics of tuition tax credits that would work in the direction of encouraging advantaged families to shift to private schools to a greater extent than disadvantaged ones. The most important of these is the relative ability of families to meet the various costs of private schooling beyond the tax credit.

Adequacy of Additional Family Resources

The fact that tuition tax credits have generally been set at levels considerably below the full cost of private education means that families with limited resources will be less able to provide the additional private educational expenditures to complement the tax credits in meeting the full costs of private schools. Again, we can view this issue in terms of responsiveness to a reduction in price. The poor are less likely to alter their consumption behavior in response to a good that is not affordable, even after receiving a discount in the form of a tax credit. We now review in more detail some of the additional costs that remain to inhibit private school enrollment, particularly for disadvantaged (and minority) families.

The most obvious and direct cost of attendance at a private school would be the portion of tuition that is not covered by the tax credit. Assuming a $500 maximum credit for one-half of tuition, this cost to families would range from $100-200 at the very least expensive schools to $4000 and up at schools with high tuitions. In addition to tuition requirements, schools customarily charge fees for such things as books, supplies, deposits, uniforms, and extracurricular activities. These costs vary widely from school to school, but can easily amount to hundreds of dollars. While a tax credit would result in a new and somewhat lower set of prices for private schooling for all families who have eligibility for a credit, the family's ability to meet these remaining direct costs will nevertheless be positively tied to its income. The poor will be discouraged from private school options on two counts. Their possession of discretionary funds for the direct costs of attending is more limited. And since their choices will be limited by finances to lower cost schools, their overall participation might be lower than that of families who have the means to choose among all private schools.

The reality of fewer options available will suppress their likelihood of choosing a private school.

The costs of transportation similarly act against the poor and minorities in their likely responses to tuition tax credits. Except in cases where there are desirable and affordable private school options within a safe walking distance for youngsters, choosing a private school may involve additional transportation costs such as fees for school-provided transport, public transit, or family car expense and parent time. These transportation costs must be added to the cost of private school attendance; and these costs both remove private choices from the grasp of the disadvantaged for financial reasons, and as suggested above also proscribe the more geographically distant options for the same group.

In addition to the more obvious tuition, fees, and transportation costs for private schooling, the simple mechanics of a federal tax credit work to subdue its qualities as an inducement for private school enrollment by poor families. Simply stated, to receive a tax credit the parent must first have and spend the money. The family which has previously forgone a private school for financial reasons would be offered an incentive in the form of a tax credit; but only if the tuition bill is paid in the fall will a reduction in tax liability occur in the following spring. Just as families will differ in their ability to meet direct costs of private schools, they will differ predictably in their ability to produce cash "up front" in order to get a credit. The price reduction actually effected by tax credits is clearly more useful to those parents with higher incomes and to those who plan their finances over longer periods of time and who maintain cash reserves. Poor families will have difficulty in meeting the cash flow requirements of private school attendance and will be less enticed by a tax credit that offers future benefits rather than present price reductions.

We have, thus far, shown that because of their limited eligibility for tax credits--which curtails price reductions--and because of limited resources to meet the variety of remaining costs of private schools, poor and minority families would not use tuition tax credits with the frequency of more economically fortunate families. In addition to the constraints owing to family resources, actions of the private schools themselves could further inhibit the use of tuition tax credits by their target families.

Tuition and Scholarship Policies of Private Schools

Private schools would have incentives to raise tuitions and to reduce scholarship awards if a tuition tax credit plan is passed since the added costs to their clientele can be "passed on" to the government. A credit would allow schools to raise tuitions while keeping the net dollar cost to parents unchanged. A school could raise its fees by the allowable credit while the parents would be reimbursed for the difference through the tax system. At least three forces would result in upward pressure on tuitions. To the extent that tax credits contribute to an increased demand for private schools, the additional prospective families would tend to bid up the prices of the schools. Also, comparatively underpaid private school teachers would probably advocate raising tuitions in order to fund salary increases. And finally, private schools traditionally seek funds from a variety of sources and operate on austere budgets. A shrewd private school administrator would consider a tuition increase as a legitimate response to a tax credit since a proposed increase that is aligned with a tax credit might be readily acceptable to parents.

If tuition increases erode tuition tax credits, the economically disadvantaged and minorities suffer from two factors: If the net costs of enrollment remain unchanged, these families will have no incentive to switch as a result of a credit--in fact, private schools would become effectively more expensive because the higher tuitions must be paid immediately and the credit must be awaited. Further, for those families with no tax liability and therefore no eligibility for a tax credit, the increased tuitions would put private schools still further out of reach.

Scholarship policies of private schools may also adjust to tuition tax credits. Scholarships may be reduced dollar-for-dollar in response to allowable tax credits since a tax credit will compensate the recipient for the loss. This would leave the apparent net costs of attendance the same for those recipients with eligibility for a credit, but it would squeeze those families with limited or no eligibility. Scholarship reductions would also create the sort of cash flow problems discussed above in relation both to tuition increases and also to the ability of poor families to take advantage of tax credits more generally. A dollar taken from a scholarship is a dollar which must be produced by the family in anticipation of a future credit.

Conclusions and Policy Implications

The equity assessments presented in this paper are fundamentally linked to a common question: How would the distribution of benefits under a tuition tax credit plan compare with a distribution of benefits that would result from allocating resources instead to a representative cross-section of families with school-age children? And, if so, should these characteristics be rewarded in public policy? The data indicate that there are many dimensions in which the public and private distributions differ, and they do so in areas in which we might reasonably raise questions of equity. The questions revolve around who participates and among the participants who gets the most.

The recipient families under tuition tax credit plans differ from pupil families more generally in a variety of ways. Obviously, they represent the one-tenth of U.S. enrollments in private schools and not the balance in public schools. About 88% of the recipients are in church-affiliated schools. Elementary children and their families are disproportionate beneficiaries since larger proportions of children in these grades go to private schools. The parents of high schoolers, in contrast to their smaller numbers, receive about half of all rebate benefits because they pay much larger tuitions.

Because of attendance patterns across the U.S., benefits would favor pupil families in the northeast and the north-central regions of the country on the basis of their numbers. However, because tuitions are higher in the south and the west, the actual dollar benefits would disproportionately favor these regions. Tax credit benefits would further be concentrated in the central cities and be relatively negligible in rural areas.

Because of their higher overall utilization of private schools, and also due to their higher likelihood of ample tax liability, families with high incomes are disproportionate beneficiaries of tuition tax credits. About two-thirds of the benefits of the typical plan discussed would accrue to families with incomes in excess of $20,000 per year, while only 20% of the benefits would extend to families below $15,000 in annual income.

Black family attendance rates for private schools are about one-third that of white families, and their share of benefits would be correspondingly low. Hispanic families utilize private schools at rates between those of blacks and whites and would receive approximately proportional levels of benefits. White families will receive disproportionately large shares of benefits. Finally, pupils with special needs are distinctly underrepresented in private schools and as a group will not share fairly in tuition tax credits.

Enrollment responses by families and pricing responses by schools are suggested as likely consequences of an implemented plan. A tax credit will induce some added numbers of families to send children to private schools, and given a particular proposal, the relevant questions are just how many will be induced, and who will be induced? From the standpoint of equity, families will probably differ in their inclinations and abilities to respond to a tax credit, and there is reason to suspect that families of low income are the least likely to change enrollment patterns. They may be least responsive to small reductions in tax bills that are promised at a future date, or they may be simply ineligible to participate. The credit may be more of an inducement to higher income families to send their children to private schools, since they are more able to meet any cash needs for attendance, and to pay tuition balances beyond a credit, and possibly due to their being more aware of and responsive to public programs generally.

Schools may alter their tuition charges as a result of the credit, since the credit might be seen as a way to permit the federal government to pay a part of parent tuition bills. How schools accommodate families for whom higher tuitions, even with a credit, would effectively impede response is an important equity consideration. Similarly, the equity consequences of changes in scholarship policies are directly linked to the effects of any changes in the cash-flow requirements of private schools attendance. The degree of accommodation will depend both upon school financial policies and IRS tax withholding policies surrounding the credit.

Policy Implications

At the outset of this chapter, readers were advised that the nature of the questions asked in the name of equity, the data brought to bear on the questions, and the conclusions drawn depend intimately upon adopted frames of reference. Both the purposes assumed to lay behind a tuition tax credit plan, and one's value judgments as to what distributions of characteristics in the population are of importance and interest effectively delimit a discussion of equity. Because of the focus selected for this paper--the tax credit proposal as an education measure--the policy implications drawn are those which relate to equity in the distribution of public educational resources. A broad conclusion is that a typical tuition tax credit plan would play favorites among the nation's school children. No attempt is made here to cast this assessment into a balance with other objectives that sponsers may have in mind, such as tax relief or enhanced competition among all schools.

It is clear from these findings that certain groups of pupil families would reap gains from tuition tax credits. Families with these characteristics will benefit most: higher income, white, having children with normal educational needs, those with elementary as opposed to high school age children, and those living in the central cities. To the extent that these distributions are unjustifiable from the standpoint of which citizens recieve how much of our public educational resources, a federal tuition tax credit would create inequities. For characteristics such as income, race/origin, and pupil needs, the idea seems particularly vulnerable in an assessment of equity.

The tax credit concept could be modified to ameliorate some, but not all, of these apparent inequities. Refundability of the credit would curtail some income related consequences, and IRS withholding policies could help poorer families with their cash needs for school attendance. The general relation of income to benefits derives from higher utilization of private schools by higher income families. This could be countered by extending larger credits to lower income families--an idea that has not been seriously entertained by policy-makers thus far. This would raise the share of benefits going directly to low income families, and perhaps encourage higher participation rates among them.

Race and origin patterns of benefit probably cannot be rectified integrally within the tax credit mechanism since preferential treatment, de jure, raises immediate constitutional questions. The regional patterns do not seem to create severe benefit imbalances, and are not primary considerations in the design of a tuition tax credit plan. Finally, tax credits could be designed directly to reflect pupil needs, thereby offsetting the degree to which special needs pupils are limited from participating in current tuition tax credit designs.

Footnotes

1. See James S. Coleman, "Rawls, Nozick, and Educational Equity," The Public Interest, No. 43 (Spring 1976):121-128, for a discussion of these extreme philosophical positions and their importance for equity in educational policy.

2. The Coleman, Hoffer, and Kilgore study (1981) of public and private school differences has sparked a national controversy on this topic. See, for example, Sociology of Education 55 (April and July 1982), a double issue devoted entirely to the study.

3. This relationship holds for two reasons. Parents of elementary school children are younger and as a group have less experience in the workforce and less earnings. They also do not need to have as much income to send children to private elementary schools which are much less costly than private high schools.

4. Much of the following discussion of dynamic issues appears in the author's analysis of implications of the Coleman, Hoffer, and Kilgore study (1981) for tuition tax credits (Catterall and Levin, 1981, pp. 147-150). The author wishes to acknowledge the contribution of Henry M. Levin to this chapter, and the editors of Sociology of Education.