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Financing Elementary and Secondary Education

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FINANCING ELEMENTARY AND SECONDARY EDUCATION

Missy Grubb
Departmental Honors in Economics
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PREFACE

A vital component of any society is its system of education. The American experience has illustrated the intimate relationship between education and the concept of common societal ideals. Community interest, participation and concern, is therefore inherent in our educational process.

However, in examination of the scope and role of this process it will become quickly evident that there exists a large degree of disparity over the goals and structure of the American educational system. Such disagreement is acutely apparent in our present quandry over school financing. Two types of rationale have evolved.

First, there is a strong preference to work out any financial alterations within the present structure of governmental support. Second, there has evolved a strong notion of major change in opposition to the present governmental system. In effort to better understand these directions of thought, the advantages and disadvantages of both will be elucidated.
Part One: Education As A Function Of Government

Thomas Jefferson is quoted as having said, "The Commonwealth requires the education of her people as the safeguard of order and liberty." Although they made no direct provision for the support of education in the Constitution, the founding fathers were well aware of the need for at least a minimally educated population. They realized that a stable and democratic society is not possible unless there is some degree of literacy and agreement among the people on common values. The Federal government, while not required by the Constitution to support education, can easily justify the constitutionality of any support it might give for education under the General Welfare Clause (Article I, section 8). This clause states that,
"The Congress shall have the power to lay and collect taxes, duties, imposts and excises, to pay the debts and provide for the common defense and general welfare of the United States."\(^2\)

By means of careful wording, the founding fathers did not accept Federal responsibility for the support of education, but allowed themselves the freedom of being able to grant aid when it was convenient. With the exception of land grants under the Northwest Ordinance (1787) and the Morrill Act (1862), it has not until recently been very convenient for the Federal government to offer support for education. Federal purse strings are beginning to loosen, but it is much easier to pass the responsibility for the support of education on to another level of government.

Because the 10th Amendment reserves for the States any powers not prohibited by the Constitution or delegated to the United States, the 'power' of being responsible for education was granted to the States. In turn, each state, with the later exception of Hawaii, delegated the major portion of this responsibility to the local governments. Because there is no recognized level of government beneath the local level, the responsibility for the support of education rests with local governments. The State and Federal governments contribute more towards education now than in the past,
but even in the 1970's over half of all the money spent on education is still supplied at the local level, as shown in Table I:

**TABLE I**

Government Support for Public Education \(^3,4\)
(per cents of total expenditures)

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal</th>
<th>State</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>0.3</td>
<td>16.5</td>
<td>83.2</td>
</tr>
<tr>
<td>1930</td>
<td>0.4</td>
<td>16.9</td>
<td>82.7</td>
</tr>
<tr>
<td>1940</td>
<td>1.8</td>
<td>30.3</td>
<td>67.9</td>
</tr>
<tr>
<td>1950</td>
<td>2.8</td>
<td>39.8</td>
<td>57.4</td>
</tr>
<tr>
<td>1960</td>
<td>4.4</td>
<td>39.1</td>
<td>56.5</td>
</tr>
<tr>
<td>1970</td>
<td>7.0</td>
<td>41.0</td>
<td>52.0</td>
</tr>
</tbody>
</table>

Local support does not seem preposterous to many people, but if the ability of each level of government to raise revenue is observed, the local level is the least capable of the three to raise substantial quantities of money. Local governmental control over the finance of education contains several major short-comings.

To begin, in 1970-71, 52% of all money spent on public schools came from local governments.\(^5\) Property taxes accounted for 98% of this money.\(^6\) In most municipalities, the property tax is the only means by which revenue can be raised. Since property wealth varies considerably between municipalities, it obviously is easier for some communities to receive adequate school funding than it is for others.
The property tax base is real estate. Real estate is taxed at a given number of tax dollars for each $100 of assessed value. Tax rates vary considerably and, more often than not, real estate is assessed at a value well below the market value. Assessment ratios also vary considerably; (In Pennsylvania alone, assessment ratios in 1971 varied from 12.8% in Paupack Township, Wayne County, to 67.5% in Philadelphia County. The effective tax rates per $1000 of assessed valuation were $12.67 and $30.21 respectively). 7

The property tax is a residual tax, and the only tax of its kind. 8 A residual tax is one in which the tax rate is adjusted each budget period to provide that part of budgeted expenditures not covered by anticipated receipts from all other sources.

The property tax method is constantly attacked on the grounds that it is regressive and discriminating. Lower income groups usually pay a higher percentage of their income for educational taxes than those in higher income brackets. Because the amount of revenue collected is proportional to per pupil property wealth, this tax is discriminating because it makes education a function of the wealth of the community.

To this point, the California Supreme Court, in Serrano v. Priest (Aug. 1971), ruled that total reliance on the property tax for public school support is unconstitutional on the grounds that it violates the equal
protection clause of the Fourteenth Amendment. Cases similar to the Serrano case have come up in Texas, New Jersey, Minnesota, Michigan, and other states. In each court the decision was the same: That the property tax is not outlawed for education, but it can no longer be the sole source of support.

The property tax is criticised for additional reasons. Assessments are not always consistent and are often based on valuations of former periods. As mentioned previously, real estate is grossly under-assessed. Ralph Nader's Public Interest Research Group estimates that at least $7 billion of property taxes are available but not collected each year. A good portion of this figure is due to under-assessment of industry. Because real estate is under-assessed, not only is the measure of fiscal ability inaccurate, but the tax is not as productive as it could be.

The property tax is also inelastic. The quantity of taxable real estate tends to be very stable throughout the business cycle, and is very slow to respond to general economic growth. Expenditures for education increase approximately 10% each year, while the market value of assessed property expands only 4.6%

Although the property tax is vehemently criticised in its role as the major source of revenue for education, it remains. While the reply usually is "tradition," it is difficult to find a solid answer to the question,
"Why is the property tax still the most significant source of revenue for municipal governments?"

The remainder of this paper is devoted to discussing improvements and alternatives to the present source of revenue for education. Some alternatives are more realistic than others, but they are all thought provoking.

There are possible improvements to the present local property tax as the major source of school income. The productivity of local property taxes is limited, due to the fact that under-assessment heavily restricts the tax base. If assessment was made at full and honest market value, the property tax base would be as broad as possible. Assessment at market value would also eliminate the problem of assessment ratio variations. Under this policy, the assessors would use an assessment ratio of 100% (assessed value/market value) across the board.

Currently, thirty states require no training or certification of local tax assessors either before or after they take office. Uniform qualification and training standards, if required, would also help to equalize assessments.

Further minimization of assessment variation would result if assessment districts were enlarged. Many small, decentralized districts help to breed assessment variations. The extreme position on this question would dictate
the existence of one large state-directed (or possibly even Federally-run) assessment agency. An agency of this nature would take full control of all aspects of tax assessors and assessments. Assessment practices would become standard and consistent.

While these operational changes may help to standardize assessment practices, they do nothing to equalize the expenditure discrepancies between and within districts. Poor districts still cannot adequately finance themselves. A possible solution to this problem would be to determine the average per pupil expenditures for an entire state based on a specific tax rate. If a locality could not supply this level of funds for its schools, the state would make up the difference. If a locality collected funds greater than the average level, the excess would go to the state to be distributed to the districts not capable of financing themselves. A revenue sharing program of this nature would result with rich and poor districts taxing real estate at the same rate. Revenue sharing in this manner would allow all districts to have equal funds to spend per pupil.

There are alternative local tax bases. Some suggestions have already been made to help solve the property tax problems of assessment practices and discrimination,
but those of regressiveness and inelasticity still remain. The regressive nature of the tax can be altered by making the tax a graduated property tax similar to the graduated income tax. As long as the base remains real estate, the tax will remain inelastic. As stated before, real estate is too stable to respond significantly with the business cycle. Income and retail sales are more responsive to economic growth and, therefore, are possible alternative tax bases for local governments.

A sales tax, unless it excluded necessities (and who is to determine what are necessities?) or was used in combination with other taxes, also would be regressive. A larger percent of a poor family's income is spent on consumption than that of a wealthy family, therefore a sales tax alone would result in a higher percentage of a poor family's income being taxed. The wealthier family probably would be taxed a higher dollar value, but the tax would remain regressive. A sales tax is much more flexible in response to the business cycle and, therefore, the revenues collected by it would better reflect economic growth.

An income tax, both personal and corporate, is another possibility for municipalities. Income taxes are the most flexible and can be the least regressive. The taxes could be administered in the manner of state and Federal income taxes. A graduated income tax--taxing higher incomes at a higher rate--would help to alleviate
the financial burden on the low income segments of a district.

Both the sales tax and income tax tend to compensate for business cycle fluctuations, but both (as with any taxes) are politically unpopular. Also, in areas where there is a strong correlation between all three tax bases (property, income, and sales) any adjustment in local taxing powers would be more likely than not to reinforce existing disparities.

Inter- and intra-district disparities are one of the major economic arguments against local support for education. All local units will never be able to finance education equally. Another argument takes into consideration the "spillover" effect. Spillover benefits are, for instance, those benefits Citizen A receives from the education of Citizen B. Spillover benefits of education tend to raise the productivity and the income of all members of the community, not just those who have received more education. Originally, the spillover benefits of education were limited for the most part to the community. Our society is considerably more mobile now than it was 200 years ago and, therefore, this is no longer a limitation for the spillover effect. Educational benefits spill out beyond the community and therefore the responsibility for education should also spill out beyond the community. Along the same lines, it is also argued that the functions of the States (as set forth by the 10th Amendment) should
not be subordinated to municipal governments, and that schools should be free from partisan politics, and education should be of more than just local importance. A simple solution would be to shift the proportion of funds supplied for education from local governments to the state and Federal governments.

It is commonly assumed and argued that increased state (or Federal) funding inevitably involves increased state (or Federal) control over local educational policy. Contenders of this assumption believe that local control over education stimulates and sustains the interest of parents and the local community in the education of their children and that it permits and encourages educational programs to meet the changing needs of a particular community. Loss of local control, therefore, would tend to reduce local interest and possibly lead to increased standardization of the educational process. They also feel that a local electorate can best understand local needs. The logic of these assumptions is questionable and an intense study on public school finance by the Urban Institute (1972) found that at least some of them are not true.

The Urban Institute study concluded that state control over local decision-making has no direct relation to the percent of state funding. No significant correlation was found between the percent of state
funding and local limitations or curricular requirements including textbook controls, budgetary and tax restrictions, personnel regulations, or jurisdictional boundaries. The study also found that with few exceptions, higher percentages of state funding tend to be conducive to educational innovation. The adoption rate of innovative practices is generally higher in states that spend more per pupil in absolute dollars. The study found this a much stronger relationship than that between the rate of innovation and the level of state funding. Finally, the study revealed that the extent of state controls appears to be only somewhat related to increased per pupil expenditures. Similar conclusions can also be found in earlier studies.¹³

Alternate schedules of state funding are possible. Economic justifications for state funding of education include: Spillover benefits, the promotion of intra-state income distribution, an administratively more efficient state tax system and greater purchasing power.

As mentioned in the last section, because benefits from education spillover the municipal boundaries of jurisdiction, the state is obligated to be at least partially responsible for them. A state organized and controlled system of income distribution between districts
would probably be more equitable than the suggestion offered for revenue sharing on a local level. Because a state is much larger than any of the districts within it, a state's financial strength is much greater than that of any of its districts. By using this strength, a state can obtain more favorable terms for local school purchases than any one locality could obtain. States are also in a position to reduce educational costs by promoting consolidation, conducting and supporting research on educational methods, etc.

Presently, most state revenue comes from both the income and sales taxes. In order to increase revenue by the amount that would be required to support additional proportions of educational finances, it would be necessary to broaden the existing tax bases or to increase the existing tax rates. The effect of the additional state revenues would not be the burden of an individual's tax liability. The money once paid to a municipality for education would now be paid to the state. Unless per pupil expenditures were increased, the individual's total tax liability would remain nearly constant.

Another tax alternative for the states is a state-wide property tax. With this system, the state would control the administration (assessment, rate-determination, etc.) and the collection of the tax. With a state-wide property tax and a large proportion of the
educational expenses paid by the state, there would be little or no need for local property taxes for education. Once again, it is possible for an individual's total tax liability to remain nearly constant. A state-wide property tax is not much less regressive than a local property tax, unless it is a graduated tax. State-wide property taxes with uniform assessment ratios and rates throughout the state would equalize tax burdens for individuals in different districts.

The first step in a series of systems of state funding is one of partial state funding. 'Partial state funding' refers to a system in which both state and local authorities contribute funds for education. This type of system currently exists to varying degrees in most states. Partial state funding may lessen inequalities in per pupil expenditures while still providing some local fiscal autonomy.

The most common form of state assistance schemes is known as the Foundation Program. Generally speaking, a state-wide uniform minimum level of per pupil educational expenditures is established and a minimum state property tax is required. With this type of plan, the state pays the minimum level of per pupil expenditures out of general revenues. Districts are free to supplement this through additional property taxes.

The Foundation Program has its shortcomings, however. It can provide for equal per pupil revenues, but
because it allows for local supplementation, it fails to overcome the advantages that wealthier districts have in increasing their expenditure levels for education. In addition, in states where this program is now practised, the state-set levels of minimum per pupil expenditures tend to remain fixed when actual costs continue to climb.

Full state funding is the extreme alternative in this category. The main goals of a fully state funded system are to further equalize educational revenues and to remove school finance from its current dependence on local property taxes. Under such a program, each state would totally cover the costs of education: Districts could not supplement these funds with local revenues. Full state funding, therefore, brings about a greater equalization of the tax burden at the expense of local fiscal autonomy. Localities do not necessarily lose all control. Maximum flexibility under a fully state funded program would be to grant the districts complete freedom to make allocations within their budget constraints. Hawaii is the only state presently operating under a fully state funded system (see Appendix).

One means of distributing revenue in a fully state funded system is to provide "weighted pupil" grants. Under this system, a particular category of students is assigned a weight of 1.0. All other students are
"weighted" relative to this base group. The "weight" for a particular type of student is the ratio of the cost of achieving a set of desired goals for the pupil in question, as compared to the costs of achieving the same goals for a pupil in the base group. This would include the higher costs of educating disadvantaged, handicapped, gifted, etc., students compared to the costs of educating average students as well as cost differences resulting from different levels of education (secondary education costs more than elementary education). This is an equitable system, but because the ratios are extremely difficult to determine, the practicality of such a system is limited.

Another popular method for distributing revenues in a fully state funded system is the Personnel Unit Formula. With this method, the state provides each district with the real resources for its educational program rather than a lump sum grant. Hawaii currently operates on a system similar to this. There, teacher positions are allocated on the basis of classroom units, and funds for texts and supplies are allocated on a per pupil enrollment basis. In general, a district's autonomy depends upon the flexibility it has for making substitutions within the personnel and non-personnel areas. Structurally similar programs exist in Delaware and North Carolina. These differ though, because they
are not fully state funded: Each district is allowed to supplement state allocations to an unlimited extent. The main goals of systems of state funding are to equalize educational resources and to remove school finance from dependence on local property taxes. The degree of state funding, as pointed out, determines the extent of equalization. The more fiscal control municipalities are willing to relinquish, the more equal the resource distributions will be. Even though the dependence of school finance on local property taxes is diminished or eliminated, the property tax still remains a source of revenue for education.

Federal funding is another source that can reduce the per-pupil expenditure disparities. All of the advantages of state funds for education would apply to Federal funds, but to a greater extent. Federal administration of taxes is more efficient than state administration; the purchasing power of the Federal government is much greater than that of any state; and Federal funds would help to diminish further inter-state as well as intra-state per-pupil expenditures. Anything the state can do, the Federal government can do equally well or better.

The shortcomings of Federal funding are similar to those of state funding and possibly may even be more acute.
There is more of a possibility for a high degree of standardization, lack of communication, loss of local interest, etc., as more money comes from sources further away from the local level. As pointed out before, however, it is very possible that such undesirable (as felt, not necessarily justifiably, by the majority of taxpayers) traits may not occur.

The extreme position in the category of Federal funding is full funding by the Federal government. This position is similar to that of full state funding, only taken one step further. No local or state taxes for education would exist. The Federal government would equally distribute funds for education, and the states and municipalities would not be permitted to supplement them. The degree of local and state autonomy would depend on the organization of the system. At most, these governments could have considerable freedom with respect to administration and limited controls over the budget. If operated correctly, a fully federally funded system could diminish per pupil expenditure differentials to zero.

In a hypothetical system of this nature, considerably more revenue would necessarily be required by the Federal government. Increased revenue could be produced by increasing the existing personal and corporate income taxes as well as by levying other taxes not now used at
the federal level. In 1972 the Nixon Administration suggested the use of a value-added tax as a partial substitute for the property tax. A tax of this type is placed on manufactured goods at various stages of production. This is in effect a cumulative sales tax that is ultimately paid by the consumer. It would be a possible candidate to increase Federal revenues if it was not so regressive or inflationary. For these reasons, it has been dismissed from the consideration of government officials for use at this time.

A slightly better alternative would be a Federal property tax on business, individuals or both. A Federal property tax would operate in a fashion similar to that explained for a system of state property taxation. While still remaining inelastic with respect to the business cycle, if administered properly, it would be more equitable and efficient than either a state or local property tax system.

Once again, revenue for education is partially dependent on a property tax. It seems inevitable that, as long as education is provided by government at any level, the property tax will continue as a source of revenue. To do away with the property tax, it would be essential to find non-government funding.
Part Two: Education As Private Enterprise

It has been observed by some that government agencies are in effect monopolies, and are generally inefficient and technologically backward in contrast to private enterprise, which tends to be much more efficient and technologically progressive. These observers (including Adam Smith over 200 years ago) suggest that in order for education to become more economically efficient and technologically progressive, it must be removed from government auspices and allowed to operate within the market system of free enterprise and competition.

Ideally, they believe that education should be left to individual decisions and finances. The market would determine what types of education were to be provided, how relevant resources are to be made available to the appropriate sectors of the education industry and who is to be educated. Governmental intervention would be restricted to absorbing the cost of benefits from education that accrue to persons other than the students.

In the market, supply would be determined by the rates of return to various types of education as influenced by the availability of resource inputs and demand would be determined by parents for the consumption of their children. An economically efficient level of output would exist when total demand is equal to the unit cost of
educational goods and services or when benefits of additional spending are just equal to the additional costs of these benefits.

Theoretically, in a perfectly competitive market, schools will only operate at the most economically efficient level. Because schools would have to compete with each other in every aspect (quality of teachers, facilities, curriculum, student admissions, etc.), a more efficient and effective use of facilities and resources would result. Competition would provide initiative to challenge existing standards and encouragement for innovation and variety. Necessarily, the process of education as a whole would improve.

In order to give the market complete control, the radical solution for these believers is an educational system with no government assistance, no compulsory education and no publicly operated schools. Parents would assume all costs of educating their children. Under this system, education would be purchased in a manner similar to the way purchases are made for food. A slightly less radical solution would be to require a minimum level of education for everyone, with schooling obtained at the parents' expense. This would be similar to requiring a driver's license or a small pox vaccine, but with a rather large personal expense. Both of these solutions have much to be said for in terms of freedom
and equal opportunity, but are clearly beyond the range of current political feasibility.

A much more moderate and politically feasible plan for the operation of education within the competitive market is Milton Friedman's proposal for educational vouchers.

According to Friedman's theory, vouchers for education are supplied by the government to all parents for each school-aged child. Vouchers are redeemable for some maximum sum for the educational services at the institution of the parents' choice and may be supplemented by the parents' personal resources.

A public, private non-profit or profit-oriented school, in order to redeem the vouchers for the cash value, would have to be accredited by the government. This approval would insure the maintenance of minimum standards for health, context of curriculum, etc. All schools would be required to finance themselves and therefore would charge tuitions not less than the minimum voucher value. As a result, public schools would compete not only with private schools, but also among themselves.

The highlight of Friedman's voucher system is freedom of choice. More freedom would be granted to those whose children presently attend private schools because they would no longer be required to pay for education twice. And more important, a range of choice in education
would become available to children of low and middle income parents comparable to that of children of upper income parents so long enjoyed...

The voucher system allows a possibility of smaller government expenditures for schooling but higher total expenditures. Because parents may supplement their vouchers, private funds are attracted to education and would therefore not necessitate tax increases. Also, because of the freedom to supplement vouchers, individuals could increase spending for education directly out of growing income without having to wait for the political process to effect an equal exchange.

The voucher system could also open many possibilities in the entire field of education. New types of schools, from a mom-and-pop corner school to highly capitalized chain schools, could come into being. If vouchers were divisible, it would become possible for students to attend one school for a particular subject and another school for a different subject. Because all schools would be competing for prospective student-customers, there would be constant initiative for innovation and improvement. The schools would become more responsive to the wishes of the people. Generally speaking, elementary and secondary education would become more like the present system of higher education.

There are, of course, many arguments against a voucher
type system. In the September 23, 1973 New York Times Magazine (pp. 23, 65, 70, and 71), Friedman gives his own replies to these objections concerning possible violation of the First Amendment with respect to the Church-State issue:

In 1973 the Supreme Court struck down (6-3) laws in New York and Pennsylvania that provided for tuition reimbursement for parents of parochial school students. This would not be the case with a voucher system, however, because vouchers of equal value would be provided to everyone and they would be given to parents, not churches. Also, social security and welfare recipients are free to contribute to churches and, under the GI bill, veterans are free to attend religious colleges.

The voucher plan may well reduce the role of the parochial schools by eliminating their privileged position as the only effective alternative to public schools available to most people.

Concerning other criticisms, Friedman in the same article categorically answered the issues placed to him:

---increased financial costs

Financial costs would rise because they would reflect the costs of non-public schools. Private funds for education would also increase by a conceivably equal amount.

---possibility of fraud

Vouchers would not be in the form of cash. To insure that a voucher is spent for approved educational services, it could be redeemable only at an accredited school. In turn, only accredited schools could cash in their voucher payments with the government.

---a voucher system would lead to racial and class segregation

This is not a factor in Friedman's system.
However, schools would be prohibited, as they presently are by the Constitution, to refuse admission to a qualified student on the grounds of race, creed, sex or social class. It could also be possible for minorities and low income groups to receive larger vouchers to help compensate for their economic disadvantage in supplementing their vouchers.

--doubtfulness over the fact that new schools, particularly in the inner-city, will be founded

Total expenditures for education are approximately $50 billion each year. This figure is only 1/3 larger than that spent in bars and restaurants annually. Because there is certainly a wide variety and price range and location of these establishments, it can be reasonably assumed that an equally wide variety of schools will also exist.

--a negative impact on public schools

Under the voucher system, the quality of all schools would be dramatically improved. The worst school may be relatively lower on the educational scale, but it will be absolutely better in quality with respect to the present system.

--inability of parents to exercise intelligently their freedom of choice

This tends to be a self-fulfilling prophecy. If, however, it was found that parents could not make wise decisions on their own, free counselling could be provided, as it is for many other special and social interests.

By far the loudest clamorings against, and the key obstacle to, an introduction of schooling into market competition results from the perceived self-interest of the educational bureaucracy. Teachers and public administrators who wanted higher pay and more job security headed the pressure that led to full assumption of financing by
the government, which came with the Free School Act in 1867. Even today, they realize that higher pay and security would remain a function of merit rather than seniority in a competitive market. If these educators did the job they were employed or elected to do, they would not be afraid of losing their salaries and security when placed in the market; they would be compensated, equally or better, for the job they actually did do. The expression of their fear, however, leads one to believe that they feel they are not performing adequately in their present positions. This complacency alone would cause serious consideration of alternative educational methods.

While the voucher system is criticized on many counts, it should be realized that it was noteworthy enough to be considered a serious alternative by the Nixon Administration and to find experimentation in a few school districts across the nation (see Appendix).
CONCLUSION

This is an attempt to bring together all of the ideas mentioned in this paper and to derive a politically and economically workable system of financing elementary and secondary education in the United States.

Friedman's voucher system, as discussed, presents too great an opportunity for segregation to willfully be accomplished. To help eliminate this possibility, a voucher system should be employed in which no personal supplements are permitted for the basic required courses of study (English, mathematics, health, etc.). Supplements could be permitted to be used for courses of study other than the basic requirements. To accomplish this, each voucher would be divided into two portions: one for the basic requirements, the other for electives such as art, athletics, advanced sciences, vocational training, etc. Vouchers would be redeemable, totally or in part, only at government approved public and private schools. Parents would be free to send their children to those schools that would best fulfill their individual needs and wishes.

Because expenditure discrepancies are smallest when funds are provided by the Federal government, all vouchers would be provided at this level. Distribution of the vouchers could take place at either the Federal, state, or local level, depending on distribution effectiveness.
The value of the vouchers would be determined by the average expenditure per child per year for the entire country. After computing the total funds required annually, tax rates would be set accordingly.

Funds for the vouchers would be collected at the Federal level and would consist of revenue from personal and corporate income and personal and business property. All real estate assessments would be made at the national level and would be consistent throughout the country at 100% of the full and honest market value. Any local or state property taxes for non-educational purposes would use the same assessment values. A greater proportion of the funds for education would come from the income rather than the real estate taxes.

As is true with any of the suggested alternatives, it would be very difficult to assess the effects of and reactions to the synthesised system of finance. To be sure, there is a lack of available data to date, especially concerning taxes, to make a scientific examination of the plan. It is also very difficult to predict what would be the actual response to a change from local fiscal and administrative control over education to Federal control. Although this is not really testable, it is hoped that it is at least food for thought for the many who are not aware of the multitude of problems as well as opportunities, existing within our present educational system.
Full State Funding In Hawaii

Hawaii is the only state in the union to operate its educational system by a State Department of Education. In 1965, the Hawaii State Legislature passed Act 97, which provided for the state government to take over the financial responsibility for all educational functions provided formerly by the counties. Since 1965, the state has provided over 95% of non-federal funds for education (10.6% of the total expenditures are provided by the Federal government, 4.3% by county authorities, and 85.1% by the state).

Hawaii's state tax system is one of the most comprehensive and highly productive systems now in use. Virtually all potential sources of revenue are tapped, including gross receipts, income, inheritance and real property. The progressive personal and corporate income taxes and broad-based sales and excise taxes produce the most revenue each year. All major taxes are state administered and collected. There are neither local taxes, personal property taxes nor special levies for school districts.

The state and four counties are the only levels of government. Real property tax is the major source of revenue for the counties—providing 80% of the funds.
used to support non-educational public services, and only 20% of the total state revenues. The state is responsible for the assessment of real property and established as annual net assessed valuation for each county. From this valuation, each county determines its revenue needs (non-educational services), and sets its tax rate accordingly. In 1967, these rates ranged from $15 per $1000 of assessed valuation in Maui County, the most rural, to $19 per $1000 in Honolulu County, the most urban.

Hawaii's school system consists of one fiscally-centralized district with seven administratively decentralized districts. The administrative units have no fiscal power.

The distribution of funds is made on the basis of a personnel/classroom unit—one teacher per classroom unit of 26-28 pupils. Non-teaching positions and equipment allocations are based on enrollment. Differentials are made by grade level, not by need, and can be adjusted to a limited extent, for program needs, by each of the seven district superintendents. By general consensus, it is agreed that there is enough flexibility under this centralized system to insure that programs may be adapted to the needs of a particular community. Each district has enough authority and freedom to experiment within the broad state framework.
There are both advantages and disadvantages to Hawaii's system of full state funding. The advantages, from an educational and economical standpoint, are much more noteworthy. The disadvantages realized to date are:

- initiatives for innovative programs usually come from the school level where there is inadequate staffing of time to develop improved methods.
- there are complaints of communication difficulties between staff and administrative personnel.
- schools and district staffs have become over-dependent on the State Department of Education, thereby reducing the development of their own capabilities for shaping local school programs to the needs of their particular communities.
- the strong role of the state legislature has resulted in a somewhat weak and politically-oriented State Board of Education.

The first three of these disadvantages seem to be capable of being remedied easily, either by increasing each school staff or by offering incentives for each school and district to develop innovative programs designed for their respective communities. All four of the listed disadvantages, especially the last one, are noticeable in school systems that are not fully state funded.

On the positive side, there are several points to mention that are definite advantages to other systems of school funding. These include:
- rapid growth communities are not penalized for their additional building needs—all structures are provided by the state.
- rural educators have access to the same materials as urban educators, and on an equal basis.
- Federal resources can be concentrated at the state level on a few priority projects rather than being dissipated into many small projects.
- poor and rural areas are not disadvantaged in terms of teachers, equipment, and facilities.
- local administrators can focus the attention on improving the educational program rather than financing it.

It is also observed that expenditure disparities do occur, but at a significantly lower rate than in other states.

While this system works rather well in Hawaii, it is questionable whether it can work equally well in other parts of the country. Hawaii is a smaller and much more rural (percentage-wise) area than most other states. Also, most all aspects of government are centralized; the local level of government is not as significant in Hawaii as in other states, although this is a rather recent development. This is not to say that a fully state funded system, as operating in Hawaii, cannot successfully operate elsewhere, but it provides the proper perspective in which to view the situation.
Experimental Voucher Systems

The first experimentation with a voucher system in the United States took place in the Alum Rock Union School District during the 1972-73 school year. Alum Rock, an economically-depressed and racially mixed community, is located on the east side of San Jose, California.

Six of the district's twenty-four schools participated in the experiment and operated twenty-two "mini-schools," with the assistance of a two year, $2 million grant from the Office of Economic Opportunity. The structure of the system was as follows: Parents were given vouchers worth $680 per year (for grades K-6) and $970 (for grades 7 and 8) -- the average annual per pupil expenditure in Alum Rock. Funds for the vouchers came from the regular district budget. Parents were free to enroll their children and spend their vouchers in any of the 22 programs offered. Traditional curriculum was offered at each of the six schools, as well as two or three non-traditional programs. The non-traditional programs ranged from those that included art as an integral part of the curriculum to "School 2000" where standard subjects were taught in modern and future contexts and the pupils in one class ranged from 5 - 10 years of age.

After one year in operation, it was observed that
there was less absenteeism, less vandalism, more variety in educational offerings, widespread local support and generally more enthusiasm for school on all sides. In the first year, parents were very conservative. Only 5% used their vouchers at schools other than the regular neighborhood school, and 25% enrolled their children in the traditional programs. In the second year, however, seven more schools were added to the program to meet community demand and parental conservatism eased somewhat.

No detailed evaluations of the experiment were available, but New York Times interviewers found no one who thought the children had learned less and many who felt there was considerable improvement among students enrolled in the program. Teachers in the experiment worked harder, but were generally pleased with what had been accomplished.

The San Jose program retained the academic essentials of Friedman's model: A free choice of schools and a variety of curricular alternatives, but both critics and supporters of the model did not feel it was a valid test of the pure Friedman concept. To begin, only public schools were included. Parents could not supplement the vouchers, schools could not be selective when enrolling students, and safeguards were taken to insure teachers and administrators would remain on the payroll even if their programs were uncompetitive. Critics argue that because the district was naturally ethnically mixed (50% Chicanos, 35% white, 10% black, and 5% Oriental and other nationalities) and
was predominately lower middle class, it would be hard to attempt to segregate a school. Therefore, the Alum Rock experiment could not be used to test the possible ill effects of resulting from racial and economic segregation.

In order to make a more valid test of Friedman's model, federal funds were granted to New Hampshire to develop a two-year program that would more closely approach the pure Friedman concept. In the original plans, both public and private schools were to be included in the program. Because it was ruled unconstitutional for parochial schools to participate, the New Hampshire experiment will also be a weak test of the pure model.

Generally speaking, political and economic conservatives favor such experiments, and liberals and most educational interest groups view them as threats to their job security and the public school system as a whole.
FOOTNOTES


2 Tiedt, p.16.


5 Shapp, p.2.


9 Shaffer, pp. 66-67.

10 Ibid., p.82.


13 Levin, p.262.

14 Ibid., p.198.

15 Ibid., p.199.

16 Shaffer, p.64.


18 Levin, p.218.

19 Ibid., p.215.

20 Ibid., p.212.


22 Lynn, p.188.


24 Jenkins, p.70.

25 Ibid., p. 70
BIBLIOGRAPHY


