

MICHIGAN EDUCATION TRUST PROGRAM

A Public Policy Approach To
Finance College Tuition

by

ALFINIO OLIVAREZ, JR.

Presented to the Public Administration Faculty
at the University of Michigan-Flint
in partial fulfillment of the requirements for the
Master of Public Administration Degree

1992

First Reader Dr. Albert Price

Albert Price

Second Reader Dr. Carl Rinne

Carl Rinne

TABLE OF CONTENTS

Legislative History of Student Aid	
Eighteenth Century	
Nineteenth Century (1941 Through 1980s)	
The Role of the State.	6
Research Design.	8
Michigan Education Trust Program	10
Rules and Procedures	
Alternative Programs	
Transition--Political Environment	
Theory Application	17
A. Causal Theory--Responding to a Problem	17
Alternative Programs	
Higher Education and Impact on Economic Value	
Maintain Higher Education Affordable	
Student Indebtedness--Dysfunction for Society	
B. Interest Theory--Responding to Public Interest	29
MET Expands Affordability to Michigan Families	
MET Provides Eligibility to Low/Middle Income Families	
MET Responds to "Middle Income Squeeze" Concept	
Encouragement of Savings	
Equitable Financing Systems	
Conclusion	43
Tables and Appendixes	
Bibliography	

LEGISLATIVE HISTORY OF STUDENT AID

The United States Constitution does not indicate specific responsibility for education with the national government. However, the federal influence on American colleges and universities has been enduring. It appears that the federal government has continually played a role in supporting higher education in an attempt to serve a variety of national purposes. The Tenth Amendment indicates responsibility to the states and the federal government playing a secondary role. However, expenditures have remained supplementary to state subsidies.

Direct sponsorship of institutions has been with the states. Over the past two centuries, the states have created and expanded public systems for higher education. The federal government has not become involved in direct sponsorship of institutions of higher learning, apart from the military academies and a few other specialized schools.

Early federal policy was promoted in public land development in the late eighteenth and nineteenth centuries. The Merrill Land-Grant College Act of 1862 fostered some of today's public/private universities; for example, Michigan State University. In the nineteenth century, proceeds from the sale of public land helped states establish and finance the early land-grant institutions -- agricultural extension programs (Gillespie and Carlson, 1983. P.1).

From the land-grant college movement to the G. I. Bill experience following World War II, public policy has progressively extended educational opportunity to new groups in society. "Federal aid was

limited to veterans assistance under the G. I. Bill and then to a few highly specialized programs, such as grants to American Indians and fellowships for graduate students in science" (Gillespie and Carlson, 1983. P.2).

In 1958, in reaction to the launching of the Soviet space satellite, Sputnik, Congress passed the National Defense Education Act (NDEA). The Act created fellowship for students in science and engineering. This program also created the National Direct Student Loans (NDSL). "Direct federal appropriations provided 90% of the capital and schools matched the remaining 10% for the low-interest loans" (Hauptman, 1982. P.16). The educational institutions were responsible for selecting borrowers as well as loan servicing and collections. The repayments were channeled into a revolving fund at an educational institution and used for new loans. In the 1960s, it was a primary source of student assistance. However, "high default and delinquency rates and low interest rates targeted NDSL for federal budget cuts" (Hauptman, 1982. P.16).

As part of the Great Society under President Johnson, the Higher Education Act of 1965 identified commitment to equalizing college opportunities for needy students. These programs were designed to identify the college-eligible poor and to facilitate their access with grants to replace contributions their families could not afford to make. This resulted in establishing the College Work Study Program (CWS), the Supplemental Education Opportunity Grant (SEOG), and the Guaranteed Student Loans (GSL). Specifically, the GSL program provided private sector loans at 6% interest with state guarantee

against default-related losses, and for students with family income below \$15,000, the federal government agreed to pay in-school interest obligations and one-half of the borrower's interest during the repayment period (Hauptman, 1982. P.32).

Nonetheless, those grants, loans, and work study programs were to assist students from low and middle income families. In addition, Congress expanded the G. I. Bill by allowing the children of deceased, disabled, or retired parents to be eligible for social security benefits while they attend college (Gillespie and Carlson, 1983. P.3). Thus, the spotlight on student aid went from national interest to a moral aspect -- removing inequitable barriers to individual opportunity.

In the 1960s, appropriations for student aid continued to increase and so did the student enrollment rate, although "in 1968, the GSL interest rate was raised from 6% to 7% and the provision of partial federal payment of interest during the repayment period was dropped" (Hauptman, 1982. P.31). In 1972, Congress and President Nixon expanded the federal commitment to student assistance -- created was the Basic Education Opportunity Grant (BEOG) for needy students. This is now called Pell Grants. "This program in 1986 provided over \$3 billion to nearly 3 million students enrolled in post secondary education and training" (Gladieux, 1987. P.12).

In 1972, federal legislation created the State Student Incentive Grant (SSIG) program to provide federal matching funds for need-based state scholarship programs. These amendments to the Higher Education Act emphasized that the responsibility for general support of

institutions should continue to rest with the states, with the federal government continuing to aid higher education through programs of special national concerns. However, "during this period, federal student aid affected virtually every institution in the country. More than one-third of all post secondary students were estimated to receive some federal aid" (Gladieux, 1987. P.9). Some of the historically black colleges and other schools serving substantially low income population have become especially dependent on federal student aid. During this period, a private corporation--Student Loan Marketing Association (Sallie Mae)--was authorized for the purpose of creating a secondary market for student loans. This government-created corporation would buy student loan paper, would lend funds to banks and others using student loan paper as collateral and make commitments to purchase or refinance the tax-exempt bonds of state agencies.

By the mid 1970s, political pressure increased to further broaden the base of eligibility for student aid. The Carter administration went along with legislation that resulted in the Middle Income Student Assistance Act (MISAA) of 1976. This program liberated eligibility for Pell Grants and opened subsidized loans to students regardless of income and need (Gillespie and Carlson, 1983. P.3). In particular, GSL grew in the 1970s. A major thrust of this program was to make loans available to students previously excluded or inhibited from borrowing. GSL was for students from a broader spectrum of family income. Family income ceiling to qualify for federal in-school interest payments was raised from \$15,000 to \$25,000.

In 1976, there were greater incentives for states to expand

guaranty agencies; for example, there was a 100% federal reinsurance for states with lower default rates, administrative allowance to state agencies, and allowance of state agencies to retain up to 30% of their collections on defaulted loans to cover administrative costs. In 1978, the income ceiling of \$25,000 was removed and allowed students from all income levels to qualify for in-school interest subsidy (Hauptman, 1982. P.35).

In fiscal years 1979 through 1981, there was increased loan volume combined with unprecedented interest rates, that led to increases in federal payments to lenders. To provide an estimate of cost,

"in the academic year 1981-82, tuition, fees, room and board, and other necessity expenses nationwide cost approximately \$40 billion. About \$8 billion in GSL was used to finance those costs -- 20% of the total bill. The federal cost increases were attributed to the escalation of general interest rates. The costs were a necessary consequence in order to make loan terms affordable to student borrowers while keeping the rate of return sufficiently attractive and secure for lenders to continue their participation in the program" (Hauptman, 1982. P.17).

Accordingly, the GSL interest rate for new borrowers was raised from 7% to 9%.

In 1980, Congress passed a loan called Parent Loans for Undergraduate Students (PLUS). Congress authorized this program in order to help families with cash-flow problems escalated by the increasing costs of college and the requirements created by restrictions on GSL. The PLUS program enabled families to borrow at the same interest rate as GSL; however, repayment of interest and principal was to begin within 60 days of when the loan was made. By 1981, the interest for PLUS was raised to 14% in order to reduce the

incentive for parents to borrow below the market rates (Hauptman, 1982. P.19).

Proposals were made by the Reagan administration to bring down the increasing student aid costs by tightening eligibility, increasing paper work requirements, and raising costs to borrowers regardless of their family income. "These costs translate into more than 1 million borrowers where college plans were affected in some way through the GSL program" (Houghton, 1982. P.18).

The Reagan administration supported the PLUS program because it was an essential piece in its strategy for reducing federal costs for college loans. PLUS is less subsidized than GSL, and the Reagan administration was interested in shifting as much borrowing as possible from GSL to PLUS. To the public, PLUS was burdensome because lenders appeared uncomfortable with the immediate repayment of interest while the borrower was still in school and the interest had increased from 9% to 14% (Houghton, 1982. P.19).

In the face of federal retrenchment regarding federal aid policies, it is only prudent that states and institutions begin to design realistic options to assure the availability of student aid for those that need it and make it affordable for students and their families.

THE ROLE OF THE STATE

The 30-year growth curve of federal student assistance has leveled off sharply, and the cost of tuition has dramatically increased. Parents will have to contribute more out of current income and savings

and students have to find jobs and work more. In the past, states have developed other mechanisms such as corporate support, secondary markets and savings plans, although states are once again being turned to for innovation and creativity.

Significant tuition increases and decreased student assistance will threaten equality of educational opportunity. "The obvious constraints on public resources in an era of enduring economic malaise, the increasing costs of providing basic post-secondary services, and the daunting price tags attached to maintaining quality education in a technological age have made it virtually imperative to reexamine current approaches" (Hearn and Longanecker, 1984. P.4). The State of Michigan has developed and is implementing an innovative program called the Michigan Education Trust Program in order to relieve the rising college costs and relieve the burden borne by parents in the low and middle income groups.

An eloquent champion in the cause of educational equity and opportunity for the poor and middle class, Steven Baily, wrote in *Ethnics and the Politician*, the following statement:

"The ultimate ethical postulate of a democratic society is not that man is good but that he is capable of good. Not that man is free from corruption but that he is desperately sick of it; not that man has created the good society but that he has caught a glimpse of it. This is not the time to abandon the tuition policy which has made it possible to provide increasing numbers of Americans with something of an unforgettable glimpse of what a good society could be all about" (Hearn and Longanecker, 1984. P.8).

Thus, the State of Michigan is initiating a course of action via MET in order to assure that all qualified students have access to

higher education. However, this approach should take into account risks and liabilities to the State, the family, and the institution of higher education.

RESEARCH DESIGN

Problem

The cost of higher education has increased at a much faster rate than the general price level in the past several years. Parents, policy-makers, and law-makers have very serious concerns that higher education in the United States is being priced out of reach for most Americans thus endangering the American Dream -- educational opportunity.

Private schools have already begun to offer tuition programs. Furthermore, private savings institutions have capitalized on the increased interest to finance education, and other states have initiated other prepayment and savings plans. However, the State of Michigan has decided to intervene in this endeavor with the MET Program. This case study is not to find which kind of approach seems most sensible and viable; rather, is the MET Program a sensible and viable approach to address the problem.

Research Questions

Based on the problem cited above, Michigan's MET Program will be analyzed. This case study will address the following questions:

1. Does the state program (MET) initiate reliability, viability, and credibility to make it successful for an educational prepayment program? Families needing assistance in planning to meet college

costs would need a program that has the organizational capacity to provide adequate investment. The program must have a good chance of meeting the goal of increased college savings and sustaining itself in the future. Reliability, viability, and credibility must include consideration of the costs of marketing and administering a program along with the relative risks associated with the investment strategy. This should also encompass the type of program that MET could feasibly operate.

2. Does MET focus on the middle to upper income families? Many families don't qualify for financial aid and the student loan default rate is significant. Students take loans in desperation and hope they will have a job and enough money to repay the loans. This could be called the middle-income squeeze. Families that don't qualify for financial aid, yet don't have the money to afford the big institutions, could be the ones that are basically being squeezed out of higher education; so a prepayment plan may attract them.

Methodology

The data compiled to address the questions comes from case studies (charts), literature review, and newspaper articles. This paper illustrates the trends of costs and inflation via charts which provide a comparison of the increase/decrease of family income and college tuition, the growth/decline of student aid, the MET income distribution and enrollment, and historical trend of educational expenses by family income.

The sociological and economic factors are illustrated by charts

and literature review which describes the American family sacrificing to sustain its standard of living and maintain a pattern of saving money.

The governmental objectives are illustrated by literature review and newspaper articles which emphasize a social policy in order to encourage families to plan and save for future college tuition and to create/implement a prepayment program (MET).

MICHIGAN EDUCATION TRUST PROGRAM

Michigan has a history of support for higher education. The Michigan constitution provides in Section 1 of Article VIII that "it is an essential function of state government to forever encourage schools and the means of education and Section 4 of Article VIII provides that it is the responsibility of state government to maintain state institutions of higher education. The citizens of this state want their children to have access to an opportunity for higher education" (Michigan Public Acts of 1986. P.1).

Since federal grant and loan eligibility has decreased, Michigan is advancing on new strategies which include tuition prepayment plans, allowing parents to invest in a financing program that would guarantee prospective college tuition payments for their younger children. Indeed, the tuition contracts that are sold are annuity contracts that provide an insurance to designated students. "In Michigan, tuition for a four-year public degree costs an average of \$9,100 and is

expected to escalate to almost \$30,000 in 18 years" (Michigan Education Trust, 1988. P.1). Many parents will be unable to pay these increasing costs, causing students to assume unmanageable educational debt and the possibility of foregoing higher education.

Michigan was the first state to introduce a prepayment tuition program. The Baccalaureate Education Student Trust (BEST) was proposed by Michigan Governor Blanchard in early 1986 and was based upon similar plans used by a few private institutions. After a number of changes, the state legislature approved the plan under the name of Michigan Education Trust (MET), which was signed into law on December 23, 1986 and became effective immediately (Michigan Public Act of 1986. P.1). Under the legislation, the trust fund will be administered by a board consisting of the state treasurer and eight other qualified individuals appointed by the governor and confirmed by the senate.

MET, which is located in the Michigan Department of Treasury, has been granted broad authority and a great deal of independence. The legislation gives MET the authority to hire staff, establish rules for participation, enter into necessary contracts, limit the number of participants, and a wide variety of other administrative activities necessary to operate the trust.

In addition, the board is directed to hire a nationally recognized actuary to annually evaluate the financial soundness of the trust. The law also gives the board the authority to invest the trust's funds in any instruments, obligations, securities, or property determined

proper (Michigan Public Act of 1986. P.8).

The actual prepaid price will be determined by the results of the actuarial analysis. The major factors influencing the price schedule will be the beneficiary's age when the contract is made, the choices of certain options in the plan, assumptions made by MET concerning the rate of return on investment and the rate of tuition, inflation, and projection of operating costs. The board has made an assumption that the average tuition increase will be 7.3% and the rate of return assumption on investments will be 9.0% in the next 18 years (Keeley, 1989).

Since more money can be made by the trust if it has a longer time to invest funds, MET will establish a price scale based upon the number of years between when the contract is made and when the beneficiary will reach college age. The younger the child, the lower the purchase price which is illustrated in Table 1 (MET-Plan Contract, August 1988. P.2).

The Michigan MET Program also has a number of options which are available. For example:

Option A-full benefit plan. Under this option, in-state or in-district undergraduate tuition benefits and mandatory fees will be provided at any of Michigan's two-year or four-year public colleges and universities. The full benefit plan contract is the most popular.

Option B-limited benefit plan. Under this option, in-state or in-district undergraduate tuition benefits and mandatory fees will be provided at those Michigan public colleges and universities where

tuition costs do not exceed 105% of the weighted average tuition costs of Michigan's four-year public institutions. Under this plan, full tuition benefits would not be covered at institutions with tuition costs greater than the 105% of the weighted average tuition; rather, only a percentage of the tuition benefits would be provided for those institutions. Those colleges and universities whose tuition rates exceed 105% of the weighted average may change annually.

Option C-community college plan. Under this option, in-district tuition benefits and mandatory fees will be provided at any of Michigan's 29 junior and community colleges.

MET will give refunds on a prepaid tuition contract if the beneficiary attends a Michigan independent institution, attends an out of state institution, receives a full scholarship, beneficiary dies or is disabled, or beneficiary does not plan to attend college. The size of the refund depends upon whether the buyer selects Plan A or Plan B at the time of purchase. The terms of Plan A and Plan B differ only in the cost and the refund amount. The purchaser, upon cancellation of the contract, would be entitled to only the original payment, less a service charge. Any investment earnings would be retained by the trust with Plan A. Plan B offers the same tuition guarantee. If, however, the contract is canceled, the purchaser would receive his/her original payment and the interest earned. Participants will be given the choice of buying the contract for a lump sum at the time the agreement is made or spreading payments out over time periods, such as yearly, monthly, or payroll deduction payments.

On the tax code issue, payments made to the Michigan Education Trust are deductible on a purchaser's Michigan income tax for the year they are made. Furthermore, purchasers do not have to pay any state or federal income tax on the interest earnings of the trust. However, students may be required to pay tax on the increase in value of the contract, at the student tax rate which is lower, when funds are withdrawn to pay for college. The amount would be spread out over the number of years the student receives benefits.

The first enrollment period was July of 1988 and a total of 40,409 contracts were processed. Tables 2 and 3 provide bar graph income distribution of MET families and income distributions of MET families compared to all Michigan tax paying families. Table 4 suggests that the largest number of signed contracts by age is when the child is between 1 and 3 years old and the largest number of signed contracts by grade is when the child is in the first grade. Table 5 illustrates that there were 96% contract purchases for full benefits, 3% for community college, and 1% for limited benefits. Table 6 suggests that parents purchased the majority of signed contracts at 84.4%, grandparents signed contracts at 13.4% and other signed contracts were at 2.2%. Table 7 illustrates that years of tuition purchased were for 4 years (74%), 2 years (18%), 1 year (5%), and 3 years (2%).

The first student to attend college using Michigan Education Trust tuition guarantee, accepted a ceremonial warrant representing his payment on April 24, 1989 from former Governor James J. Blanchard to the University of Michigan (Appendix 1). The second enrollment period was scheduled for the first week of October, 1989.

The Michigan Education Trust has conducted a telephone survey on the status of college tuition prepayment or saving programs. The results are as follows:

<u>Program Option</u>	<u>Number of States</u>
Prepaid Tuition Program	9
College Saving Bond Program	17
Considering a Program	20
Not Considering a Program	<u>6</u>
Total	52 *

* Alaska has enacted a college savings bond program and a prepaid tuition bill is currently in the legislature; Missouri has enacted both a prepaid tuition and a college savings bond program (Michigan Education Trust, Telephone Survey, 1989.).

Presently, there are four approaches that various states have considered and debated regarding tuition savings plans -- trust approach, education IRA approach, tuition certificate approach, and savings bond approach. A summary is illustrated in Appendix 2.

In fairness to the MET program and the State of Michigan, through the higher education budget, the state appropriates money for scholarships, grants, and work study programs for students attending colleges and universities. The amounts, as appropriated for 1988-89, are listed in Appendix 3 (Lyddon, 1989. PP.3-4).

The outcome of the 1990 state political election resulted in Governor Blanchard (Democratic) being defeated by John Engler (Republican). Governor-elect John Engler has indicated that the Michigan Education Trust (MET) is a program worth saving. In its first two years, more than 50,000 children were enrolled in the program that guarantees tuition payments at any of the state's 15

public universities or 29 community colleges when the children reach college age. In the third year of MET, enrollment contributors were permitted to make monthly installment payments or invest a lump sum (Michigan Education Trust, 1990. P.2).

Programs, such as MET, can be encouraged to flourish or die in the political arena. Governor-elect Engler attacked Blanchard for his lack of a realistic, comprehensive education program and for the kind of flawed fiscal policy that some interpret MET to be. His criticism of the program is that the MET payments are based on assumptions that tuition will increase an average of 7.3% over the next 20 years. Governor-elect Engler indicates that a more realistic estimate would be 8.7% based on what has happened in the past 20 years. (Lansing State Journal, 12/5/90). He further indicates that the deficit will come if the IRS insists on taxing MET on revenues it collects from MET contracts as well as on investment earnings. However, Governor-elect Engler aims to raise prices for individuals to purchase MET contracts to make them more closely resemble anticipated tuition hikes. While not specifying how much the price could go up, he did indicate annual tuition levels rising at least one percentage higher than is factored into current rates. Current contract holders are secured in the price they agreed to and what they will receive from the state. However, he indicates the state is short \$50-\$100 million to pay for existing contracts; and policy politics go on and on.

This program is an innovative program which identifies a problem and seeks to stabilize or balance the cost of tuition for the good of the public interest. Robert Kennedy once said, "Some men see things

as they are and say, why? I dream things that never were and say, why not?" (Ross, 1968. P.1).

THEORY APPLICATION

Two theories stimulate the topic of this paper--causal theory and interest theory. These theoretical strategies have been articulated from Stone's The Policy Paradox (1988).

A. Causal Theory--Responding to a Problem

Causal theory is the relationship between cause and effect. It is an identified problem that requires a solution. The federal government retrenchment of student aid has increased college tuition which has resulted in the concern of affordability of college. This has created a public concern for new programs to ease the burden of paying for higher education.

This causality concept identifies victims, and it illustrates symbols and numbers in order to demonstrate the benefits and costs. "In politics, causal theories are ideas about causation, and policy politics involves strategically portraying issues so that they fit one causal idea" (Stone, 1988. P.154). It attempts to search for responsibility, for example:

1. State government has identified a problem that is high on the public agenda.
2. State government has a moral responsibility.
3. State government has provided cost containment.
4. State government has mobilized people who share a risk factor.
5. Investment rate of return has increased higher than tuition

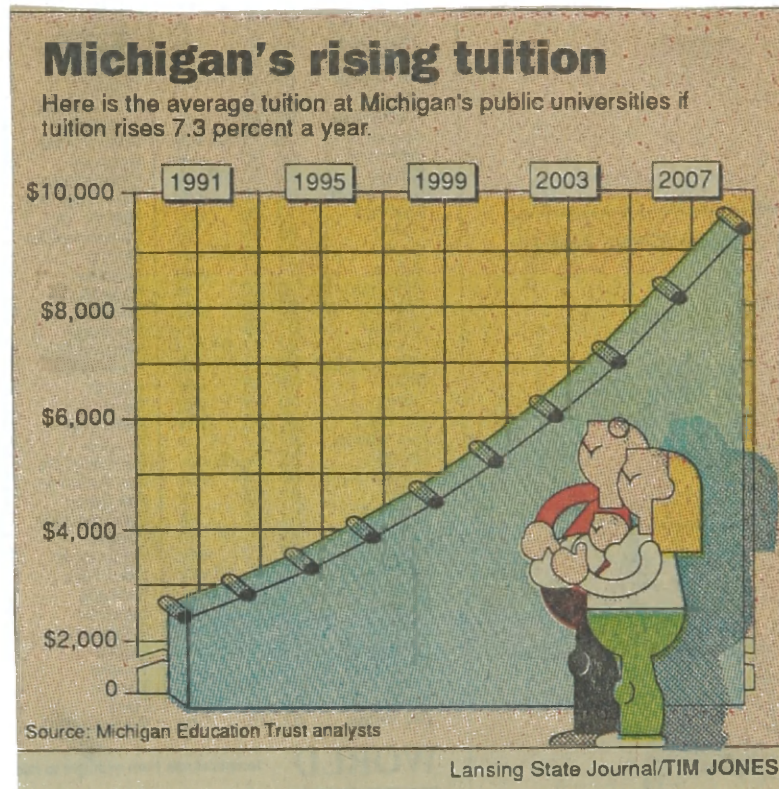
increase.

6. It is a stimulus to political organizations and a resource for political leaders seeking to create alliance.

It has been asserted that causal theory can become more successful if its proponents have visibility, access to media, and prominent positions. It is interesting to note that former Governor Blanchard has been accused of meddling in the financial and political affairs of the various state universities in order to keep tuition low. For example, MSU had \$600,000 yanked from its research budget for refusing to roll back its tuition (Lansing State Journal, 8/14/90). However, the public educational institutions are constitutionally autonomous, which means higher education is supposed to be able to conduct its affairs without any external influence. It seems that former Governor Blanchard's fight was about moral responsibility and the economic costs on a chain of possible causes.

According to Stone, causal theory places the burden of reform on individuals who have means, skills, or resources to solve the problem (Stone, 1968. P.163). Former Governor Blanchard has described victims of harm through high tuition rates and thereby invoked government influence to curtail the harm. Causal theory serves as a device for building an alliance between the public interest that has a problem and government that might have a solution. The former governor seems to be applying a strategic plan for causal interpretation. In essence, the political process has identified a cause and assigned responsibility in its attempt to solve the problem.

The newspaper graph below illustrates Michigan's rising tuition:



Families have various options for creative college financing which have been previously mentioned in Appendix 2. Below are listed the advantages to the state and the investment risks of various tuition savings plans:

<u>Plan</u>	<u>Advantages</u>	<u>Risks</u>
Trust Approach	<ul style="list-style-type: none"> *Encourages parents to save for and share costs of college. *Promotes enrollment in Michigan institutions, because restricted to Michigan. 	<p>State assumes risk; trust earnings must keep pace with inflation and rising tuition costs. Guaranteed to cover tuition. Funds pooled, risk spread.</p>
Education IRA Approach	<ul style="list-style-type: none"> *Encourages parents to save for and share costs of college. *Promotes enrollment in Michigan institutions if restricted to Michigan. 	<p>Individual assumes risk that his or her choice of investment will keep pace with tuition inflation. Not guaranteed to cover tuition.</p>

<u>Plan</u>	<u>Advantages</u>	<u>Risks</u>
Tuition Certificate Approach	*Encourages parents to save for and share costs of college. *Promotes enrollment in Michigan institutions.	Institution assumes risk that its tuition will not increase faster than the investment earnings from the prepaid certificate. Tuition costs to individual guaranteed.
Savings Bond Approach	*Encourages parental savings for college. *Helps finance state's capital program. *Eliminates current processing costs on biennial interest payments for bonds.	Individual assumes risk in the belief that tax-free state bonds will keep pace with tuition inflation. Tuition costs not guaranteed.

Experts, such as Kenneth Klegon of Financial Management Associates, Lansing, Michigan, agree that a college education will be of growing importance in the years ahead (Lansing State Journal, 9/4/90). It is equally certain that college costs will keep rising.

While savings options abound, it is important not to put off saving for children's education. However, Robert Hughes, an East Lansing financial advisor, indicates that "the trouble with most people is they don't save because they lack the discipline" (Lansing State Journal, 9/4/90).

Robert Bowman, former State Treasurer, said that "the prepaid tuition program (MET) is designed for families who don't want to worry about the savings of the stock market or about tuition increases. While the stock market offers greater potential gains, the risks have been evident in the recent market decline" (Lansing State Journal, 9/4/90).

MET supporters say the program eliminates parents' worries about providing for their children's college education. They also say it

provides an incentive for children to work hard in school because they know they will have an opportunity to attend college. MET also has its critics. Some question whether its investments will out pace tuition increases, although MET's outside auditors say the program is sound. A financial report for the MET board by an independent accounting firm for the year ending September 30, 1989 showed the fund had \$279.6 million in assets and owed future benefits of \$278 million, making it \$1.6 million overfunded (Lansing State Journal, 7/3/90). On November 20, 1990, the MET program conducted a nation-wide survey regarding the states' savings program activities and the results are illustrated in Table 8.

The following explanation seems to further describe the causal theory application. The evolution of higher education and its impact on economic value can be viewed on a historical and national perspective. Leon Keyserling, Chairman of President Truman's Council of Economic Advisors in 1950 was influential in formulating that education and an expanded economy would offer prosperity to all. "The vehicle which economics rode to prominence in education policy making was labeled human capital theory" (Leslie and Brinkman, 1988. P.5). The idea of human capital is that the personal decision to spend on education is an investment decision. "Educated workers possess a stock of human capital which contributes to production and to economic growth" (Leslie and Brinkman, 1988. P.6). In lieu of enlightened public policy makers that favored investment in education due to economic and human capital rationale, the primary government motive for educational spending had been to promote social equity

(Leslie and Brinkman, 1988. P.6).

Perhaps the declines in education spending are resulting from emerging and more pressing national and state needs. It is not that higher education has been reduced in public favor as much as the concern for national defense, health care, care of the aged, and the needs of the penal system has increased.

Leslie and Brinkman provide an illustration as to why higher education is the ingredient that benefits the national economy and social communities:

1. Individual Investment--The economic practice related to economic efficiency has been that more public support should be directed to educational levels where rates of return are highest--elementary and secondary schools. Greater public subsidies will only drive rates of return higher; hence, if rates of return at a particular level are judged to be too low, prudent public policy is to raise public subsidies at that educational level. Social subsidies that are too low may lead to economic inefficiency due to under-investment (Leslie and Brinkman, 1988. P.9). Furthermore, if values such as learning and collegiate social and cultural activities are included, the private returns are increased.
2. Social Investment--The social benefits of higher education could be recognized as lower welfare and crime rates, community leadership and volunteer work of graduates, and conducting research and development. The various factors of production are land, labor, and capital (Leslie and Brinkman, 1988. P.12).
Education and higher education are viewed as an accurate estimate

of contribution in labor growth and improvements. Furthermore, colleges and universities bring external financial resources (wealth and employment) to their communities. For example, "a typical small, public college with a \$10 million budget will add about \$15-\$16 million to the local economy and provide roughly 590 jobs. A typical large, public institution with a \$100 million budget will add about 10 times these amounts" (Leslie and Brinkman, 1988. P.13).

The history of the past few decades records the initiation of efforts to change the levels of representation in government and bring about social equity. Government at all levels became involved in efforts aimed at providing greater opportunities to all of the people for involvement in government decision making and program administration. The public dialogue during that period was full of such phrases as "power to the people", "citizen participation", "community action", etc. There was an air of excitement and hope that affected many people previously excluded from governmental processes. It is ironic that when we face shortage of dollars, raw materials, and national commitment, we lose momentum of action and hope in the ideals of democratic government. For example, one of the greatest creative statesman of our age was Franklin Roosevelt. He was creative, precisely, because he preferred experiment to ideology. He, and men of his time, insisted that the resources of the democratic system were greater than many believed--that it was possible to work for economic security within a framework of freedom (Ross, 1968. P.16).

Today, in the midst of inflation and possible recession, we

formulate policies that are fiscal conservative conscious; however, let's not forget the social problems that continue and the liberal social conscious obligations we have to solve those problems. In other words, these fiscal conservative monetary policies characterize the cheapest and lowest limit of funds to be provided, whereas the liberal social policies characterize progressive reform in order to aid the common welfare of the public.

It is interesting to note that the Savings and Loan problems will cost the taxpayers billions of dollars and years to pay off and the Chrysler Corporation was bailed out at the taxpayers' expense. It is ironic how the federal government happens to find the money needed in order to rescue certain national economic woes. This significant point is being made in order to highlight the federal government's neglect of the nation's educational woes by placing the burden on parents and students.

The causal theory responds to the following dilemmas:

1. Trends--There is a crisis of affordability for college.

Student Aid -- During the 1980s, student aid has been on the decline. The distribution among type of students and the composition of the pool of aid funds have been shifting. First, the percentage of Pell Grant money going to proprietary vocational school students has nearly doubled during the 1980s, from 12% to 23%. Second, the dramatic shift in the composition of student loans is the most common form of financial assistance. Loans accounted for 17% of aid in 1975-76, 41% in 1980-81, and 48% in 1986-87. Grant aid has gone from a peak of 80% 10 years ago to 48% presently (Gladieux, 1987. P.14).

The shift in the grant-loan balances has been the winding down of Vietnam-era veterans educational benefits, the phasing act of social security benefits, and the growth of student borrowing. Table 9 illustrates this cycle of decline from 1963-64 to 1983-84.

Furthermore, middle class families are being squeezed out of the Guaranteed Student Loan (GSL) program because "the GSL costs the government up to 50 cents on every dollar loaned. Increased federal loan costs since the late 1970s have gradually forced Congress to limit eligibility" (Gladieux, 1987. P.14). Additional tightening in the GSL program occurred with the Higher Education Amendment Act of 1986. "Middle income families, who might have hoped that financial aid would be available, awakened to diminished prospects for such assistance" (Hansen, 1988. P.10).

Debate continues on how college cuts should be shared among students, parents, and the taxpayers. Policy makers are concerned about the possible effect of mounting student debt on students career choices and on equity of access to higher education. There is also concern with the role of the family and the importance of parents planning and saving well in advance for their children's education (Hansen, 1988. P.11).

In order to provide a perspective of the amount of resources society has provided to help students finance their education over the last 30 years, Table 10 shows the amount of aid in current dollars awarded through federal, state, and institutional programs since 1963-64. The amount of student aid awarded in 1963-64 was a total of \$546 million. Of this amount, aid provided through federally

supported programs was about \$190 million. As Table 10 illustrates, during the 1960s and 1970s federally supported programs, as well as state and institutionally awarded aid, were on the rise. By 1977-78, Pell Grants provided \$1.6 billion annually. In that year, aid to students totaled \$11.1 billion. By 1980-81, aid from all sources reached \$17.3 billion (Gillespie and Carlson, 1983. P.4).

Table 11 provides another way that student aid has changed relative to total higher education activity. This table illustrates that student aid has grown dramatically in comparison to the overall growth of higher education since 1963-64, student aid increasing over 5 times as fast as educational and general expenditures.

Income -- Table 12 shows that since 1980, college tuition has increased nearly 40 percent, twice as fast as the median family income, which has gone up less than 20 percent. Carol Frances indicates "the basic conclusion is that students and their families are finding it harder to pay for college" (ASHE Reader, 1986. P.146). Carol Frances has also appeared before the U.S. House of Representatives to testify as to the trends in college costs and the ability to pay (Frances, 1987. P.3). Table 13 identifies trends in income and tuition from 1980 to 1985 which further suggests that income has not kept up with college costs.

It is interesting to note that Carol Frances also suggests that one aspect of social forces bearing on American families in their ability to pay for college is the number of single parent households in the U.S. She indicates that since 1970, the number of single parent households has increased by 80%, five times as rapidly as the

number of married couple households.

Inflation -- An article by the New York Times in April 1986, described the continuing increase of tuition costs. Table 14 indicates that college and university tuition has tended to increase 2 or 3 points faster than general inflation, but in the high-inflation years of the late 1970s and early 1980s, college costs did not keep pace with the Consumer Price Index (CPI). They caught up around 1981-82, when general inflation was subsiding (Fiske, 1986. P.12).

Another example, Table 15, shows the average annual change in tuition and fees from 1970 to 1986, along with increases in the CPI and personal income. "Tuition and fees have increased at about twice the rate of general prices during the 1980s, 9.8% v. 4.9%" (Malarkey, 1987. P.18). A relevant question for families today is whether the 1980s represents a new long term trend in college costs?

A. Hauptman and T. Hartle attempt to explain that the recent increases in college costs have resulted from the following: "decreased federal support has resulted in colleges increasing tuition to help cover the costs of institutionally-funded financial aid; second, faculty salaries rose in the period 1980-87, in part to remedy the ground lost by faculty compensation in the 1970s; third, institutions with large proportions of science and medical students have great need for sophisticated support personnel which demands increased salaries; fourth, automation in instruction, research, and administration has increased; the computer has become a standard and it is an increased cost; fifth, substantial amounts of buildings and equipment date back to the 1960s and 1970s, and need renovation or

replacement" (Greenberg, 1988. PP.14-15).

2. Student indebtedness is dysfunctional for society.

Students who must bear a large portion of their educational costs themselves may be less willing to pay for high quality education, to experiment with new ideas, or to give themselves the opportunity to learn for learning's sake (Hansen, 1988. P.11).

The objective of providing access to higher education and to equalize educational opportunity has had a profound effect on the systems of finance. This would explain the traditional emphasis on low tuition and student financial aid. In addition, "it is in the social interest to provide more instruction, research, and public service than individuals would demand if they were required to pay the full cost" (ASHE Reader, 1986. P.227).

The federal fiscal dilemma looms, with annual deficits reaching around \$200 billion and a cumulative national debt exceeding \$3 trillion. These debts clearly constrain federal creativity in addressing the national educational needs.

High tuition is placing students in debt. In particular, "college students are feeling the pinch by using credit cards as they try to supplement their tuition and living expenses" (Lansing State Journal, 12/2/91). Every year we increase the federal debt which future generations have to pay, and now we place their generation of students in more debt by having them obtain more loans for their education. The students deserve better. Higher education provides to society many social benefits--from medicine to the performing arts. In essence, state government is responding to a social and economic problem.

B. Interest Theory--Responding to Public Interest

Interest theory is the involvement or concern with a segment of society that shares the same interests for the benefit of those individuals that are engaged in a similar problem.

While available to all, MET will provide particular benefit to middle income families in Michigan.

1. Eligibility for student aid has become more stringent in order to aid the lowest income student; thus more middle income students are not eligible for student aid.
2. Because of the number of middle income families participating in MET, it will free up additional dollars of financial aid; the most needy students will have better access to student aid.
 - a. Tuition Incentive Program (TIP) provides community college education for children of low income families.
 - b. As previously illustrated, there are other state financial aid programs.
 - c. MET has requested the legislature to provide \$500,000 for needy students and MET attempts to solicit from the private sector \$1 million for needy students. The objective is to purchase contracts from the funds collected for those students that are identified as needy.
3. One significant aspect at the federal level has been the perception that the middle class is being forced out of higher education by rising tuition costs and by a federal government that pays attention only to poorer students' financial needs.

Although the heavily funded Middle Income Student Assistant Act of 1978 (MISAA) initially quieted this debate, arguments about the validity of the "middle increase squeeze" have once again come to dominate congressional debates on student aid, as well as state legislatures (Hearns and Longanecker, 1986. P.256).

In the first two years, MET contracts had to be purchased with a lump sum and some families took out loans. However, many parents are unable to afford one-time lump sum payments to buy a contract. In its third year, MET continues to expand its affordability to as many families as possible. However, because of its structure, it happens to be accessible to middle income families. The middle class pays a lot of taxes and a lot of the distribution from the taxes goes to those who need it (Robert Bowman, former State Treasurer, Lansing State Journal, 2/5/90). MET is making itself accessible to the middle and upper income families of Michigan. In order to provide some examples, Table 2 illustrates the income distribution of those Michigan families that are participating in the MET Program. This chart suggests that 65% of those families that participate in the MET Program earn \$40,000 or more. Another comparative data is Table 2A which illustrates the national average family income. This chart suggests that the average income of \$40,000 or more is the top 30% of all families. Clearly, those families that are taking advantage of the MET Program are those that have the resources and income to participate.

MET now offers monthly purchase and payroll deduction payment

options in addition to the one-time lump sum and installment payments through loans from savings institutions or other financial institutions. Under these new options, contracts may be purchased over a 4, 7, or 10-year period. With the monthly installment plans, the parents of newborns have these three payment options for buying four years of tuition:

1. \$216/month for four years;
2. \$140/month for seven years;
3. \$112/month for ten years.

A less expensive program for community colleges is also available.

State employees will also have the opportunity to buy MET contracts through a payroll deduction plan. MET is encouraging other public and private employees to follow suit.

Below are MET incentives to provide eligibility to middle and low income families:

1. **Student assets v. parent assets** - In February, 1990 middle and low income families found that enrolling the MET program severely reduced their chances for federal grants and loans because of a decision by the U. S. Department of Education. This ruling explained that the assets generated by a MET contract belong to students, not to their parents. Students assets are considered more than the parents when applying for federal aid. This has a major impact on how much financial aid families can receive. Under federal law, families applying for financial aid must prove they need it by reporting their assets.

Phyllis Hoogman, financial aid director at Hope College in Holland

and president of the Michigan Student Financial Aid Association, said, "I think this is going to become more of an issue as more and more families with MET contracts (since 1988 - 49,273 families) start coming through the pipeline." Many MET families will make too much money when their children enter college to qualify for financial aid. Many MET families believed they would qualify for government grants and loans to cover those additional expenses - room, board, books and/or travel (Lansing State Journal, 3/7/90).

H. Jack Nelson, Acting Interim Director, Student Financial Assistance Services, Michigan Department of Education, describes three scenarios in order to explain how MET impacts on student eligibility for financial assistance. The descriptions that follow identify MET as an asset and as a resource. The asset applied toward education is a percentage of expenses. The needs analysis is evaluated by the respective university/college on a need basis scholarship.

In the first scenario, Part A, a student would be eligible for financial assistance at a school with a budget over \$5,502. In Part B, a student would not be eligible for financial assistance because the total family contribution exceeds the total tuition of any Michigan public university/college.

In the second scenario, Part A, a student would be eligible for financial assistance at every Michigan university/college because tuition exceeds the \$2,260 total family contribution. In Part B, a student would be eligible for financial assistance at a Michigan school with a budget over \$5,390.

In the third scenario, all resources are applied toward education,

not a percentage. In Part A, family/student contribution plus MET contract would be subtracted from the college budget. The total need for additional financial aid is \$2,998. In Part B, the same methodology is applied, however, family/student contribution plus MET contract is greater than the college budget, therefore, need for additional financial assistance is zero.

The needs analysis conducted by respective Michigan schools is important because if limited financial aid is available, this assessment would accurately identify students receiving MET contracts. This application would free-up additional dollars of financial aid to the most needy students.

**MICHIGAN DEPARTMENT OF EDUCATION
STUDENT FINANCIAL ASSISTANCE SERVICES**

Treatment of MET in needs analysis.

I. MET as a student asset (per U.S. Department of Education letter)

- A. Family Size 2 -- 1 parent, a child
Income \$20,581; Asset value \$60,100
MET value assumed \$10,000

Parent contribution	\$1,302
Student contribution	<u>4,200</u>
Total family contribution	\$5,502

This case would have financial need at colleges with a budget over \$5,502.

- B. Family Size 5 -- 2 children in college
Income \$47,000; Asset value \$94,000
MET value assumed \$10,000

Parent contribution	\$4,400
Student contribution	<u>4,200</u>
Total family contribution	\$8,600

This case would not have financial need at any public college.

II. MET as a parent asset

A. Family Size 2 -- 1 parent, 1 child
Income \$20,581; Asset value \$60,100 + \$10,000 MET
MET value assumed \$10,000

Parent contribution	\$1,560
Student contribution	<u>700</u>
Total family contribution	\$2,260

This case would have financial need at every Michigan college.

B. Family Size 5 -- 2 children in college
Income \$47,000; Asset value \$94,000 + \$10,000 MET
MET value assumed \$10,000

Parent contribution	\$4,690
Student contribution	<u>700</u>
Total family contribution	\$5,390

This case would have financial need at colleges with budgets over \$5,390.

III. MET as a student resource (MET would be treated the same as a scholarship or grant).

A. Family Size 2 -- 1 parent, 1 child
Income \$20,581; Asset value \$60,000

Parent contribution	\$1,302
Student contribution	<u>700</u>
Total contribution	\$2,002

Family contribution would be subtracted from college budget to determine need and MET would meet part of the need.

Example:

College budget	\$7,500
Less family contribution	<u>2,002</u>
Need	\$5,498
Less MET (annual tuition)	<u>2,500</u>
Need for additional financial aid	\$2,998

B. Family Size 5 -- 2 children in college
Income \$47,000; Asset value \$94,000

Parent contribution	\$4,400
Student contribution	<u>700</u>
Total contribution	\$5,100

Family contribution would be subtracted from college budget to determine need and MET would meet part of need.

Example:	College budget	\$7,500
	Less family contribution	<u>5,100</u>
	Need	\$2,400
	Less MET (annual tuition)	<u>2,500</u>
	Need for additional financial aid	\$ -0-

Former State Treasurer, Robert Bowman, who was MET's chief architect, said "students could transfer MET benefits to their parents once they turn 18 years old and predicted it would be reversed." On April 11, 1990, the Competitive Scholarship and Tuition Grant Advisory Committee members agreed that the Michigan Department of Education and the Authority should endorse the treatment of MET contracts as a parent asset. Accordingly, it was recommended that the Michigan Higher Education Assistance Authority approve the policy that the Michigan Education Trust contract be treated as a parent asset in evaluating student eligibility for the Michigan Competitive Scholarship or Tuition Grant for the 1990-91 academic year.

The MET program continues to expand its public interest theory. This interest concept identifies change through mobilization. "All potential problems have an equal chance of stimulating political organizations, but people ration energy by paying attention to the things they care about most" (Stone, 1988. P.171). Mobilization for collective interest is influenced by moral and social leadership. Political society with influence, cooperation, and loyalty as essential features of its structure, creates norms of altruism and channels for collective effort. Furthermore, participation in collective efforts tends to follow the laws of passions rather than the laws of matter. In addition, the logic of collective action is the importance of symbols and ambiguity. Groups are more likely to

organize around a threatened or actual loss than around a potential gain. They are ready to sacrifice and take risks in order to avoid a loss (Stone, 1988. P.175). It seems that hope becomes strong when accompanied by a sense of deprivation, when the promise of something better is linked to perception of a deteriorating and intolerable present.

Debra Stone attempts to explain that, "People are more likely to organize and fight about something that effects them intensely" (Stone, 1988. P.176). She uses the terms benefits and costs to describe good and bad effects, and the terms concentrated and diffused to capture the intensity or strength of policy effects.

Katherine Stone, Public Relations Director for Michigan State University (represents 34,000 undergraduates) says "we will not sit idly by and watch education become inaccessible." Robert Bowman, former State Treasurer, says, "if government can play a role, it should. It doesn't have to be big, but it ought to be effective."

2. Implementation of the Challenge Fund - MET continues to utilize the Challenge Fund to be matched on a 2:1 basis. The external funds could come from the corporate community or the philanthropic community. In fiscal year 1989-90, the state legislature appropriated \$400,000 for the Challenge Fund. In fiscal year 1990-91, the legislature appropriated \$390,000. The process is to allow individual school districts to determine the criteria for selecting an individual recipient of a MET contract, but at no time shall the MET Challenge Fund be utilized for a student who is not participating in a federally subsidized hot lunch program.

The structure can be identified in two different functions that could be served with the MET Challenge. MET could finance college education for a graduating senior who otherwise could not afford college -- used as a scholarship or MET could be used to give particular younger students incentive to work hard because a prepaid college education is waiting for them.

At the present time, the Tuition Incentive Program (TIP) provides community college education for children of low income families. However, there is still merit to guaranteeing a four-year degree through the MET program. The aforementioned incentive programs by government suggest Stone's application of the interest theory. The good interests do not emerge naturally and they need protection. The role of government is to protect weak but legitimate interests. "In the American political culture, the most important source of outside help is government" (Stone, 1988. P.182).

The application of the interest theory is to define an issue and to make an assertion about who is at stake, who is affected, and define interests and the constitution of alliances. The MET program has defined the interested parties and the stakes involved.

The middle income squeeze is a political reality as well as an economic factor. A comparative analysis will illustrate its validity. In 1978, the Educational Policy Research Center for Higher Education prepared a study that reflected the cost of education, the burden of families by income group, the distribution of aid to students, and attendance patterns by income group. The study cites several concerns:

- A. Sociological and economic factors--years of hard work to attain middle income status sacrifices the standard of living and savings. Additionally, borrowing increases the strain on cash flow.
- B. Inflation--parents who saved for their children's college education have suffered from inflation.
- C. Political reality and government objectives--social policy must emphasize the cost factor, with reliance on subsidized borrowing. Political pressures are likely to require outright subsidies, especially to parents with high bills for education (Frooskin, 1978. PP.10-14).

The 1978 study suggests that the "middle income squeeze" is not a myth, but fact. The following illustrates some examples:

- A. Table 16 (Costs of attendance by income) -- parents with incomes under \$7,500 did not need to contribute anything to the cost of their dependents educational and living expenses. The contribution of parents with incomes between \$12,000 and \$15,000 increased to \$1,096; between \$15,000 and \$20,000 increased to \$1,559, and those with incomes over \$25,000 averaged \$2,672.
- B. Table 17 (Costs of attendance by income) -- roughly 1/3 of all students whose parents had incomes under \$12,000 in 1976-77 had costs of less than \$2,200. However, one out of five dependent students whose parents had incomes under \$12,000 a year had costs of \$4,400 plus. The proportions increased to one out of four for students in households with incomes between \$12,000 and \$25,000 and rose to 38% for students whose parents' incomes exceeded \$25,000.

- C. Table 18 (Burden of college costs per family) -- this indicates that 20% of the parents in the \$15,000 to \$25,000 income bracket shoulder extremely high costs. As many as half of the parents in the \$25,000 plus income group also have this burden.
- D. Table 19 (Income and enrollment rates) -- the argument that college costs put an excessive burden on parents with moderate incomes is often heard. The argument has been identified by statistics that show the proportion of dependent children who attend college is lower in households above the poverty level than those below that level. The argument is false because those figures exclude non-degree students enrolled in vocational programs and do not include the exodus of dependents from poor families. Once non-degree students are taken into consideration, the proportion of fulltime dependent students increases slightly as family incomes grow from the poverty level to roughly \$20,000 in 1975. Above that level it increases. The analysis also indicates that 2/3 of the dependents 18-24 years old where parents have incomes under \$10,000 become independent, as contrasted to one in eight in families with incomes over \$25,000 per year (Frooskin, 1978. PP.19-33).

In comparing the aforementioned national income groups during the late 1970s and comparing the median income of \$22,108 in Michigan, Table 20, during the late 1970s suggests that middle income families shoulder the burden of high educational costs.

In the 1990s, the median income has again doubled from the 1980 statistical report and the middle income group continues to be squeezed.

The interest theory responds to the following dilemmas:

1. The public sector should encourage savings for college.

Families, in trying to secure scholarships and financial aid, also have several other options in deciding how to finance college. They can save for the cost of education before the student enters school; they can pay out of current income while the student is in school; they can pay the education by borrowing; or they can use a combination of these methods. Families will have various preferences depending on their income, saving behavior, and other variables. Furthermore, other institutions are also offering prepayment tuition programs.

However, the state could encourage savings because creating a savings program focused on education will tend to raise awareness about the tradeoffs between saving and other forms of financing. Secondly, the state encourages families to change their behavior in planning for future college costs because it is morally healthy for family and society. Thirdly, the state can provide financial expertise, guarantee tuition, and offer other choices for a family to consider. Fourth, a policy which encourages families to plan and save for future college tuition will free up more money for the truly needy.

A state program could fill an important gap in the public's understanding of the financing options available, and offer the benefits in terms of the choices available. While the idea of saving for college is not new, the level of interest in innovative financing techniques is unprecedented.

In 1983 the Roper Organization conducted a survey of parents on

parental savings (Malarkey, 1987. PP.13-14). As might be expected, the tendency to save and the amount of savings increases with income. Also, families tend to save more as their children approach college age. The analysis suggests that a low percentage of families save and will be unable to meet the projected college tuition increases of the future. Furthermore, many would not know the expectations about what is necessary to meet college costs.

2. The State can guarantee an equitable financing system with the MET Program

The State provides for an innovative financing technique, for example:

1. To provide students and their parents economic protection against rising tuition costs.
2. To provide wide and affordable access to state institutions of higher education for the residents of this state.
3. To encourage attendance at state institutions of education.
4. To provide students and their parents financing assistance for post secondary education.

The perception is that Michigan families will be attracted to the MET program because of the tuition guarantee and the uncertain future of college costs. MET will not only guarantee college tuition, but there could be state and federal tax deductions. MET assumes that the rate of return for investment (9.0%) will be greater than the increase of college tuition (7.3%). The preplan has risks, but student loans have risks and financial aid also has risks.

In 1989 the Rev. Jessie Jackson made a speech regarding

affordable housing and investments, and he made an interesting comment which parallels the MET program concept -- "providing affordable housing is a risk to the taxpayer; however, not doing anything is a greater risk to human capital."

Table 21 shows a comparison of the ten year income in Standards and Poor's Index of 500 common stocks and an index of thirty day U.S. Treasury bills and public and private education costs (Malarkey, 1987. P.21). For each year, the four columns on the left show how much these indices of investments and tuition increased over the preceding ten years. The four columns on the right show how close to the cost of education a family would come if they had invested the cost of education ten years earlier. It is interesting to note that in the 1980s, when tuition began its rapid increase, these investments kept pace. Investments in a stock yielded a higher average return but also had considerably more variation; for example, in 1973, the reaction of the stock market to the energy crisis.

In comparison, Table 22 is the same as the previous table but it takes into account a 30% annual tax on investment earnings (Malarkey, 1987. P.23). Even with taxes, the worst a family would have done investing in treasury bills in the last ten years was to end up with 90% of the cost of a private education. This demonstrates the positive effects of investment strategies.

Attitudes and behavior do change. It was not merely the passage of the Middle Income Student Assistant Act in 1978 that triggered a surge in financial aid applications, nor was it simply tax breaks for the Individual Retirement Account (IRA) that inspired new savings.

People began to apply for aid and fund IRA'S because they wanted the possible payoffs -- financial aid or immediate tax breaks and long-range asset accumulations (Brouder, 1988. P.20).

CONCLUSION

MET - The Appropriate Public Policy

Advantages:

1. The prepaid tuition program is designed for families who don't want to worry about the savings of the stock market or about tuition increases. It prompts students to work hard in school because they know they will have an opportunity to attend college. It provides peace of mind to people because it assumes guaranteed tuition. It provides incentives for the student and the family.
2. The MET plan is not a financial aid program. It is a plan that reduces the need for financial aid for students whose families will be able to make a larger contribution to their college costs by saving more effectively. This plan is not allowed to supplement financial aid programs for low income students and does not compete with need-based financial aid programs for funding. The intent of the program allows middle/upper income families to participate which will free up additional dollars for financial aid. Thus, the most needy students will have better access to student aid.
3. The MET program provides credibility necessary to the success of a program that the private sector might not be able to do for an educational savings/prepayment program. The State's experienced money managers can take advantage of prudent investment

opportunities. It provides a public insurance because investments will yield enough to keep pace with rising tuition. Two major accounting firms indicate that MET is actuarially sound and has considerable surplus.

4. The MET program communicates a clear understanding to parents of the options and benefits associated with saving for education. Very few families save, and even among those who do, the low level suggests that many have unreal expectations about what is needed to meet college costs. MET is providing families with information about the potential costs associated with college and a practical means of meeting those costs. This program provides guidance for families to save for education rather than consume in the present, which is intrinsically better for the moral health of the family and of society. This induces change in behavior.
5. The MET program provides flexibility in educational choice. This public policy comes down on the side of greater choice. Since the benefits of enabling a student to attend the school that best matches his/her educational needs seems obvious, public policy should favor a program which allows a full range of choices.

Disadvantages:

1. Though accountants say the program is sound, critics say it could wind up with a budget shortfall, sticking taxpayers, parents, or universities with the bill.
2. The MET program will penalize families who decide not to spend their earnings on college.

MET - Responding to Middle/Upper Class Families

The assumptions have been that MET's savings and prepayment plan is aimed simply at helping wealthy families resolve their cash-flow problems, that such plans offer nothing to poor students. Clearly, in the current environment of rapidly increasing college costs and decreasing federal support, many middle income families feel that they can no longer afford college for their children. The fact is that MET provides sensibility and reliability objectives to help parents/ students meet their responsibilities for paying educational expenses to the extent that they are able. Indeed, the purpose of the MET program was to make the plan accessible for all families; however, due to the nature of its savings/prepayment orientation, low income and some middle income families are unable to make a sustained effort to accumulate savings or obtain a loan. The MET program does focus on the middle income families. The result has been to assist middle/ upper income families toward the goal of paying higher education costs.

The MET program initially addressed the causality concept because it identified a problem which required innovative solution; however, the effect of this program is that it benefits only those that can afford it or have the capacity to save. The public interest being served is that of the middle/upper class.

Policy makers in government and public and private education must continue to develop new approaches to keeping college costs down and guaranteeing access to anyone that has the interest and the ability to attend institutions of higher education.

TABLE 1

**MICHIGAN EDUCATION TRUST
ENROLLMENT AND CONTRACT PRICE SCHEDULE**

Beneficiary's Age or Grade in School <i>Use age if not in school. If in school, use grade.</i>	Academic Year Beneficiary Expects to Enter College.	Prepaid Tuition Amount			
		1 yr.	2 yrs.	3 yrs.	4 yrs.
AGE (as of 12-1-88)					
0	2006	\$1,689	\$3,378	\$5,067	\$6,756
1	2005	1,710	3,420	5,130	6,840
2	2004	1,740	3,480	5,220	6,960
3	2003	1,762	3,524	5,286	7,048
4 or older and not in school	2002	1,795	3,590	5,385	7,180
GRADE (as of Fall 1988)					
Kindergarten	2001	1,822	3,644	5,466	7,288
1	2000	1,875	3,750	5,625	7,500
2	1999	1,923	3,846	5,769	7,692
3	1998	1,976	3,952	5,928	7,904
4	1997	2,017	4,034	6,051	8,068
5	1996	2,055	4,110	6,165	8,220
6	1995	2,108	4,216	6,324	8,432
7	1994	2,160	4,320	6,480	8,640
8	1993	2,204	4,408	6,612	8,816
9	1992	2,254	4,508	6,762	9,016
10	1991	2,288	4,576	6,864	9,152
11	1990	3,379	6,758	10,137	13,516
12	1989	3,379	6,758	10,137	13,516

IMPORTANT:

If the Beneficiary is in school, use his/her grade to determine the program cost and the year he/she is expected to enter college. If the Beneficiary has not started school, use his/her age.

MICHIGAN PUBLIC INSTITUTIONS OF HIGHER EDUCATION

Four-Year Universities		Institution Name	Location
Institution Name	Location		
1. Central Michigan University	Mount Pleasant	6. Gogebic Community College	Ironwood
2. Eastern Michigan University	Ypsilanti	7. Grand Rapids Junior College	Grand Rapids
3. Ferris State University	Big Rapids	8. Henry Ford Community College	Dearborn
4. Grand Valley State University	Allendale	9. Highland Park Community College	Highland Park
5. Lake Superior State University	Sault Ste. Marie	10. Jackson Community College	Jackson
6. Michigan State University	East Lansing	11. Kalamazoo Valley Community College	Kalamazoo
7. Michigan Technological University	Houghton	12. Kellogg Community College	Battle Creek
8. Northern Michigan University	Marquette	13. Kirtland Community College	Roscommon
9. Oakland University	Rochester	14. Lake Michigan College	Benton Harbor
10. Saginaw Valley State University	University Center	15. Lansing Community College	Lansing
11. University of Michigan	Ann Arbor	16. Macomb Community College	Warren
12. University of Michigan	Dearborn	Macomb College - South Campus	Warren
13. University of Michigan	Flint	Macomb College - Center Campus	Mt. Clemens
14. Wayne State University	Detroit	17. Mid-Michigan Community College	Harrison
15. Western Michigan University	Kalamazoo	18. Monroe County Community College	Monroe
		19. Montcalm Community College	Sidney
		20. Muskegon Community College	Muskegon
		21. North Central Michigan College	Petoskey
		22. Northwestern Michigan College	Traverse City
		23. Oakland Community College	Bloomfield Hill
		Oakland College - S. E. Campus	Royal Oak
		24. St. Clair County Community College	Port Huron
		25. Schoolcraft Community College	Livonia
		26. Southwestern Michigan College	Dowagiac
		27. Washtenaw Community College	Ann Arbor
		28. Wayne County Community College	Detroit
		29. West Shore Community College	Scottville

TABLE 2

Income Distribution of MET Families

*Percent of
MET Families*

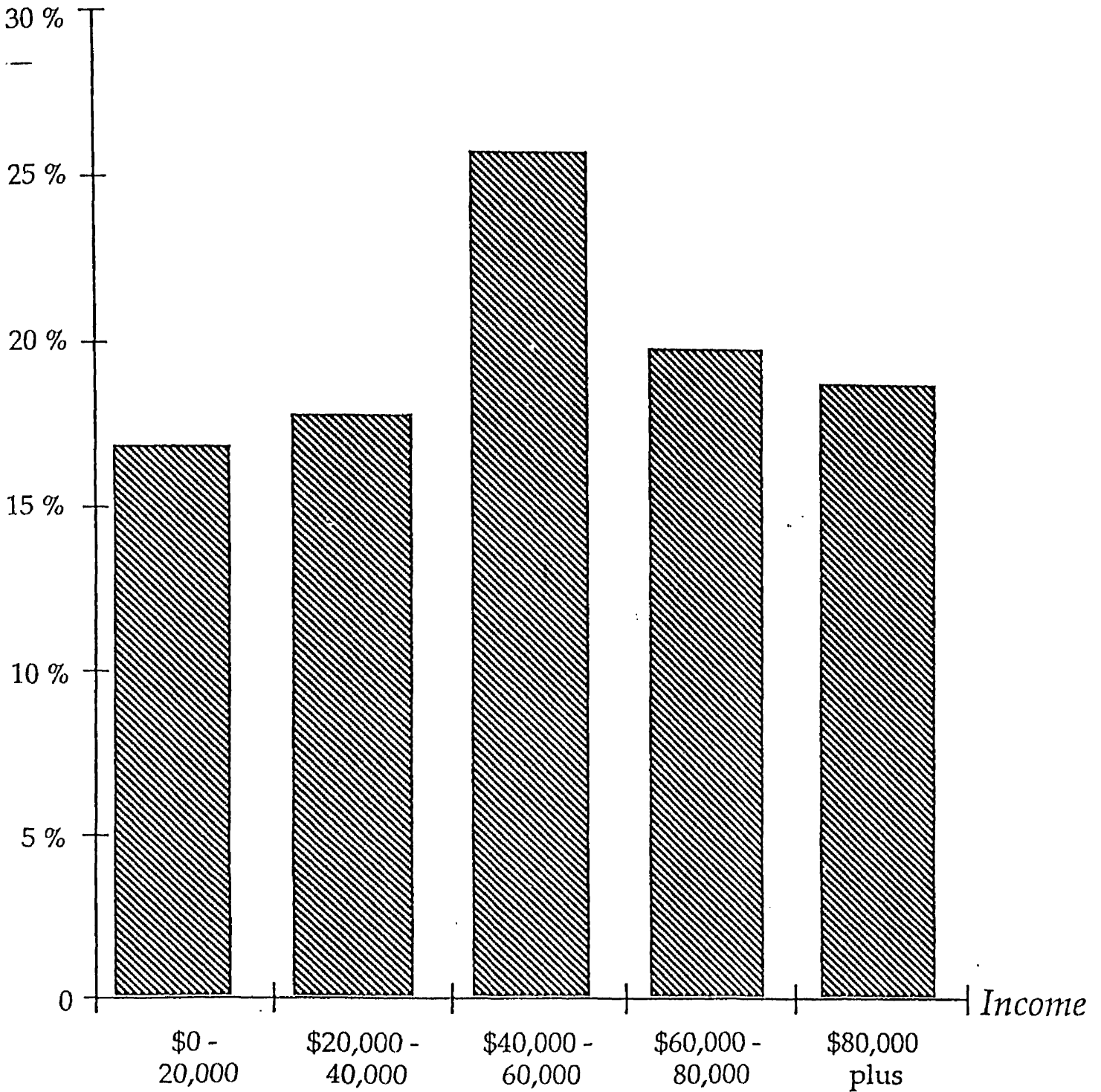


TABLE 2A

INCOME GAINS AND LOSSES
1977-88

Changes in Average Family Income
(1987 Dollars)

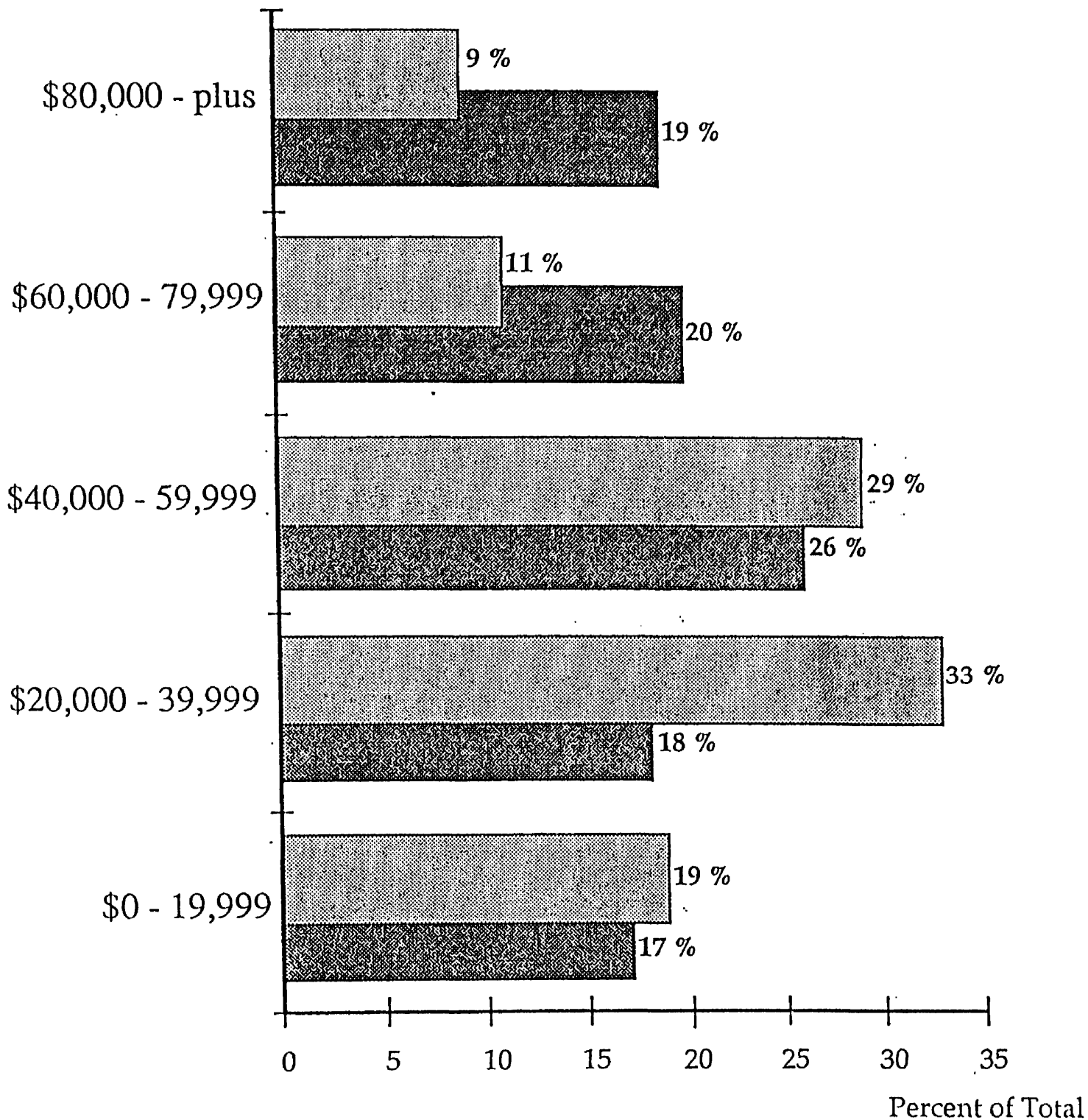
<i>Income Decile</i>	<i>Average Family Income</i>		<i>Percentage Change</i>	<i>Change in Average Family Income</i>
	<i>1977</i>	<i>1988*</i>	<i>1977-88</i>	<i>1977-88</i>
First	\$ 4,113	\$ 3,504	-14.8%	\$ -609
Second	8,334	7,669	-8.0	-665
Third	13,140	12,327	-6.2	-813
Fourth	18,436	17,220	-6.6	-1,216
Fifth	23,896	22,389	-6.3	-1,507
Sixth	29,824	28,205	-5.4	-1,619
Seventh	36,405	34,828	-4.3	-1,577
Eighth	44,305	43,507	-1.8	-798
Ninth	55,487	56,064	1.0	577
Tenth	102,722	119,635	16.5	16,913
Top 5%	134,543	166,016	23.4	31,473
Top 1%	270,053	404,566	49.8	134,513
All Families	33,527	34,274	2.2	747

* CBO projection of 1988 incomes

Source: *Challenge to Leadership*, Urban Institute

TABLE 3

Income Distribution of MET Families and All Michigan Families



□ All Michigan Families

■ MET Families

TABLE 4

MET 1988 Enrollments by Age and Grade

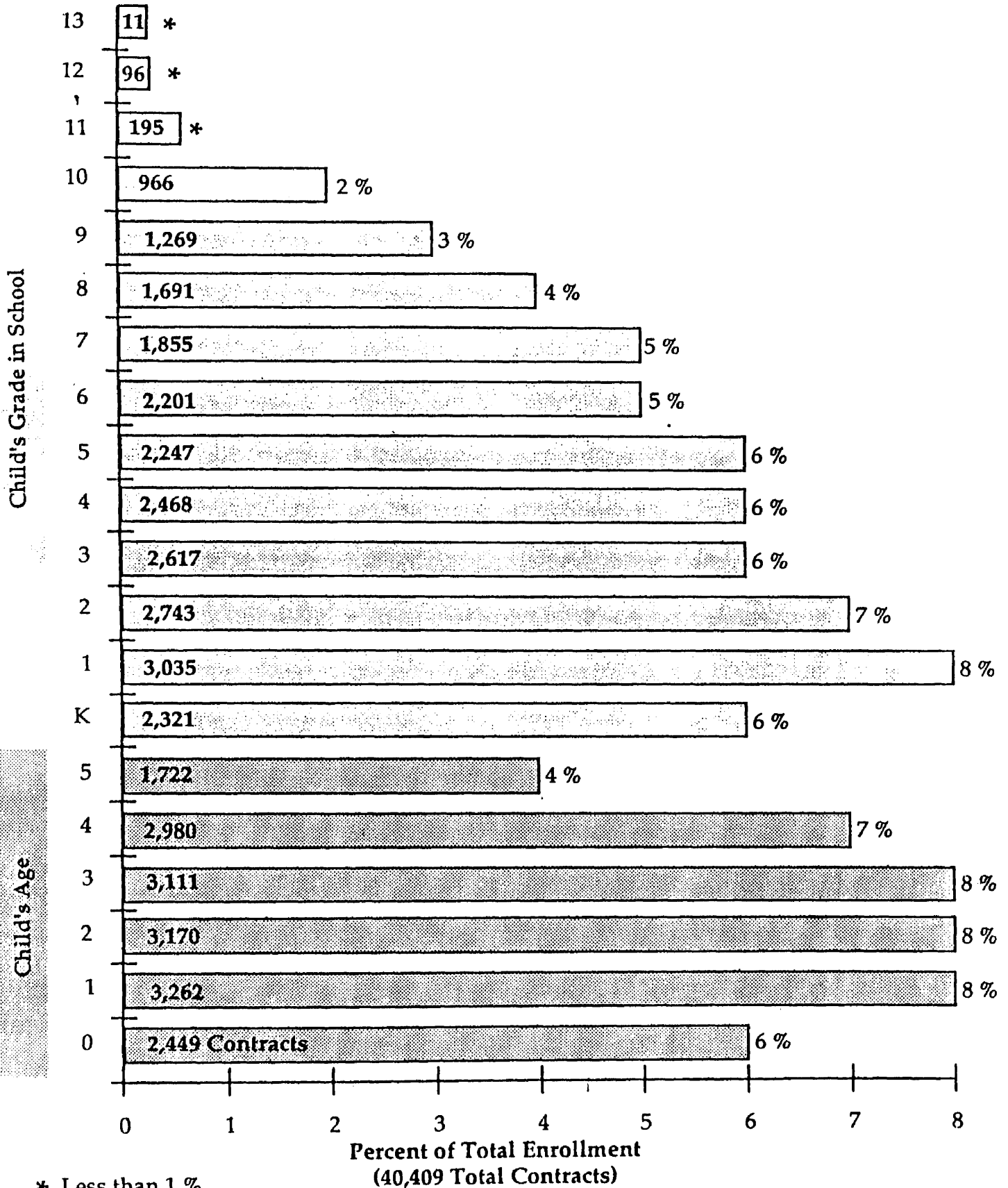


TABLE 5

MET 1988 Enrollments Type of Contract Purchased

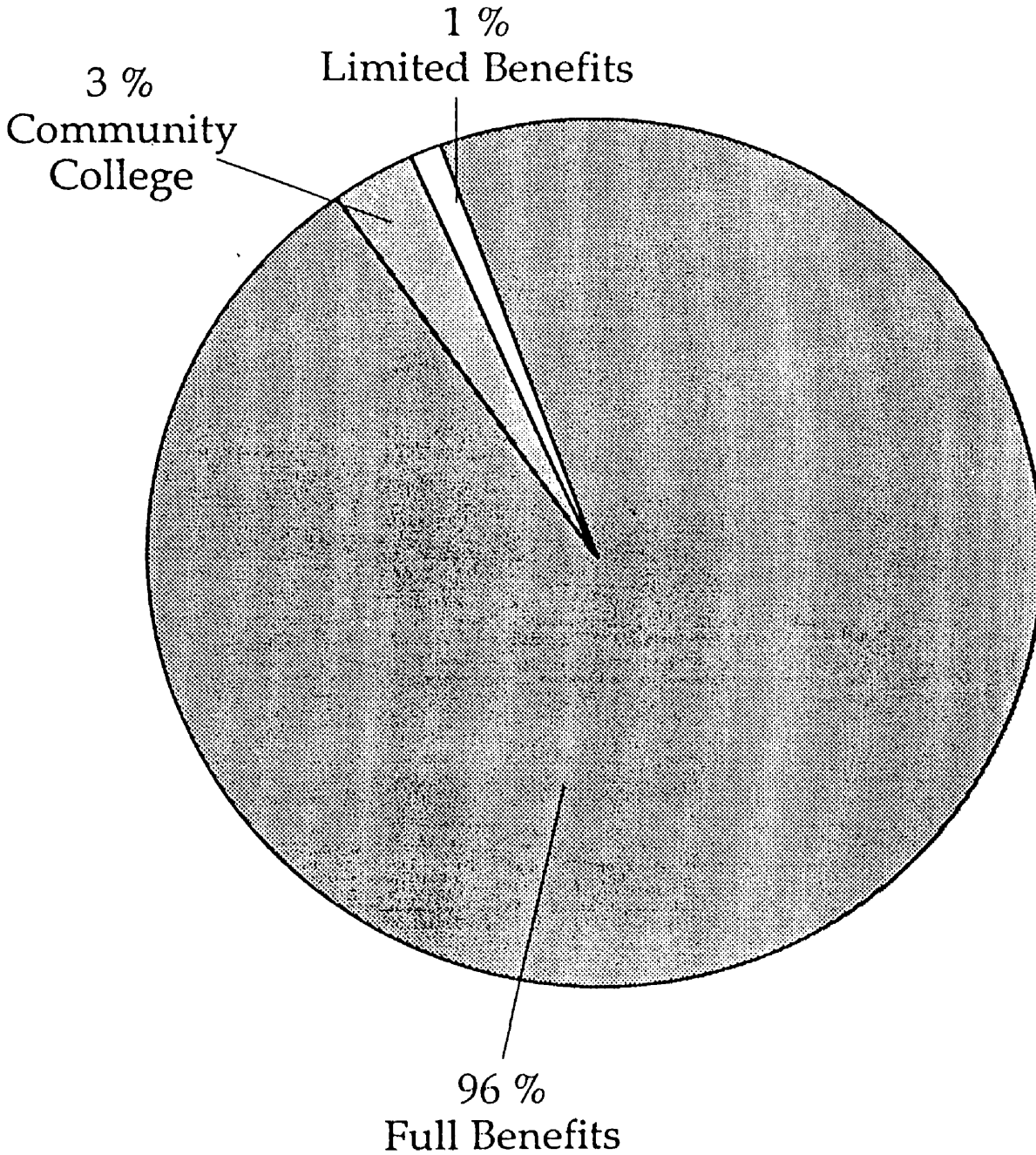


TABLE 6

MET 1988 Enrollments Relationship of Purchaser

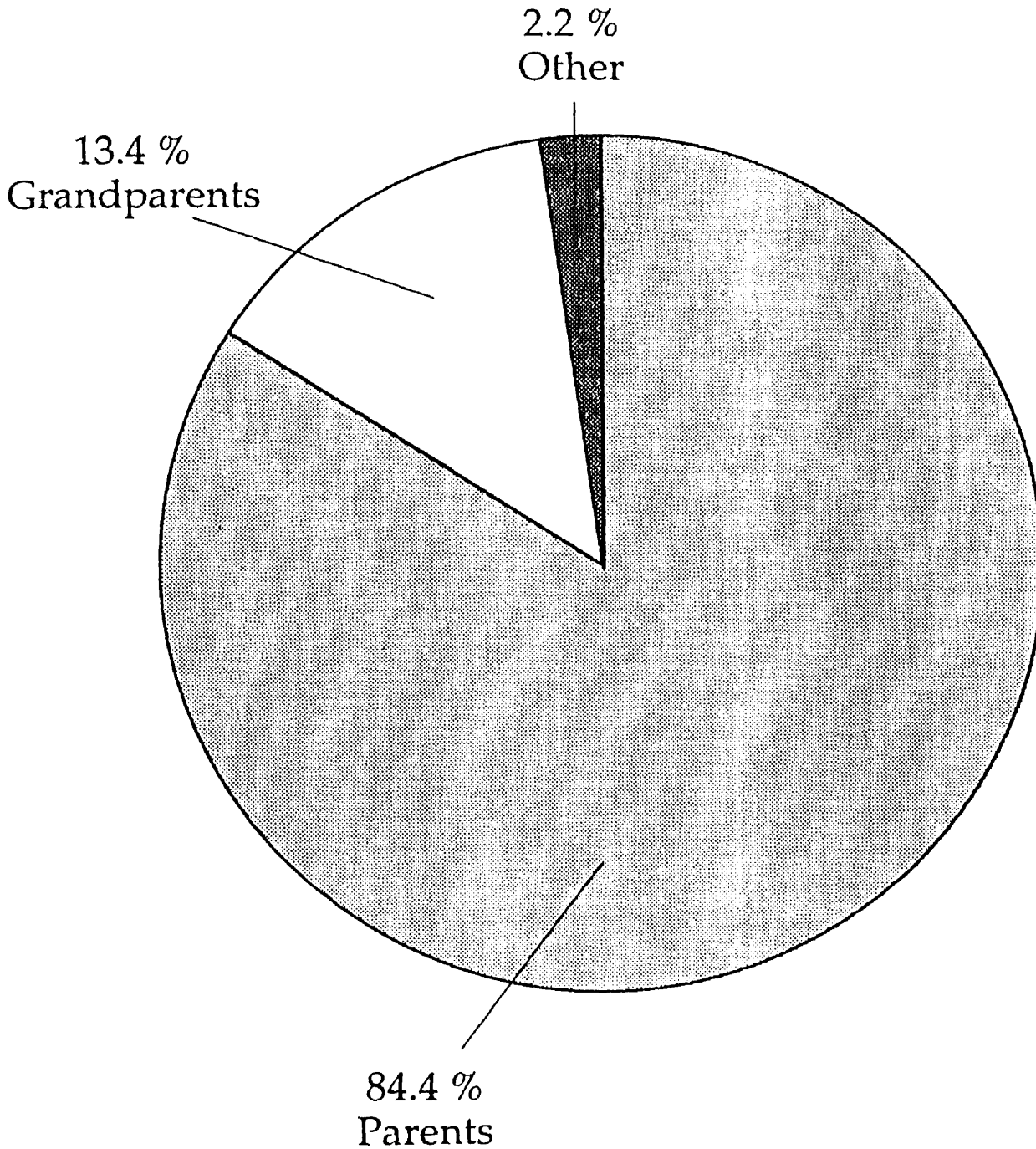
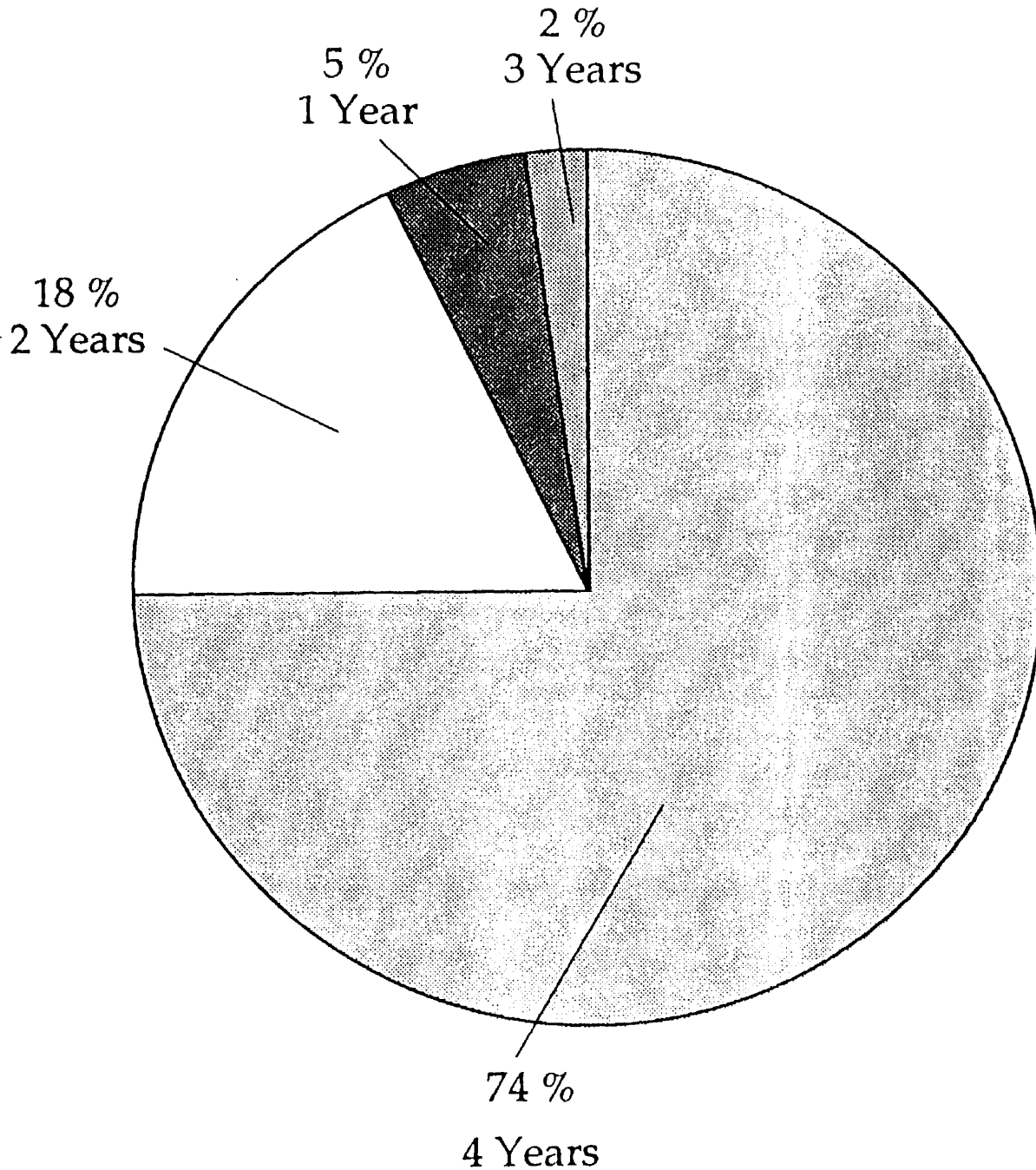


TABLE 7

MET 1988 Enrollments Years of Tuition Purchased



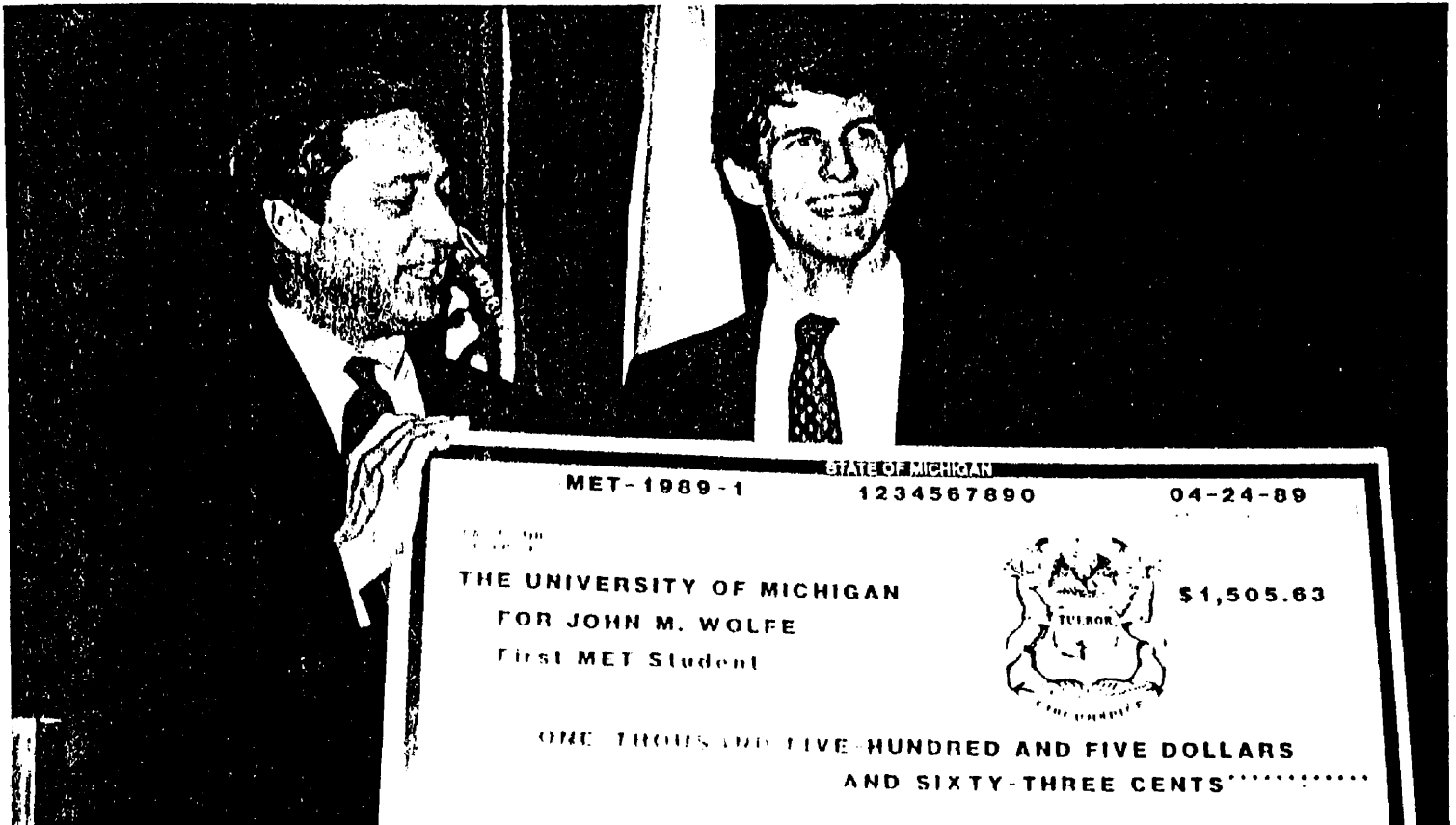
Michigan Department of Treasury



Treasury Ledger

May 1988

Vol. 11 No. 5



Gov. James J. Blanchard, left, presents a beaming John Wolfe with a ceremonial warrant for the amount paid to The University of Michigan on Wolfe's behalf by the Michigan Education Trust. Wolfe is the first student to use his tuition guarantee.

First MET student receives tuition payment

The first student to attend college using Michigan Education Trust tuition guarantee benefits accepted a ceremonial warrant representing his payment April 24 from Gov. James J. Blanchard.

Last semester's tuition for John Wolfe, 19, a freshman at The University of Michigan, was paid to the University by MET, the first such payment

made by the new tuition guarantee program.

College courses beginning in January 1989 were the first to be eligible for MET benefits, and Wolfe was the first MET recipient to request his benefits be applied toward his tuition.

"John was the first student to actually call us and tell us he needed his money to pay

tuition," said Sabrina Keeley, MET Assistant Director. "The
Continued on Page 2

Inside...

A Treasury employee competes in statewide women's bodybuilding competition. See the article, page 4.

Table 1.1. Features of Tuition Savings Plans

<i>Trust Approach</i>	<i>Education IRA Approach</i>	<i>Tuition Certificate Approach</i>	<i>Savings Bond Approach</i>
<p><i>A. Overview.</i> Creates a new state trust that will attempt to forecast tuition costs for years into the future, instruct parents how much to prepay to meet those costs, merge their payments in a centralized pool and invest the pool in order to build a balance to meet future tuition costs. The trust guarantees tuition at any public four-year college or university up to 105% of the weighted average annual tuition rate at all state institutions. Participants may choose from two plans:</p> <p><i>Plan A:</i> Participants may withdraw only original investment.</p> <p><i>Plan B:</i> Participants may withdraw principal and appreciation. Tuition coverage based on average at state institutions.</p>	<p><i>A. Overview.</i> Parents would purchase Education Accounts that work much like an IRA (Individual Retirement Account). Accounts could be set up with banks, savings and loans, insurance companies and other financial institutions. When the child enters college, the parents will authorize withdrawals for tuition, fees, and room and board. Parents, grandparents and others would be able to contribute up to \$2,000 annually for each child until the child is 18.</p>	<p><i>A. Overview.</i> Parents may buy tuition certificates from a college or university or separate authority in units equal to a <i>certain fraction of current tuition</i> (e.g., 1/100 of current tuition or in multiples of \$100). The certificates can be redeemed at any time in the future to cover either a portion or all of the tuition costs at participating institutions. For example, a \$100 certificate might stipulate that its redemption value is 4.3 credits at Lincoln Land Community College, 2.7 credits at Illinois State University and .50 credits at Bradley University, etc. Each figure is simply \$100 divided by the current price of a credit.</p>	<p><i>A. Overview.</i> A portion of each of the State of Illinois General Obligation Bond sales could be structured to include zero coupon college savings bonds with a maturity of 1 to 2.5 years. The initial offering price is determined by the state and prevailing market conditions. The bonds would provide a source of funds to the state to finance its ongoing capital program and a savings plan for parents to prepare for the cost of their child's college education. Bonds could be marketed widely through banks and financial institutions in small denominations. An optional bonus payment could be made to bondholders providing proof that their child has enrolled in an Illinois college or university.</p>

APPENDIX 3

STUDENT FINANCIAL AID PROGRAMS AND STATE
GENERAL FUND APPROPRIATIONS - 1988-89

State Competitive Scholarship Program	\$22,454,300
Based on academic merit and financial need, provides scholarships of \$100 to \$1,200 per year for attendance at a degree granting college or university in Michigan. Began in 1964.	
Michigan Tuition Grant Program	\$44,562,518
Based on financial need, provides grants to students attending independent colleges and universities in Michigan. Grants range from \$100 to \$2,475 per year. Students may <u>not</u> receive <u>both</u> a Michigan Competitive Scholarship and a Tuition Grant. Began in 1966.	
Michigan Work-Study Program	\$ 5,535,911
Provides opportunities for needy students in degree granting colleges and universities to work part time while attending college. Jobs are subsidized by the State funds and the employer. The funds are usually used to supplement the federal College Work Study program, but may also provide opportunities for students to work for for-profit companies in field related to their academic majors. Began in 1986.	
Adult Part Time Grant Program	\$ 2,004,900
Provides funds for needy adults who attend college part time (3-11 credit hours). Grants are up to \$600 per year for up to two years at any single institution. Available through degree granting colleges and universities. Began in 1986.	
Michigan Educational Opportunity Grant (MEOG)	\$ 1,019,298
Provides grants of up to \$1,000 per year for exceptionally needy undergraduates at public colleges and universities. Began in 1986.	
Grant for Michigan Dental Graduates	\$ 3,553,595
Provides funds directly to the independent university dental school (University of Detroit) to help offset the costs of educating dentists. Funds do not go to the students. Began in 1974.	
Grant for General Degree graduates	\$ 3,980,800
Provides funds to the independent colleges and universities on the basis of the number of baccalaureate and masters degrees granted. Funds do not go to the students. Began in 1974.	
Grant for Allied Health graduates	\$ 609,197
Provides funds to the independent colleges and universities on the basis of the number of allied health degrees granted. Funds do not go to the students. Began in 1974.	
Indian Tuition Waivers	\$ 1,182,400
Provides reimbursement to the public colleges and universities for free tuition of North American Indians. By terms of treaties and state laws any certifiable North American Indian in Michigan can attend a public college or university tuition free.	

TABLE 8

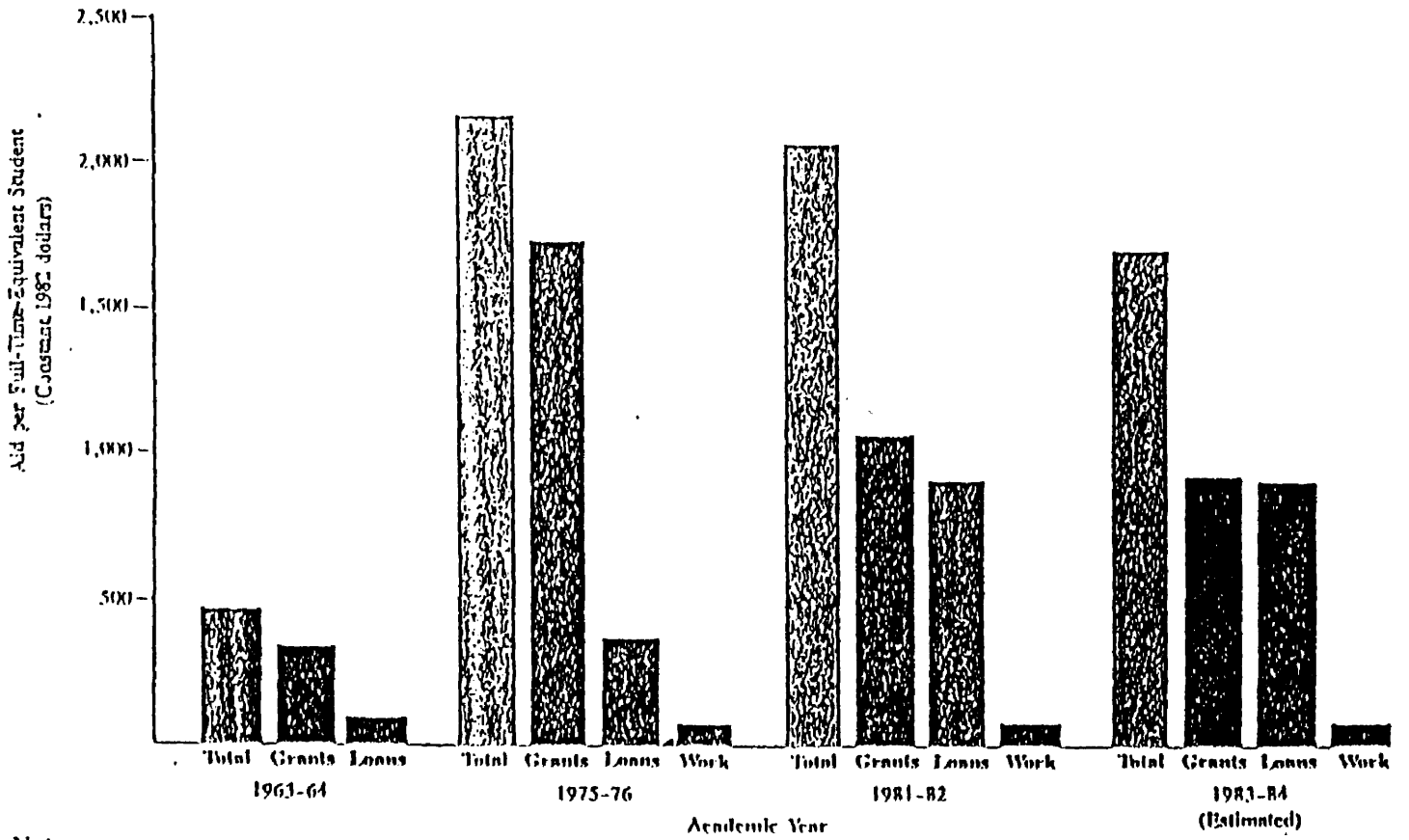
M I C H I G A N E D U C A T I O N T R U S T
S U R V E Y

<u>STATES WITH PREPAID TUITION PROGRAMS</u>	<u>STATES WITH SAVINGS BOND PROGRAMS</u>	<u>STATES CONSIDERING PROGRAMS</u>	<u>STATES NOT CONSIDERING PROGRAMS</u>
Alabama	Alaska*	Arizona	Minnesota
Alaska*	Arkansas	California	Montana
Florida	Colorado	Georgia	Nevada
Maine	Connecticut	Idaho	New Mexico
Michigan	Delaware	Kansas	
Missouri*	Hawaii	Louisiana	
Ohio*	Illinois	Maryland	
Oklahoma	Iowa	Mississippi	
West Virginia	Kentucky	Nebraska	
Wyoming	Massachusetts	New Jersey	
	Missouri*	New York	
	New Hampshire	Pennsylvania	
	North Carolina	South Carolina	
	North Dakota	South Dakota	
	Ohio*	Utah	
	Oregon	Vermont	
	Rhode Island	Wisconsin	
	Tennessee		
	Texas		
	Virginia		
	Washington		
	<u>OTHER COLLEGE SAVINGS PROGRAM</u>		
	Kentucky		

*Alaska, Missouri and Ohio have enacted both a prepaid tuition and a college savings bond program.

TABLE 9

Figure 5
 Aid per Full-Time-Equivalent Student:
 Total, Grants, Loans, Work
 (Constant 1982 dollars)



Note:

TABLE 10

Table 1. Aid Awarded to Postsecondary Students in Current Dollars
(In millions)

Federally Supported Programs	Academic Year					Estimated 1982-83	Estimated 1983-84
	1963-64	1970-71	1975-76	1977-78	1980-81		
Generally Available							
Fell	--	--	936	1,588	2,607	2,439	2,419
SEOG	--	134	201	243	366	355	355
SSIG	--	--	20	60	76	74	60
CWS	--	227	295	469	658	565	641
NIOSL	114	240	460	615	695	695	684
GSI-PLUS	--	1,015	1,267	1,737	6,204	6,350	6,900
Subtotal	114	1,616	3,179	4,712	10,607	10,478	11,059
Specially Directed							
Social Security	--	499	1,093	1,370	1,883	733	220
Veterans	67	1,121	4,180	2,598	1,738	1,302	1,088
Other Grants	9	16	64	83	119	81	60
Other Loans	--	42	45	42	61	99	108
Subtotal	76	1,678	5,381	4,093	3,801	2,216	1,476
Total Federal	190	3,295	8,561	8,805	14,408	12,694	12,535
State Grant Programs	56	236	490	677	801	1,025	1,058
Institutionally Awarded Aid	300	965	1,435	1,596	2,138	2,424	2,502
Total All Programs	546	4,496	10,486	11,078	17,347	16,143	16,095

Figure 2
 Growth in Student Aid and Educational Activity
 (Constant 1982 dollars in billions)

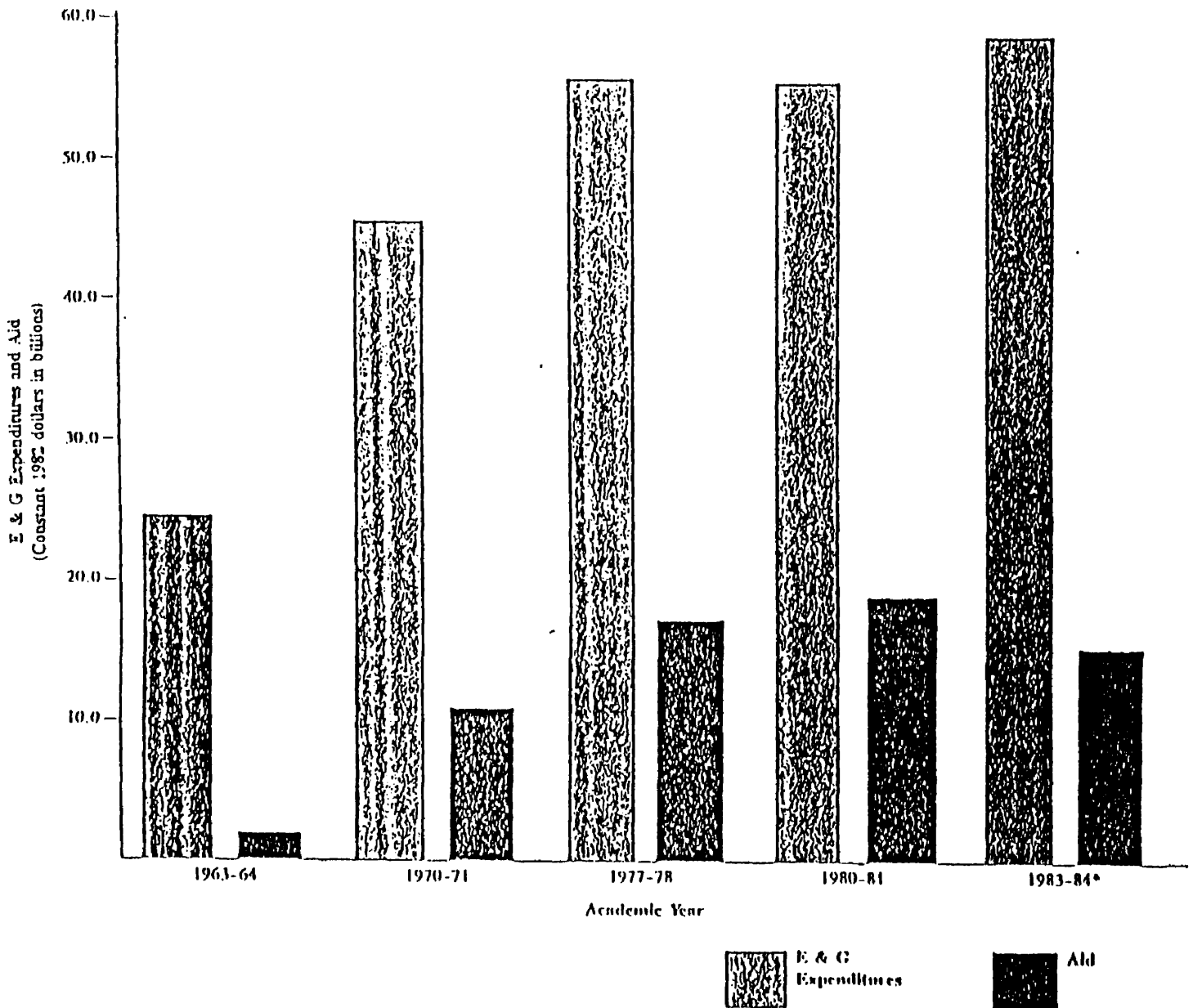


TABLE 12

Trends in Family Income and College Tuition 1980-1983

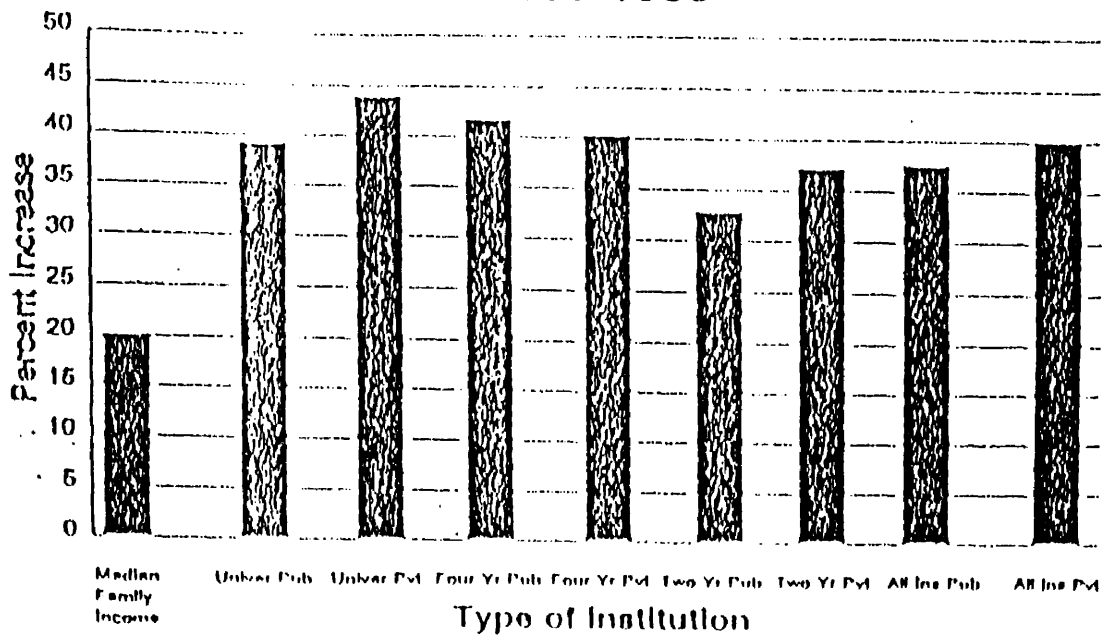
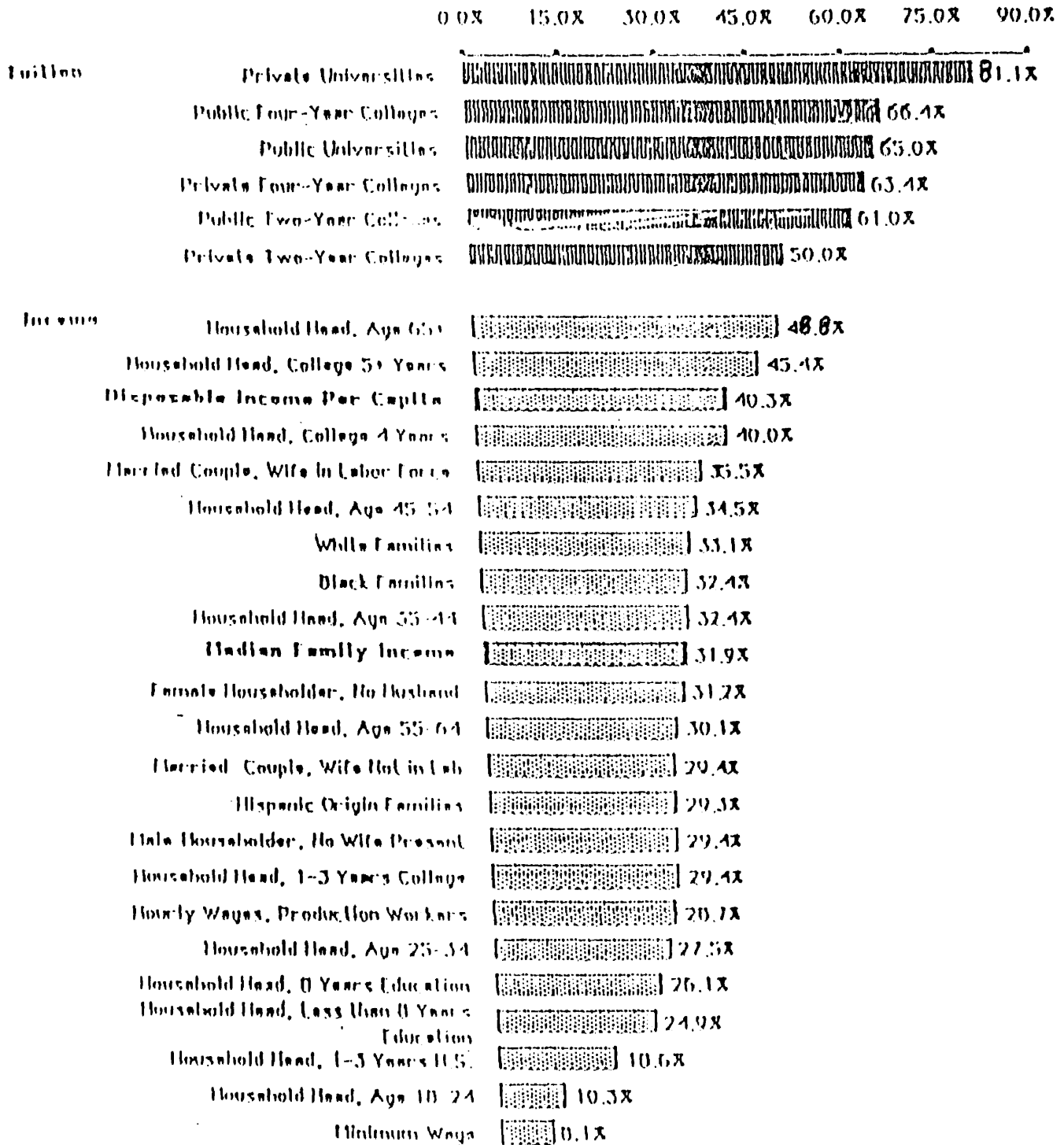


TABLE 13

COMPARISON OF TRENDS IN INCOME
AND TUITION, 1980-85

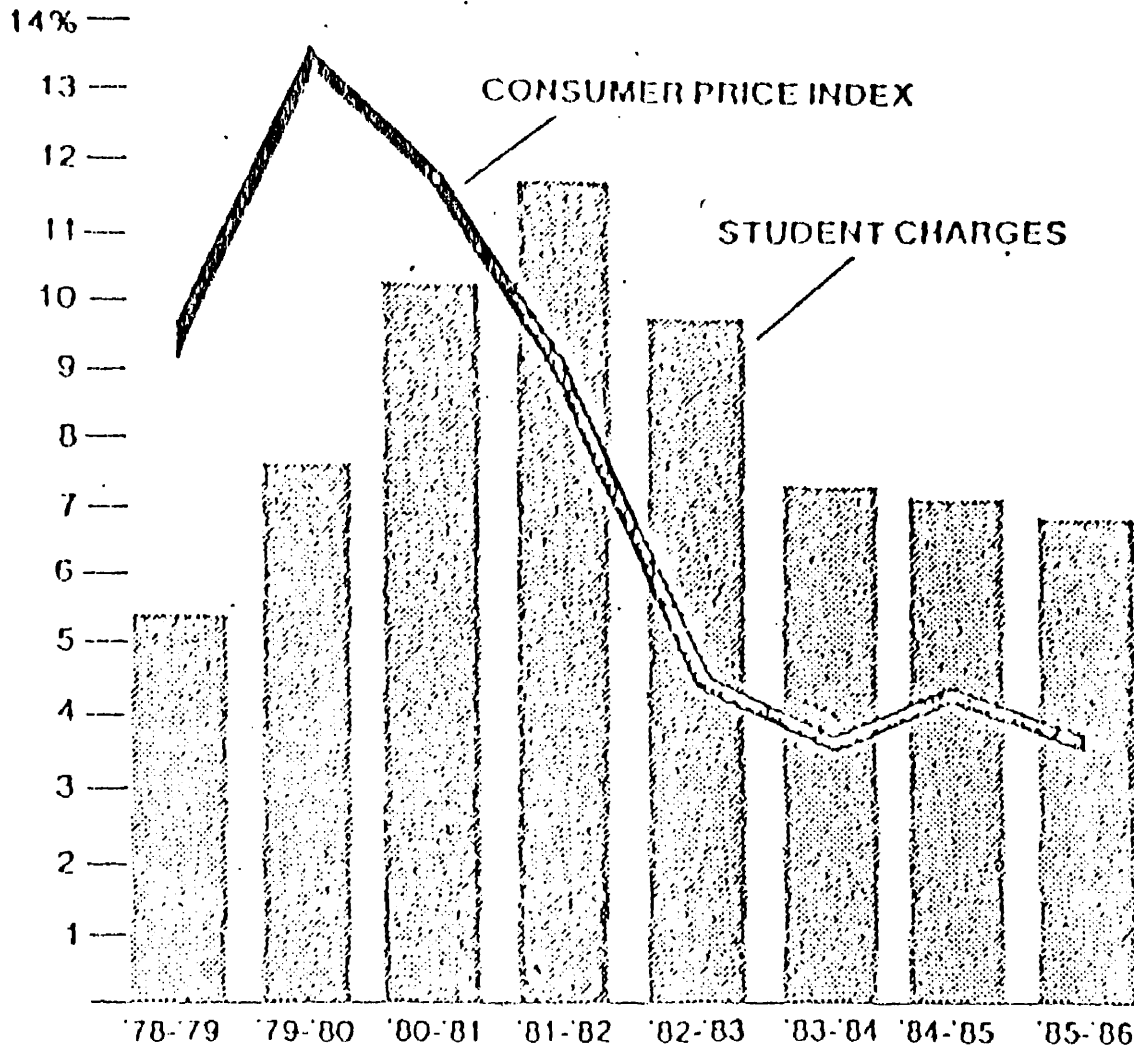


Percent Increase, 1980-1985

TABLE 14

Education and Inflation

Percentage change in the Consumer Price Index and in average charges to college students for tuition, fees, room, board and other expenses. The student charges are for school years and the Consumer Price Index is for fiscal years, which begin in October.



Source: American Council on Education

The New York Times/April 7, 1989

TABLE 15

Average Annual Change in Tuition and Fees,
1970-71 to 1986-87

	1970-71 to <u>1980-81</u>	1980-81 to <u>1986-87</u>	1970-71 to <u>1986-87</u>
All higher education	6.6%	9.8%	7.8%
All public institutions	6.1	9.8	7.5
Universities	6.7	9.9	7.9
Four-year	8.1	10.0	8.8
Two-year	7.5	9.5	8.2
All independent institutions	7.6	9.9	8.4
Universities	8.0	11.0	9.1
Four-year	7.8	9.8	8.5
Two-year	8.1	8.3	8.2
Consumer Price Index	7.8	4.9	6.7
Disposable personal income	9.2	6.5	8.2

SOURCES OF FINANCING ACADEMIC YEAR EDUCATIONAL AND LIVING EXPENSES
OF ALL FULL-TIME DEPENDENT UNDERGRADUATES BY FAMILY INCOME
IN 1976/77
(dollars per capita)

	Number (000's)	Cost	Grants ¹	Government Loans ²	College Work-Study	Other Work	Transfers ³	Total	Parents
\$0-\$7,499	671	2,818	1,016	317	197	648	640	2,818	-
\$7,500-\$11,999	561	3,005	560	260	153	926	358	2,257	748
\$12,000-\$14,999	413	3,320	341	508	186	949	240	2,224	1,096
\$15,000-\$19,999	729	3,475	249	349	73	1,105	140	1,916	1,559
\$20,000-\$24,999	740	3,575	205	235	-	1,130	104	1,470	2,105
\$25,000 or more	1,191	3,788	75	-	-	971	70	1,160	2,672

¹Grants = BEOG, SEOG, State Grants.

²Loans = NDSL, GSL, State GSL.

³Transfers = VA, Social Security.

Source: Special tabulations of 1976 SIE. See Appendix.

TABLE 17

DISTRIBUTION OF COSTS FOR FULL-TIME DEPENDENT
STUDENTS IN 1976/77 BY PARENTAL INCOMES

(in percentages)

	<u>Less Than \$2,200</u>	<u>\$2,201- \$3,300</u>	<u>\$3,301- \$4,400</u>	<u>\$4,400+</u>	<u>Total</u>
\$0-\$7,500	36	30	21	13	100.0
\$7,501-\$12,000	35	27	20	18	100.0
\$12,001-\$15,000	27	27	20	26	100.0
\$15,001-\$25,000	25	26	21	28	100.0
\$25,000+	15	25	22	38	100.0
Total	28	27	21	24	100.0

Source: 1973 CPS.
1976 SIE.
Costs and incomes inflated to 1976/77.

TABLE 18

ILLUSTRATIVE FINANCING OF POSTSECONDARY COSTS BY DIFFERENT LEVELS
OF COLLEGE COSTS BY INCOME GROUPS, 1976/77

(dollars per capita)

<u>Level of Costs</u>	<u>Less Than \$10,000</u>	<u>\$10,000-\$15,000</u>	<u>\$15,000-\$25,000</u>	<u>\$25,000+</u>
<u>Twenty-Fifth Percentile</u>				
Parents	1,650	1,700	2,100	2,600
Loans	150	550	930	1,620
Grants	165	10	10	10
Work	385	20	10	10
	950	1,120	1,150	970
<u>Fiftieth Percentile</u>				
Parents	2,400	2,500	3,000	3,500
Loans	150	1,200	1,600	2,520
Grants	240	80	100	10
Work	1,060	100	150	10
	950	1,120	1,150	970
<u>Seventy-Fifth Percentile</u>				
Parents	3,400	3,800	4,200	4,600
Loans	150	1,300	1,850	3,250
Grants	340	600	500	10
Work	1,960	780	700	370
	950	1,120	1,150	970
<u>Eighty-Fifth Percentile</u>				
Parents	3,700	4,300	4,700	5,200
Loans	150	1,400	2,200	3,800
Grants	370	1,200	550	30
Work	2,230	1,580	800	400
	950	1,120	1,150	970

POTENTIAL AND ACTUAL DISTRIBUTION OF DEPENDENTS AGED 18-24 AND OF FULL-TIME STUDENTS 18-24 IN 1975 BY FAMILY INCOME

Family Income	Less Than	\$5,000-	\$10,000-	\$15,000-	\$20,000-	Total
	\$5,000	\$10,000	\$15,000	\$20,000	\$25,000	
<u>Dependents 18-24 (in thousands)</u>	2,486	4,450	5,570	5,325	4,048	26,935
<u>Potential</u>						
Actual	765	1,742	2,217	2,772	2,386	14,287
Actual/Potential	.308	.392	.398	.521	.589	.530
<u>Full-Time Students 18-24/Actual</u>	.061	.087	.096	.129	.171	.152
<u>Full-Time Students 18-24/Potential</u>	.197	.223	.241	.247	.291	.286

TABLE 19

Sources: CPR, P-60, #105, p. 92, 158.

Methodology: The distribution of 14-15 year olds (assumed all to be dependent) was "grown" by 7 per cent (to account for the greater earnings of parents of 18-24 year olds, assumed to grow at 1 per cent per year) and then applied to all 18-24 year olds. This is the potential distribution. The actual distribution is on p. 158.

TABLE VI-16. MICHIGAN INCOME AMONG HOUSEHOLDS, FAMILIES AND UNRELATED INDIVIDUALS IN MICHIGAN, BY COUNTY: CENSUS 1980

County	Median household income		Median family income		Median income of unrelated individuals		County	Median household income	Median family income	Median income of unrelated individuals
	1980	1979	1980	1979	1980	1979				
Alcona	\$10,730	\$12,301	\$4,873	\$9,134	\$11,210	Lake	\$9,134	\$11,210	\$4,873	
Alger	14,224	16,354	4,873	21,403	22,984	Lapeer	21,403	22,984	4,873	
Allegan	17,906	20,162	7,291	15,938	17,975	Leelanau	15,938	17,975	7,291	
Alpena	15,166	17,228	4,987	18,537	20,825	Lenawee	18,537	20,825	4,987	
Antrim	14,026	16,174	5,487	24,544	26,339	Livingston	24,544	26,339	5,487	
Arenac	13,184	15,016	5,407	13,261	15,327	Luce	13,261	15,327	5,407	
Baraga	12,007	15,598	4,930	12,454	14,985	Mackinac	12,454	14,985	4,930	
Barry	18,684	20,651	6,776	24,222	26,666	Macomb	24,222	26,666	6,776	
Bay	19,043	22,034	6,572	14,351	17,281	Manistee	14,351	17,281	6,572	
Benzie	13,410	15,435	5,365	16,517	19,492	Marquette	16,517	19,492	5,365	
Berrien	16,274	19,166	6,588	14,410	16,824	Mason	14,410	16,824	6,588	
Branch	16,150	18,535	7,393	13,081	16,023	Mecosta	13,081	16,023	7,393	
Calhoun	17,603	20,789	6,683	14,195	16,380	Memolinee	14,195	16,380	6,683	
Cass	16,488	18,548	6,529	21,527	23,598	Midland	21,527	23,598	6,529	
Charlevoix	14,028	16,896	5,610	12,321	13,953	Missaukee	12,321	13,953	5,610	
Cheboygan	13,012	15,203	5,380	21,356	23,281	Monroe	21,356	23,281	5,380	
Chippewa	12,499	14,987	4,110	14,792	16,942	Montcalm	14,792	16,942	4,110	
Clare	11,349	13,231	5,121	10,254	11,995	Montmorency	10,254	11,995	5,121	
Clinton	21,573	23,368	8,505	16,167	18,716	Muskegon	16,167	18,716	8,505	
Crawford	11,832	14,184	5,100	14,082	16,468	Newaygo	14,082	16,468	5,100	
Delta	15,076	17,668	5,223	25,325	28,807	Oakland	25,325	28,807	5,223	
Dickinson	14,293	17,094	5,191	14,157	16,334	Oceana	14,157	16,334	5,191	
Eaton	21,778	24,574	8,957	10,506	12,270	Ogemaw	10,506	12,270	8,957	
Emmet	15,099	18,384	5,881	13,153	15,984	Ontonagon	13,153	15,984	5,881	
Genesee	20,996	23,717	9,078	12,970	14,937	Oscoda	12,970	14,937	9,078	
Gladwin	12,255	14,678	5,056	11,175	12,922	Oscoda	11,175	12,922	5,056	
Gogebic	10,973	13,683	4,726	15,341	16,941	Otsego	15,341	16,941	4,726	
Gd. Traverse	16,686	19,325	6,296	20,232	22,059	Ottawa	20,232	22,059	6,296	
Gratiot	15,796	18,334	4,558	12,491	15,244	Presque Isle	12,491	15,244	4,558	
Hillsdale	15,399	17,512	5,032	10,865	12,474	Roscommon	10,865	12,474	5,032	
Houghton	11,456	14,398	3,340	19,726	22,126	Saginaw	19,726	22,126	3,340	
Huron	13,860	16,397	5,946	18,476	21,119	St. Clair	18,476	21,119	5,946	
Ingham	18,090	21,921	4,440	16,091	18,609	St. Joseph	16,091	18,609	4,440	
Ionia	17,439	20,037	6,395	14,590	16,629	Sanilac	14,590	16,629	6,395	
Iosco	11,724	13,649	5,994	12,450	14,670	Schoolcraft	12,450	14,670	5,994	
Iron	11,331	14,532	4,462	19,722	21,737	Shiawassee	19,722	21,737	4,462	
Isabella	15,002	18,318	2,831	18,332	20,583	Tuscola	18,332	20,583	2,831	
Jackson	18,530	21,364	7,104	15,397	17,700	Van Buren	15,397	17,700	7,104	
Kalamazoo	18,634	22,211	5,705	20,969	25,465	Washtenaw	20,969	25,465	5,705	
Kalkaska	13,714	15,691	5,345	18,629	22,134	Wayne	18,629	22,134	5,345	
Kent	18,554	21,530	7,403	13,394	15,884	Wexford	13,394	15,884	7,403	
Keweenaw	9,076	11,705	4,233	19,224	22,108	MICHIGAN	19,224	22,108	4,233	

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.
NOTE: Income data pertain to the year 1979.

TABLE 20

TABLE VI-17. MEDIAN FAMILY INCOME IN MICHIGAN COUNTIES: CENSUS 1970 AND 1980

County	Income ^a		County	Income ^a	
	1970	1980		1970	1980
Alcona	\$ 5,842	\$12,301	Lake	\$ 6,000	\$11,210
Alger	8,014	16,354	Lapeer	10,388	22,984
Allegan	9,309	20,162	Leelanau	8,278	17,975
Alpena	8,765	17,228	Lenawee	10,027	20,825
Antrim	8,043	16,174	Livingston	11,551	26,339
Arenac	8,320	15,016	Luce	8,974	15,327
Baraga	8,045	15,598	Mackinac	7,273	14,985
Barry	20,651	24,222	Macomb	13,110	26,666
Bay	10,408	22,034	Manistee	8,365	17,281
Benzie	7,760	15,435	Marquette	8,562	19,492
Berrien	10,056	19,166	Mason	8,476	16,824
Branch	9,325	18,535	Mecosta	7,902	16,023
Calhoun	10,789	20,789	Memolinee	7,703	16,380
Cass	9,781	18,548	Midland	11,618	23,598
Charlevoix	8,535	16,896	Missaukee	6,820	13,953
Cheboygan	7,660	15,203	Monroe	11,398	23,281
Chippewa	7,131	14,987	Montcalm	8,526	16,942
Clare	7,547	13,231	Montmorency	5,851	11,995
Clinton	11,014	23,368	Muskegon	9,757	18,716
Crawford	7,930	14,154	Newaygo	8,121	16,468
Delta	8,779	17,668	Oakland	13,826	28,807
Dickinson	8,316	17,094	Oceana	8,000	16,334
Eaton	11,423	24,574	Ogemaw	6,545	12,270
Emmet	8,610	18,384	Ontonagon	8,421	15,984
Genesee	11,255	23,717	Oscoda	7,961	14,937
Gladwin	8,157	14,678	Oscoda	6,411	12,922
Gogebic	7,236	13,683	Otsego	9,413	16,941
Grand Traverse	9,542	19,325	Ottawa	10,445	22,059
Gratiot	8,891	18,334	Presque Isle	7,889	15,244
Hillsdale	8,895	17,512	Roscommon	6,895	12,474
Houghton	6,300	14,398	Saginaw	10,878	22,126
Huron	7,783	16,397	St. Clair	10,125	21,119
Ingham	11,193	21,921	St. Joseph	9,686	18,609
Ionia	9,578	20,037	Sanilac	8,583	16,629
Iosco	7,165	13,649	Schoolcraft	7,692	14,670
Iron	7,443	14,532	Shiawassee	10,540	21,737
Isabella	9,207	18,318	Tuscola	9,558	20,583
Jackson	10,726	21,364	Van Buren	8,735	17,700
Kalamazoo	11,037	22,211	Washtenaw	12,294	25,465
Kalkaska	6,686	15,691	Wayne	11,351	22,134
Kent	10,692	21,530	Wexford	8,024	15,884
Keweenaw	4,809	11,705	MICHIGAN	11,032	22,108

SOURCE: Bureau of the Census, special release.

a. Figures pertain to incomes received during 1969 and 1979.

TABLE 21

Table 5 - Saving Current Tuition to Cover Future Cost

Year	Percent Increase Over Previous 10 Years				Percent Savings Over or Under Cost of Ed.			
	Common Stocks	U.S. T-bills	Cost of Education		Common Stocks		U.S. T-bills	
			Public	Private	Public	Private	Public	Private
1960	74.1%	17.2%	26.0%	30.0%	37.3%	26.2%	-7.6%	-15.0%
1961	71.9%	10.0%	27.1%	30.0%	35.3%	23.9%	-7.2%	-15.0%
1962	65.1%	19.0%	27.3%	39.5%	29.7%	10.4%	-5.9%	-14.2%
1963	60.6%	21.3%	27.5%	40.3%	25.9%	14.5%	-4.9%	-13.5%
1964	62.7%	22.4%	26.9%	39.6%	20.2%	16.5%	-3.5%	-12.3%
1965	63.0%	23.6%	26.0%	39.4%	20.5%	17.0%	-2.5%	-11.3%
1966	57.2%	25.6%	26.3%	37.9%	24.5%	14.0%	-0.6%	-0.9%
1967	56.9%	27.2%	26.7%	37.2%	23.0%	14.3%	0.4%	-7.3%
1968	52.6%	29.0%	27.9%	39.2%	17.5%	9.6%	-0.0%	-6.7%
1969	42.2%	32.7%	32.5%	40.7%	7.3%	1.0%	0.2%	-5.7%
1970	53.9%	33.0%	34.0%	41.3%	14.0%	0.9%	-0.2%	-5.3%
1971	52.4%	34.3%	36.7%	40.5%	11.4%	0.4%	-1.0%	-4.5%
1972	35.0%	36.3%	37.4%	39.7%	-1.7%	-3.4%	-0.0%	-2.4%
1973	0.6%	30.7%	37.1%	41.1%	-26.6%	-20.7%	1.2%	-1.7%
1974	34.0%	39.3%	30.4%	42.0%	-2.6%	-5.1%	0.7%	-1.9%
1975	34.0%	39.0%	40.5%	43.6%	-4.1%	-6.1%	-0.5%	-2.6%
1976	21.9%	39.0%	40.0%	44.2%	-13.4%	-15.4%	-0.7%	-3.0%
1977	33.0%	40.1%	39.7%	44.0%	-4.0%	-7.6%	0.3%	-2.7%
1978	41.1%	42.2%	40.6%	44.3%	0.4%	-2.2%	1.2%	-1.4%
1979	49.2%	45.0%	42.0%	46.7%	4.5%	1.7%	2.1%	-0.6%
1980	36.4%	50.9%	45.4%	50.9%	-6.1%	-9.6%	3.0%	0.0%
1981	55.3%	52.5%	40.5%	54.3%	4.6%	0.7%	2.7%	-1.1%
1982	73.2%	52.9%	50.5%	54.7%	15.1%	12.0%	1.6%	-1.2%
1983	65.4%	54.6%	50.0%	55.1%	9.7%	6.6%	2.6%	-0.3%
1984	67.5%	55.7%	50.7%	55.0%	11.2%	7.6%	3.3%	-0.0%
1985	69.9%	53.5%	40.0%	52.9%	14.0%	11.1%	3.7%	0.4%
Average	51.2%	36.5%	36.9%	43.9%	11.0%	5.2%	-0.5%	-5.3%
Std. Dev.	17.4%	12.0%	8.4%	5.9%	15.5%	12.4%	3.1%	5.1%

Sources: "Stocks, Bonds, Bills and Inflation: The Past and the Future", Roger G. Ibbotson and Rex Sinquefeld, (Charlottesville: The Financial Analysts Research Foundation, University of Virginia, 1982)

"Digest of Education Statistics", Office of Education Research and Improvement, U.S. Department of Education, 1986.

TABLE 22

Table 6 - Saving Current Tuition to Cover Future Cost

Tax Rate: 30.0%

Year	Percent Increase Over Previous 10 Years				Percent Savings Over or Under Cost of Ed.			
	Common Stocks	U.S. T-bills	Cost of Education		Common Stocks		U.S. T-bills	
			Public	Private	Public	Private	Public	Private
1960	74.1%	17.2%	26.0%	30.0%	19.8%	10.1%	-11.6%	-10.8%
1961	71.9%	10.0%	27.1%	30.8%	10.3%	0.4%	-11.4%	-10.9%
1962	65.1%	19.8%	27.3%	39.5%	14.4%	4.3%	-10.6%	-10.4%
1963	60.6%	21.3%	27.6%	40.3%	11.7%	1.5%	-9.9%	-10.1%
1964	62.7%	22.4%	26.9%	39.6%	13.4%	3.1%	-0.0%	-17.1%
1965	63.0%	23.6%	26.0%	39.4%	13.6%	3.4%	-0.1%	-16.4%
1966	57.2%	25.6%	26.3%	37.9%	10.9%	1.6%	-6.7%	-14.5%
1967	56.9%	27.2%	26.7%	37.2%	10.4%	1.9%	-6.1%	-13.3%
1968	52.6%	29.0%	29.9%	39.2%	5.4%	-1.7%	-6.9%	-13.2%
1969	42.2%	32.7%	32.5%	40.7%	-2.2%	-0.0%	-7.2%	-12.7%
1970	53.9%	33.0%	34.0%	41.3%	2.7%	-2.5%	-7.7%	-12.5%
1971	52.4%	34.3%	36.7%	40.5%	-0.1%	-2.7%	-9.3%	-11.0%
1972	35.0%	36.3%	37.4%	39.7%	-9.4%	-10.9%	-0.7%	-10.2%
1973	0.6%	30.7%	37.1%	41.1%	-26.0%	-20.0%	-7.3%	-9.9%
1974	34.0%	39.3%	30.4%	42.0%	-10.1%	-12.4%	-7.9%	-10.2%
1975	34.0%	39.0%	40.5%	43.6%	-11.5%	-13.4%	-9.0%	-10.9%
1976	21.9%	39.0%	40.0%	44.2%	-10.1%	-20.0%	-9.2%	-11.3%
1977	33.0%	40.1%	39.7%	44.0%	-11.9%	-14.5%	-0.3%	-11.0%
1978	41.1%	42.2%	40.6%	44.3%	-0.4%	-10.7%	-7.0%	-10.2%
1979	49.2%	45.0%	42.0%	46.7%	-5.0%	-0.3%	-7.5%	-10.0%
1980	36.4%	50.9%	45.4%	50.9%	-13.7%	-16.0%	-6.7%	-10.1%
1981	55.3%	52.5%	40.5%	54.3%	-6.6%	-10.1%	-7.9%	-11.4%
1982	73.2%	52.9%	50.5%	54.7%	0.5%	-2.2%	-0.9%	-11.4%
1983	65.4%	54.6%	50.0%	55.1%	-3.3%	-6.0%	-0.3%	-10.9%
1984	67.5%	55.7%	50.7%	55.0%	-2.3%	-5.4%	-7.0%	-10.0%
1985	69.9%	53.5%	40.0%	52.9%	0.6%	-2.6%	-7.1%	-10.1%
Average	51.2%	36.5%	36.9%	43.9%	-0.3%	-5.5%	-0.3%	-12.0%
Std. Dev.	17.4%	12.0%	0.4%	5.9%	11.7%	0.9%	1.4%	3.0%

Sources: "Stocks, Bonds, Bills and Inflation: The Past and the Future",
 Roger G. Ibbotson and Rex Sinquefeld, (Charlottesville:
 The Financial Analysts Research Foundation, University of
 Virginia, 1982

"Digest of Education Statistics", Office of Education Research and
 Improvement, U.S. Department of Education, 1986.

BIBLIOGRAPHY

- ASHE Reader Series. Finance in Higher Education-Society, Students and Parents-A Joint Responsibility. Howard R. Bowen. Lexington, Massachusetts: Ginn Press, Larry L. Leslie and Richard E. Anderson, 1986.
- ASHE Reader Series. Finance in Higher Education-Enrollment Effects of Alternative Postsecondary Pricing Policies. James C. Hearns and David Longanecker. Lexington, Massachusetts: Ginn Press, Larry L. Leslie and Richard E. Anderson, 1986.
- Brouder, Kathleen. The Class of 2010: Encouraging Families to Save for College. The College Board of Review. New York: Spring 1988.
- Evangelouf, Jean. The Chronicle of Higher Education. Colleges and States Devising New Ways to Help Families Pay Higher Tuition Fees. July 1986.
- Fiske, Edward B. Colleges to Raise Tuition 7% to 8%. New York Times: April 1986.
- Frances, Carol. Testimony Before the Select Committee on Children, Youth, and Families. U. S. House of Representatives. Trends in College Costs and the Ability to Pay for College. Washington, D.C.: July 1987.
- Frooskin, Joseph. Middle Income Students and the Cost of Post-Secondary Education. Educational Policy Research Center for Higher Education and Society. Washington D.C.: February 1978.
- Gillespie, Donald A. and Carlson, Nancy. Trends in Student Aid-1963 to 1983. Washington, D.C.: College Board Publication, 1983.
- Gladieux, Lawrence. The Federal Government and Higher Education Tradition, Trends, Stakes and Issues. Washington, D.C.: College Board Publication, 1987.
- Greenberg, Marvin W. The Class of 2010: What's Happened to College Tuition and Why. The College Board of Review. New York: Spring 1988.
- Hansen, Janet S. The Class of 2010: Pay Now, Go Later-College Prepayment and Savings Plans. The College Board of Review. New York: Spring 1988.
- Hauptman, Arthur M. Financing Student Loans: The Search for Alternative in the Face of Federal Contraction. College Entrance Examination Board, Washington, D.C. Ford Foundation, New York, N.Y.: June 1982.

- Hearn, James C. and Longanecker, David. The Enrollment Effects of Post-Secondary Tuition Rises: Facts, Myths, and Unknown. Conference Paper, American Educational Research Association. New Orleans, LA: April 1984.
- Invitational Conference on College Prepayment and Savings Plans. Proceedings College Entrance Examination Board. Denver: 7 and 8 July 1987.
- Keeley, Sabrina. Administrator, Michigan Education Trust. Telephone Interview. 12 June 1989.
- Leslie, Larry L. and Brinkman, Paul T. The Economic Value of Higher Education. New York: Collier MacMillan Publishers. 1988.
- Lowi, Theodore J. The End of Liberalism. New York: W. W. Norton and Company. 1969.
- Lyddon, Jan W., PHD. Legislative Research Analyst, Michigan House of Representatives. Office of the Speaker. June 1989.
- Malarkey, Daniel. Tuition Futures for Massachusetts. Kennedy School of Government. Harvard University: May 1987.
- Michigan Education Trust. Question and Answer-Michigan Guarantee Tuition Plan. Michigan Department of Treasury. Lansing, Michigan: March 1988.
- Michigan Education Trust-Plan Contract. The Nation's First Tuition Guarantee Program. August 1988.
- Michigan Public Acts of 1986. Enrolled House Bill No. 5505-Michigan Education Trust Act. Lansing, Michigan: 83rd Legislative Regular Session of 1986.
- Phillips, Kevin. The Politics of Rich and Poor. New York: Random House. 1990.
- Ross, Douglas. Robert F. Kennedy: Apostle of Change. New York: Pocket Books. 1968.
- Rourke, Francis E. Bureaucratic Power in National Policy Making. Fourth Edition.
- Schattschneider, E. E. The Semisovereign People. Hinsdale, Illinois: The Dryden Press, 1975.
- Stone, Deborah A. Policy Paradox and Political Reason. Glenview, Illinois: Scott, Foreman and Company, 1988.
- Verway, David I. Michigan Statistical Abstract, 20th Edition. Bureau of Business Research, Wayne State University, Detroit, Mich., 1986-87.