PUBLIC CHOICE AND PUBLIC POLICY: THE CASE OF REFORMING THE FINANCING OF PUBLIC EDUCATION IN MICHIGAN

Dissertation for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY
WILLIAM A. SEDERBURG

1974

This is to certify that the

thesis entitled

Public Choice And Public Policy: The Case Of Reforming The Financing Of Public Education In Michigan

presented by

William A. Sederburg

has been accepted towards fulfillment
of the requirements for

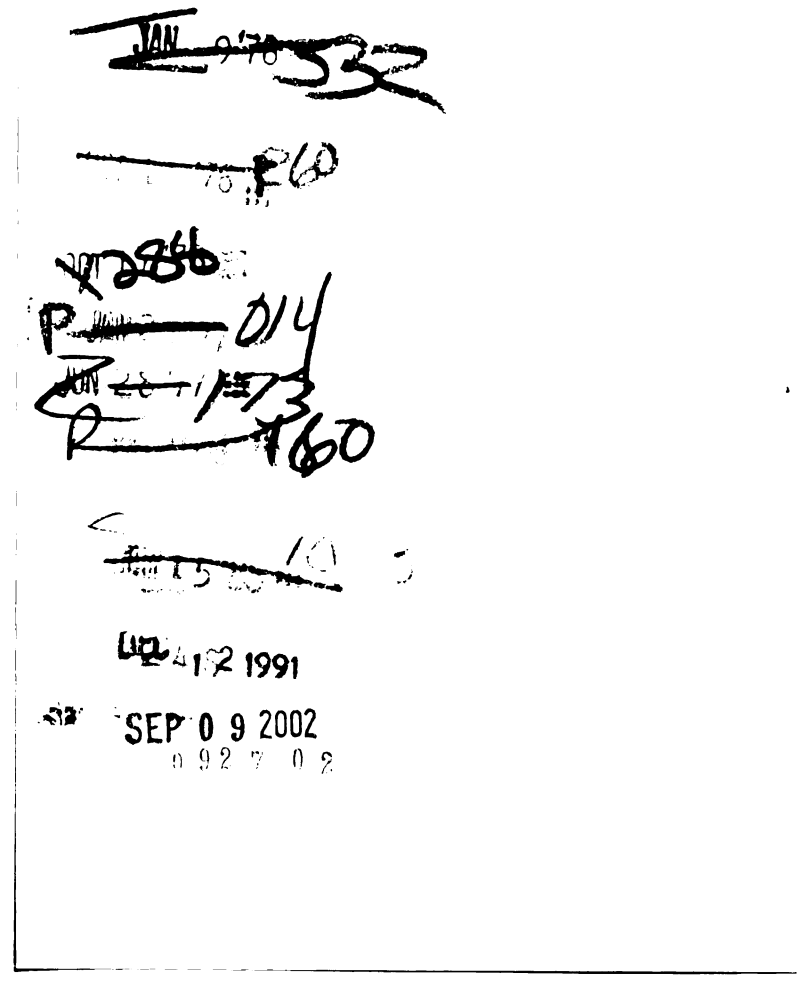
Ph.D. degree in **Political** Science

Frank A. Pinner

Major professor

Date 3/7/74

O-7639


SEP 0 9 2002

ABSTRACT

PUBLIC CHOICE AND PUBLIC POLICY: THE CASE OF REFORMING THE FINANCING OF PUBLIC EDUCATION IN MICHIGAN

By

William A. Sederburg

On November 7, 1972, the Michigan electorate voted on a constitutional amendment which, if passed, would have accomplished two objectives. First, it would have greatly reduced property taxes. In effect, its passage would have meant substantial "property tax relief" for Michigan homeowners. Second, the amendment would have shifted the primary responsibility for financing public education from the local school district to the state. The amendment, known as Proposal C, was defeated by a margin of 54 to 46 percent. The purpose of this dissertation is to analyze the financial and political circumstances leading up to the vote on Proposal C and to compare two explanations for the public's choice on school finance.

The two objectives of the proposal suggested to the author two basic explanations for the electorate's vote. One explanation was that the vote ought to be related to the property tax burden incurred by residents in different school districts in the state. If voters desired property tax relief, they should have voted in favor of Proposal C. Three economic variables were used to determine whether or

not a relationship existed between the desire for property tax relief and the vote on Proposal C. The three variables were tax burden on income, tax burden on homeowners, and total tax effort.

The proposed shift in the level of government which would be primarily responsible for financing public education led to a second explanation. This explanation was that the vote was related to the degree of "social distance" among school districts in the seven metropolitan areas in Michigan. Three social distance variables were used to test this theory. They were segregation, life style, and social rank. The social distance explanation was used in an attempt to "tap" the public's concern over preserving local control of education and preventing cross district busing of school children.

The economic and social distance explanations were tested in seven metropolitan areas in Michigan. Multiple regression analysis was used to determine which set of variables "best explained" the variance in the vote on Proposal C. In five of the seven areas, the social distance variables explained more of the variance than did the economic variables. In two areas, the economic variables best explained the variance.

The reason for the difference in the explanatory power of each set of variables was determined by conducting a content analysis of newspapers in each area for three months prior to the election. A direct relationship was found between the power of the social distance variables and newspaper coverage given to racial integration in the schools.

The importance of the social distance variables and the affect of newspaper coverage about racial integration in the schools indicates that voters were concerned with sociological as well as economic issues. Social Scientists have recently been very concerned with the relationship between the distribution of economic costs and benefits and public policy. This research leads one to suggest that the reform of public school finance in Michigan was as much affected by sociological factors as by economic benefit. It points to the need to include both types of explanations in analyzing public choice and public policy.

PUBLIC CHOICE AND PUBLIC POLICY: THE CASE OF REFORMING THE FINANCING OF PUBLIC EDUCATION IN MICHIGAN

By

William A. Sederburg

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Political Science

1974

ACKNOWLEDGMENTS

I would like to thank the members of my dissertation committee for the time and effort expended in their thoughful and constructive criticisms of the original draft. Kent J. Chabotar and Leroy Ferguson contributed greatly to the development of the hypotheses and the presentation of the findings.

A special thanks is given to the chairman of the committee, Frank A. Pinner, for his personal and intellectual contribution to the study. His theoretical concerns and practical solutions to difficult methodological problems were extremely valuable in conducting the analysis of the vote on Proposal C. With the rare combination of humanistic concern and academic sophistication, his guidance has been well beyond the call of duty. I am forever grateful.

I thank the Department of Political Science for a research grant that enabled me to collect and analyze the needed data. The entire department staff proved very helpful and constructive. I also wish to thank my wife, Joyce, and my parents, for their constant understanding and support. This dissertation is dedicated to them.

All errors in judgment and analysis are my own.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Throughout the last half of the 1960's and into the 1970's, many school districts throughout the United States were facing a severe financial strain. During the 1970-71 school year, for example, the financial problems manifested themselves in a variety of ways. In California 30 school districts went bankrupt; the number of teachers throughout the state decreased by 9,000, while the number of students increased by 100,000. Teachers were laid off in Cincinnati, Chicago, New York, Los Angeles, Detroit, and in many other cities. Libraries were closed in Cincinnati. In New York, teachers were paid from the 1972 budget.[1]

The financial problems of the public schools in the United States stimulated a number of studies on the causes and solutions to the problems of school finance. The National Educational Finance Commission, Advisory Commission on Intergovernmental Relations, Urban Institute, Michigan's Citizen Research Council, and other sources published studies of the underlying crises in financing public education.[2]

The consensus of these studies was that the crisis is the result of the inadequacy and inequity built into the present method of funding education. Currently, most school districts are funded from

a combination of local, state, and federal sources. Table 1.1 shows the relative contribution of each source.

TABLE 1.1.--Revenue and Percentages by Governmental Level for Public Elementary and Secondary Schools (in Billions).

School Year	Local Revenue	Percent	State Revenue	Percent	Federal Revenue	Percent	Total	Percent
1961-62	$10.0	56.9	$ 6.8	38.7	$ .76	4.3	$17.5	100
1965-66	13.4	53.0	9.9	39.1	1.9	7.9	25.4	100
1970-71	21.8	52.0	17.2	41.1	2.9	6.9	41.9	100

Source: Tables 29, 30 in Financial Status of the Public Schools, Washington, D. C., Committee on Educational Finance, NEA, 1970.

The backbone of the financial system is the revenue raised from the local property tax. According to the National Educational Finance Commission, 52 percent of all educational funds are derived from local taxes. Of the amount, 98 percent is derived from the property tax.[3] Consequently, increasing attention is being paid to the relative merits or demerits of the property tax.

The crisis in public school finance takes the form of the classic "cost revenue squeeze," in which educational costs far exceed the capacity of the financial system to provide needed revenue.[4] The cost revenue squeeze can be easily demonstrated. Educational costs have risen at an annual rate of 9.7 percent for the past decade (1961-1971). This corresponds to an annual increase in the Gross National Product of only 6.8 percent. Teacher salaries have increased by 78

percent, from $5,449 per year to $9,689 per year.[5] Trends in total expenditures for public schools are shown in Table 1.2.

Although the costs have increased sharply (302 percent), the means for obtaining the needed revenue have been strained to the point where the public has refused to support increased revenues for public education. The strain on the methods used for financing public education is most evident in the often-discussed "taypayers' revolt" against increased millage for local districts.[6] The method of allowing the public to vote on educational millages and school bonds has opened the public education system to the public's negative reaction to more taxes. In 1960 voters rejected 11 percent of all school bond issues placed before them. In 1965 the number increased to 33 percent. In 1970 the percentage of bond election failures was 52 percent.[7] Many states, such as Michigan, also require local school districts to obtain voter approval for basic operating millage, thereby greatly compounding the problem of inadequate funds.

The causes of the taxpayers' revolt are typically attributed to the nature of the property tax, rather than a reaction against public education. An advisory Commission on Intergovernmental Relations survey found that the property tax is two and one-half times more unpopular than the federal income tax and three and one-half times more unpopular than the sales tax.[8]

Burkehead, Johns, Rossmiller, and others have pointed to defects in the property tax that have had a particulary important impact on the public attitude toward it.[9] One of the defects is the method of

TABle 1.2.--Trends in Total Expenditures for the Public Schools, 1930-1970 (Includes all items for Current Expense, Capital Outlay and Interest on School Indebtedness).

Year	Total Expenditures	Consumer Price Index	Expenditures in 1969 Dollars	Average Daily Attendance (1000's)	Expenditures Per Pupil in ADA 1969 Dollars	Percent of GNP Spent on Public Schools
1929-30	$ 2,203	58.7	$ 4,935	21,165	$223	2.2
1939-40	2,331	48.4	6,149	22,042	279	2.6
1949-50	5,768	83.0	8,877	22,284	298	2.2
1959-60	15,613	101.5	19,641	32,477	605	3.2
1969-70	39,489	127.7	39,489	42,168	936	4.2
Percent Increase 1929-30 to 1969-70	1,612	114	700	99	302	91

Source: National Educational Finance Project, Gainsville, Florida, 1971.

administering the tax. The Advisory Commission on Intergovernmental Relations observed that "much more action toward improved administration of the property tax is still urgently needed."[10] Their indictment is based on allegedly inequitable assessing practices within and among localities and the regressive nature of the property tax.

The regressive nature of the property tax is shown in the increased percentage of income the poorer property owner must pay, compared to the wealthier property owner. For example, in 1970, a homeowner with an income of $10,000 paid about $340 or 3.4 percent of his income for property taxes. Homeowners with an income of less than $7,000 paid an average tax of 6.6 percent. Elderly homeowners paid, on the average, 8.1 percent of their annual income.[11] Coupled with the problem of regressivity is the fact that the property tax has risen much faster than average income. In 1953, a family with an income of $5,000 paid $110 or 2.2 percent in property taxes. The same family in 1971 earned $12,000 and paid a little over $400, or 3.4 percent of their annual income in property taxes.[12]

A third feature of the property tax is the uneven distribution of property value among school districts. Property value varies according to the value of homes in the district and the degree of industrialization. School districts with either residential property with high assessed valuations or large industrial plants within their boundaries tend to have a strong tax base on which to draw funds. The impact of such a variation is that two districts, each levying the same amount in taxes, will not raise the same amount of money. The

unequal tax base among school districts has created wide differences in tax rates and in the economic burden carried by districts with low property value. The unequal tax base from one district to another, and from one state to another, is indicated in Table 1.3.

TABLE 1.3.--Variations in Local Ability, Per Pupil, to Support Education.

State	Unit Analyzed	Year	Property Value Per Pupil		Ratio of High to Low
			Low	High	
Mass.	City, Town	65-66	$ 5,000	$3,335,398	66
Kentucky	School Dist.	64-65	4,868	94,129	19
Colorado	County	63-64	4,339	48,672	11
Oregon	County	62-63	17,104	73,104	4
Maryland	County	64-65	7,742	20,064	3

Source: Joel Berke, "The Current Crisis in School Finance: Inadequacy and Inequity," in Phi Delta Kappan, September, 71.

A final weakness of the property tax is the fact that revenues are not related to educational need. Many districts, wealthy in property value, do not have the great educational problems faced by the inner city school district. Conversely, in the "poorer" districts, where educational need is often the greatest, the revenue sources are commonly the weakest.

Coupled with the increasing costs and the strain on the present method of raising revenue is the need to achieve equity in school financing. Already noted were the uneven distribution of property tax

base between districts and the lack of a relationship between educational need and property wealth. These disparities have caused tremendous differences in the amount of money spent per pupil each school year. For example, in Michigan the dollars spent for each pupil varied between $580 and $1,600 in 1971.[13]

Variations in the amount of money spent by school districts for each child have been the subject of recent court cases.[14] In cases brought before the Supreme Courts of Michigan, California, Texas, Minnesota, and New Jersey, the plaintiffs have argued that the accidents of a child's birthplace and of his parents' residence should not be cause for denying him equality of educational opportunity, as measured by dollars spent.

The California Supreme Court, in Serrano v. Priest (1971), found the method of funding public education in California unconstitutional. In their ruling, the court stated:

> This system conditions the full entitlement to such interest [quality education] on wealth, classified its recipients on the basis of their collective affluence and makes the quality of a child's education depend upon the resources of his school district and ultimately on the pocketbook of his parents.[15]

In ruling California's system of financing education unconstitutional, the court established the criterion of equal educational opportunity based on equal dollars and equal tax base. Other state supreme courts have followed California in declaring the present method of funding public education unconstitutional. Recently, the United States Supreme Court, in Rodriguez v. State of Texas, 1973, upheld the current system of financing public schools.

School finance and the property tax are inextricably linked. Approximately one-half of all funds spent are derived from the local property tax, yet this tax has been the primary cause of the "taxpayers' revolt," inequities in expenditures per student, and the inability of school districts to raise additional revenue. The weaknesses and inequities in the property tax, outlined above, have helped create political pressure to reform public school finance.

The property tax has become the primary target of political leaders seeking to reform school finance. The obvious solution to the financial crisis is to provide homeowners with property tax relief, public schools with adequate funds, and students with equal educational opportunity. This could be accomplished by shifting from reliance on the local property tax to reliance on state taxes. However, to alter the method of financing public schools, state constitutions would have to be amended to restrict local funding. In many states the amendment process requires approval of the state electorate.

On November 7, 1972, the ballots of four states--Oregon, Michigan, California, and Colorado--included proposed constitutional amendments that would have restricted the use of local property taxes and shifted the primary source of education funds to the state. The voters in all four states rejected the amendments. In Michigan, the amendment was defeated by a margin of 1,324,702 in favor to 1,815,126 against (46-54 percent). The results were similar in the other three states.

The primary purpose of the present study is to determine why the constitutional amendment was defeated in Michigan. What caused the voters to reject the change in the way schools are financed? Two models

or explanations of public choice and public policy are proposed. The two explanations are compared by using multiple regression analysis. The percentage of variance explained should offer clues about the explanatory power of each model. The status of school finance in Michigan prior to the election and the political history of the amendment are also discussed. Through this case study approach, the underlying dimensions of the vote should be apparent.

The two explanations of public choice and public policy to be explored are the economic and social distance models. The economic interpretation hypothesizes that the economic benefits of property tax relief would best explain the vote. It is assumed that voters would want to shift from the highly disliked property tax to one that would be less disliked. Three independent variables make up the economic explanation: tax burden on homeowners, tax burden on income, and the total tax effort of the district. All three variables are measured by school district.

The social distance explanation assumes that voters wanted to keep the property tax because of a desire to maintain the role of the local school district in financing education. Approval of the amendment would have removed the opportunity for voters to vote on educational millages. The model hypothesizes that the amendment was interpreted as an integrative mechanism: the shifting from local to state funding would have meant the social and political consolidation of the state school system. If voters interpreted the amendment as a threat to local political and social boundaries, they may have been

willing to accept the burden of the property tax in order to maintain social boundaries.

The concept of social distance is used to test this hypothesis. Social distance is defined as "life style differences between aggregates of people living in proximity."[16] Life style refers to general ways of living. Shevky and Bell used three measures--segregation, urbanization, and social rank--to differentiate social areas according to life styles. Segregation is the degree of racial separation. Urbanization is a measure of the urban, as compared to suburban, mode of life: low familism. Social rank is a measure of social class: education and occupation. Social distance between areas is computed by taking the difference between the suburban and inner-city district on each measure.

The two models of public choice and public policy are compared in the seven Standard Metropolitan Statistical Areas of Michigan. The analysis is limited to the seven metropolitan areas so that the concept of social distance can be operationalized. Chapter III, Research Design, explains this choice in greater detail. The seven areas incorporate over 70 percent of the total vote on the constitutional amendment. An explanation of the vote in these metropolitan areas provides good clues about the entire vote.

This study is organized into seven chapters. In Chapter II the two models of public choice and public policy are presented. Chapter III contains a description of the research design used to analyze the vote. The financial situation facing public education in Michigan

prior to the constitutional amendment is reviewed in Chapter IV. In Chapter V the political history of the amendment is discussed. Chapter VI contains the findings and analysis of the data. The final chapter is a summary and conclusion chapter.

FOOTNOTES--CHAPTER ONE

[1]Joel Berke, "The Current Crises in School Finance: Inadequacy and Inequity," Phi Delta Kappan, September, 1971, p. 3.

[2]Recent studies on educational finance include eleven smaller studies and six volumes (Gainsville: National Educational Finance Project, 1971), The Advisory Commission on Intergovernmental Relations has published Financing Schools and Property Tax Relief - A State Responsibility (Washington: Advisory Commission on Intergovernmental Relations, 1973), the Urban Coalition has published Public School Finance: Who Pays and Who Benefits (Washington: Urban Coalition, 1972), and in Michigan the Michigan Citizens Research Council has published a series of background papers on educational finance.

[3]Committee on Educational Finance, National Education Association (Washington: NEA, 1970), Table 30.

[4]Berke, op. cit., p. 2.

[5]Ibid.

[6]Karen DeW. Lewis, "Educational Report/Federal Policy Toward School Finance Faces Review by Administration, Courts," National Journal, December, 1972, p. 1954.

[7]Ibid., p. 1955.

[8]Advisory Commission on Intergovernmental Relations, "Financing Schools and Property Tax Relief-A State Responsibility," Report A-40, January, 1973, p. 26.

[9]Richard Rossmiller, Fiscal Capacity and Educational Finance, (Gainsville: National Educational Finance Project, Special Study No. 10, 1971), Roe I. Johns and E. L. Morphet, Problems and Issues in Public School Finance (New York: Teachers College, Columbia University, 1952), and Jesse Burkehead, Public School Finance: Economics and Politics (Syracuse: Syracuse: Syracuse University Press, 1963).

[10]Advisory Commission on Intergovernmental Relations, op. cit., p. 69.

[11]Lewis, op. cit., p. 1958.

[12] Ibid.

[13] Michigan Department of Education, Bulletin 1012, 1971-72, Lansing, Michigan, 1972.

[14] For an excellent discussion of the impact of the court cases see Joel Berke and John Callahan, "Serrano v. Priest: Milestone or Millstone for School Finance," Journal of Public Law, Vol. 21, No. 1, 1972, pp. 23-71.

[15] California Supreme Court, Serrano v. Priest (5 Cal. 3d 584, 487 P 2d 1241, 96 Cal. Rptr. 601, 1971), p. 54.

[16] Brett W. Hawkins, "Life Style, Demographic Distance, and Voter Support of City-County Consolidation," Southwestern Social Science Quarterly, Vol. 58, No. 2, September, 1972, p. 325.

CHAPTER II

TWO EXPLANATIONS OF PUBLIC CHOICE AND PUBLIC POLICY

On November 7, 1972, the voters of Michigan had an opportunity to vote on a constitutional amendment which would have accomplished two purposes. First, the amendment would have greatly reduced reliance on the property tax as the primary source of educational revenue. This change would have provided many citizens throughout the state with substantial "property tax relief." Secondly, the amendment would have shifted the primary responsibility for funding public education from the local school district to the state. This change would have meant a fundamental restructuring of the process through which decisions concerning the financing of public education are made.

The vote on the amendment, better known as Proposal C, was obviously a policy-making decision. Citizens, both individually and collectively, had an opportunity to accept the changes outlined in the amendment or to maintain the status quo. Consequently, the vote on Proposal C can be, and is, approached theoretically in terms of the relationship between public choice and public policy.

In recent years, the literature on the relationship between public choice and public policy primarily has taken two directions. One direction can be termed "economic," in that it emphasizes the economic conditions of the unit of analysis and the economic costs or

benefits accrued to the public if a certain policy is adopted. The second direction stresses the importance of the structural characteristics of the policy process and the political environment. Research on metropolitan consolidation and on public referenda suggests that the maintenance of social, economic, and political differences is important in determining how the public will vote on different policy alternatives.

The Economic Explanation

The economic explanation or model of public choice and public policy has two facets. One method of analyzing the impact of economics on policy is to study the economic conditions of the unit of analysis and correlate environmental variables with different policies. Generally, this method has concentrated on the relationship between the economic condition of American states and the level of expenditure in different policy areas. The second method of studying the relationship between economics and policy is to analyze the distribution of costs and benefits caused by different policies.

The literature on the systematic analysis of the effect of economic conditions on public policy dates back to at least 1952, when Fabricant published The Trend of Government Activity in the United States. He found that more than 70 percent of the variance in state and local expenditures could be attributed to differences in per capita income, urbanization, and population density. On education policy, Fabricant identified per capita income as the most important variable in determining expenditures per pupil.[1]

Subsequent research has supported Fabricant's identification of the importance of the economic condition of the state in determining expenditure levels. Fisher, Shapiro, and Hirsh also concluded from their research that expenditure levels for education were determined largely by the economic wealth of the state or locality.[2]

Dawson and Robinson expanded the Fabricant, Fisher, Shapiro research design to include political dimensions of policy outcomes. In exploring Key's hypothesis that interparty competition and welfare policy were related, Dawson and Robinson found that party competition had little effect on the "welfare orientation" of the state when per capita income was controlled for.[3] Hofferbert redefined "welfare orientation" and added other political variables including party control, malapportionment, and regional controls. Hofferbert's conclusion was that political variables had no independent impact on "welfare orientation."[4]

Politics, Economics, and the Public: Policy Outcomes in the American States by Dye was the appex of this line of research relating socio-economic characteristics of political units to expenditure levels in different policy areas.[5] Dye expanded the previous research by including additional socio-economic and political variables, and found that only economic development variables had an independent effect on educational policy. Educational policy was defined primarily as the amount of money spent on education in the state. Economic development consisted of education, income, urbanization, and industrialization; of the four, per capita income was of greatest influence in affecting

educational policy.[6] Dye found that political variables (constitutional framework, electoral system, party system, interest group structure, power structure, and political style) were not significantly correlated with educational policy. After analyzing five different policy areas, he concluded:

> Political system characteristics have relatively little effect on political outcomes of the states. Economic development shapes both the political system and the political outcomes, and most of the association between system characteristics and policy outcomes can be attributed to the influence of economic development.[7]

Dye, Sharkansky, Hofferbert, and other policy analysts have been criticized on two grounds.[8] One criticism is that the dependent variable, public policy, has been defined primarily as an expenditure level. It seems almost axiomatic to say that states with more moeny will spend more. The second criticism is that Dye and others have not offered an adequate explanation of how economic development gets translated into higher expenditures or into other types of policy.

Students of public policy have attempted to meet the first criticism by conceptualizing different dimensions of public policy.[9] For example, Sharkansky and Hofferbert distinguished between public policy and policy outputs.[10] Public policy was defined as expenditures or other indicators of official concern. Policy outputs were defined as the effect of the policy. For education, the policy was the amount of money spent in the state for education. Educational policy outputs included the percentage of ninth grade students who went on to complete high school and the percentage of candidates passing the minimum academic standards for the selective service.

Sharkansky and Hofferbert concluded that socio-economic variables were more highly correlated with public policy (expenditures) than with policy output (impact). Policy output was most highly correlated with policy.

Fry and Winters introduced a new dimension to public policy analysis that may prove fruitful. Their study was concerned with answering two basic questions: (1) Does politics make a difference in public policy outcomes? and (2) How are certain factors, socio-economic and political variables, specifically related to policy outcomes?[11] They contended that the allocation of benefits and burdens of state revenue and expenditure policy was a more fruitful area of analysis than studying only the level of expenditure.

> We have taken as our dependent variable the net redistributive impact of revenues and expenditures as represented by the ratio of expenditure benefits to revenue burdens for the three lowest income classes in each state. The major hypothesis of our study is that, in regard to the allocation of the burdens and benefits of state government revenues and expenditures, political variables will have a stronger influence on policy outcomes than will socio-economic variables.[12]

The authors operationalized the redistributive impact by selecting a number of allocation bases that appeared to describe the incidence of revenue burdens and expenditure benefits across income classes.

> For instance, elementary and secondary education expenditure benefits were assumed to be distributed according to the number of children under 18 in families in each income class, so that if 20% of children under 18 were in families with an income of $4,000 to $4,999, 20% of expenditures on elementary and secondary education were assigned as benefits to that income class.[13]

They then multiplied this percentage by the total amount of money spent in that category, i.e., elementary and secondary education. The totals were summed for all categories for both expenditures and revenues. A

redistributive ratio was computed by dividing the expenditure benefits for each income class by the revenues paid by that class.

Using multiple regression analysis, Fry and Winters computed the percentage of the variance, in redistributive impact between states, explained by both political and socio-economic variables. Multiple partial correlations were computed to determine which set of variables best explained the redistributive ratio. They found that political characteristics explained more of the variance than did socio-economic variables. Political variables included five mass political behavior variables, four governmental institution variables, and four elite behavior variables. Socio-economic variables included Dye's economic development variables (education, urbanization, industrialization, and income), a Gini index of equality, and the percentage of families earning less than $3,000 per year. They concluded:

> ...Previous studies of policy outcomes in the states have been hard pressed to find an independent impact for the political variables considered, and where the relative impact of political and socio-economic variables has been examined, the socio-economic variables have predominated. In the present analysis, these finding are reversed.[14]

Sullivan attacked Fry and Winter's findings on methodological grounds.[15] He pointed out that in order to use multiple regression analysis to compare different models each model must have the same number of independent variables. Although Fry and Winters used five variables for each group of variables, they selected the most powerful political variables from a set of nine, while selecting five socio-economic variables from a set of six. Sullivan recomputed the multiple regression coefficients and the multiple partial correlations. He

found that Fry and Winter's findings were reversed when proper statistical procedures were used. Sullivan concluded that although politics may make a difference in the amount of redistribution, it by no means overshadows the role of socio-economic factors.

Booms and Haldorson expanded Fry and Winter's search by refining the dependent variable.[16] Using six redistributive equations, Booms and Haldorson changed the rankings of many of the states on the redistributive ratio. This method increased the percentage of variance explained by the socio-economic variables. Their study still found that political variables explained more of the variance than did socio-economic variables. However, they did not restrict the number of independent variables in each group of variables. This opens their analysis to the same criticisms made of Fry and Winter's research.

Research on the impact of socio-economic characteristics of the state or locality under study has pointed to the importance of economic conditions in affecting public policy. Policy has been defined as the level and distribution of public resources. In both cases, the economic environment has had a direct effect on public policy.

If Proposal C had passed, the economic effect would have been a reduction of property tax burdens. Supporters of Proposal C attempted to sell it on grounds that the proposal offered substantial "property tax relief." If, as policy analysts have shown, the economic condition of the environment is related to policy outcomes, it is conceivable that economic variables measuring the extent of property tax relief offered by Proposal C ought to be correlated with the vote. Theoretically, in school districts with a heavy property tax burden, support

for Proposal C should have been greater than in districts with a less heavy tax burden.

The second criticism raised against policy analysts is that they have not provided a clear explanation of how environmental conditions are translated into public policy. Dye referred to the economic development literature in explaining how higher governmental expenditures come about.[17] As governments become more urbanized and technologically developed, increased demands for governmental survices are created. The government is responsible for providing new industrial services as well as meeting the social problems created by urbanization. The new responsibilities lead to increased expenditures and increased revenues. This description explains how higher levels of expenditures may come about. It does not explain other policy preferences such as the redistribution of public resources.

If we accept the conclusion that socio-economic conditions are positively associated with expenditure levels, redistribution, or other policies, the question of how the environment is linked with different policy choices becomes important.

Most policy analysts have explained the linkage in terms of systems theory, which creates a model of public policy in which the socio-economic environment creates inputs for the political system. The political system translates these inputs into public policy. The effects of the public policy change the environment; this, in turn, creates new inputs. Inputs are defined as demands and supports. Demands "occur when individuals or groups, in response to perceived

environmental conditions, act to promote goals, interests, or actions. Support is rendered when individuals or groups accept the outcome of elections, obey the laws and pay their taxes."[18]

In this conceptualization, the socio-economic environment creates the political demands for policy change. Dye's environmental measures of economic development (urbanization, industrialization, education, and income) are not demands in themselves, but are representative of demands. Demands are individual or group responses, not economic conditions. In this analysis, the economic conditions of the school district are seen to create political preferences among individuals and groups. These preferences are indicated by support or opposition to the proposed policy change. It is hypothesized that the extent of property tax relief offered by Proposal C in the local district should be positively related to the vote on Proposal C. Support for Proposal C should be greater in districts with high property tax burden than in districts with low tax burden.

If this hypothesis is plausible, it is important to ask how individuals select among different policy choices. This question has been studied by political economists who have looked at the distribution of costs and benefits caused by different policies and how this distribution influences policy preferences.

The conceptualization of economic distribution as being at the heart of the political process is the core of the political economy approach to public policy. Jacob and Lipsky, in a review of the literature on policy analysis, identified this core:

> The distribution of benefits and sanctions is perhaps the most significant output dimension for political scientists, since most of the conflict preceding the adoption of a program is not about whether it should be embarked upon but who will pay and who will benefit.[19]

The study of policy in terms of distribution of resources has generated considerable research.[20] In education there has been interest in the distribution of costs and benefits in the method of financing public education. The claim that "equal educational opportunity" is dependent on local wealth and social status has encouraged courts to demand that expenditures per pupil be based on the wealth of the entire state rather than the local school district. In the most well-known court decision, Serrano v. Priest, the California Supreme Court ruled that the current method of funding public education is inherently unequal and therefore unconstitutional. Indeed, the current controversy in financing public education is based primarily on the analysis of public policy in terms of the distribution of costs and benefits.

Various authors have used the concept of distribution of costs and benefits in developing economic models of how policy decisions are made.[21] For example, Ross identified the main components of the political economy model of public choice and public policy as consisting of the analysis of costs and benefits; the concepts of markets, exchange, and bargaining; and the use of strategies to gain relative advantage.[22] Wade and Curry offered a seven-element model of the policy process. Their model consisted primarily of the government acting as the mechanism for distributing or redistributing economic resources.[23]

Although these models are useful, Mitchell provided probably the best summary of how to decide which policy to accept. He summarized the political economy model as follows:

> Underlying the above listed questions is the fundamental conception of politics as being essentially an exchange phenomenon, not totally different from economic exchange. In this view of politics, the economists are inclined to emphasize rational choice on the part of individuals and organizations as they engage in various types of exchange among themselves and with political parties and governments in pursuit of their subjective self interest.... Governments want support, compliance, and resources, while the individual citizens want to improve their shares of the benefits and/or reduce costs.[24]

Mitchell's elaboration of the political economy model of policy choice implied that choice is based on a "balance shed," by which the citizen calculates the economic advantage or disadvantage of the policy being considered. It seems logical that the political economy model ascribes to Down's statement that "rational men are not interested in policies per se but in their own utility income."[25]

In essence, the economic explanation used in this research is a synthesis of the two facets of policy research. It is accepted that environmental conditions affect policy preferences. However, rather than defining environment as gross economic development, we define environment as the distributive impact of current school finance policy. According to systems theory, the output of current school finance policy feeds back into the environment, creating demands from individuals and groups. Current school finance policy has created differences in taxation burden between school districts. In turn, these differences generate political demands for shifting to another means of funding public education. Conceivably, these demands and policy preferences are based on a cost/benefit analysis of the proposed policy.

Fry and Winters and Booms and Haldoson used the distributive impact of state policy as their dependent variable. We suggest here

that the distributive impact of current policy can also be used as a measure of the economic environment. The dependent variable becomes the percentage of people favoring the adoption of a change in public policy.

Thus, we hypothesize that Proposal C will be supported in school districts that would receive substantial "property tax relief" with the passage of the proposal. Three variables of economic benefit ought to be related to the vote. First, some districts tax themselves at a much higher rate than other districts. However, the tax rate, in itself, does not adequately reflect financial effort since districts vary as to tax base. Consequently, a better measure of tax effort is to divide the tax rate for education by the state equalized valuation for each school district. This is the first economic variable. The second variable measures the tax burden on homeowners in the district. Districts vary greatly according to the percentage of property tax revenues raised from business property, thereby putting less strain on residential property owners. The variable used to measure this tax effort is computed by dividing the total number of dollars raised from residentail property in the district by the number of homeowners. A final economic variable is tax effort in comparison to total income. People paying a smaller percentage of their income in property taxes would be less likely to support a change in the method of financing education than individuals paying a larger percentage of their income in property taxes. This variable was measured by dividing the money raised from residential property taxes by the total family income in the district.

These three variables provide a good indication of the distributive impact of current policy and whether or not economic benefit was correlated with the vote on Proposal C.

Social Distance Explanation

A second approach to public choice and public policy is to study the relationship between policy preferences and the social environment. One of the key questions to answer when discussing the policy preferences of different electorates is whether individual or household characteristics are sufficient for the prediction of behavior, or whether it is also essential to study the social environment as well. Bell, in reviewing the work on this question, concluded that there was "convincing evidence that the social character of local areas within a city as defined by economic, family, and ethnic characteristics is an important factor in predicting individual attitudes and behavior, subcultural patterns and social organization."[26] The characteristics of the social area are seen to shape both attitudes and social interaction. These attitudes and interactions are reflected in the public's support of or opposition to a change of policy.

Passage of Proposal C would have shifted the primary burden of financing public schools from the local school district to the state. In effect, it would have financially integrated the public school system in Michigan. Many opponents to Proposal C argued that its passage would have meant the loss of local control of public education. If this argument had an impact, the vote on Proposal C might best be explained as a vote against social and economic integration.

Social scientists have identified socio-economic differences within metropolitan areas as important determinants of public policy. The pioneer work done in identifying socio-economic differences was Shevky and Bell's The Social Areas of Los Angeles.[27] The authors identified three measures useful for clarifying social areas within a metropolitan region: social rank, urbanization, and segregation. Social rank is an index made up of education and occupation. Urbanization is an index measuring life style or family status characteristics. It consists of the proportion of women in the labor force, fertility ratio, and the percentage of single family dwellings. Segregation is the proportion of minority ethnic groups in the census tract. Although developed primarily for methodological purposes, Shevky and Bell suggested their measures of urban differentiation could be related to policy preferences.

The early uses of Shevky and Bell's social measures correlated policy preferences with the three indices within a single metropolitan community. Greer and Kaufman used the three indices to explain the vote for Stevenson in the 1952 Presidential election and support for a metropolitan sewage district. As their universe they used 216 census tracts in the St. Louis metropolitan area. Generally, they concluded that "the population types as described by the Shevky-Bell typology produce significant differentiation in voting behavior."[28]

One conclusion is of particular interest for this research. Greer and Kaufman discovered that the percentage of people supporting a metropolitan sewage district was very low in familistic areas (low

on the urbanization index). This was in direct conflict with the voters' economic self-interest.

> Were one to assume a strictly rational model of voting, in which the material interests of the voters would be clearly calculated and made manifest in choice patterns, the familistic neighborhoods of low urbanization should have voted for the district.[29]

The explanation was that familistic areas were interested in maintaining local control over sewage disposal and the corresponding taxation policy. The familistic census tracts tended to be located in the suburban fringe surrounding the city of St. Louis. Consequently, Greer and Kaufman concluded that the vote on the sewage district was interpreted as an integrative decision in which the suburban areas, with high familistic scores, wanted to maintain their individual role in sewage control.

Local control was also identified as a major influence on policy outputs in the Philadelphia metropolitan area.[30] Dye, Herman, Williams, and Liebman used urban differentiation to explain policy differences among governmental units. They combined the social rank index of Shevky and Bell with measures of the size, age of the population, wealth, religion, race, property value, property use, and political party preference. Unfortunately, they did not empirically demonstrate that these measures sufficiently differentiated urban areas.

The major conclusion reached by Dye et al. was that urban differentiation and the desire to maintain differences shaped both the politics and the policies of governments in the metropolitan area. Dye, et. al. concluded that suburban school districts and municipalities were engaged in the politics of protecting and preserving

suburban values. "There is no doubt that local control does have meaning for suburban municipalities."[31]

Dye foresaw future conflict between efforts to integrate public services and the desire to maintain local control. He hypothesized that when suburban areas perceive a policy to be a threat to "local control," there will be little support for the policy, regardless of other consequences.

The identification of local control as a major factor in policy choices in metropolitan areas leads to the hypothesis that issues viewed as integrative in nature will be opposed by suburban units of government. Students of international politics have suggested that viable political integration is a function of cultural or social distance. As Karl Deutsch pointed out, culturally similar societies are more likely to share enough values and to enjoy sufficient facility of communication to provide the necessary policy consensus for political integration.[32] Dissimilar societies are less likely to achieve the consensus necessary for such integration. The related hypothesis in this research is that social distance, as measured by differences in social rank, urbanization, and segregation is related to the vote on Proposal C.

A number of studies have used the concept of social or "demographic" distance as the major independent variable to explain policy preferences.[33] Dye et al. hypothesized that cooperation between different political units was an effect of social and economic distance.[34] The authors measured cooperation as the existence of an agreement

between municipalities or school districts in the Philadelphia, Pennsylvania, area jointly to finance a service facility. Sewers, schools, and police radio networks were the only policy areas in which a substantial number of municipalities had a joint agreement. Distance was computed as the difference between contiguous units on measures of social rank (as measured by the procedures of a Shevky and Bell), market value of property per capita, and party identification. Using this method, 534 pairs of contiguous municipalities or districts were subdivided according to whether or not they had a joint agreement. The cooperative and noncooperative pairs were then measured on social and economic distance.

Dye et al. found that cooperative agreements between school districts were more common among districts with similar social rank. When they controlled for urbanization, they found a rural district was more likely to have an agreement with another rural district than with an adjacent urban district. This was explained by the "lesser social distance between rural districts," than between rural and urban districts.[35] Differences in social rank were also related to cooperative agreements for sewage disposal and radio networks.

Along the same line of research, Dye found that differences in education policy between central cities and their suburbs were related to differences in social status and life style.[36] Education policy was defined as total educational expenditures in the school district and the municipal and school tax rate. Life style and social status were composed of variables similar to those included in Shevky and Bell's

indices. Life style consisted of a fertility ratio, percentage of women in the labor force, percentage of single family dwellings, and percentage of 14-17 year olds in school. Social status was composed of median years of education for adults, percentage of population having graduated from high school, percentage in white collar jobs, and income. Dye did not combine these variables to make two indices. Instead, he subtracted the value for each variable for the central city from the average value for each variable for the suburban school districts. His study used five metropolitan areas of Wisconsin. Thus, he was able to determine whether life style and social status scores were higher for the city or the suburbs in five metropolitan areas.

Dye concluded that expenditure levels for education are related to the direction of social distance.

> In larger urban areas, where social and life style differences between city and suburb are more pronounced, public expenditures reflect these differences; but in smaller urbanized areas, where social and life style differences are slight, differences between city and suburb in educational expenditures are slight or tend to run opposite to the expected direction.[37]

Suburbanites tax themselves more for education than for other municipal services. Dye attributed this to the fact that education is the means whereby suburbanites maintain their social status relative to the central city.

Wood supported the same conclusions reached by Dye: Education and suburban life style are closely associated; and maintaining the role of the locality is an important concern for suburbanites. In his study, Wood theorized that suburbia is a result of the ideology of

faith in a community of limited size and a belief in the condition of intimacy.[38] To Wood, suburbia has become the heroic defender of democracy because of its faith in representation and smallness. Central to this faith is the fiscal independence of the suburban municipal government and the local school district.

The independence of both municipal governments and school districts is based on an independent tax base--traditionally, the local property tax. As Wood viewed it, any attack on the property tax will be interpreted by suburbanites as an attack on the suburban life style.[39] If Wood's theories are correct, Proposal C would have been viewed by suburbanites as a threat to their life style and fiscal independence.

Oliver Williams used Shevky and Bell's life style measure as the key for explaining the proliferation of metropolitan governments. In a theoretical essay, he suggested that "those life style values which depend upon location for their realization are the major sources of metropolitan politics."[40] He hypothesized that local political units will resist integrative efforts for the sake of life style services such as education, but will accept integration of system maintenance services such as sewage control, highways, etcetera. Consequently, if Proposal C was interpreted as an integrative mechanism, life style characteristics ought to help explain the vote.

Wirt and Walter also studied policy preferences in both suburban and central cities.[41] They attempted to determine whether or not demographic differences between the central city and suburbs are related to Republican or Democratic voting behavior, Congressional voting behavior of suburban legislators, and voting on public referenda.

Wirt and Walter factor analyzed demographic variables for 407 communities throughout the country. Four factors emerged from the analysis. The first three corresponded to the dimensions found by Shevky and Bell. The four factors were labeled affluence (income, education, and occupation), young families (age, fertility, women in the work force, owner-occupied housing, etc.), ethnicity (percentage foreign born or nonwhite), and recent growth (percentage of single family dwellings). These factors were then correlated with Republican voting, voting by the elected Congressmen, and voting on public referenda.

The most interesting conclusion reached by Wirt and Walter, at least as it relates to the vote on Proposal C, was that differences in social status were more important in affecting voting behavior on public referenda than differences in place of residence (i.e., city or suburb). Suburbs tended to vary across the spectrum on measures of affluence (social status), young families, ethnicity, and recent growth. Policy preferences also varied across the same spectrum. Consequently, rather than just studying the difference between the central city and suburb, it is important to study the differences among suburbs as measured by demographic characteristics and policy preferences.

In contrast to Wirt and Walter, Hawley and Zimmer contended that the place of residence (either suburban or central city) has been a key factor in voter support of school consolidation plans in metropolitan areas. Hawley and Zimmer conducted a public opinion survey of why voters in metropolitan districts opposed or supported school

consolidation. They asked whether there was more variation in opinions about school consolidation between the central city and the suburban communities than there was between groups of people whether they lived in the central city or suburban community. They concluded that "there is much more variation in the views held by place of residence than by type of resident."[42] The preservation of the suburban life style was seen as playing a major role in affecting voter support of school consolidation. While residents of the central city favored consolidation, suburban residents opposed consolidation on grounds that they would lose "local control" of public education.

Students of metropolitan politics have pointed to the importance of urban differentiation in determining both politics and policy preferences. The original indices of urban differentiation developed by Shevky and Bell have been used to identify the differences between suburban and central city policy preferences. A common theme in the literature is that suburban communities will resist integrative policies that are perceived to be a threat to local control. These policies are opposed because of the impact they might have on suburban life style and social status.

The social distance explanation presented here suggests that the vote on Proposal C can be interpreted better in terms of social integration than as a referendum on property tax relief. The vote may have been a decision by the public on whether or not to shift the primary responsibility for funding public education from the local school district to the state. In this view, support of Proposal C would

indicate a desire to alleviate differences among school districts and among communities. Opposition to Proposal C was indicative of the desire to maintain social, economic, and political differences.

Most studies of urban differentiation have used a derivative of Shevky and Bell's three dimensions (social rank, urbanization, and segregation). In Chapter III the research design used in this research is presented. The design uses these three measures to differentiate school districts in seven metropolitan areas of Michigan. Indices of social rank, life style (urbanization), and segregation are computed for each district. The value for each index for the central city school district is subtracted from the value for each index for the suburban school district. This gives a measure of the social distance between the central city and the suburb.

It is hypothesized that the greater the social distance between the suburban districts and the central city district, the less support there will be for Proposal C. Testing this hypothesis will give an indication of the importance of the local control arguments presented during the campaign for Proposal C. If Proposal C was interpreted as an integrative mechanism and a threat to local control, social distance variables should explain the vote on Proposal C better than economic variables.

CHAPTER II--FOOTNOTES

[1]Solomon Fabricant, The Trend of Government Activity in the United States Since 1900 (New York: National Bureau of Economic Research, 1952), Chapter 6.

[2]Glenn Fisher, "Determinants of State and Local Government Expenditures: A Preliminary Analysis," National Tax Journal, XIV (December, 1961), pp. 349-355. Werner Z. Hirsch, Analysis of the Rising Cost of Public Education (Washington: Joint Economic Committee, 1959), and Sherman Shapiro, "Some Socio-Economic Determinants of Expenditures for Education," Comparitive Education Review, VI, (1962), pp. 169-166.

[3]Richard E. Dawson and James A. Robinson, "Inter-Party Competition, Economic Variables and Welfare Policies in the American States," The Journal of Politics, XXV (1963), pp. 265-289.

[4]Richard I. Hofferbert, "The Relation Between Public Policy and Some Structural and Environmental Variables in the American States," American Political Science Review, LX (March, 1966), pp. 73-82.

[5]Thomas R. Dye, Politics, Economics, and the Public: Policy Outcomes in the States (Chicago: Rnad McNally, 1966).

[6]Ibid.

[7]Ibid., p. 293.

[8]See Herbert Jacob and Michael Lipsky, "Outputs, Structure, and Power: An Assessment of Changes in the Study of State and Local Politics," in Hofferbert and Sharkansky, State and Urban Politics (Boston: Little, Brown, and company, 1971), pp. 14-40.

[9]For an excellent review of how policy has been defined in different ways see Lewis A. Froman Jr., "An Analysis of Public Policies in Cities," Journal of Politics, Vol. 29 (1967), pp. 94-108.

[10]Ira Sharkansky and Richard I. Hofferbert, "Dimensions of State Politics, Economics and Public Policy," American Political Science Review, Vol. 63, September, 1969, pp. 880-899.

[11]Brian Fry and Richard F. Winters, "The Politics of Redistribution," American Political Science Review, Vol. 64, June, 1970, pp. 508-522.

[12]Ibid., p. 508.

[13]Ibid., p. 511.

[14]Ibid., p. 521.

[15]John L. Sullivan, " A Note on Redistributive Politics," unpublished critique of Fry and Winter's "The Politics of Redistribution," Iowa State University, 1972.

[16]Bernard H. Booms and James R. Halldorson, "The Politics of Redistribution: A Reformulation," American Political Science Review, Vol. 67, No. 3, September, 1973, pp. 924-933.

[17]Thomas R. Dye, Understanding Public Policy (Englewood Cliffs: Prentice Hall, Inc., 1972), p. 232.

[18]Thomas R. Dye, "A Model for the Analysis of Policy Outcomes," in Ira Sharkansky (ed.), Policy Analysis in Political Science (Chicago: Markham Publishing, 1970), p. 23.

[19]Jacob and Lipsky, op. cit., p. 19.

[20]The distribution of resources as the "heart" of politics has been the focal point of the new "political economy" or rational calculus approach to politics. This approach includes James M. Buchanan and Gordon Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy (Ann Arbor: University of Michigan Press, 1962), Anthony Downs, An Economic Theory of Democracy (New York: Harper and Row, 1957), R. L. Curry and L. L. Wade, A Theory of Political Exchange (Englewood Cliffs: Prentice-Hall, 1968), Mancur Olson, The Logic of Collective Action (Cambridge: Harvard University Press, 1965), William Riker, The Theory of Political Coalitions (New Haven: Yale University Press, 1962); and many others.

[21]For an excellent review of the literature on equal educational opportunity see: Frederick Mosteller and Daniel P. Moynihan, On Equality of Educational Opportunity (New York: Vintage Books, 1972).

[22]Robert Ross, "Public Choice in American Politics: An Introduction," Introductory Readings in American Government: A Public Choice Perspective (Chicago: Markham Publishing, 1971), pp. 1-11.

[23]L. L. Wade and R. L. Curry, A Logic of Public Policy: Aspects of Political Economy (Belmont, California: Wadsworth Publishing Company, 1970).

[24]William C. Mitchell, "The Shape of Political Theory to Come: From Political Sociology to Political Economy," The American Behavioral Scientist, Vol. 11, No. 2 (Nov-Dec., 1967), pp. 8-21.

[25]Anthony Downs, An Economic Theory of Democracy (New York: Harper and Row, 1957), p. 18.

[26]Wendell Bell, "Social Areas: Typology of Urban Neighborhoods," Marvin Shussman (ed.) in Community Structure and Analysis (New York: Thomas Y. Crowell, 1959), pp. 62-92.

[27]Eshref Shevky and Wendell Bell, Social Area Analysis: Theory, Illustrative Application and Computational Procedures (Westport, Connecticut: Greenwood Press, 1972). This is an update of their work on the Social Areas of Los Angeles (Berkeley: University of California Press, 1949).

[28]Walter Kaufman and Scott Greer, "Voting in a Metropolitan Community: An Application of Social Area Analysis," Social Forces, Vol. 38, March, 1960, pp. 196-224.

[29]Ibid., p. 201.

[30]Oliver Williams, Harold Herman, Charles Liebman, and Thomas Dye, Suburban Differences and Metropolitan Policies (Philadelphia: University of Pennsylvania Press, 1965).

[31]Ibid., p. 297.

[32]Karl Deutsch et. al., Political Community in the North Atlantic Area (Princeton: Princeton University Press, 1957).

[33]Demographic Distance has been defined most clearly by Brett Hawkins as indicators of life style differences between aggregates of people living in proximity and is trated as indicative of separatist, or life-style protective values. See Brett Hawkins, "Life Style, Demographic Distance and Voter Support of City-County Consolidation," Social Science Quarterly, Vol. 58, No. 2, Sept., 1972, pp. 325-337.

[34]Thomas R. Dye, et. al., "Differentiation and Cooperation in a Metropolitan Area," Midwest Journal of Political Science, Vol. 7, No. 2, May, 1963, pp. 145-155.

[35]Ibid., p. 146.

[36]Thomas R. Dye, "City Suburban Social Distance and Public Policy," in Thomas R. Dye and Brett Hawkins (eds.), Politics in the Metropolis (Columbus: Charles Merrill Books, Inc., 1967), pp. 154-164.

[37]Ibid., p. 161.

[38]Robert C. Wood, Suburbia: Its People and Their Politics (Cambridge: Riverside Press, 1958).

[39]Ibid.

[40]Oliver Williams, "Life Style Values and Political Decentralization in Metropolitan Areas," Social Science Quarterly, Vol. 48, Dec. 1967, p. 303.

[41]Benjamin Walter and Frederick Wirt, "The Political Consequences of Suburban Variety," Social Science Quarterly, Vol. 58, No. 3, Dec., 1972, pp. 746-767.

[42]Basil G. Zimmer and Amos H. Hawley, Resistance to Reorganization of School Districts and Government in Metropolitan Areas (Providence: Brown University Press, 1966).

CHAPTER III

RESEARCH DESIGN

In Chapter II, two explanations of public choice and public policy were developed. The economic explanation of public choice suggested the hypothesis that the economic benefit of property tax relief would best explain the vote on Proposal C. The social distance explanation suggested that the vote would be associated with differences among social areas as measured by social rank, segregation, and life style. The purpose of this study is to compare the two explanations of public choice and public policy.

Hypotheses

The hypotheses from the economic explanation state that if property tax relief had been the most important criterion determining voter support of Proposal C, the communities with a heavy tax burden would have been most interested in tax relief and therefore most likely to support Proposal C. Conversely, if property tax relief had not been an important criterion, tax burden should not be related to the vote.

Three variables measure the tax burden of a school district. The first variable is a ratio of the property tax rate to the value of property in the school district. This variable measures the tax effort exerted by the district. If districts voted on the need for tax relief, communities with greater tax effort should have supported

Proposal C more than communities with low tax effort. The second variable in the economic explanation is tax burden on income. Support for Proposal C should have been greater in districts where families pay a larger share of their income for property taxes than in districts where families spend a smaller share of their income for property taxes. The third independent variable is tax burden on homeowners. Many of the revenues raised for public education come from business property. Consequently, the burden of the property tax on homeowners varies from one district to another. Therefore, support for Proposal C should have been greater in districts where taxes on residential property pay most of the school costs than in districts where taxes on business property pay most of the costs.

The social distance explanation theorizes that differences in social areas, or in this case school districts, can best explain the vote on Proposal C. The difference or "distance" between districts is measured by differences in social rank, segregation, and life style. The original analysis of social areas by Shevky and Bell identified these three measures as the key indices of urban differentiation.[1] Later research found that these variables were also related to differences in policy preferences.

The original social area analysis by Bell and Shevky has been criticized on two accounts. One of the criticisms is that the indices used to represent the three dimensions were not empirically justified.[2] Social rank, life style, and segregation were composities of different measures from the Federal Census. Social rank consisted of the average

between an education and occupation ratio. Life style, or familism, was an average of a fertility ratio, the percentage of women in the labor force, and the percentage of homeowners. Segregation was the percentage of nonwhite and foreign-born residents in each census tract. The second criticism is that the number of dimensions used to differentiate urban areas was not justified empirically.[3] The question is why three rather than four, five, or more dimensions were used.

Bell[4] and later Van Arsdol[5] used factor analysis to determine whether the component variables were grouped properly into the three dimensions. Bell's analysis confirmed the original dimensions of segregation, life style, and social rank. Van Arsdol found that in six of the ten cities he studied, the factor structures were in accordance with the Shevky and Bell conceptualization. In the other four cities, the factor structures deviated from the three dimensions, with the component variables not falling into the postulated factors.

The Van Arsdol analysis suggested that perhaps more than three dimensions are needed to differentiate urban areas. Rees reviewed most of the recent studies using cluster and factor analysis to construct indices of urban differentiation.[6] He found seven dimensions in the studies reviewed. In the order of their strength, as measured by how often they appeared in the research as significant factors, the seven were socio-economic status, family status, ethnicity or minority group status, change and mobility (population change and movement), scale variables (population and population density), health and social problems, and others. Table 3.1 shows what variables are typically associated with the various factors. The three most often cited factors are

TABLE 3.1.--Classification of Variables Employed in Factorial Ecology.

I. Socioeconomic Status Variables
   1. Population Variables
      1.1. Education
      1.2. Occupation
      1.3. Income
   2. Housing Variables
      2.1. Quality
      2.2. Value of Rent
   3. Household Material Possessions
   4. Mixed Population and Housing Variables (for instance, the degree of overcrowding)

II. Family Status or Life Cycle Stage Variables
   1. Population Variables
      1.1. Age
      1.2. Size
      1.3. Fertility
      1.4. Marital Status
   2. Housing Variables
      2.1. Type
      2.2. Age

III. Ethnicity or Minority Group Status
   1. Racial Group
   2. Nativity Group
   3. Linguistic Group
   4. Regional Group (Migrants)

IV. Change and Mobility Variables
   1. Mobility
      1.1. Movement Rates
      1.2. Movement classified by origin or destination
   2. Population change

V. Scale Variables
   1. Population
   2. Area
   3. Population Density
   4. Locational Measures (such as distance from inner city)

VI. Health, Welfare, and Social Problems
   1. Mental Health
   2. Physical Health
   3. Welfare
   4. Crime and Delinquency
   5. School Population Statistics

VII. Others
   (A number of other variables such as commuting statistics or land use measures have been included in factorial ecologies.)

Source: Philip Rees, "Problems of Classifying Sub-areas Within Cities," in Brian Berry, City Classification, p. 285.

consistent with the original dimensions identified by Shevky and Bell.

To determine whether or not the Shevky and Bell indices were compatible with the analysis of social areas as determined by school district boundaries, 14 variables for 183 school districts were factor analyzed. The factor analysis is presented in Table 3.2. Five factors account for 80.7 percent of the variance and have an eigenvalue above 1.0. They can be labeled social status, family status or life style, urbanization index, stability and segregation. The first three are consistent with Shevky and Bell's indices of urban differentiation, thereby allowing the use of their indices to measure differences in school districts.

Methodology

A multiple regression design is used to compare the two models of public choice and public policy. Multiple partial correlations are used to control for the interaction between models. Multiple partial correlations allow the researcher to determine the relative success of each model in explaining the vote on Proposal C.

The use of multiple regression analysis to compare two models has caused some debate in political science. Fry and Winters used multiple regression analysis to compare an economic model of policy analysis with a political model.[7] Sullivan criticized Fry and Winter's approach on grounds that they selected their variables in favor of the political model.[8] Fry and Winters used five independent variables for each model. However, they selected the five most powerful political

TABLE 3.2.--Varimax Rotated Factor Matrix after Rotation with Kaiser Normalization for 14 Variables in 183 Districts.

Variable	Factor One	Factor Two	Factor Three	Factor Four	Factor Five	Comm.
Percent 18	.197	-.772*	-.106	.277	.090	.733
Percent 65	.196	-.788*	192	.285	.175	.810
Percent Families with children	-.010	-.843*	-.055	.046	-.030	.718
Percent staying in location 5 Years	.223	-.059	-.018	.112	.696*	.545
Average Rent	-.873*	.145	-.030	-.121	-.067	.804
Average Income	-.953*	.021	-.029	.195	.005	.947
Urban Index	.396	.029	-.466	.478*	-.189	.641
People/House	.073	-.854*	-.212	.280	.113	.872
Percent Black	.186	-.180	.698*	-.101	-.068	.570
Fertility Ratio	.364	.431*	.182	.215	.032	.369
Percent Female Laborers	.049	-.637*	-.079	-.170	-.163	.470
Ed. Ratio	-.708*	-.123	.335	.195	.244	.727
Occupation Ratio	-.748*	.301	-.037	-.022	.129	.669
Percent Home Owners	-.111	-.520*	-.231	.067	.445	.530

*Indicates what factor the variable is closest to.

Factor	Eigenvalue	Percent of Variance	Cumulative Variance
1	3.96	28.3	28.3%
2	3.62	25.9	54.2%
3	1.57	11.2	65.4%
4	1.12	8.0	73.4%
5	1.02	7.3	80.7%

Factor Names

Factor:
1. Social Status
2. Life Style
3. Segregation
4. Urbanization Index
5. Stability

variables from a set of nine variables, while selecting five out of six economic variables. This procedure weighted the research in favor of the political variables. Sullivan claimed that in order to use multiple regression analysis to compare different models, identical numbers of independent variables must be used. Furthermore, these variables must be derived from the theory or from empirical analysis so that the power of each variable in each model is similar.

Rao and Miller stated two conditions for the use of this type of research design.[9] First, the dependent variable must be the same for each model. Second, each regression equation, or model, must have an equal number of independent variables. This stipulation is similar to Sullivan's criticism of Fry and Winters approach. A third condition made by Sullivan, is that the variables in each model be derived from theory rather than by selecting the strongest variables from a larger sample. The dependent variable in this study is the percentage of voters favoring adoption of Proposal C in 183 school districts; it is the same for each model. Each model contains three independent variables derived from theory. Therefore, the stipulations made by Sullivan and by Rao and Miller have been met.

Unit of Analysis

The main unit of analysis is the school district within the seven Standard Metropolitan Statistical Areas of Michigan. School districts are used because property tax rates vary more among school districts than among other governmental units or individuals, and data were available and were relatively inexpensive.

A second unit of analysis is the census tract within the central city school districts. Central city school districts have a wide variety of subcommunities within their boundaries. It is important to determine if the social distance model is as applicable within school districts as it is among districts. Therefore, a multiple regression equation is computed for each central city school district using differences among census tracts to measure social distance. The economic model could not be used because of the uniformity of tax rates and the lack of information on revenues raised in each tract.

The choice of school districts and census tracts as the units of analysis implies the use of aggregate rather than survey data. Aggregate data are used because the lack of financial resources prohibited an extensive survey of public opinion.

The difficulty in using aggregate data, as W. S. Robinson showed in the early fifties,[10] "is that one cannot necessarily infer the correlations between variables, taking people as the unit of analysis, on the basis of correlations between the same variables based on groups of people as units."[11] Since the Robinson article, further logical and statistical studies have attempted either to prove or to mitigate the danger of the "ecological fallacy."[12]

In a rejoinder to Robinson's article, Menzel argued that not all aggregate data are used to infer individual characteristics or relationships. Menzel believed that territorial units are viable units of analysis in their own right.[13] Ranney expanded Menzel's argument by defending the use of aggregate data to explain the behavior of different electorates.

> Accordingly, if aggregate data studies carefully and thoroughly identify and describe recurring patterns of preferences and turnout characteristics of particular electorates over time, and by ecological correlations, relate those patterns to other traits of the electorate and their environments, they can be valuable allies to the sample surveys in the investigation of electoral behavior.[14]

The debate over the "ecological fallacy" centers on the level of analysis conducted and the inferences made across different levels. Although inferences are made about individual behavior, this research design is primarily concerned with the territorial unit as the level of analysis.

Scheuch[15] and Alker[16] displayed other types of ecological fallacies in addition to those found by Robinson. They found that aggregating individual characteristics and opinions to describe group or territory behavior often leads to the "individualistic fallacy." Specifically, one cannot infer correlations between variables, taking groups of people as the unit of analysis, on the basis of correlations between the same variables based on individuals as the unit of analysis. Survey research, then, is suspect of misleading the researcher when he is attempting to describe the behavior of groups or territorial units.

Ecological correlations may tell something about territorial units that "can be used as contextual properties explaining the variations in the correlated variables."[17] They may also provide clues to the behavior and motivation of individuals within the unit. As Allardt pointed out:

> One may contend that the analysis of ecological data and correlations may indeed for some researchers in some circumstances be a powerful tool in making statements about individual behavior. It may be that ecological data facilitate fruitful causal interpretation better than corresponding individual data, if such are available.[18]

The use of aggregate data in this research is defended on grounds that social areas have an impact on voting behavior and that the use of "social distance" between areas requires either ecological data or aggregating survey data. Both methods result in problems of inferring behavior. To answer the question of why differences in social areas affected the vote on Proposal C, inferences are made about the motivation of individuals. Naturally, care must be taken in inferring the psychological reasons for a person supporting or opposing a constitutional amendment. However, as Allardt said, it may be that such inferences will "facilitate causal interpretation better than corresponding individual data."[19]

One method of determining the validity of using aggregate data is to compare the correlations between variables, based on aggregate data, with the relationship between the same variables based on survey data. If the relationships are in the same direction, the researcher can be more confident in using ecological correlations to infer individual behavior.

A survey of attitudes of Detroit-area voters toward Proposal C showed the same direction of relationships between variables as those indicated by the ecological correlations. The survey, done by Market Opinion Research for the Michigan Education Association, was conducted two months prior to the election. The correlations are between the same variables as those used in the survey and the vote on Proposal C (percentage yes). Consequently, there is a two-month time difference that may have had some effect on the findings. The

unit of analysis for the ecological correlations is the school district within the metropolitan Detroit area.

Market Opinion Research Summary	Ecological Correlation
"Blacks support C in better proportion than whites (63 percent blacks, 48 percent white)."	+.43 [Percent Black with percent yes vote on C]
"Support drops as income rises (61 percent lowest income group; 49 percent highest)."	-.49 [Average family income with yes vote on C]
"Best support among those 60 and over (61 percent)."	+.28 [Percent over the age of 65 with percent yes vote on C]
"City voters give better support (61 percent) than suburban voters (46 percent)."	-.22 [Urban index (high is rural) with percent yes vote on C]
"Support rises with educational level."	+.02 [Median educational level with percent yes vote on C]
N = 450 individuals	N = 84 school districts Significance Level = .217 at .05 level.

Although only five variables were comparable, all five are in agreement about the relationship between variables. The link between education level and support of Proposal C is not significant in the ecological correlation. However, the percentage of support for Proposal C in the higher educational levels was not given in the survey report. Consequently, the strength of the relationship between voter support and education is unknown and open to question. The comparison of survey data with ecological correlations gives confidence to the researcher in using aggregate or ecological data.

The Universe

The social distance and economic models of public choice are analyzed in the seven Standard Metropolitan Statistical Areas (SMSA) of Michigan as defined by the 1970 Federal Census. The metropolitan areas are Detroit, Grand Rapids, Lansing, Jackson, Flint, Muskegon, and Saginaw. The school districts in these seven metropolitan areas constitute the universe under study. They were selected because of two considerations. The first was that to operationalize the concept of social distance, some school district had to be used as the reference point.[20] In the urban area this decision was easy to make. The central city school district was the obvious nominee. Many people have moved from the central city to suburban areas because of the different school districts involved. Suburbia has become symbolic of a certain "life style" in which the education system plays an integral role of maintaining social status and independence.[21] If suburban residents were concerned with maintaining social distance, part of that concern would most likely be related to their impression of the condition of the central city district. Thus, the central city district is used as the reference point in the urban areas. In rural areas the concept of social distance is less meaningful. With whom do residents in rural school districts compare their district or life style? It is much less likely that rural residents are concerned with maintaining social distance, since the creation of rural districts is more related to historical precedent than urban differentiation.

The second reason for studying the seven metropolitan areas is that Proposal C was defeated primarily because of the vote in the

11 counties that make up the seven SMSA's. Table 3.3 gives the vote on Proposal C in the seven metropolitan areas (11 counties), compared with the remainder of the state. Analysis of the vote on Proposal C in the metropolitan areas gives an excellent indication of why the proposal was defeated state-wide.

TABLE 3.3.--Vote on Proposal C in Eleven Counties and the Remainder of the State of Michigan.

	11 Counties	State minus 11 Counties	Entire State
Yes Vote	794,477	530,225	1,324,702
No Vote	1,251,608	563,518	1,815,126
Percent Yes	38.3	48.5	42.3

The counties are sufficiently heterogeneous to include a variety of school districts ranging from urban to suburban to rural. Table 3.4 lists the metropolitan area, counties, and types of school districts in each county. School districts are classified according to the Michigan Department of Education's classification of school districts into metropolitan core, city, suburban, small town, and rural.[22] School district boundaries are not coterminous with county boundaries. Consequently, a method of determining whether or not a school district should be considered part of the county had to be determined. The decision rule was that if a school district had at least three-fourths of its land area within the county it was considered to be

TABLE 3.4.--School District Classification for 183 Districts in 11 Counties

County	Core Cities	Type of District		Urban Fringe	Rural	Total
		Cities	Towns			
Lansing Area						
Ingham	1	0	1	4	5	11
Clinton	0	0	1	4	3	6
Eaton	0	0	2	2	3	7
						24
Detroit Area						
Wayne	3	1	4	28	0	36
Oakland	1	1	6	15	4	27
Macomb	0	1	3	16	1	21
						84
Saginaw	1	0	1	5	6	13
Muskegon	2	0	2	5	3	12
Flint (Genessee)	1	0	2	12	5	20
Jackson	1	0	0	3	8	12
Grand Rapids	1	0	3	11	3	18
Total	11	3	25	103	41	183

Source: Michigan Department of Education, Local District Report: Explanatory Materials, 1970.

Metropolitan Core: One or more adjacent cities with a population of 50,000 or more which serve as the economic focal point of their environs.

City: Community of 10,000 to 50,000 that serves as the economic focal point of its environs.

Town: Community of 2,500 to 10,000 that serves as the economic focal point of its environs.

Urban Fringe: A Community of any population size that has as its economic focal point a metropolitan core or a city.

Rural Community: A community less than 2,500.

of the universe under study. Using this rule, the universe consists of 183 school districts.

A second part of this research is an analysis of the effectiveness of the social distance model in explaining the vote on Proposal C in the seven central city school districts. In this part of the research the universe under study consists of all the census tracts or subcommunities within the central city school district. A composite index of segregation, life style, and social rank was used to identify the census tract or subcommunity with the most ghetto-like characteristics: low social rank, high degree of segregation, and an urban life style. The identified census tract or subcommunity was used as a reference point to determine social distance within the city. Census tracts were used because of their availability at low cost and to make analysis easier. In Detroit, the large number of census tracts (800) made it economically impossible to use them as the unit of analysis. Instead, 49 subcommunities, as identified by the Detroit Mayor's Committee for Community Renewal were used. The subcommunities were composites of census tracts with similar geographic, social, and economic characteristics; these census tracts had to be geographically contiguous.[23]

Sources of Data

The use of school districts, census tracts, and subcommunities made it possible to use a variety of data. The Michigan Department of Education provided measures of taxation rates, state equalized valuation of property, and the number of students in each district. The Federal Census for 1970 provided the socio-economic data on educational

levels, percentage of craftsmen or laborers, percentage of women in the labor force, percentage of people owning or buying their own home, number of children per 1,000 women of child-bearing age, and the percentage of Blacks. The census data were placed in school districts by first determining if the census tract was geographically in the district and then apportioning the data if the census tract was in more than one school district. The census data were apportioned according to the percentage of land area within the tract residing in the school district. For example, if one-half of the tract was in one district and the other half was in another district, the census data were divided in half and distributed equally to each district. The overlap was estimated as either one-fourth, one-half or three-fourths. Precise proportions were not computed because of the difficulty in measuring land area. This estimation procedure undoubtedly resulted in some error in the final measures. Consequently, some explanatory power may have been lost.

A third source of data was a survey mailed to local and intermediate school district superintendents.[24] The survey asked the superintendents to estimate the percentage of property tax revenue raised from local business property. Subtracting the estimates from 100 gave the percentage of property tax revenue raised from residential property. When the local superintendent's estimate was not available, the intermediate district superintendent's estimate was used. Through this procedure, a return of 100 percent was accomplished. To test the validity of the estimates made by the superintendents, a correlation

(Pearson's) was computed between the local superintendent's estimate and the intermediate district superintendent's estimate. The correlation was +.79, which is significant at the .001 level, indicating a high degree of confidence in the validity of the estimates.

The final source of data was the Detroit Mayor's Committee for Community Renewal. The committee provided census data for 49 subcommunities in Detroit. Their report included 20 demographic variables that were drawn from the 1970 Federal Census and the 1965 Michigan Census.

Dependent Variable

The dependent variable for both models is the percentage of votes in favor of Proposal C in the school districts, census tracts, and subcommunities. The election results were obtained from the county clerks' offices in the 11 counties. Precinct maps were obtained from the Republican State Headquarters and city clerk's offices.

Placing the vote totals of precincts into school districts, census tracts, and subcommunities required the same proportioning procedure as was used in placing census data into the different units. Again, this procedure undoubtedly clouded the results to some degree.

Independent Variables

There are six independent variables, three for each explanation. The three variables for the economic model are tax effort, tax burden on homeowners, and tax burden on income. The three independent variables for the social distance model are social rank differences, life style differences, and segregation differences.

The tax effort of the school district is computed by dividing the dollars raised from residential property by the total equalized valuation of property in the district. The dollar amounts raised from residential property were determined by multiplying the total yield of local property taxes levied for school operations by the proportion of the yield raised from residential property as estimated by the local or intermediate school district superintendent. The equalized valuation of property is 50 percent of the total value of property within the school district, equalized throughout the state. In effect, tax effort is the total tax burden a community is willing to accept in order to pay for its schools.

Tax burden on homeowners is computed by dividing the number of dollars raised from residential property in the district by the number of homeowners. This provides a measure of the dollars paid for school taxes per home.

Tax burden on income was computed by dividing the total family income in the district (income per family multiplied by the number of families in the district) by the number of dollars raised from residential property. This measures the proportion of family income paid in school taxes for the district.

The three independent variables for the social distance model are the difference between social areas on measures of social rank, life style, and segregation. Segregation was measured by subtracting the percentage of black residents in the inner-city school district or census tract from the percentage of black residents in the suburban

districts. In most cases this resulted in a negative value. The difference was then assigned as the segregation value of the suburban district. The central city district was given the value of zero. This provided a measure of the racial distance or separateness between two districts.

The life style variable was measured by averaging the standardized values of the number of children below the age of five per 1,000 women between the ages of 15 and 44, the number of women in the labor force per 1,000 women between the ages of 15 and 65, and the percentage owning or buying their own home multiplied by 1,000. The values were standardized within metropolitan areas as well as between areas. The formula used for standardizing the ratios was $[(X-\overline{X})/S.D.]*10 + 50$ where X is the value of the ration being standardized, $\overline{X}$ is the mean score for the ratio, S.D. is the standard deviation of the ratio, and * indicates multiplication. This formula standardizes the ratio with 50 being the mean of the standardized scores. The life style index was computed by adding the three standardized ratios and dividing the sum by three. The life style index of the central city school district or census tract was subtracted from the suburban district's core to measure the distance between life styles in the two areas.

Social rank is the average of the standardized scores of an occupation and education ratio. The education ratio is the number of people with less than eight years of education per 1,000 adults. The occupation ratio is the number of craftsmen or laborers per 1,000 employed people. Both ratios were standardized within the metropolitan

area. The social rank index was computed by adding the standard scores for each ratio and dividing by two. The index score of the central city district or census tract was subtracted from the suburban or outer census tract to give a measure of the difference in social rank between areas.

A second part of the analysis consisted of determining whether or not the social distance explanation was applicable within the central city school district as it was within the metropolitan area. Social rank, segregation, and life style indices were computed for each census tract. The ratios making up the different indices were standardized within the city according to the formula given above. The indices of social rank, segregation, and life style were then subtracted from the index scores of the census tract with the highest average score. The census tract with the highest average score was determined by standardizing the percentage of black residents within the city, then adding the three indices and dividing by three. In this manner the census tract with the highest score--high percentage of Blacks, low social rank, and an urban life style--was used as the reference point from which to compute social distance.

Detroit proved to be a special problem. The data that were available for the 49 subcommunities were not identical to the census data used for the census tracts in the other six communities. Therefore, a factor analysis of the 20 demographic variables available by subcommunity was conducted. Table 3.5 presents the analysis. Three factors, life style, segregation, and social rank, account for 74.2

TABLE 3.5.--Varimax Rotated Factor Matrix After Rotation with Kaiser Normalization for 14 Demographic Vairables for 49 Sub-communities of Detroit.

Variable	Factor One	Factor Two	Factor Three	Comm.
Percent Black	-.412	.641	-.201	.620
Percent 65 or older	-.025	-.891*	.138	.814
Percent 17 or younger	-.123	.733*	-.181	.586
Average Income	.644	.030	.702*	.907
Percent Home Owners	.888*	.015	.379	.934
Average Rent	-.461*	.030	.063	.217
Percent Single Family Dwellings	.919*	-.020	.342	.961
Female Heads of the Household	-.644*	-.029	-.390	.568
Education	.076	.076	.792*	.638
High Socio-Economic Status	.215	-.262	.794*	.745
Percent White Collar	-.064	-.457	.784*	.828
Percent Families with Children	.814*	.331	.092	.775
People per House	.482	.660*	.033	.670
Length of Residence	.460*	.107	-.051	.226

*Indicates what factor the variable is closest to.

Factor	Eigenvalue	Percent of Variance	Cumulative Variance
1	5.09	36.4	36.4%
2	3.71	26.5	62.8%
3	1.58	11.3	74.2%

Factor Names

Factor: 1. Life Style
2. Segregation
3. Social Rank

percent of the variance and have an eigenvalue of 1.0. They are very similar to the three dimensions used by Shevky and Bell. Substitute variables were selected from the three factors to make up for the differences in the two sets of data. The substitute variables were chosen on whether or not they measured the same characteristic as the original variable and if it was in the same factor. Median years of education were substituted for the education ratio, percentage of people employed in white-collar occupations was substituted for the occupation ratio, the percentage of the population below the age of 18 was substituted for the fertility ratio, and the percentage of women in the labor force was dropped from the index. These changes will give a picture of social rank, segregation, and life style for the Detroit subcommunities that is similar to that for the other cities.

Summary

This research design proposes to compare two models of public choice and public policy. The social distance and economic models will be compared by computing multiple regression equations for each model in each of the seven metropolitan areas in Michigan. The multiple partial correlations between the vote on Proposal C and the two models will provide an answer to the question of which model best "explained" the vote. A multiple regression equation will also be computed for the social distance model in each central city school district. This is done so that the strength of the model within a school district can be compared to the strength of the model among school districts.

CHAPTER III--FOOTNOTES

[1]Eshref Shevky and Wendell Bell, Social Area Analysis: Theory Illustrative Application and Computational Procedures (Westport, Connecticut: Greenwood Press, 1972).

[2]See Otis D. Duncan, "Review of Social Area Analysis by Shevky and Bell," American Journal of Sociology, Vol. 61, 1955, pp. 84-95.

[3]See Phillip Rees, "Problems of Classifying Sub-areas within Cities," in Brian Berry (ed.), City Classification Handbook of Methods and Applications (New York: Wiley Inc., 1972), pp. 265-330.

[4]Wendell Bell, "Economic, Family and Ethnic Status: An Empirical Test," American Sociological Review, Vol. 20, 1955, pp. 45-52.

[5]Maurice Van Arsdol, Santo F. Camilleri, and Calvin F. Schmid, "The Generality of Urban Social Area Indices," American Sociological Review, Vol. 23, 1958, pp. 277-284.

[6]Phillip Rees, op. cit., p. 285.

[7]Brian R. Fry and Richard F. Winters, "The Politics of Redistribution," American Political Science Review, Vol. 64, June 1970, pp. 508-522.

[8]John L. Sullivan, "A Note on Redistributive Politics," unpublished paper (Iowa State University, Ames, Iowa), 1972.

[9]Tohluri Rao and Roger LeRoy Miller, Applied Econometrics (Belmont, California: Wadsworth Publishing, 1971), p. 18.

[10]W. S. Robinson, "Ecological Correlations and the Behavior of Individuals," American Sociological Review, Vol. 15, June, 1950, pp. 351-357.

[11]W. Phillips Shively, "Ecological Inference: The Use of Aggregate Data to Study Individuals," American Political Science Review, Vol. 62, December, 1969, pp. 1183-1196.

[12]For an excellent collection of essays on the topic see: Mattei Dogan and Stein Rokkan, Quantitative Ecological Analysis in the Social Sciences (Cambridge: M.I.T. Press, 1969).

[13]Herbert Menzel, "Comment on Robinson's Ecological Correlations and the Behavior of Individuals," American Sociological Review, Vol. 15 (October, 1950), pp. 674-675.

[14]Austin Ranney, "The Utility and Limitations of Aggregate Data in the Study of Electoral Behavior," in Austin Ranney (ed.), Essays on the Behaviorial Study of Politics (Urbana: Univeristy of Illinois Press, 1962), pp. 91-102.

[15]Erwin K. Scheuch, "Social Context and Indivdual Behavior," in Dogan and Rokkan, op. cit., pp. 69-86.

[16]Hayward R. Alker, Jr., "A Typology of Ecological Fallacies," in Dogan and Rokkan, op. cit., pp. 69-86.

[17]Erik Allardt, "Aggregate Analysis: The Problem of Its Informative Value," in Dogan and Rokkan, op. cit., p. 42.

[18]Ibid., p. 44

[19]Ibid., p. 42.

[20]A second method of operationalizing the concept of social distance would have been to use Dye's method of using all possible pairs of communities. Two problems arise when using this strategy. First, it would have been very difficult to determine the dependent variable and assign a value to each pair of communities. Secondly, the large number of pairs would have made using this method a very cumbersome task.

[21]For a good description of the suburban phenomenon see Robert Wood, Suburbia: Its People and Their Politics (Boston: Houghton Mifflin Co., 1958).

[22]Michigan Department of Education, Local District Report: Explanatory Materials for Assessment Report No. 6, 1971.

[23]Mayor's Committee for Community Renewal, A Profile of Detroit: 1969, City of Detroit, Michigan, 1970.

[24]A copy of the survey is included as Appendix A.

CHAPTER IV

FINANCING PUBLIC EDUCATION IN MICHIGAN

Michigan has not been immune to the financial crisis facing public education throughout the United States. In a survey of school superintendents, Klingele found that 94 percent of the school districts in Michigan experienced financial problems during the 1972-73 school year which required the curtailment of expenses.[1] Fifty-five school districts operated with deficit budgets.[2] One district was forced to reduce the hours of education below the legal limit.[3] In Detroit, the financial situation forced larger class sizes, less extensive extra-curricular programs, fewer teachers, teachers being hired as full-time substitutes, and other budget-reducing tactics. The situation deteriorated to the point where a federal court judge ordered the Detroit Public Schools to maintain their 1971-72 program during the 1972-73 school year. In the spring of 1973 the Michigan Legislature had to enact special legislation to ensure adequate funds for Detroit.

The means by which school districts curtailed expenditures varied. The Klingele study identified the 15 most frequently used methods of limiting expenses. Table 4.1 gives the percentage of school districts that used that particular method of limiting expenditures.

TABLE 4.1.--Percentage of Michigan Public School Systems Indicating Methods Used for Curtailing Expenses.

Method	Percent Using Method
Tightening purchasing and accounting controls	72
Purchasing less equipment, materials, and supplies	59
Enlarging class size	45
Cutting travel expenses (to conferences, etc.)	44
Cutting maintenance	40
Reducing the number of faculty	34
Freezing the development and implementation of new programs	33
Reducing administrative staff	30
Reducing academic programs (P. E., music, kindergarten)	27
Reducing transportation expenses (busing)	23
Not filling positions caused by attrition	23
Cutting athletic programs	12
Halting all new programs	10
Terminating co-curricular activities	10
Freezing salaries	6

Source: William E. Klingele, "Curtailing Expenses in Michigan Public Schools," in Michigan School Board Journal, Vol. XX, April, 1973, p. 23.

N = 165

As can be seen, most school districts in Michigan were directly affected by the financial crisis facing public education in the United States. The crisis in Michigan was precipitated by rising costs, the exhaustion of the property tax, and inequities in school finance.

Rising Costs

The first component of the financial crisis in Michigan is the sharp rise in the cost of education over the last ten years. The state's expenditures for kindergarten through twelfth grade, exclusive of locally raised funds, went from $299 million in 1961-62 to $813 million in 1971-72. During the same period, per pupil expenditures rose from $375.66 to $875.26. Total operating expenses for the entire educational system increased by 166 percent, from $611.7 million to $1,019 million.[4]

During the same decade, the average teacher salary rose from $5,898 to $11,685. This dramatic increase could be partially attributed to the organization of teaches into bargaining units. Of Michigan's 601 school districts, 570 recognize a teacher organization as the bargaining agent for their professional employees. This figure includes virtually all districts of any appreciable size.[5] The recognition of bargaining agents in so many school districts has greatly increased the influence of the two teacher organizations in Michgan: the Michigan Education Association and the Michigan Federation of Teachers.

The rising costs of public education in Michigan are given in Table 4.2 for the time period from 1949-50 to 1970-71. The consumer price index is also given to account for inflation.

TABLE 4.2.--School Revenues by Source for All Public School Districts in Michigan for Selected Years (in Thousands).

Source	1949-50	1954-55	1959-60	1965-66	1970-71	Percent Change
Property Tax	113,569	206,363	347,741	514,363	1,027,042	+ 905
	(35%)	(35%)	(40%)	(45%)	(49%)	+ 14
State Aid	128,444	200,153	236,295	472,389	811,971	+ 632
	(39%)	(34%)	(27%)	(41%)	(38%)	- 1
Federal	5,834	6,903	8,725	18,833	23,861	+ 408
	(2%)	(1%)	(1%)	(1%)	(1%)	- 1
Others	78,821	175,736	282,599	137,626	240,622	+ 305
	(26%)	(30%)	(32%)	(13%)	(12%)	- 14
Total	326,668	589,155	875,360	1,143,212	2,113,496	+ 647
	(100%)	(100%)	(100%)	(100%)	(100%)	
Consumer Price Index	83.0		101.5		127.7	+ 154

Source: Bulletin No. 1011, Michigan Department of Education and the National Educational Finance Project.

Increasing costs, in themselves, are not a threat to the education system. However, when rising costs are combined with a limited tax structure, problems result.

Exhaustion of the Property Tax

The second component of the financial crisis is the "exhaustion of the property tax." This expression can be interpreted in a number of ways. First, it can be seen as the unwillingness of the citizens to support increased taxation. Secondly, it can be interpreted as the effect of constitutional property tax limitations. The Michigan Constitution provides that the total number of mills levied on any property in the state may not exceed 50 mills. Charter cities and townships may, however, write different limitations into their charters. This limitation was partially negated in 1971 by a decision of the Michigan Supreme Court. The court ruled, in Butcher v. Grosse Isle, that there was no limit on millage used for bonded indebtedness as long as it was voted by the people. As of fall, 1972, there was no way of knowing how many districts were close to the constitutional limitation. Finally, property tax exhaustion can be interpreted as reaching a maximum yield in comparison to other tax alternatives.

Property tax revenues, prticularly those used to support education, have risen more rapidly than revenues derived from any other source. Figure 1 compares the rate of increase in property tax yield with other taxes, with 1959 serving as the base year. Much of the recent increase in property taxes is clearly due to the rising cost of education. Figure 2 shows that the educational property tax has

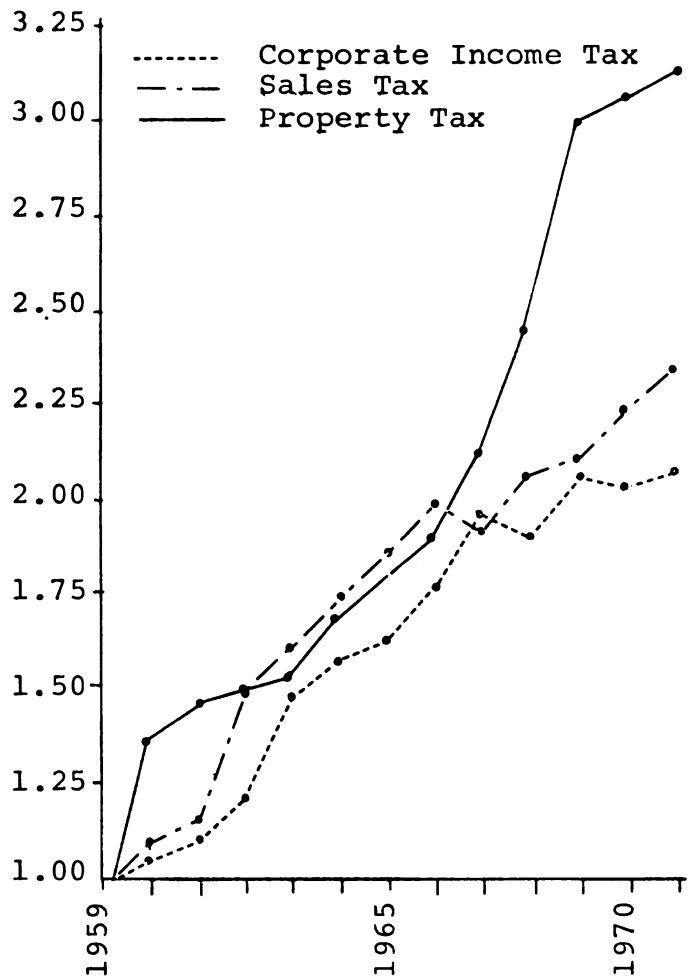


Figure 1.--Changes in the Yields of Three State Taxes, 1959-1971.

Source: Citizen Research Council of Michigan, Legislative Handbook.

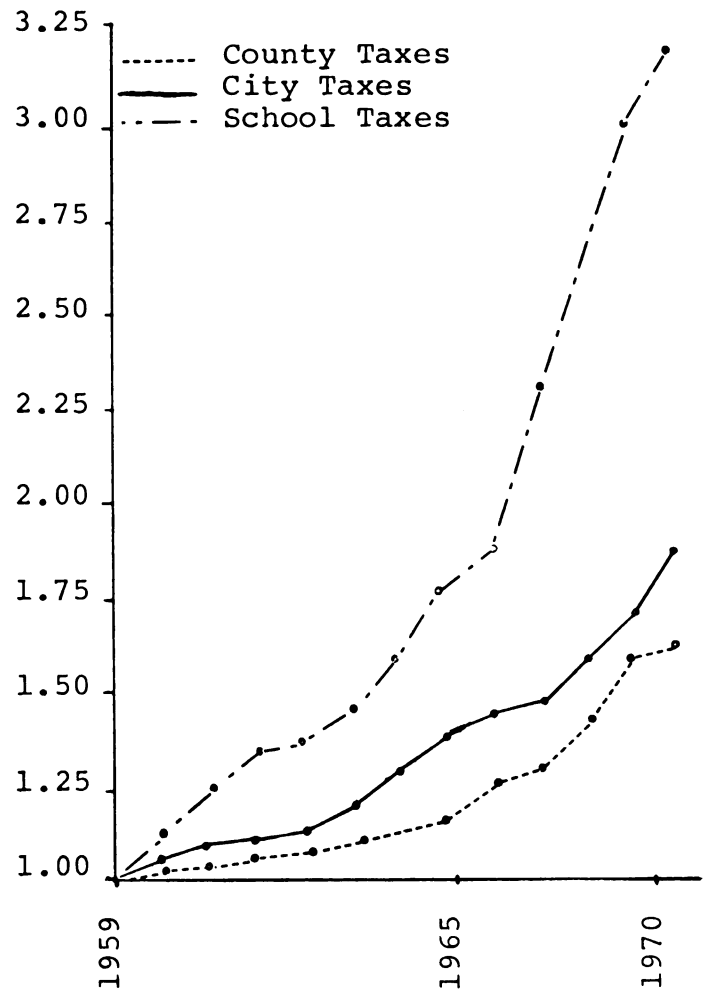


FIGURE 2.--Changes in Property Tax Revenues for Three Purposes 1959-1971 (1959 = 1.0).

Source: Citizen Research Council of Michigan, Legislative Handbook.

increased at a much faster rate than have property taxes for other purposes.

If property taxes are to be held down to a level at which the public will support public education, and if, in particular, they are not to "bump" against the constitutional limitation, the educational property tax is the most obvious candidate for trimming or elimination. This is the context in which political leaders, particularly the Governor, would see the problem and the need to offer a constitutional amendment to limit the property tax.

As mentioned earlier, the much-noted "taxpayers' revolt" is also an indication of the "exhaustion of the property tax." Unfortunately, the Michigan Department of Education did not start collecting data on local millage elections until 1968. The curves in Figure 3 show the proportions of millage elections won, as well as of requested mills passed, during the period for which data exist. The curves, although smoothed by the use of three-month moving averages, are very uneven. In spite of vigorous up and down swings, there is no evidence of a major trend related to the years between 1968 and 1972. If any trend exists, it is toward increasing acceptance of millage proposals. It may be that millage defeats were less common prior to than following 1968. However, this information was not available.

In Pinner, Collins, and Sederburg's study of financial reform in Michigan education, a number of superintendents argued that millages were more difficult to pass than in previous years.[6] However, defeat only meant that the superintendents had to return to the voters with another millage request. It was argued that in spite of all the trials

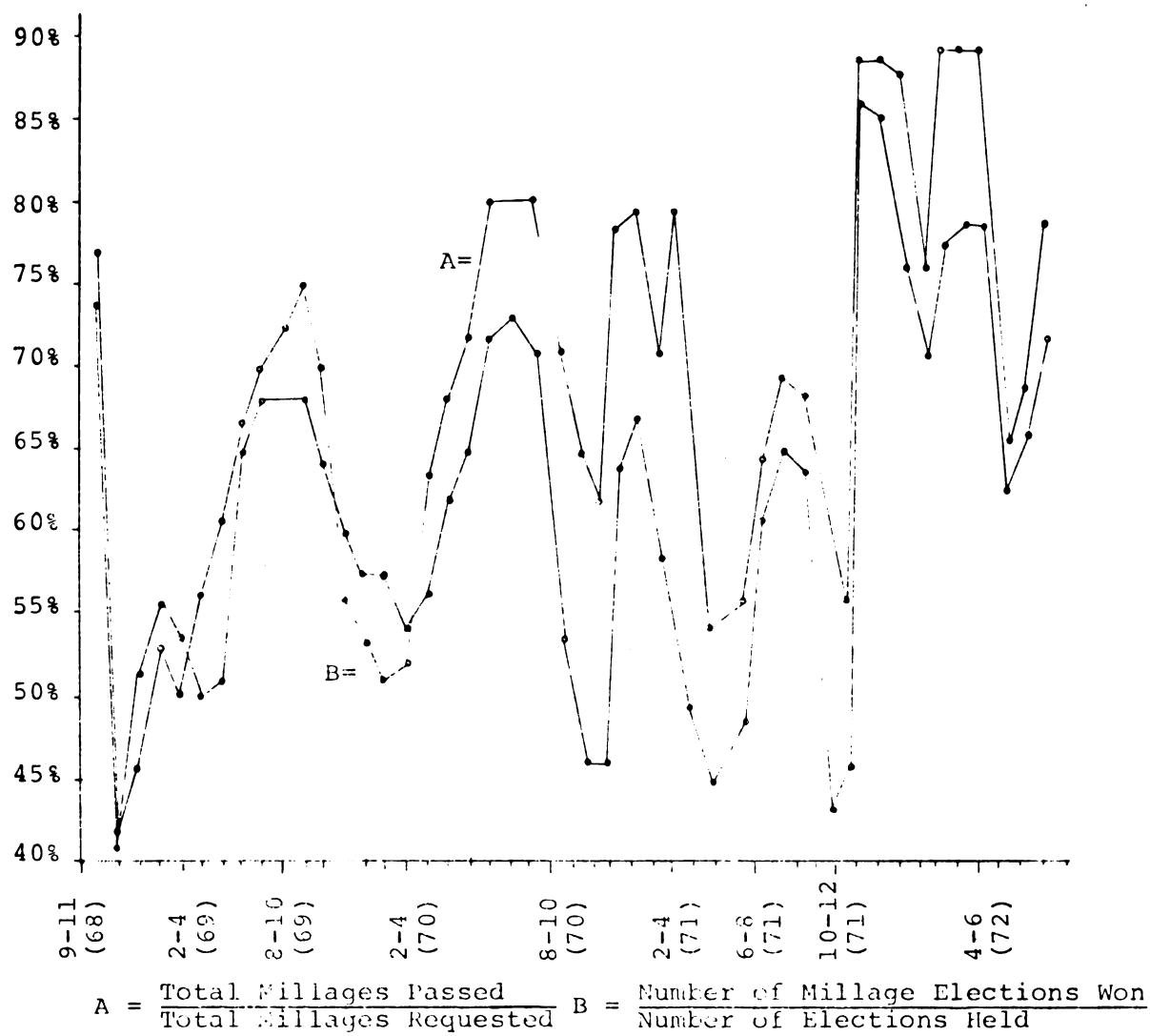


Figure 3.--Percentage of Millage Eelctions Won and of Requested Mills Passed, September, 1968 to August, 1972.

Source: Michigan Department of Education, Operating Millage and Bond Issue Reports.

and tribulations, most districts managed to obtain the millage they needed.

To test this theory Pinner et al. related the instructional dollars per pupil to the frequency of the millage defeats. Table 4.6 shows the zero order and the partial correlations between per pupil in structional expenditures and various factors, including percentage of millage defeats.

TABLE 4.6.--Zero-Order and Partial Correlations between Per Pupil Expenditures and Selected Variables in 182 School Districts.

	Correlations	
	Zero-Order	Partial
Percent of millage elections lost	.144	.053
Number of pupils in district	.565	.347
SEV per pupil	.501	.498
Urbanization	-.569	-.303
Average Socio-economic status of families in district	.166	.196
Percent white	-.322	-.232

Source: Frank Pinner et al., The State and Education: Decision Making on the Reform of Educational Finances in Michigan, a report to the Urban Institute.

The correlations are based on all 182 school districts for which millage elections were reported by the Michigan Department of Education during the period from September, 1968, to April, 1971. The average SEV (State Equalized Valuation) of these districts was slightly below the state average--$15,473 per pupil as against $16,321 for the state as a whole. Their average socio-economic status was 50.35, which is very close to the state average of 50.00 (the mean of the distribution of

standard scores used by the Department of Education). The socio-economic status scores were obtained from the 1970 Michigan educational assessment program. The assessment tests asked a series of questions related to socio-economic status of fourth and seventh grade students in Michigan school districts. The closeness of the state average and the average of the 182 school districts makes it relatively safe to say that the 182 districts are representative of all the districts in Michigan.

These data show virtually no effect of millage defeats upon the level of instructional expenditures, particularly when all other major variables for which data were available had been controlled for. This approach, however, does not answer the question of whether or not school districts had to limit their programs during the past few years.

To answer this question, a brief poll of the superintendents in the seven metropolitan areas used in the analysis presented in Chapter VI was conducted. The superintendents were asked if they had been forced, because of financial pressure, to reduce their educational programs during the past two years. Most superintendents responded by replying no, they had not had to reduce their programs, but they could not expand them. Typical of the comments received from local superintendents were:

> On the other hand, we have had to maintain a no improvement status quo for the past three years and will continue to do in 1973-74.
>
> We have not been able to expand programs, and this is so badly needed.

Of the superintendents in the 183 districts surveyed, 53 percent indicated they had not had to reduce their programs during the past two

years. On the other hand, 47 percent of the districts actually were forced to reduce the educational program in their districts.[7]

The perceived "taxpayers' revolt" may be less severe than imagined by some. Wirt and Kirst, in a study of California referenda, found that the public was voting against any change in the property tax level rather than against education.[8] They concluded that "it seems as if change of any kind is more opposed than the status quo."[9] Thus, although there may be an increasing tendency for voters to reject additional millages for education, the voters also rejected lower millages for education. If Wirt and Kirst are correct, it appears reasonable to say that the general attitude of the public is to maintain the status quo on property tax rates. The cost-revenue squeeze in public education may be due to increasing costs coupled with a tax structure that has become frozen at the status quo.

Inequity in School Finance

Increased sensitivity to inequalities in funding education constitutes the third component of the financial crisis. These inequalities are inherent in any system that relies heavily on local property values as a tax base. To reduce the degree of inequality among districts (and the burdens that increasing educational costs impose on local taxpayers) the State of Michigan supplements local tax revenues by two types of state aid. The first, based on the number of pupils in a district, attempts to compensate for variations in local property wealth. The second type of state aid attempts to compensate, by flat grants, for the special needs of various categories of pupils, such as the physically, mentally, or emotionally handicapped and the culturally deprived.

The first form of state aid is embedded in the general aid formula that allocates state funds to local districts under the provisions of the School Aid Act of 1957. To meet changing financial requirements, the act is revised annually. Of crucial importance in applying the formula to any given district is the concept of State Equalized Valuation (SEV) per pupil. To compensate for differences in local assessment practices, the total assessed property valuation in a district is adjusted (equalized) by the state so that the resuting amount represents as closely as possible 50 percent of the current market value of all real property. This figure, when divided by the number of "members" (full-time equivalent students), yields the district SEV per member, or, for short, "SEV." The law specified a gross allowance per member. To obtain the state's per student contribution, this allowance is reduced by a "deductible millage" (also specified by law) multiplied by the SEV. In most years since this method for computing state aid was enacted, Michigan has operated under a two-part formula, with different gross allowances and deductible millages applying to districts above and below an SEV level specified by law. Both the gross allowance and the SEV level defining the breakpoint for the application of the two alternative formulae have been revised upward from year to year. The "deductible millages" have also been changed from time to time. For fiscal year 1972-73, the legislature again adopted a two-part formula with the break point set at the SEV of $17,750. For high SEV districts, the deductible gross allowance was $644, and the deductible millage was $16 for each $1000 of SEV. For low SEV districts, the corresponding figures were $715 and 20 mills.

A simple illustration will show that this formula, while it reduces disparities among districts, does not come close to eliminating inequalities in funds available for each child in districts of varying SEV levels. Assume that two districts have SEV's of $10,000 and $20,000, respectively. Assume further that both districts tax themselves at the rate of 26 mills, which is the state average. In the low SEV district, the combination of locally raised property tax income and of state aid will produce $775 per pupil ($515 state aid and $260 local tax), whereas in the high SEV district, $844 will be available for each child ($324 state aid and $520 local tax). Moreover, in a low SEV district, a 26 mill rate may constitute more of a hardship than in a district with higher property values because the residents in districts with low property values typically have smaller incomes.

In addition to general state aid, school districts receive various types of grants for transportation, vocational education, remedial reading and other programs. Further, a provision makes it possible to reduce the SEV of a district whose overall property tax rate for all purposes (except school operating costs) exceeds the state average by 25 percent or more. The purpose of this disposition is to bring relief to the taxpayers in cities suffering from "municipal overburden"--essentially the large cities with high operating costs that must provide services for large numbers of nonresidents working and doing business in town.

The joint operation of the various state aid, grant, and relief provisions produces results that are often discriminatory or irrational,

usually both. The number of educational resources available to a child depends on the social status characteristics of his community, the amount of business and industrial property located in his school district, the density of the school population, and the ability and aggressiveness of the school administrators in pursuing additional funds under various grant programs. The inequities are illustrated in Table 4.7. Data are taken from the 1971-72 school aid formula because Proposal C was written, and debated, about eliminating these inequities.

TABLE 4.7.--Financial Data for Selected School District 1971-1972.

District	SEV/Pupil	Mills Levied	Instructional Cost per Pupil	Total Cost per Pupil	Average Teacher Salary
River Rouge	66,844	20.9	$1,027.63	$1,504.36	$14,895
Inkster	8,556	25.9	661.13	936.01	11,729
Detroit	19,872	20.80	744.35	1,043.35	13,747
Ann Arbor	31,608	32.55	972.60	1,296.23	12,763
Lansing	20,515	30.0	804.77	1,131.26	11,493
East Lansing	26,688	34.50	893.87	1,277.01	11,440
Redford Union	13,935	35.90	701.94	952.15	12,493

River Rouge is a working-class suburb of Detroit that benefits from the presence of several large industrial plants. At a moderate cost to the taxpayer, it can afford one of the most expensive school

systems in the state. Inkster is an entirely residential, working-class suburb (predominantly black) that, in spite of a much higher tax effort, has much less to offer its children. Redford Union is an example of a district relatively low in property wealth that, at considerable cost in taxes, can achieve only mediocre results. These, as well as the other figures in Table 4.7, are only indicative of the problem of inequality, which has been amply studied and discussed in several important documents. (Thomas Report, 1968, and Schools and Inequality, 1969).[10]

The increased sensitivities to the inequalities built into the method of financing education are probably a result of the national attention given to court cases, research studies, tax pressures, and the dramatic accentuation of inequalities during the past few years. In 1966-67, the average SEV for districts in Michigan was $13,988. Six years later, in 1971-72, it had risen to $18,883, an increase of 38 percent. The standard deviation in district SEV's increased by 20 percent from $7,411 to $9,247. The amount of variability in district SEV's, as measured by the standard deviation, was already quite high in 1966-67, and it increased even more during the next five years. This indicates that some districts experienced increases in their property wealth well above the state average, others remained stationary, and a few experienced losses.

Similar comparisons based on the funds available for each pupil complete the picture of inequitable changes. During the same six-year period, average instructional expenditures per pupil rose by 91 percent from $328.31 to $627.40. The spread in per pupil expenditures also

increased, but owing to the "gross allowancs" and other features of the state aid act, it was not nearly as sharp as the cost increase. The standard deviation increased by 71 percent. Even so, differences in the dollars available for the education of children in different districts had augmented further.

The most dramatic shifts, and those likely to have the greatest impact on officials as well as voters, occurred in the dollar amounts per pupil derived from local sources. On the average these increased by 35 percent from $320.02 to $432.00. At the same time, the amount of disparity in locally raised dollars increased by 92 percent as the standard deviation went from $89.89 to $172.85. The rate of increase in locally raised dollars was nearly four times the rate of increase in SEV levels. The disparities obviously reflect rapidly rising millage rates. But this increase had to be quite uneven to produce a 92 percent increase in the standard deviation. The better situated districts must have increased their millages much more drastically than the districts with less favorable property conditions. The latter, in all likelihood, were unable to keep up with inflation.

The shifts in property values have had a particularly adverse effect on the major cities in the state, as can be seen in Table 4.8. The SEV of core cities has grown more slowly than the state average, whereas that of the surrounding suburban areas has increased more rapidly.

There can be little doubt that the issue of inequality had been brought to the attention of all groups and people involved in the educational policy-making process. It was one of the major concerns in

TABLE 4.8.--SEV in Three Major Cities and Surrounding County Districts. 1966/67 - 1970/71.

	1966/67	1967/68	1968/69	1969/70	1970/71	Percent Change
Michigan Average	$13,898	$14,459	$15,198	$16,321	$17,764	22
Wayne County except Detroit	16,496	20,554	19,300	20,872	22,815	28
Detroit	16,665	16,261	16,808	17,720	18,347	9
Kent County except Grand Rapids	11,262	12,065	12,938	13,734	14,743	24
Grand Rapids	18,928	19,727	20,191	20,343	21,540	12
Genessee County except Flint	9,722	10,299	11,068	12,106	13,796	30
Flint	17,350	17,405	18,285	19,087	20,463	15

the Thomas and Guthrie studies. It has figured prominently in Governor Milliken's several messages to the legislature, and its reduction was the first objective listed by the Governor's Commission on Education Reform, where it was stated in the form that became a cliché. The Commission's aim was: "To assure each child, no matter where he may live or what his circumstances may be, an equal educational opportunity."

The combination of increased expenditures, the exhaustion of the property tax, and the inherent problems of inequality resulting from reliance on the local property tax created an atmosphere throughout Michigan that was hospitable to increased pressure to reform the

financing of public education. The financial pressures were reflected in political strategies aimed at removing the burden of the property tax from homeowners. The key to these strategies was the need to change the Michigan Constitution to allow greater state funding. The result of the political strategies was a constitutional amendment presented to the Michigan electorate at the November, 1972, general election. The proposed amendment, known as Proposal C, was the primary effort to reform school finance in Michigan during 1972.

CHAPTER IV--FOOTNOTES

[1]William E. Klingele, "Curtailing Expenses in Michigan Public chools," Michigan School Board Journal, Vol. 20, April, 1973, p. 23.

[2]Interview with Mr. Robert McKerr, Associate Superintendent for Finance - State Department of Education, April 5, 1973.

[3]Ibid.

[4]Michigan Department of Education, 1012 Bulletins 1960-1971, Lansing, Michigan.

[5]Interview with Kai Erickson, Director of Public Relations, Michigan Education Association, November 6, 1973.

[6]Frank Pinner et. al., Education and the State: Decision Making on the Reform of Educational Finances in Michigan, report to the Urban Coalition, 1971. Chapter Three.

[7]Copy of the survey is found in Appendix A.

[8]Frederick Wirt and Michael Kirst, The Political Web of Schools (Boston: Little Brown and Company, 1972).

[9]Ibid., p. 105.

[10]J. Alan Thomas, School Finance and Educational Opportunity in Michigan (Lansing, Michigan: Michigan Department of Education, 1968). James Guthrie, George Kleindorfer, Henry Levin and Robert Stout, Schools and Inequality (Washington: The Urban Coalition, 1969).

[11]Office of Planning and Coordination, Bureau of Policies and Programs, A Chronology of Educational Reform in Michigan, Lansing, Michigan, 1970, p. 6.

CHAPTER V

THE POLITICS AND HISTORY OF PROPOSAL C

The financial crisis faced by public education in Michigan provided the impetus for increased political pressure to reform the method of funding education. The political history of financial reform prior to the vote on Proposal C showed the interaction of the economic and social distance models of public choice and public policy. It is clear from an analysis of the political history of Proposal C that most state policy makers debated the issue in terms of the economic effects of shifting from a property tax to an income tax. This is particularly interesting because the vote is best explained by the social distance explanation.

Students of the politics of education at the state level have concentrated on the differences between "closed" and "open" systems of educational politics. Iannaconne, Bailey, Masters, Kirst, Usdan, Bowles, and others have discussed the relative merits of the education community presenting an united front or being "fragmented."[1] The level of educational expenditures in a state, according to these authors, is dependent on the "ability of the schoolmen to present a cohesive front."[2] They did not discuss the politics of different financing plans or the distributive impact different plans have on school districts within states.

According to Masters and Salisbury, and Iannacconne, the overriding characteristic of educational politics in Michigan is the "lack of consensus" among the players of the political game.[3] The lack of consensus noted by Masters could also be seen in the political history of financial reform and the debate over Proposal C. The history of Proposal C appeared to confirm Master's hypothesis about the red flag of school finance.

> Issues that involve basic changes in the revenue structure or involve substantially increased expenditures for educational purposes, can activate groups that are capable of exerting strong counter pressures and manipulating strong consensus building symbols in opposition to the proposed changes or increases in expenditure levels.[4]

The debate over financial reform showed the division within the education community as well as the appearance of noneducation groups that were activated because of the taxation changes involved in educational finance reform.

Pinner, Collins, and Sederburg, in a study of financial reform in Michigan education, found that the political coalitions involved in taxation questions were different from those formed with respect to school aid distribution.[5] The development of Proposal C, and of financial reform generally, activated both types of coalitions and involved a large share of the political community in Michigan.

A brief review of this activity shows the dynamic of reforming school finance in Michigan and how this dynamic can be discussed in terms of the economic and social distance explanations. First, a history of Proposal C is given. Emphasis is given to the struggle between the Governor and the Legislature, the resulting stalemate in

the legislature, and the initiative petition drives conducted by the Governor, the Democratic Party, and the Michigan Education Association. Second, a brief description of the campaign conducted for Proposal C and the issues brought out in the campaign are presented. Last, a general review is made of the results of the vote on Proposal C.

History

The history of Proposal C dates back to at least 1966. In 1966 the Michigan State Board of Education and the Michigan Legislature spent $200,000 for a thorough analysis of educational opportunity in Michigan. The study was conducted by Dr. J. Alan Thomas. Completed in the fall of 1967, the Thomas report concluded that educational opportunity varied greatly throughout Michigan. The report suggested that the state play a greater role in equalizing the financing of public education and offered four alternative plans that would make for greater equality.[6]

The report was commissioned primarily on the initiative of the Democratically controlled State Board of Edcucation and legislature. However, their goal of equal educational opportunity was embraced by Republican Lt. Governor William G. Milliken when he became Governor in 1969. When Milliken took office in 1969, the political climate was generally favorable to the need for educational reform. Milliken soon announced his intention of appointing a special commission of non-educators to study legislative needs for educational reform.

The Governor's proposal to create a special commission began the debate over school finance reform. The proposal was criticized

as "a delaying tactic," "paralysis through analysis," and "a study of a study."[7] The commission was primarily an attempt by the Republican Governor to gain the initiative in education reform. Governor Milliken had long been an active participant in educational reform as Chairman of the Senate Education Committee. It was natural that he selected education as his main priority during his first term in office.

In October of 1969 Governor Milliken presented to the legislature his special message on educational reform. Basing his recommendations on the commission's report, Milliken outlined the basic objectives for which he would strive during the 1969 and 1970 legislative sessions. These included the reduction, if not elimination, of inequality in school expenditures among school districts. This objective was to be attained by eliminating the local property tax, except for a locally adopted three-mill "enrichment" tax, and by guaranteeing a fixed basic allowance for each pupil. Each mill of the "enrichment" tax was to be equalized, so that a mill levied anywhere in the state would raise the same amount of money. Monies were to be distributed to the different districts according to a plan developed by the Michigan Association of Professors of Educational Administration called the Classroom Unit Plan. This plan would provide equal funds for every classroom of 27 children in any district in the state.

Second, Milliken called for the elimination of the inequality of tax burden among school districts. This would be done by shifting the financing of public education away from the local property tax to a statewide property tax. Property taxes would be collected by the state and then redistributed to the local districts.

Another objective was the "rationalization" of the governance of public education to insure accountability. This was to be accomplished by establishing regional superintendents of public instruction, appointed by the Governor, an appointed State Superintendent of Public Instruction, a state assessment to test achievement of school children, and aid to nonpublic schools.

The last objective of the Governor's message became the most controversial. In his message to the legislature, Milliken asked for their approval of public aid to parochial schools. Parochiaid, as it became known, was added to the reform package to gain the support of Democratic Speaker of the House, William Ryan. Ryan, a strong Catholic from the inner city of Detroit, was very interested in aiding the financially depressed parochial schools in Detroit. Although undoubtedly interested in aid to nonpublic schools, Milliken also could see the need to get Speaker Ryan's help in passing the reform proposals through the Democratically controlled House of Representatives.

The Fall, 1969, and Winter, 1970, sessions of the legislature saw only limited action on Milliken's proposals. Only aid to nonpublic schools and state assessment were fully debated. The debate on parochiaid clouded the major issues Milliken wanted to stress. Parochiaid and assessment were the only proposals passed by the legislature. The Michigan Education Association, along with over 20 other organizations, organized a petition drive to place the question of parochiaid on the November, 1970, ballot in the form of a constitutional amendment. The electorate overruled the legislature and the Governor and voted to

prohibit aid to nonpublic schools. Thus, the net results in reforming education and educational finance were meager. The legislature passed a state aid bill for public education that was similar to the 1969-70 school aid bill.

The governor's original proposals for educational reform if passed, would have established a state system of education. His plan called for a statewide means of collecting and distributing funds, regional superintendents appointed by the Governor, a state superintendent appointed by the Governor, and aid to nonpublic education. In pushing his proposals, the Governor stressed the economic arguments of equality of tax burden and state aid distribution. He ignored the importance and strength of the arguments used in favor of "local control" of public education. The proposals were opposed by most members of the educational community because of the threat they posed to the role played by the local and intermediate school districts. The opposition to his proposals by the public and educators meant the failure to achieve any significant financial reform. In effect, Milliken's proposal had within it elements of both the social distance and economic explanations. First, he stressed economic arguments in favor of a state system of educational finance. Second, he challenged the importance of the social distance explanation by (1) ignoring the role played by the local district in financing and administering the schools and (2) opposing the political strength of the local districts.

With the legislative stalemate over his initial proposals, Milliken again addressed the legislature on educational reform. In April, 1971, Milliken spoke of the educational crises.

> We are now in our second year of the battle for educational reform. The crisis is still with us, and has grown worse. Many school districts are bankrupt; others teeter on the brink of financial disaster.[8]

In the context of his second message, Milliken outlined a number of proposals for educational reform. Many were changed from the 1969 recommendations.

Although Milliken kept alive the objectives he had identified in 1969, with the exception of aid to nonpublic schools, he made a change in strategy. He now called for a constitutional amendment to eliminate the property tax as the primary source of revenue for public education. Thus, he abandoned his previous suggestion of a statewide property tax, replacing it with a proposal to rely on the personal flat rate income tax and a value added tax for businesses. The decision to change from a state property tax to an income tax was outlined as follows:

1. Frequently, because of taxpayers resistance, school operating millages fail in elections, thereby denying needed support to the local educational system.

2. The property tax, while very stable, does not grow as quickly as the economy or educational needs.

3. The varying property wealth of different districts, regardless of the level of the property tax levied, produces varying resources for education.

4. The property tax falls particularly heavily on senior citizens, small farmers, and low income persons who are buying homes.[9]

For these reasons, Milliken proposed a constitutional amendment that would be equitable and adequate in funding education. This recommendation began a discussion of possible constitutional amendments, a

discussion that resulted in Proposal C being presented to the public on November 7, 1972.

The 1971 message on educational reform also recommended a variety of other reforms. Each local district could pass an "enrichment" tax of up to six mills for additional educational programs. The property tax would be equalized by the state so that a mill levied in one district would raise the same amount of money as a mill levied in another district. The concept of regionalization was dropped because of the vocal and effective criticism of local and intermediate school district superintendents. Their strong influence in the legislature limited any serious effort to create regional districts with regional superintendents appointed by the Governor. Milliken added the recommendation to approve a constitutional amendment to make the State Board of Education appointed by the Governor, rather than elected by the people. The Classroom Unit Plan of distributing state aid was dropped. It was replaced with a set of criteria the legislature should use in setting up a distribution formula.

In effect, Milliken's 1971 proposals indicated a shift of emphasis from creating a total state system of public education to concentrating on a means of equalizing tax burden and school aid. Milliken dropped many of the proposals that generated opposition from people interested in maintaining local school district boundaries and the power of the local district. He was forced to concentrate on reforming public education through economic reform. Milliken stressed the need for finding a more equitable and adequate means of financing education.

In doing so, he shifted from a set of proposals based on both the economic model and social distance model to a one that was limited to the economic model of public choice.

The emphasis placed on the economic model was shown by the rationale Milliken used in proposing a constitutional amendment: taxpayers' resistance to the property tax, elasticity of the property tax, variation in tax burden, and distribution of property wealth. In the 1971 message Milliken attempted to meet the expected criticism that a shift to state funding would mean a loss of local control.

> Long standing tradition in the state requires that local communities and school districts retain control over important matters of educational concern such as curriculum and personnel. The difficult problem of raising educational revenue would be removed from local districts, so they can concentrate on educational quality.[10]

Thus, with the proposal for a constitutional amendment to reform school finance, the Governor became aware of the conflict between the two models of public choice and public policy. The 1971 proposals emphasized the economic model.

The Democrats' response to Milliken's two proposals (constitutional amendment and a flat rate income tax) combined basic agreement on goals with disagreement about means. Speaker Ryan stated that he "would go along with Milliken's proposals if Milliken would consider adding a graduated income tax to the constitutional amendment."[11] Since 1963, the Democratic Party in Michigan has supported deleting the prohibition of the graduated income tax in the Michigan Constitution. Democrats in the legislature saw this as an excellent opportunity to achieve that goal.

The issue in the legislature became one of whether to support a flat rate or graduated income tax and whether there should be one or two constitutional amendments--one to limit the property tax and the other to permit a graduated income tax. The Democrats wanted to include a specific rate of graduation within a property tax relief amendment. Apparently, their hope was to have property tax relief sell the graduated income tax to the public. The Republicans, on the other hand, wanted separate amendments. Since constitutional amendments to allow a graduated income tax had twice been defeated, Republicans did not want to risk the success of property tax relief.[12] Further, two amendments would most likely mean passage of property tax relief but defeat of the graduated income tax, thereby achieving the Republican goal of retaining the flat rate income tax.

The constitutional amendment that received the most attention in the legislature was House Joint Resolution (HJR) GG, which was written by a coalition of Democrats and rural Republicans. It eliminated all millage for operating expenses of local schools and allowed 13.25 mills for county, township, community colleges, and special education programs. An additional 1.75 mills could be added by a vote of the people in the local school district. The resolution also sought to repeal the graduated income tax prohibition and limited the rate of the value added tax to 2.5 percent.

Milliken, although previously opposed to a combined amendment, decided to support HJR GG. The change was largely due to Democrat Speaker Ryan's agreement to drop his previous demand of including

specific rates of graduation in the amendment. With this agreement, Ryan and Milliken were successful in gaining passage of the resolution in the Michigan House of Representatives.

When GG reached the Senate it was sent to the "unfriendly" Senate Judiciary Committee, where it died. The Michigan Senate, controlled by Republicans, was very inhospitable to the graduated income tax portion of the resolution. On September 1, 1971, Senate Republican Leader Robert Vanderlaan reported that the Senate Republican caucus had voted not to bring GG out of committee. He commented that "Republicans would continue to work for meaningful tax reform but could not accept the graduated income tax."[13]

Resolution GG would have accomplished the same basic goal of shifting the primary responsibility for funding public education from the local property tax to a state income tax that Proposal C attempted to accomplish. Consequently, the debate over resolution GG is of considerable interest in understanding the debate over Proposal C.

The debate over Resolution GG showed the predominance of the economic model of public choice and public policy. Property tax relief was the primary reason given by legislators for supporting the resolution. Typical of the comments from proponents of HJR GG was Republican Floor Leader Roy Spencer's statement:

> I support this resolution because the Legislature of the State of Michigan is willing to place before the electorate of the state a proposal that will allow the people to make a decision as to whether or not they should limit the property tax structure of this state.[14]

Spencer, representing a primarily rural district, had long been an advocate of limiting the property tax. Other legislators, such as Speaker Ryan, supported GG Because "it is the only way we can get fiscal reform and education reform in the state."[15]

Opponents of GG stressed their opposition to combining property tax relief with the graduated income tax. Representative Crampton summed up much of this opposition to GG:

> Believing that property tax reduction to be our urgent priority, I was prepared to vote for this imperfect means of achieving it. Amending it to kill the prohibition against the imposing of graduated income tax on the people of this state has killed any chance of my supporting the resolution.[16]

Of the 13 legislators recording statements in the House of Representatives Journal, only Representative Bryant objected to the resolution because of the effect of shifting the primary responsibility for funding education to the state and thereby limiting local control.

> I voted no on HJR GG because both aspects of it are a fraud on the people. The property tax aspects are badly conceived and would end local control. Amending it to eliminate the prohibition of the graduated income tax opens unlimited state government.[17]

The voting on GG in the House of Representatives followed party lines, except for a few Republicans whose districts would have gained from property tax relief (primarily rural districts). The problem of supporting or opposing HJR GG was evidently interpreted by most legislators as a question of the distribution of resources and tax burden. Debate centered around the economic model of public choice. Little debate was devoted to the question of the importance of the state assuming greater control over educational finance. Thus, at the

legislative level, little importance was given to a social distance model of public choice.

The second phase of the history of Proposal C started with the death of HJR GG in the Michigan Senate. Its death made it clear to both the Governor and the Democratic leaders that the legislature was not likely to act on a constitutional amendment in the near future. Consequently, both Milliken and the Democrats initiated plans to conduct petition drives to place the question on the ballot.

Governor Milliken's proposed constitutional amendment would have abolished local millages for school operating costs, except for a six-mill enrichment program, with retention of local millages for construction, continuation of property taxes for county and township operations, and reduction of total property levels by one-half. It did not contain any specific statement about a graduated income tax.

In September, 1971, State Democratic Chairman James McNeely announced a petition drive to get an amendment similar to HJR GG on the ballot. The Democrat's constitutional amendment limited property taxes, allowed a graduated income tax, specified the rates of graduation of the income tax, and stipulated that renters as well as homeowners would receive tax relief.

The Governor's petition drive was "torpedoed" in early March, 1972, when the MIchigan Supreme Court ruled that the Michigan Constitution did not limit the bonded indebtedness of Michigan political units. In Butcher v. Grosse Isle the court ruled:

> All governmental units with power to tax, including those specified in paragraph 2, clause 2, "city, village, charter authority

> or other authority," as well as unchartered units, are not limited, either as to rate or amount, as to tax imposed for capital outlay expenditures or bonded indebtedness, which is approved by the voters.[18]

The effect of the court's decision was that unless the proposed constitutional amendment limited bonded indebtedness, a school district could exceed the prescribed taxation level by using allowed millage for operating purposes and using property taxes above the prescribed levels for bonded indebtedness or capital outlay. This would mean that districts would still vary on property taxation and tax burden. The Governor's proposed amendment did not limit the bonded indebtedness of local school districts or intermediate school districts. Consequently, it would not have guaranteed equal property tax relief.

A further complication was encountered by the Governor's proposal when State Senator Harry Demaso asked the Attorney General for a ruling on one phrase of the amendment that inadvertently might have allowed a graduated income tax. In view of these problems, the Governor decided to withdraw the petitions. The Democratic Party had not yet printed their petitions. Consequently, they were able to rewrite their amendment to compensate for the Butcher decision.

With only the Democratic petition drive alive, the Michigan Education Association (MEA) endorsed the concept of two constitutional amendments to appear on the November 7, 1972, ballot. The MEA's Board of Directors had previously debated whether to support the Democrats' proposal or to support the Governor's proposal, adding to it an additional amendment to drop the prohibition against the graduated income tax. Basically, the MEA felt the graduated income tax proposal might

defeat the property tax relief amendment. The two amendments, later to be known as Proposals C and D, (1) limited the use of the property tax to no more than 26 mills, and (2) removed the prohibition against the graduated income tax.

It is interesting to conjecture why the MEA put their considerable organizational strength behind a petition drive to reform school finance. Undoubtedly, part of the reason was a sincere commitment to the goals of equity in school funding. However, a more compelling reason might have been the need to find new sources for increased expenditures for education. Millage defeats and local school boards' subsequent refusal to give teachers additional economic benefits added to the need to find a new source of funds. Shifting to the state income tax offered the opportunity to find such new funds.

> Two compelling reasons exist for teachers to support these two proposals (C and D).
>
> One reason involves job security and working conditions. Passing property tax millages becomes increasingly more difficult. In the wake of millage defeats come teacher lay-offs and for the teachers who remain on the staff, bad working conditions because of reductions in programs, staff, supplies, and services. Even affluent school districts are discovering that they are no longer exempt from such problems.
>
> Secondly, teachers are property-owning taxpayers or may become property owners in the future and they have friends and relatives who are property owners and who are threatened by a tax that doesn't have to maintain any relation to their ability or non-ability to pay.[19]

Adoption of the amendment would also mean that funding levels would be determined in the legislature rather than at the local level. Apparently, the MEA was confident that they could be effective in securing their demands from the legislature.

Proposal C, the property tax relief amendment, reduced the maximum levy from 50 mills to 26 mills. The 26 mills were divided as follows: 8 for counties, 1.5 for townships, 4.5 for intermediate school districts, special compensatory or vocational education, 6 (voted) for county and township purposes, and 6 (voted) for school enrichment. The enrichment millages were to be equalized so that one mill levied in one district would raise the same number of dollars as one mill levied in another district. The proposed amendment also limited the millage to be used for bonded indebtedness. This provision overcame the obstacles presented in the Butcher decision.

The State Chamber of Commerce, Michigan Farm Bureau, and the Michigan Association of Elementary School Principles quickly endorsed the proposal and joined the petition drive. The Chamber of Commerce and Farm Bureau were particularly interested in the tax relief aspects of Proposal C. The Michigan Chamber of Commerce took the following position:

> The State Chamber of Commerce policy recommends elimination of the property tax as a primary source of support for public school operations. Revision of the property tax laws as they relate to school operations is inevitable in view of court rulings in other states and pending court action in Michigan. This present proposal is the beginning of such necessary revision. Alternatives to which the public is being subjected are much less desirable. The State Chamber has extended its support to the property tax amendment proposed by the M.E.A.[20]

The Michigan Association of Elementary Principles was primarily interested in finding an equitable source of school funds. Their Board of Directors took the position that full state funding was inevitable; it was only a question of how the funds were to be raised.

> The issue then before us is not whether or not the state will fully fund public education; the courts are already making

> that decision. The issue we face is whether or not that collection of funds will be based upon property taxes or some other means of revenue collection, logically some type of income tax.[21]

By assuming that the state would be responsible for funding education, the MAESP argued that "local control" had nothing to do with Proposal C.

> ...The matter of local control, then, is not an issue in the question of property tax relief. The sole issue is how will our schools be funded, and the choice, hopefully, will be made by voters in the November election.[22]

The MAESP position on Proposal C showed a handy division between the two models of public choice and public policy. The decision on whether to support Proposal C had to be based on the economic model, since the social distance model was not relevant because of current court cases.

The Michigan Association of School Administrators (MASA) and the Michigan Association of School Boards (MASB) opposed the original petition drive on grounds that the legislature should be responsible for offering constitutional amendments. The MASA and MASB were concerned about the possibility that both the Democratic and MEA amendments might appear on the ballot, thereby confusing the voters. Once the petition drive was certified as Proposal C and was set to appear on the ballot, the MASB Board of Directors urged their membership to endorse the proposal. However, a resolution endorsing the amendment was soundly defeated at the MASB state convention the first week in November. The debate on the floor of the convention showed the concern over the loss of local control that adoption of Proposal C would cause.

Following the MEA's announcement of a petition drive to place two questions on the ballot, Governor Milliken made the following statement:

> The MEA's announcement today for a statewide coalition drive represents a major breakthrough toward our mutual objective of achieving not only property tax relief but also assuring the quality and equality in the education of every child in Michigan.[23]

With this statement the Governor teamed with the MEA and other organizations in a coalition effort to place on the ballot the question of property tax relief and shifting funding from the local district to the state.

The process of getting enough signatures to place the proposals on the ballot showed the debate between property tax relief (the economic model) and local control (the social distance model). The MEA and the Governor were both pleased with the pubic's reaction to the petition drive. However, the drive did indicate the MEA had to deal with the issue of local control. The Exectuive Director of the MEA stated on May 30, 1972, that:

> Public acceptance of the petition drive has been "absolutely overwhelming." People are obviously sick and tired of financing schools through the outdated and inequitable property tax. This is certainly true of retired and elderly citizens.[24]

An analysis of the public's reaction to the petition drive by the MEA's Teacher's Voice showed three basic concerns expressed by citizens in explaining their opposition to the petition.

> Local Control. Many citizens argue that because the MEA proposes to remove the local property tax as a basic means of school support, it will destroy "local control" of schools.
>
> Ability to control the local property tax. Taxpayers point out that the local property tax is the one tax that must be passed upon by themselves and hence is a tax over which they exercise some control.
>
> Property tax replaced by a more burdensome tax. Higher-income families with modest property ownership argue correctly that

> they are apt to pay more through an income tax than they would through a property tax.[25]

Of the three objections encountered by the MEA, two are directly related to the desire to maintain the role of the local district. The social distance model is most useful in describing the impact of these arguments on the vote on Proposal C.

Through the combined efforts of the MEA, the Governor's office, and affiliated groups, enough signatures were obtained to place the two proposals on the ballot in November. The Democratic Party's initiative petition drive was unsuccessful. Consequently, on July 8 only the two proposals made by the MEA, Proposals C and D, were certified by the State Board of Canvassers to appear on the ballot.

Campaign

The campaign for and against Proposal C also showed how economic and social distance variables can be used to interpret public choice and public policy. The campaign in support of Proposal C emphasized the economic aspects of property tax relief. In its support, the MEA and the Governor organized campaigns to acquaint the voters with the inequities built into the present method of funding education. They presented their case in public appearances: television, radio, and newspaper advertisements; and through state organizations. The only organized opposition, at the state level, came from the Michigan AFL-CIO. They made their opposition known by distributing information about Proposal C to all their members. They did not conduct a general campaign aimed at informing all voters in Michigan about Proposal C.

Their opposition to Proposal C was based primarily on an economic argument stressing the uncertainty of what the changes would mean to the average working man. They also pointed to the possible loss of local control if the proposal was adopted. The impact of the statewide campaigns was an emphasis on economic concerns. The voter was given information about the economic aspects of property tax relief. He was not as well informed, through a campaign effort, of the social distance aspects of Porposal C.

The MEA spent over $250,000 in the campaign for both proposals. The bulk of these funds was raised by a voluntary contribution of $4 by over 60,000 MEA members. The money was used to buy advertising time on television and radio, publish brochures, advertise in the major newspapers, gain the support of interested organizations, and staff an additional office in Detroit.[26]

The Governor's assistance to Proposal C was evident in both the petition drive and the campaign itself. During the petition drive the Governor's office hired three individuals to coordinate the drive in different regions of the state. The total budget was approximately $18,000, which was raised from contributions from individuals personally supporting the Governor. The Governor and his staff were successful in obtaining nearly 80,000 of the required 216,000 signatures; they were obtained primarily from Republican party members. The staff personnel worked closely with party members in soliciting volunteers to distribute petitions and solicit signatures.[27]

The campaign for Proposal C, once it was certified, was less well financed by the Governor's office. The major effort consisted in

speaking for the Proposal whenever the Governor or any of his staff made a speech in Michigan. The Governor's press section also solicited the editorial endorsements of Proposal C from major newspapers in the state.

The only organized effort against Proposal C at the state level came from the Michigan AFL-CIO. Three weeks before the election the AFL-CIO sent a news release to all affiliates and newspapers in Michigan urging members to work for the defeat of Proposal C. It is impossible to test the effectiveness of this last-minute campaign. However, it undoubtedly raised a number of questions in people's minds about the effectiveness of the amendment.

The issues outlined in the AFL-CIO news release give an indication of the major reasons used by people opposing Proposal C. In contrast to the MEA's analysis, the AFL-CIO concentrated on economic reasons why they opposed Proposal C. The news release outlined five major reasons for opposing C:

1. Proposal C would grant $500 million tax break to business by eliminating property taxes on business property.

2. Proposal C would force the legislature into increasing the flat rate income tax to at least 7 percent just to replace the lost revenue, thus placing an intolerable burden on the workers and their families.

3. Proposal C, by prohibiting a state-wide property tax on business would force the legislature into the enactment of a so-called value added tax which is actually a hidden sales tax falling hardest on those least able to pay.

4. Proposal C, while maintaining silence on the issue of local control, leaves this important area open to the interpretation by the courts.

5. Proposal C can only be labeled irresponsible because it fails to guarantee adequate state financing while eliminating the local tax base.[28]

The issue of the loss of "local control" if Proposal C had passed was a major point of contention with other opponents of Proposal C. Dr. Michael Deeb, a Democratic member of the State Board of Education, objected to the Board's support of Proposal C because:

> There has been virtually no public discussion as to what this method would do to the local control of schools. It is all part of a compromise to deprive the people of their check on how well schools are run in the local area.[29]

Deeb's position concurred with the Democratic Party's resolution urging the defeat of Proposal C. The Democratic Party opposed the proposal on grounds that it did not guarantee tax relief for renters or local control of school finance.

The debate over Proposal C was reflected in the editorials of major newspapers throughout Michigan. Their discussion shows the predominance of economic arguments used in gaining support for the proposal.

In Detroit, the two major newspapers split over the support of Proposal C. The Detroit Free Press called for its support because:

> ...The overriding appeal of Proposal C is that it would offer a replacement for a millage system that has already broken down. In short, it is a means of keeping the schools open.[30]

The Detroit News wrote against Proposal C because "it cannot deliver property tax relief as it claims." Further, the News referred to the fear of some educators that Proposal C would "significantly decrease local control over education." Consequently, the News wrote that Proposal C contained "clear and present dangers to the financing and administration of public schools in Michigan. It should be defeated."[31]

In the other large newspapers in Michigan, the reaction was mostly favorable towards adoption of Proposal C. The Muskegon Chronical supported the amendment:

> Clearly, approval of the amendment will bring a measure of property tax relief and, we are convinced, enough meaningful reform to warrant voter support.[32]

The Saginaw News justified its support of Proposal C as being

> ...based on the realization that it offers the opportunity to end the incessant and acrimonious local school operating millage votes. That it represents truly meaningful property tax relief for legions of older, retired persons living on fixed incomes. That it guarantees a better standard of living in 60% of the state's hardest pressed school districts ...and that it is a fairer means of financing public school operations and providing a vehicle for equity in educational opportunity for all children in Michigan.[33]

The Lansing State Journal urged voters to vote yes on Proposal C because it remedied the heavy tax burden on property owners for support of local schools and provided "a uniform method of distributing school revenues so that all schools get an even break."[34] The Jackson Citizen Patriot said that whether or not people vote for Proposal C depended on the degree of their confidence in the legislature:

> If voters have enough faith in the Legislature to write a tax program that will sufficiently recover the lost revenue from property taxes while funding education equitably then they should vote "yes" on Proposal C....We trust the lawmakers in Lansing; we'll vote yes on Proposal C.[35]

Other newspapers throughout the state made the same types of arguments in favor of Proposal C. A minority of newspapers opposed the amendment because of the loss of local control. The conservative Grand Rapids Interpreter wrote:

> The voters of Michigan should wake up before it is too late, and vote "No" with an overwhelming tide of emphasis, to let these schemers (the Governor and the MEA) know that we are not yet ready to allow them to take our home, or other property, in the misguided belief that they are doing it for our children's education. Most of them couldn't care less about the education of children, what they want is complete control of the schools, and your property.[36]

In summary, most of the larger newspapers in the state spoke in favor of Proposal C, basing their support on the economic model. The Detroit News and Grand Rapids Interpreter opposed Proposal C because of the implications of losing local control.

The debate over Proposal C was clouded by the issue of school integration and "busing." The busing issue tended to dominate the political campaigns in Michigan in 1972.[37]

In September, 1971, Federal District Court Judge Stephen Roth found the State of Michigan guilty of de jure segregation of the Detroit Public Schools. Roth ordered the Michigan State Board of Education to prepare different proposals to combat segregation. The proposal accepted by Roth as best meeting the goal of integrating the schools required cross-district busing among 53 school districts in the Detroit area. In effect, this threatened the local integrity of most of the suburban districts surrounding Detroit. Roth's decision was appealed to the United States Supreme Court by Attorney General Frank Kelley and Governor William Milliken. Final determination of the case is still pending at the time of this writing.

Roth's order triggered the highly emotional and divisive debate over the merits or demerits of "busing" to attain racial balance and equal educational opportunity. Eventually, the issue of busing would complicate greatly the issue of financial reform. Speaking of the impact of the Roth decision, Milliken said:

> Even the suggestion of cross district busing to achieve racial integration has stirred a storm of emotions and uncertainty that threatens to tear the very fabric of our whole public education system.[38]

The Macomb Daily newspaper agreed with Milliken's assessment of the impact of the Roth decision. In analyzing the election returns following the November election, the Daily wrote:

> No assessment of last Tuesday's election can ignore how extensive was the scope of the cross busing issue in the Michigan balloting.
>
> Its range was not confined to southeastern Michigan as many political leaders expected. It cut a wide statewide swath.[39]

State Republican Chairman William McLaughlin attributed the defeat of Proposal C to the impact of busing and the threat it posed to local control.

> ...The defeat of the proposition to cut down sharply on property taxes to finance schools and substitute higher income taxes, "smacked of local control. Anything that stood in the way of antibusing Tuesday got run over."[40]

The issue of busing and school integration was also very real in Lansing, Saginaw, Grand Rapids, and Jackson. All four areas either had already confronted the issue (Saginaw), or had desegration plans under consideration or in operation because of pending lawsuits forcing integration of the schools.

To many voters in Michigan, any issue related to education was directly related to the issue of busing. Although the issue was never publicly brought into the debate over Proposal C, both the Governor's office and the MEA felt busing was "behind the scenes."[41] One week prior to the election, the Governor held a staff meeting to discuss whether or not he should try to separate the issue of busing from the issue of school finance reform. The Governor and his staff decided not to raise the issue in the public's mind. The decision was based on a public opinion poll showing that Proposal C would pass and that the issue of busing was not related to the public's attitude toward school finance reform. In retrospect, this has been seen as a major error.

In summary, proponents of Proposal C argued that its passage would mean property tax relief, equitable funding of public schools, and a method of easing the financial crises facing public education. Opponents argued that the economic effects of Proposal C were not known. Its passage would probably mean a substantial increase in the income tax. They also suggested that adoption of the amendment would reduce local control. The issue of busing was not used by either side, although it was felt to be a major factor in the election outcome. It is difficult to assess the amount and effectiveness of information available to the voter. The campaigns in favor of Proposal C attempted both to stress economic aspects and to reduce fear over loss of local control. Basically, the debate over Proposal C and the conjecture about the vote reduced to the question of whether or not property tax

relief would sell the proposal. Would property tax relief overcome the desire to maintain the status quo and the present degree of local control?

Election

The final vote on Proposal C came as a surprise to many state policy makers. The Proposal was defeated by a margin of 1.3 million to 1.8 million votes. Their surprise was undoubtedly a result of polls conducted by Market Opinion Research of Detroit for the Detroit News showing Proposal C passing by a 60 to 40 percent margin.

The polls conducted prior to the election had shown a steady trend toward increasing support of Proposal C. Table 5.1 shows this trend.

TABLE 5.1.--Public Support for Proposal C in the Detroit Metropolitan Area.

	Poll 1 (9/1/72)	Poll 2 (9/21/72)	Poll 3 (10/11/72)
% Yes	58	60	65
% No	33	30	29
% Undecided	9	10	6
Total	100	100	100

Source: The Detroit News, September 12, 1972, October 3, 1972, and October 13, 1972.

N = 450.

In the October poll the research firm tried to determine if there was a relationship between support of Proposal C and attitudes toward busing. The results of the poll are presented in Table 5.2.

TABLE 5.2.--Support of Proposal C and Attitudes Toward Busing.

	Position on Proposal C			
	Yes	No	Undecided	Total
% Opposing Busing	59	32	9	100
% Supporting Busing	67	20	13	100
Total Sample	60	30	10	100

Source: Detroit News, October 3, 1972, p. 14A.

As can be seen, Market Opinion Research found that the effect of busing attitudes on support of Proposal C was rather small.

The Michigan Education Association also contracted with Market Opinion Research to conduct a public opinion poll on attitudes toward Proposal C. The MEA-sponsored poll reached the same basic conclusion as did the Detroit News poll: Proposal C would pass. One of the more interesting questions asked by the MEA poll was why voters who were against Proposal C objected to it. Table 5.3 lists a breakdown of the major reasons people gave for opposing Proposal C.

TABLE 5.3.--Reasons Given for Opposing Proposal C.

Reason	Percent of Those Against
Will increase income taxes	14
Taxes are already too high	13
Lose local control	15
State control/no limitation	6
Will still increase property tax	17
Poor will get hurt	7
People with no children still pay tax	4
Other	24
Total	100

Source: Report of Market Opinion Research to Michigan Education Association September, 1972.

Table 5.3 indicates that: (1) 27 percent were concerned with higher taxes because of the limitation of the property tax, (2) 21 percent were concerned with the loss of local control or future state domination, and (3) 17 percent were confused about whether it would really limit property taxes.

The polls taken for the Detroit News and the MEA gave the Governor and other political leaders a false sense of security about the passage of Proposal C. The questions about the impact of busing and the loss of local control were not seen to be major obstacles to the proposal's success.

It is difficult to determine why the polls were so incorrect about the passage of Proposal C. Two explanations seem plausible. First, the last poll was taken approximately a month before the election.

The campaign against the proposal, conducted by the Michigan AFL-CIO, had not yet taken place. There may have been a major shift of opinion during that month. The second explanation is that the sample used by Market Opinion Research was not representative of the voting population. In either case, the polls misled policy makers into thinking Proposal C had an excellent chance of passing and that the issue of busing or local control did not need to be separated from the question of school finance.

Proposal C was favored in 26 of Michigan's 83 counties. Appendix B provides a county-by-county breakdown of the vote. An analysis of the vote by county shows that Proposal C was viewed more favorably in rural than urban counties. Table 5.4 shows this distinction.

TABLE 5.4.--Vote on Proposal C by Percentage of Rural Population in Michigan's 83 Counties.

	0 - 25 % Rural	26 - 50 % Rural	51 - 75 % Rural	76 - 100 % Rural
Yes	790,808	187,634	218,815	133,411
No	1,219,646	183,471	169,265	142,505
% Yes	39 %	51 %	45 %	48 %
N =	8	13	28	33

Source: Federal Census for 1970, State of Michigan and Michigan Secretary of State.

Proposal C was defeated primarily because of the vote in Detroit and Grand Rapids. The difference between "no" votes and "yes" votes in those two areas accounted for 450,000 of the 490,000 votes separating

victory from defeat. The defeat of Proposal C was primarily an urban phenomenon. Consequently, it is analyzed by comparing the two models of public choice and public policy in the urban areas of Michigan.

Summary

The history, campaign, and voting behavior associated with Proposal C were traced in this chapter. The review has shown the competition between the economic and social distance models and how the two perspectives influenced the discussion of reforming educational finance. The next chapter explores which model best explains the vote on Proposal C.

CHAPTER V--FOOTNOTES

[1]Laurence Iannaccone, Politics in Education (New York: The Center for Applied Research, 1967). Stephen Bailey, et. al., Schoolmen and Politics: A Study of State Aid to Education in the Northeast (Syracuse: Syracuse University Press, 1962). Nicholas A. Masters, et. al., State Politics and the Public Schools: An Explanatory Analysis (New York: Alfred A. Knopf, 1964). Michael Usdan, The Political Power of Education in New York State (New York: The Institute of Administrative Research - Teachers College, Columbia University, 1963); Michael Kirst (ed.), The Politics of Education at the State and Federal Level (Berkeley: McCutchan Publishing Corporation, 1972); and Dean B. Bowles, "The Power Structure in State Education Politics," Phi Delta Kappan, February, 1968, pp. 337-340.

[2]Bailey, op. cit.

[3]See Masters, et. al., op. cit., especially chapter six on Michigan.

[4]Masters, op. cit., p. 267.

[5]Frank Pinner, et. al., Education and the State: Decision Making on the Reform of Educational Finances in Michigan, a Report to the Urban Coalition, Washington D. C., 1971. Chapter 5.

[6]J. Alan Thomas, School Finance and Educational Opportunity in Michigan (Lansing, Michigan: Michigan Department of Education, 1968).

[7]George Montgomery, William Ryan, and William Copeland, Gongwer News, April 5, 1969.

[8]William G. Milliken, Special Message to the Legislature on Excellence in Education, April 12, 1971, p. 2.

[9]Ibid., p. 2.

[10]Ibid., p. 2.

[11]Speaker of the House William Ryan, Gongwer News, April 15, 1971.

[12]Constitional amendments to allow a graduated income tax had been defeated in 1966 and 1968 by about a three to one margin.

[13]Senate Republican Leader Robert Vanderlaan, Gongwer News, September 1, 1971.

[14]Representative Roy Spencer, Journal of the Michigan House of Representatives, No. 108, July 29, 1971, p. 2360.

[15]House Speaker William Ryan, Journal of the Michigan House of Representatives, No. 108, July 29, 1971, p. 2363.

[16]Representative Louis Crampton, Journal of the Michigan House of Representatives, No. 108, July 29, 1971, p. 2365.

[17]Representative Bryant, Journal of the Michigan House of Representatives, No. 108, July 29, 1961, p. 2369.

[18]Robert E. Butcher and Gladys K. Butcher v The Township of Grosse Ile, State of Michigan Supreme Court, No. 52935, June, 1971, p. 13.

[19]Michigan Education Association, "Tax Proposal Answers," Teachers Voice, Vol. 50, No. 1, September 4, 1972, p. 2.

[20]Michigan Chamber of Commerce, Special Report, April, 1972, p. 4.

[21]Ed Keller, "Property Tax Relief and Local Control: Separable Issues," The Michigan Elementary Principal, Vol. 47, No. 4, Summer, 1972, p. 4.

[22]Ibid.

[23]Governor William G. Milliken, Press Release, March 18, 1972.

[24]Terry Herndon (Executive Secretary Michigan Education Association) Gongwer News, May 30, 1972.

[25]Michigan Education Association, op. cit., p. 2.

[26]Interview with Kai Erickson, Director of Public Relations, Michigan Education Association, February 9, 1973.

[27]Interview with Dick Pastula, Special Assistant to the Governor, February 9, 1973.

[28]Michigan State AFL-CIO, Press Release, October 17, 1972.

[29]Michael Deeb, Gongwer News, October 11, 1972.

[30]Detroit Free Press, "C and D Would bring Equity in School Finance," Detroit Free Press, November 5, 1972.

[31]Editors, "No on Proposal C," Detroit News, October 4, 1972.

[32]Editors, "Problems Remain, but Vote Yes on Proposal C," Muskegon Chronicle, October 26, 1972.

[33]Editors, "Proposal C Presents Tax Reform Opportunity," Saginaw News, November 2, 1972.

[34]Editors, "Yes on C but a No for D," Lansing State Journal, October 31, 1972.

[35]Editors, "Legislature Key to Proposal C," Jackson Citizen Patriot, October 25, 1972.

[36]Editors, "Clever Selling Job May Backfire on Proposal C at Ballot Box," Grand Rapids Interpreter, October 19, 1972.

[37]Editors, "Busing Cuts Big Swath in Statewide Balloting," Macomb Daily (Mt. Clemens, Michigan), November 18, 1972, p. 6-A.

[38]William G. Milliken, Gongwer News, February 10, 1973.

[39]"Busing Cuts Big Swath in Statewide Balloting," Macomb Daily, November 13, 1972, p. 6-A.

[40]Ibid.

[41]Interviews with Dick Pastula and Kai Erickson, op. cit.

CHAPTER VI

ANALYSIS OF DATA

Analysis of the vote on Proposal C shows that neither the economic nor the social distance explanation, alone, was capable of describing the voting behavior of the Michigan electorate. However, when both explanations are used and the vote is analyzed according to metropolitan regions, a fairly comprehensive picture can be drawn of what factors influenced the vote on Proposal C.

This chapter analyzes the vote on Proposal C in four ways. First, zero-order and partial correlation matrices are presented showing a variety of demographic variables and how they correlate with the vote on Proposal C. From these matrices, it is clear that two explanations of public choice and public policy are relevant to an analysis of the vote. Secondly, multiple regression analysis and multiple partial correlations are used to compare the two explanations of public choice and public policy within each of the seven metropolitan areas. Third, different hypotheses are discussed and analyzed in an effort to explain why the metropolitan regions differed in the "explanatory" power of the two sets of variables. The fourth section analyzes whether or not the concept of social distance is as relevant for social differences within school districts as among school districts. In the last section, some of the major findings of the research are reviewed.

The Over-All Picture

The correlations between demographic characteristics in the 183 school districts and the vote on Proposal C are shown in Table 6.1. Three conclusions may be drawn from the correlation matrix. First, support of Proposal C was negatively related to the wealth of the community and the school district. Since school district expenditures are basically a function of community wealth, it is not surprising to find school district variables and general wealth variables similarly correlated with the vote on Proposal C. Support for Proposal C was correlated with family income (-.36), value of the home (-.43), and average rent (-.28), to about the same extent as with instructional expenditures (-.28), average teacher salaries (-.44), and state equalized valuation (-.29). The precentage of the total budget received from state aid was positively correlated with the vote on Proposal C (.31) because the percentage of funds received from the state is determined by the wealth of the district.

The second conclusion to be drawn from Table 6.1 is that home ownership and property tax rate were negatively associated with support of Proposal C (-.26 and -.28, respectively). Although proponents of Proposal C argued that its passage would mean property tax relief for the homeowner, it is apparent that home ownership and high millage levels were associated with the desire to maintain the current system.

The third and final conclusion is that districts with a large percentage of people age 65 or over tended to support Proposal C more than communities with a smaller percentage (+.27). Possibly, tax

TABLE 6.1.--Zero-order Correlations Between 13 Demographic Variables and the Percentage Favoring Adoption of Proposal C in 183 School Districts.

	% Yes on C	% State Aid	Instruction Expense	Average Teacher Salary	SEV	Millage	% Black	% Over 65	Education	Occupation	% Homeowners	Home Value	Average Rent	Average Income
Percentage Favoring C	XX													
Percent State Aid	.31	XX												
Instructional Expense	-.28	-.78	XX											
Average Teacher Salary	-.44	-.57	.69	XX										
State Equalized Valuation	-.29	-.91	.73	.54	XX									
Millage Rate	-.26	-.38	.54	.38	.09	XX								
Percent Black	.18	-.16	.37	.26	.20	.05	XX							
Percent Over 65	.27	-.18	.25	.11	.23	-.11	.30	XX						
Education Ratio	-.16	-.12	.09	.03	-.05	.42	-.33	-.35	XX					
Occupation Ratio	-.10	-.45	.51	.31	.29	.52	-.03	.12	.57	XX				
Percent Homeowners	-.28	.25	-.39	-.19	-.28	-.05	.53	-.36	.21	-.15	XX			
Median Home Value	-.43	-.48	.35	.34	.33	.45	-.22	.66	.66	.10	.10	XX		
Average Rent	-.49	-.41	.39	.41	.24	.54	-.23	-.38	.66	.60	.12	.85	XX	
Average Income	-.36	-.41	.32	.35	.26	.44	-.22	-.17	.64	.70	.16	.90	.82	XX

relief was an important factor in influencing opinion in that segment of the community. It may also be spurious because of the relationship between the more highly urbanized districts, the high percentage of people age 65 or over, and support of Proposal C.

In addition to school districts in the seven metropolitan areas, correlations were computed for the census tracts within the central cities of six of the areas, and for subcommunities in Detroit. The correlation matrices are presented in Tables 6.2 and 6.3.

Table 6.2 gives the correlations between 13 demographic variables in 182 census tracts in six metropolitan central cities (excluding Detroit). Only two variables were significantly related to the vote on Proposal C. The percent black was positively correlated with support of the amendment (+.55). The percentage of people buying or owning their own home was negatively correlated with such support (-.43). The difference in the two correlations is interesting, in that it suggests social characteristics rather than economics may explain the vote within school districts as well as among school districts. If property tax relief had been important, the percentage of people owning or buying their homes should have been positively correlated with the vote on the proposal. However, this was not the case.

The same conclusion can be drawn from Tables 6.3 and 6.4. Table 6.3 shows the correlations among 14 demographic variables in the 49 subcommunities of Detroit. The percentage nonwhite was highly correlated with the vote on Proposal C (+.87). The relationship between home ownership and support of the amendment was similar to the

TABLE 6.2.--Zero-order Correlations Between Nine Demographic Variables and the Percentage Favoring Adoption of Proposal C in 182 Census Tracts in Six Central Cities.

	% for C	% Black	% Over 65	Education	Occupation	% Owning Home	Home Value	Rent	Income	Tax Rate
Percentage Favoring C	XX									
Percent Black	.55	XX								
Percent Over 65	-.13	-.32	XX							
Education Ratio	-.16	-.16	-.21	XX						
Occupation Ratio	.02	-.39	.21	.66	XX					
Percent Homeowners	-.43	-.31	-.27	.50	.10	XX				
Median Home Value	-.07	-.25	-.32	.70	.54	.10	XX			
Average Rent	-.05	-.27	-.37	.63	.40	.31	.80	XX		
Average Income	-.15	-.35	-.19	.63	.43	.53	.77	.60	XX	
Tax Rate	.22	-.12	.10	.00	.15	-.03	.08	.04	-.08	XX

Note: .36 is significant at .01 level.

TABLE 6.3.--Zero-order Correlations for Selected Variables from 49 Subcommunities of Detroit.

Variables	% Yes Vote C	% Nonwhite	% Over 65	% Under 18	Median Income	% Owning or Buying Home	% Single Family Homes	Education	High Socio-Economic Status	% White Collar	% Unemployed	% Families with Kids under 18	% Children in Parochial School	Length of Res.
% Yes Vote on C	X													
% Nonwhite	.87	X												
% Over 65	-.44	-.64	X											
% Under 18	.44	.47	-.70	X										
Median Income	-.49	-.39	.04	-.27	X									
% Owning or Buying Home	-.64	-.42	.03	-.21	.85	X								
% Single Family Homes	-.68	-.47	.05	-.19	.81	.97	X							
Education	.00	-.06	.02	-.18	.63	.40	.37	X						
High Socio-Economic Status	-.32	-.45	.35	-.30	.65	.47	.46	.66	X					
% White Collar	-.24	-.48	.56	-.42	.49	.22	.23	.57	.71	X				
% Unemployed	.69	.66	-.27	.21	-.49	-.54	-.56	-.19	-.46	-.25	X			
% Families with Kids under 18	.19	.33	-.74	.68	.29	.29	.28	.09	-.10	-.29	.03	X		
% Children in Parochial School	-.67	.74	.55	.46	.46	.46	.47	.11	.46	-.48	-.51	-.25	X	
Length of Residence	-.27	-.15	-.06	.04	.27	.38	.37	.02	.07	-.16	-.28	-.21	.27	X

TABLE 6.4.--Partial Correlations for Selected Variables from 49 Subcommunities of Detroit with Percentage Nonwhite Controlled for.

Variables	% Yes Vote C	% Nonwhite	% Over 65	% Under 18	Median Income	% Owning or Buying Home	% Single Family Homes	Education	High Socio-Economic Status	% White Collar	% Unemployed	% Families with Kids under 18	% Children in Parochial Schools	Length of Res.
% Yes Vote on C	X													
% Nonwhite	X	X												
% Over 65	.28	X	X											
% Under 18	.06	X	-.58	X										
Median Income	-.33	X	-.29	-.10	X									
% Owning or Buying their Home	-.60	X	-.34	-.01	.83	X								
% Single Family Homes	-.61	X	-.37	.05	.77	.96	X							
Education	.11	X	-.07	-.17	.66	.41	.38	X						
High Socio-Economic Status	.14	X	-.09	-.11	.57	.35	.31	.71	X					
% White Collar	.38	X	.38	-.26	.38	.03	.00	.62	.63	X				
% Unemployed	.31	X	.25	-.15	-.33	-.38	-.39	-.20	-.24	.09	X			
% Families with Kids under 18	-.21	X	-.72	.63	.49	.49	.53	.12	.04	-.16	-.27	X		
% Children in Parochial Schools	-.10	X	.15	-.15	.24	.24	.19	.09	.22	.22	-.05	.01	X	
Length of Residence	-.28	X	-.21	.13	.35	.35	.33	.01	.01	-.27	-.24	-.28	.24	X

other six areas, with correlations of -.64 for the percentage owning or buying their own home and -.68 for the percentage of single-family dwellings. Because of the high correlations between support of Proposal C and percentage nonwhite, partial correlations were computed for 12 variables while controlling for percentage nonwhite. Controlling for the percentage nonwhite (Table 6.4), did not significantly reduce the correlation among the percentage owning or buying their own home, the percentage of single-family dwellings, and the vote on Proposal C. However, other relationships that were significant before were no longer significant at the .01 level. Only the percentage of white-collar workers in a subcommunity was significantly correlated (+.38) with the vote on Proposal C. This may substantiate the theories of some urbanists that "cosmopolitans" support consolidation or integration more than "locals" do. However, this was the only instance of a positive relationship between the percentage of white-collar or professional employees and the percentage voting for Proposal C.

All four matrices show the vote on Proposal C was more strongly related to the social characteristics of the school district, census tract, or subcommunity than to home ownership or tax rate. Thus, the vote on Proposal C may best be explained by social differences rather than property tax relief for homeowners.

Comparisons of Two Explanations

A second purpose of this chapter is to compare two such explanations of public choice and public policy. Chapter II gave the theoretical rationale for each explanation. The social distance explanation

suggests that as social distance between school districts or census tracts increases, support for Proposal C will decline. Social distance was measured on three dimensions: social rank, segregation, and life style. The economic explanation hypothesizes that the vote on Proposal C should be explained best by the economics of property tax relief. Three variables are used to measure the current burden of property taxes in the school district: tax effort, tax burden on homeowners, and tax burden on income.

The first step in comparing the two explanations was to compute the multiple regression equation for each set of variables for all 183 school districts. The variables were standardized by using the mean and standard deviation for all 183 districts. Table 6.5 gives the multiple regression coefficients, zero-order correlation coefficients, and Beta scores for each model.

As can be seen, the regression equations, together, account for only 7 percent of the variance (R^2). Two explanations come to mind. Either the independent variables selected have scarcely any effect on the vote, or else such relationships as exist vary in strength and direction over metropolitan areas, so that they become obscured when the data for all seven areas are combined.

To test these possiblities, multiple regression equations and multiple partial coefficients were computed for each metropolitan area. The social distance variables were standardized by using the mean and the standard deviation of each metropolitan area, to insure comparability among metropolitan areas. This is a different approach than

TABLE 6.5.--Multiple Coefficients of Determination, Simple Correlation Coefficients, and Beta Scores for 183 School Districts on Two Explanations of Public Choice and Public Policy.

	R^2	r	β
Economic Model[a]			
Tax Effort	.01	-.11	-.12
Tax Burden on Homeowners	.00	-.01	-.02
Tax Burden on Income	.00	.00	-.02
Total	.01		
Social Distance Model[b]			
Segregation	.03	.18	.13
Social Rank	.01	.15	.16
Life Style	.02	-.13	-.15
Total	.06		

[a] $F = .84$

[b] $F = 4.25$

$N = 183$

the one used by Shevky and Bell in their original analysis.[1] The researchers standardized their social distance variables by using the range of the variable over all metropolitan areas. Standardizing by metropolitan area, rather than by all seven areas, is based on the assumption that social distance is relative and that individuals compare their social status with surrounding communities rather than by some absolute or statewide standard.

Before computing the regression equations, correlations between independent variables in each explanation for all seven metropolitan regions were calculated. This was done to test for multicollinearity between independent variables. The intercorrelations are given in

Table 6.6. A number of correlations present a problem of collinearity. In Lansing and Jackson the correlation between segregation and tax effort is above $.80^2$ (.92 in Lansing and .94 in Jackson). However, since they are in different models the multiple partial correlations will control for their interaction.

In four cases there were serious problems of multicollinearity. The correlation between tax burden on homeowners and tax burden on income was -.79 in Grand Rapids, -.88 in Jackson, -.79 in Flint, and -.84 in Muskegon. To compensate for the high correlations, tax effort and the more powerful of the other two economic variables (tax burden on homeowners and tax burden on income) were used to calculate the multiple regression equations for the economic explanation in the four metropolitan areas. The following formula was used to adjust for the unequal number of independent variables and degrees of freedom.

$$\bar{R}^2 = 1 - \frac{N - 1}{N-K-1} (1-R^2)$$

N is the number of school districts in the metropolitan area. K is the number of independent variables used in the regression equation. R^2 is the squared multiple coefficient of determination. Calculating the multiple partial correlations between the two explanations after using this formula to adjust for the unequal number of independent variables and degrees of freedom, allowed a comparison of the two explanations in the seven areas.

Table 6.7 presents the multiple coefficients of determination (R), the squared multiple coefficients of determination (R^2), the

TABLE 6.6.--Zero-order Correlations Between Independnet Variables in Seven Regions and the Entire Universe

Area	Soc. Distance			Economic			Soc. Distance			Economic			Soc. Distance			Economic			Soc. Distance			Economic		
Explanation Variables	SEG	RANK	LFSTY	EFFORT	TXBDH	TXBDI	SEG	RANK	LFSTY	EFFORT	TXBDH	TXBDI	SEG	RANK	LFSTY	EFFORT	TXBDH	TXBDI	SEG	RANK	LFSTY	EFFORT	TXBDH	TXBDI
	Grand Rapids																							
Soc. Distance: SEG		-.17	-.35	.67	-.24	.44		-.31	.06	.92	.14	-.10		.28	-.15	.32	-.27	.37		.05	-.34	-.47	-.12	-.09
Soc. Distance: RANK			.17	-.52	.19	-.26			.30	-.28	-.62	.22			.21	-.11	-.52	.18			.30	-.29	-.46	.17
Soc. Distance: LFSTY				-.39	-.28	.32				.24	-.48	.20				.07	-.23	.00				-.47	-.17	.10
Economic: EFFORT					-.20	.25					.15	.20					.03	.03					.01	.04
Economic: TXBDH						-.60						-.31						-.56						-.79
Economic: TXBDI																								
	N = 13						N = 24						N = 84						N = 18					
	Jackson						Flint						Muskegon						All Seven					
Soc. Distance: SEG		-.05	-.44	.94	.59	.33		.28	.03	.71	.03	-.19		.34	-.05	.15	-.18	.22		.20	-.15	.38	.06	.06
Soc. Distance: RANK			.30	.09	-.40	.26			.36	-.11	-.32	.07			.15	-.01	-.10	.04			.22	-.09	-.06	.01
Soc. Distance: LFSTY				-.45	-.40	.26				-.20	-.14	.17				-.03	.08	.12				-.10	-.15	.09
Economic: EFFORT					.73	-.49					.01	-.16					-.32	.41					.02	-.08
Economic: TXBDH						-.88						-.79						-.84						-.43
Economic: TXBDI																								
	N = 20						N = 20						N = 133						N = 183					

SEG = Segregation
RANK = Social Rank
LFSTY = Life Style
EFFORT = Tax Effort
TXBDH = Tax Burdon on Homeowners
TXBDI = Tax Burden on Income

corrected R^2 ($\bar{R}^2$), and multiple partial coefficients of determination. The table shows the striking differences in the explanatory power of the two sets of variables in each metropolitan area. In three of the metropolitan regions the social distance variables clearly explained more of the variance (R^2 and $\bar{R}^2$) than did the economic variables. In Jackson and Grand Rapids the social distance variables explained more of the nonadjusted variance (R^2) than did the economic variables. However, when the amount of variance explained was adjusted to compensate for the number of independent variables and degrees of freedom, the relationship became nonexistent. In Muskegon and Flint the economic variables explained more of the variance than did the social distance variables. It would appear that the lack of any significant finding in Table 6.6 was due to compromising the power of each explanation by combining all metropolitan regions.

The independent variables differ in the amount of variance explained. Table 6.8 subdivides the two explanations or models into the component independent variables. It lists the amount of variance explained by each variable (R^2), the zero-order correlation between the variable and the dependent variable, and the Beta weight for each variable. It also gives the same data for two economic variables in the four metropolitan regions where tax burden on home ownership and tax burden on income were highly correlated.

In Detroit and Flint, segregation contributed the greatest variance explained by the social distance variables. Social rank was most important in Lansing. In the other four areas life style differences contributed greatest to the amount of variance explained by the

TABLE 6.7.--Multiple Coefficients of Determination, Corrected Multiple Regression Coefficients of Determination ($\bar{R}^2$), and Multiple Partial Correlations of Determination for Two Explanations of Public Policy and Public Choice.

	Saginaw			Lansing			Detroit			Grand Rapids			Jackson			Muskegon			Flint		
	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$	R	R^2	$\bar{R}^2$
All Six Variables	.92	.84	.68	.69	.48	.27	.59	.34	.34	.51	.26	.00	.59	.34	.00	.72	.52	.04	.82	.68	.49
Five Variables*										.51	.26	.00	.57	.32	.00	.69	.46	.30	.81	.67	.50
Social Distance Three Variables	.39	.79	.58	.66	.44	.22	.52	.27	.27	.49	.24	.00	.53	.27	.00	.22	.05	.00	.60	.36	.17
Economic																					
Three Variables	.56	.31	.11	.36	.13	.00	.16	.02	.02	.34	.11	.00	.30	.09	.00	.64	.41	.18	.73	.53	.49
Two Variables										.30	.09	.00	.29	.08	.00	.60	.36	.11	.72	.52	.44
Multiple Partial Coefficients of Determination as Computed for R^2 and $\bar{R}^2$.																					
Social Distance Controlled for Economic	(3)	.76	.64		.40	.27		.31	.31		.17	.00		.31	.00		.19	.00		.29	.00
	(2)*										.19	.00		.26	.00		.16	.00		.28	.07
Economic Controlled for Social Distance	(3)	.24	.24		.07	.06		.10	.10		.03	.00		.13	.00		.49	.04		.48	.39
	(2)*										.03	.00		.13	.00		.43	.00		.48	.37

*Because of the high correlation between tax burden on homeowners and tax burden on income in Grand Rapids, Jackson, Muskegon, and Flint, the multiple regression coefficients of determination and the multiple partial correlations were computed using two variables in the economic explanation as well as all three variables. The corrected multiple regression coefficient of determination ($\bar{R}^2$) is used to adjust for the unequal number of variables in each explanation.

model. Tax effort contributed the most variance explained by the economic variables in Grand Rapids. Tax burden on homeowners was the most important economic variable in Saginaw, Lansing, Detroit, Jackson, and Flint. Tax burden on income was the most powerful economic variable in Muskegon.

Although the ranking of the variables differed, the average contribution made by each variable to the power of each explanation shows a relatively equal contribution. The average percentage of variance explained by life style, social rank, and segregation was 16, 10.9, and 9.7, respectively. For the economic variables, tax effort, tax burden on homeowners, and tax burden on income had averages of 5.4, 11, and 6.7 percent, respectively.

The multiple partial coefficients of determination show that the amount of variance explained by each model varied from one metropolitan region to another. In five of the seven regions, the social distance variables were better at explaining the variance in the vote on Proposal C than were the economic variables. The economic variables were more successful than were the social distance variables in Muskegon and Flint. Table 6.9 highlights these differences. The seven metropolitan regions are ranked according to the success of the social distance variables in explaining the voting on Proposal C. The ranking is based on the difference between the multiple partial coefficients of determination for the noncorrected variance explained. $\bar{R}^2$ was not used because of the very unstable nature of the statistic for regions with few independent variables and small number of school districts.

TABLE 6.8.--Multiple Coefficients of Determination, Zero-Order Correlations, and Beta Weights for Four Social Distance Variables, Three Economic Variables and the Two Most Powerful Economic Variables in the Metropolitan Areas where Multi-Collinearity Exceeds .79

Metropolitan Area	Saginaw			Lansing			Detroit			Grand Rapids			Jackson			Muskegon			Flint		
	R^2	r	β	R^2	r	β	R^2	r	β	R^2	r	β	R^2	r	β	R^2	r	β	R^2	r	β
Variables																					
I. Social Distance																					
Segregation	.07	.27	.04	.08	.29	.50	.18	.43	.23	.06	.24	.17	.00	.05	-.21	.03	.18	.04	.26	.51	.24
Social Rank	.27	.39	-.20	.18	.49	-.22	.01	.16	.10	.01	.11	.12	.08	-.28	-.44	.02	.18	.07	.04	.05	-.21
Life Style	.44	-.71	-.54	.18	-.52	-.63	.08	-.34	-.44	.17	-.41	-.56	.20	-.48	-.28	.00	.05	.03	.06	-.28	-.05
Total Variance Explained	.73			.44			.27			.24			.28			.05			.36		
II. Economic																					
Tax Effort	.04	.20	.02	.02	.14	.06	.01	.11	.08	.06	.25	.11	.03	.17	.03	.07	.26	.02	.15	.39	.01
Tax Burden on Homeowners	.20	.39	.00	.09	.32	.17	.01	.11	.08	.03	-.16	.01	.05	-.02	-.02	.02	.04	1.0	.37	.61	.03
Tax Burden on Income	.08	-.45	-6.7	.02	-.24	-.11	.00	.02	.00	.02	-.24	-.11	.01	.04	-3.9	32	.30	24.5	.01	-.47	3.07
Total Variance Explained	.32			.13			.02			.11			.09			.14			.53		
III. Economic Model with Two Strongest Variables																					
Tax Effort										.06	.25	.11	.03	.17	.03	.07	.26	.02	.15	.39	.01
Tax Burden on Homeowners										.03	-.18	-.01	.05	-.02	-.01				.37	.61	.02
Tax Burden on Income																.29	.30	24.0			
Total Variance Explained										.09			.08			.36			.52		

TABLE 6.9.--Multiple Partial Coefficients of Determination for Two Explanations of Public Policy and Public Choice in Seven Metropolitan Areas and the Relative Ranking of Each Explanation.

Metropolitan Area	Social Distance Controlled for Economic		Economic Controlled for Social Distance		Difference Between Multiple Partial Coefficients		Ranking
	R^2	$\bar{R}^2$	R^2	$\bar{R}^2$	R^2	$\bar{R}^2$	
Saginaw	.76	.64	.24	.24	.52	.40	1
Lansing	.40	.27	.07	.06	.33	.21	2
Detroit	.31	.31	.10	.10	.21	.21	3
Grand Rapids							
Three Economic Variables	.17	.00	.03	.00	.14	.00	4
Two Economic Variables	.19	.00	.03	.00	.1	.00	
Jackson							
Three Economic Variables	.31	.00	.13	.00	.18	.00	5
Two Economic Variables	.26	.00	.13	.00	.13	.00	
Flint							
Three Economic Variables	.29	.00	.48	.39	-.19	-.39	6
Two Economic Variables	.28	.07	.48	.37	-.20	-.30	
Muskegon							
Three Economic Variables	.19	.00	.49	.04	-.30	-.04	7
Two Economic Variables	.16	.00	.43	.00	-.27	.00	

Metropolitan Differences

Why should metropolitan areas differ as to the model that best explains voting behavior? Two general explanations may account for the differences. One explanation lies in the characteristics of the metropolitan region. The social and demographic characteristics of Flint and Muskegon may be sufficiently different from the other five areas to account for the differences in the two sets of variables. Three hypothesis are related to this explanation.

The first hypothesis about social and demographic characteristics is that the differences in the strength of the two models may be a result of the nature of the independent variables. Conceivably, values for the social distance model may be greatly different for Muskegon and Flint than the other urban areas. Table 6.10 presents the mean, ranking of the mean, standard deviation, and ranking of the standard deviation for each metropolitan area. A Spearman rank-order correlation between the mean of each variable and the ranking of the power of the social distance model is also presented. The rank-order correlations indicate that there is little relationship between the mean values and social distance. Only the relationship between the mean value on tax burden for homeowners and strength of the social distance model is significant. The high correlation is probably a function of the importance of the school in maintaining the suburban life style. In areas where homeowners are willing to accept a greater tax burden to support schools, there may be a greater tendency to be concerned about maintaining the role played by the

TABLE 6.10.--Mean, Ranking of the Mean, Standard Deviation, Ranking of the Standard Deviation, and Spearmen Rank-Order Correlations for the Mean Ranking on Six Independent Variables.

Variable	Saginaw	Lansing	Detroit	Grand Rapids	Jackson	Flint	Muskegon	r_s^*
Segregation								
Mean and Rank	- 21.6 (3)	- 8.4 (6)	- 40.4 (6)	- 10.2 (5)	- 11.6 (4)	- 7.6 (7)	- 24.5 (2)	.25
S.D. and Rank	6.6 (4)	1.9 (1)	10.7 (6)	2.6 (2)	3.7 (3)	8.5 (5)	15.0 (7)	
Social Rank								
Mean and Rank	3.9 (3)	2.6 (5)	- 5.6 (1)	2.5 (6)	2.9 (4)	1.2 (7)	5.5 (2)	.14
S.D. and Rank	8.8 (4)	8.7 (3)	9.1 (6.5)	9.0 (5)	8.1 (2)	9.1 (6.5)	8.0 (1)	
Life Style								
Mean and Rank	7.5 (3)	- 8.8 (3)	4.7 (7)	9.1 (2)	7.8 (4)	4.9 (6)	11.6 (1)	-.32
S.D. and Rank	10.0 (7)	4.9 (3)	5.1 (4)	5.7 (5)	4.7 (2)	4.5 (1)	6.0 (6)	
Effort								
Mean and Rank	56.0 (5)	65.0 (4)	184 (1)	78 (3)	52.5 (6)	83 (2)	46 (7)	.25
S.D. and Rank	52 (2)	84 (4)	303 (7)	97 (5)	62.5 (3)	114 (6)	24 (1)	
Tax Burden Home								
Mean and Rank	440 (1)	407 (3)	420 (2)	323 (4)	269 (7)	312 (5)	297 (6)	.86
S.D. and Rank	423 (7)	231 (5)	212 (4)	150 (3)	121 (1)	147 (2)	337 (6)	
Tax Bd. on Income								
Mean and Rank	.44(7)	.46(4)	.45(5.5)	.45(5.5)	.51(2.5)	.51(2.5)	.53(1)	.67
S.D. and Rank	.23(4.5)	.26(6)	.30(7)	.19(1.5)	.22(3)	.23(4.5)	.19(1.5)	
Average Rank of S.D.	4.7	3.7	5.7	3.6	2.3	4.2	3.7	

*Spearman rank order correlation between rank on social distance model and rank on mean score.

local district in financing education. In addition, the procedure of rank ordering metropolitan areas and tax burden on homeowners most likely distorts to some extent the relationship between the two variables. Although the relationship is significant, neither Flint nor Muskegon differed greatly from the other areas on the mean value of the independent variables.

A second hypothesis is that the social distance model may be strongest where there is a high degree of homogeneity or similarity between districts, both economically and socially. If Proposal C had been interpreted as an integrative mechanism, a metropolitan area that was hetereogeneous might have been more worried about the integrative implications of Proposal C than a community that was already homogeneous. This hypothesis is tested by comparing the average ranking of the standard deviations for the six variables with the strength of the social distance model. A low standard deviation would indicate a high degree of homogeneity, whereas a high standard deviation would indicate a low degree of homogeneity. The correlation is -.19, which would say there is very little relationship between homogeneity and strength of the social distance model.

The third hypothesis that may account for the difference in the strength of the social distance model is that the model may be influenced by the economic conditions of the areas. It is possible that in poor areas the interest in the economic aspects of Proposal C may have been greater than in relatively wealthy areas. Table 6.11 lists a number of economic measures for the seven areas and the Spearmen

TABLE 6.11.--Mean Values and Rankings of Eight Wealth Variables in Seven Metropolitan Areas.

Economic Variable	Saginaw	Lansing	Detroit	Grand Rapids	Jackson	Flint	Muskegon	R_s^*
Percent State Aid	48.6	52.1	34.5	46.4	49.6	49.9	54.1	
Rank	(3)	(6)	(1)	(2)	(4)	(5)	(7)	.46
Instructional Expense	$ 573	$ 590	$ 684	$ 590	$ 554	$ 548	$ 620	
Rank	(5)	(4)	(1)	(3)	(6)	(7)	(2)	.07
Average Teacher Salary	$10,326	$10,148	$12,131	$10,628	$10,390	$10,976	$10,523	
	(6)	(7)	(1)	(3)	(5)	(2)	(4)	-.43
Percent Homeowners	8.15	72.8	78.1	82.2	81.1	81.5	76.7	
	(2.5)	(7)	(5)	(1)	(4)	(2.5)	(6)	.03
Average Home Value	$17,062	$17,146	$23,024	$16,811	$13,233	$18,270	$13,308	
	(3)	(4)	(1)	(5)	(7)	(2)	(6)	.39
Average Rent	$ 96	$ 102	$ 135	$ 98	$ 94	$ 114	$ 80	
	(5)	(3)	(1)	(4)	(6)	(2)	(7)	.32
Average Income	$11,638	$12,034	$14,412	$12,372	$11,167	$12,715	$10,500	
	(5)	(4)	(1)	(3)	(6)	(2)	(7)	.25
State Equalized Valuation	$17,054	$13,462	$21,454	$16,001	$14,724	$14,959	$12,432	
	(2)	(6)	(1)	(3)	(5)	(4)	(7)	.54

*Spearman Rank order correlations between rank on Social Distance Explanation and Rank on Wealth Variable.

*Significance level for an N of 7 is .71 for significance level of .05.

rank-order correlations between the economic characteristic and the strength of the soical distance model. A review of the data in Table 6.11 shows that neither Flint nor Muskegon was much different from the other metropolitan areas. Muskegon was the poorest metropolitan area (average income of 10,500, SEV of 12,432, and average home value of 13,308). This may account for some of the voters' interest in property tax relief in the Muskegon area. However, the same is not true for Flint. Flint ranked second on average income, fourth on SEV, and second on home value. The Spearman rank-order correlations show no clear relationship between the economic characteristics of the metropolitan areas and strength of the social distance model.

A second explanation for the differences in the two models is the variety of local issues affecting the vote. It is hypothesized that social distance variables may be more important in areas threatened by cross-district busing or some form of forced school desegregation. Indeed, social distance maintenance may affect the vote most when social boundaries or social distance are preceived to be threatened.

To test this hypothesis, the major newspapers in all seven areas were analyzed for the three months prior to the election. The number of column inches printed on the topic of integrating the public schools was computed for both the state and local level. The column inches were further subdivided into news items, editorials, letters to the editor, and special features. The number of column inches was then divided by the average length of the newspaper. This gave a ratio of the relative importance of school integration in each urban area.

TABLE 6.12.--Ratios of the Importance of School Integration in Seven Metropolitan Areas.

	Letters to Editor		News		Editorials		Features		Total		All
	Local	State	Local	State	Local	State	Local	State	Local	State	
Saginaw	0	0	1.67	9.71	.73	0	2.56	.82	4.95	10.53	15.49
Lansing	10.98	0	28.18	14.57	1.92	.45	8.63	0	49.71	15.02	64.74
Detroit											
(Free Press)	1.04	0	13.9	3.30	3.90	0	2.34	0	21.18	3.3	24.48
(News)	5.76	0	38.8	1.94	4.67	0	4.34	0	53.6	1.98	55.54
Total Detroit	4.12	0	30.41	2.40	4.41	0	3.67	0	42.64	2.39	45.05
Grand Rapids	.57	0	6.08	8.15	.34	.27	0	0	6.98	8.41	15.41
Jackson	3.3	0	3.88	10.79	.74	1.71	0	0	7.94	12.50	15.49
Flint	.19	.37	.49	9.47	.45	.97	0	0	1.33	10.82	12.15
Muskegon	.08	0	0	8.11	1.30	1.14	0	0	1.14	9.24	10.38

The ratios of column inches devoted to stories or comments about racial integration in the schools indicate that there existed a variety of interest and issues in the different metropolitan areas. Before further analyzing the content of Table 6.11, it may be worthwhile to look at the status of school desegregation in the seven areas.

This brief analysis reveals the startling fact that in Muskegon and Flint, the two areas where the economic model best explained the vote, there was no pending lawsuit that would have forced the integration of the schools. In all other areas there has been, or was, a lawsuit pending which threatened school desegregation. The threat was exacerbated by the Detroit cross-district busing controversy.

In Lansing, five members of the local school board were recalled in the November election because of a busing plan integreting the city schools. The Lansing State Journal gave considerable coverage to the recall and the relationship between the recall vote and integregation in the schools. The recall vote was highly correlated with the vote on Proposal C (-.79 yes on recall and no on C, for 69 precincts in Lansing). In Detroit, Judge Stephen Roth had ordered a massive cross-district busing plan that would have involved 53 school districts, thus posing a threat to the viability of the local district. The Roth decision, and the appeal of that decision, remained a major factor in the November election, particularly in Detroit. In Grand Rapids, the local school board was faced with a lawsuit aimed at forcing desegregation of the schools. This plus a lawsuit in nearby Kalamazoo drew considerable attention to the issue. In Jackson, the

local school superintendent was fired because of his support of a desegregation plan. A lawsuit followed. In Saginaw, the question of integrating the public schools had already reached a climax and had subsided somewhat. In 1971 the Saginaw public schools were closed for over one month because of racial violence. The school board decided to promote a county-wide desegregation plan that would have included all the school districts in the Saginaw region. The plan was hotly debated throughout the Saginaw area. The suburban districts were successful in their opposition to the plan. Consequently, the Saginaw Board of Education passed a desegregation plan involving only the city of Saginaw Public Schools.

Comparing the ranking of the urban areas on the importance of the social distance variables in explaining the vote and the ranking of the areas on the amount of space given to the issue of racial integration in the public schools by the newspapers, as measured by column inches of newsprint divided by average length of newspaper, shows a close relationship between the two. Table 6.13 presents the rankings of the metropolitan regions on the two measures. The amount of space given to the issue of school integration by the newspaper is named the School Integration Ratio. Only Saginaw was dramatically different on the two rankings. In the other six regions, the order of importance of the social distance explanation was almost identical to the order of importance given to local concerns over school integration. The reason why Saginaw did not score highly on the School Integration Ratio may be that the public debate over school

TABLE 6.13.--Comparative Rankings of the Social Distance Explanation and the School Integration Ratio.

	Social Distance Rank	Rank of the School Integration Ratio
Saginaw	1	5
Lansing	2	1
Detroit	3	2
Grand Rapids	4	4
Jackson	5	3
Flint	6	6
Muskegon	7	7

Spearman Rho = .61 with Saginaw, .83 without Saginaw.

desegration was held during 1971 rather than 1972. The issue may have been less relevant to the newspaper in Saginaw than to the citizen who remembered the previous threat to his school district boundaries.

It appears that local issues were most important in explaining why some metropolitan areas voted according to the social distance model while other areas voted according to the economic model. This initial analysis indicates that where social boundaries were felt to be threatened, the voters responded by calling for maintenance of present boundaries. However, when social boundaries were not threatened, voters responded according to economic interests.

Social Differences Within School Districts

A fourth objective of this analysis is to determine if the concept of social distance can be applied to social differences within

school districts as it was to social differencea among school districts. This objective is important because of the large size of the central city school districts. For example, the Detroit Public Schools enroll over 280,000 pupils every year. This is approximately 13 percent of the total student population of Michigan.

The seven central school districts were used to compare the relationship between social distance variables within a district to the social distance variables among school districts. Census tracts were used as the unit of analysis in all cities except Detroit. In Detroit, the large number of census tracts (800) prohibited their use. However, 49 subcommunities, determined by the Detroit's Mayors Committee for Community Renewal, were used. The subcommunities were composites of similar census tracts, both socio-economically and geographically. Measures of percentage of nonwhite, life style, and social rank were computed for all census tracts and subcommunities. The variables were then standardized. The census tract or subcommunity with the most ghettolike characteristics were used as the reference point. The standardized values of the three variables for the census tract were subtracted from all of the other census tracts or subcommunities thereby yielding a social distance measure. The difference was assigned to the census tract that was not used as the reference point. The referent census tract was given the value of 0.0 on all three measures. The three social distance variables were then regressed on the percentage favoring adoption of Proposal C.

Table 6.14 gives the multiple regression coefficients of determination and Beta weights for the three social distance variables in

TABLE 6.14.--Multiple Regression Coefficients of Determination and Beta Weights for Three Social Distance Variables in Census Tracts or Subcommunities in Seven Metropolitan Cities.

	Detroit		Saginaw		Jackson		Lansing		Grand Rapids		Flint		Muskegon	
	R^2	β	R^2	β	R^2	β	R^2	β	R^2	β	R^2	β	R^2	β
Segregation	.75	.91	.75	1.07	.35	.90	.23	.47	.59	.88	.26	.82	.04	.46
Social Rank	.02	.14	.04	- .23	.26	-.50	.02	-.06	.05	-.21	.16	-.53	.13	-.48
Life Style	.04	-.19	.01	- .10	.08	-.36	.14	-.37	.03	-.15	.11	-.34	.01	-.10
Total R^2	.81		.80		.69		.39		.67		.53		.18	
N =	49		21		13		43		46		47		12	

seven central city school districts. Segregation, life style, and social rank accounted for anywhere between 81 and 18 percent of the variance. Unfortunately, the explanatory power of the three variables within the central city school district was not consistent with the entire metropolitan area. Table 6.15 shows the amount of variance explained in each metropolitan area and central city, the relative ranking according to the percentage of variance explained, and the ranking of the seven metropolitan areas on the School Integration Ratio.

TABLE 6.15.--Percentage of Variance Explained by the Social Distance Variables in Metropolitan Areas and Central Cities.

	R^2 Metro	Rank	R^2 City	Rank	Rank on School Integration Ratio
Saginaw	.79	(1)	.80	(2)	(5)
Detroit	.27	(3)	.81	(1)	(2)
Lansing	.44	(2)	.39	(6)	(1)
Grand Rapids	.24	(6)	.67	(4)	(4)
Jackson	.28	(5)	.69	(3)	(3)
Flint	.36	(3)	.53	(5)	(6)
Muskegon	.05	(7)	.18	(7)	(7)

The Spearman rank-order correlations between percentage variance explained by the social distance variables in the metropolitan area and the central city was +.49. The correlation between the ranking of the importance of school desegregation and percentage variance explained in the central city was +.36. Neither correlation was significant, becaue of the small n.

The explanation for the difference between central city and metropolitan area on the variance explained by the social distance model is not clear. It may have resulted from the nature of the data. The use of a considerably smaller unit of analysis, i.e., census tract rather than school district, may have accentuated the importance of the percentage nonwhite. Segregation explained 75, 75, 35, 23, 59, 26, and 4 percent of the variance in the different central cities. This was considerably more than segregation explained for the metropolitan areas (7, 18, 8, 6, 2, 26, and 3 percent).

A second possiblity is that metropolitan voters saw Proposal C as being closely associated with the Detroit cross-district busing plan. Metropolitan voters may have been voting on the basis of maintaining the school district. The central city voter may have been more concerned with maintaining the character of the neighborhood. Desegregation plans had already been put into effect in most cities, thereby lessening the concern over the issue of the loss of local control for the central city resident but not for the metropolitan area resident. This would account for the differences in the correlation between the importance of the school desegregation ranking and the variance explained by the social distance model.

Conclusions

Four basic conclusions can be drawn from this analysis of the vote on Proposal C. First, the vote on Proposal C cannot sufficiently be explained by only one model of public choice and public policy.

When multiple regression equations were computed for all 183 districts the two models, combined, explained only 7 percent of the variance.

Secondly, the seven metropolitan areas differed on which model best explained the vote in that area. In five of the seven areas, the social distance model explained the vote better than the economic model did. In Flint and Muskegon the economic model was most successful in explaining the vote.

Third, the social distance model was useful in explaining the vote on Proposal C within the central city school district as well as between school districts. The amount of variance explained varied from 18 percent in Muskegon to 81 percent in Detroit. In the central city districts, segregation played an important role in affecting the vote. Segregation was much less important in the suburban districts.

Finally, the differences among metropolitan areas on the strength of the social distance model is most closely associated with the amount of newspaper coverage given to integration in the public schools. The busing controversy had a big impact on all elections in Michigan in 1972. The issue was reflected in the strength of the soical distance model.

The relationship between the importance of school desegregation and the vote on Proposal C points to an interesting hypothesis that deserves further inquiry. If Proposal C was interpreted as a threat to social and political boundaries, what role does "boundary maintenance" play in other political issues? Anthropologists, sociologists,

and others have described man as a "territorial animal" who will fight to maintain his place in the world. For the political scientist, boundary maintenance behavior may have important ramifications for political preferences and the interpretation of referenda voting. This is particularly important in discussing either metropolitan reorganization or educational politics.

The two models of public choice and public policy were quite successful in explaining the vote on Proposal C. The analysis indicates that the vote, like the debate over Proposal C, was divided on whether the economic aspects of property tax relief and tax redistribution would "sell" the proposal or whether the public would vote to protect their social and political boundaries. In the final analysis, the social distance model was most successful in explaining the vote on Proposal C.

CHAPTER VI--FOOTNOTES

[1]Eshref Shevky and Wendell Bell, Social Areas Analysis: Theory, Illustrative Application and Computational Procedures (Westport, Conn.: Greenwood Press, 1972), p. 54.

[2]Traditionally, econometricians have established a criterion of .80 and above as indicating "harmful multicollinearity," see L. R. Klein, An Introduction to Econometrics (Englewood Cliffs, New Jersey: Prentice-Hall, 1962).

[3]See Herbert M. Blalock, Jr., Social Statistics (New York: McGraw Hill, 1970), pp. 429-470.

CHAPTER VII

CONCLUSIONS

The final vote on Proposal C caught a number of state policy makers off guard. Prior to the election, there had been a general consensus that Proposal C would pass because of the "property tax relief" it would have given to homeowners throughout Michigan. Lulled by the results of public opinion polls taken by Market Opinion Research of Detroit, the Governor, the Michigan Education Association, the legislature, and other policy makers were confident of the passage of Proposal C. However, when the vote count was taken, Proposal C was soundly defeated. Therefore, the question is raised, why was Proposal C defeated? This is the basic question motivating the research presented in this dissertation.

Proposal C contained two major provisions. The first was a constitutional limitation on the property tax. It was this provision that many leaders assumed would "sell" the proposal to the public. The second part of the proposal would have shifted the primary responsibility for funding public education from the local school district to the state. It is this provision that may explain why Proposal C was defeated. Many of the opponents of Proposal C argued that its passage would mean the loss of local control. This, coupled with the controversy over busing, drew attention to the second aspect of the proposal.

The two provisions in the amendment led to two explanations about why Proposal C was defeated. The first explanation is that the vote on Proposal C should be positively related to the rate of taxation and the tax burden imposed on local school districts. Three variables were hypothesized to be correlated with the vote on Proposal C. They were tax burden on homeowners, tax burden on income, and total tax effort. It seemed logical that people who stood to gain the most "property tax relief" would support Proposal C more than people gaining less property tax relief. This explanation was termed "economic" because it stressed the economic aspects of Proposal C.

The second explanation of the vote on Proposal C is that the public did not want to shift the primary responsibility of funding public education from the local school district to the state. Implicit in this hypothesis was that the public wanted to maintain present "boundaries" between themselves and other school districts. To operationalize this hypothesis, the concept of social distance was used. Social distance was computed by taking the difference between the central city school district and the suburban school district on measures of social rank, life style, and segregation. If the public interpreted Proposal C as an integrative mechanism, opposition to Proposal C might best be explained by studying the social differences between the suburban districts and the central city school district.

These two explanations were tested by using multiple regression analysis and multiple partial correlations. It was discovered that in five metropolitan areas the social distance variables explained more variance in the vote on Proposal C than did the economic explanation.

In two areas, the economic variables explained more of the variance than did the social distance variables.

A brief analysis of the seven metropolitan regions indicated that local issues, particularly school integration, were most important in determining which metropolitan regions voted according to the economic explanation and which voted according to the social distance explanation.

From the research conducted on the vote on Proposal C, a number of findings stand out in their importance for future policy decisions and research. First, the two theoretical models used in this research provided a meaningful conceptualization for stuyding educational finance reform in Michigan. The history, the political campaign, and the vote were all discussed in terms of the two explanations of public choice and public policy. The same type of conceptualization may prove useful in studying voting behavior on other referenda such as millage elections for school districts, metropolitan consolidation, or any referenda that might be considered "integrative" in nature.

The success of the social distance variables in explaining the vote on Proposal C points to the conclusion that not all political behavior can be explained according to economic theory. The vote shows that few voters calculated the economic benefits that "property tax relief" might bring them. Thus, political sociology is also an important aspect of the study of political behavior.

Probably the most significant finding of this research is the relevancy of the concept of "social distance" for understanding public

choice and public policy. Chapter VI suggested that a possible explanation for the relationship between the amount of news space given to school integration and the power of the social distance variables is that when the social boundaries of voters are threatened, they react in defense of those boundaries even if it means increased financial costs.

Anthropologists have theorized about this territorial nature of man. However, there has been very little discussion or study of the importance of social boundaries in affecting political behavior. This research suggests that this type of analysis might prove beneficial in understanding politics. For example, the concept of representing geographical areas, political struggles over reapportionment, and metropolitan consolidation may all be discussed by using these concepts.

The concept of social distance was found to be as applicable to social differences within school districts as it was to social differences among school districts. It may be that politics within large cities can also be analyzed according to the social distance model.

It is apparent that Proposal C was not interpreted as a viable means of attaining property tax relief. Although the public, at large, was supportive of the need to limit or reduce property taxes, supporters did not succeed in convincing the electorate that Proposal C was the vehicle to accomplish that goal. For the policy maker, this might indicate that a legislative solution to the problem might be more feasable than a constitutional amendment.

Analysis of the vote on Proposal C showed that the issue of school integration or busing was crucial in determining which explanation would best fit the vote on Proposal C. It is possible that when the issue subsides in public interest, the maintenance of social boundaries may be less important. If Proposal C were to be presented to the voters in Michigan again in four years, it is conceivable that the economic explanation may best explain the vote.

The research has attempted to reflect the dynamics of public school finance reform in Michigan from 1969 to 1973. The climax of this dynamic came in the constitutional amendment to limit the property tax as the primary source of educational revenue. Two explanations were developed to explain the debate and vote on Proposal C. Hopefully, the analysis of this important issue will assist the policy maker as well as the political scientist in understanding the reform of educational finances in Michigan.

APPENDICES

APPENDIX A

School District _____

What percentage of local property tax revenue is derived from business property (non-homeowners) in your district?

Exact percentage (if possible) _____%

Estimate (If exact percentage is not available)

(Check one)

0 - 10%	_____
11 - 20	_____
21 - 30	_____
31 - 40	_____
41 - 50	_____
51 - 60	_____
61 - 70	_____
71 - 80	_____
81 - 90	_____
91 -100	_____

Has your district had to reduce the educational program offered to your students in the past two years due to financial constraints?

Yes _____ No _____

APPENDIX B

Vote Returns on Proposal C for 83 Counties

County	Yes	No	County	Yes	No
Alcona	1794	1757	Lake	1557	1394
Alger	1656	1923	Lapeer	8848	8139
Allegan	10413	14703	Leelanau	2855	2638
Alpena	4487	6648	Lenawee	14091	13312
Antrim	3010	2975	Livingston	11161	12721
Aranac	2125	2174	Luce	1193	989
Baraga	1597	1601	Mackinac	2410	2322
Barry	7232	8094	Macomb	60420	155433
Bay	21896	30894	Manistee	3668	4650
Benzie	1887	2024	Marquette	11938	10343
Berrien	21047	32771	Mason	4408	5932
Branch	5632	7061	Macosta	5294	4891
Calhoun	27227	23047	Menominee	3672	6367
Cass	7302	6451	Midland	10681	15168
Charlevoix	2910	4311	Missaukee	1647	1853
Cheboygan	3415	3662	Monroe	19085	18606
Chippewa	6157	4756	Montcalm	6758	7069
Clare	2910	3628	Montmarency	1274	1349
Clinton	8485	10231	Muskegon	27043	27263
Crawford	1702	1183	Mewaygo	5673	6166
Delta	6231	7895	Oakland	120664	231833
Dickinson	3886	6586	Oceana	3577	3803
Eaton	12721	15078	Ogenaw	3278	1904
Emmet	3095	4692	Ontonagon	2227	2497
Genessee	71422	80104	Osceola	2103	3895
Gogebic	4359	5143	Oscoda	1070	968
G.D. Traverse	8741	7769	Otsego	1998	2544
Gratiot	7806	5979	Ottawa	20428	34874
Hillsdale	5231	7452	Presque Isle	2550	3386
Houghton	7530	6168	Roscommon	3340	2699
Huron	6355	6984	Saginaw	31022	36821
Ingham	61228	52710	St. Clair	9936	12334
Ionia	7286	9055	St. Joseph	6277	10214
Iosco	4575	3967	Sanilac	7274	7548
Iron	2910	3855	Schoolcraft	1830	1978
Isabella	8910	7763	Shiawassee	10761	12846
Jackson	26181	24475	Toscola	8489	8196
Kalamazoo	39015	40690	Van Buren	8043	10859
Kalkaska	1386	1401	Washtenaw	62768	35507
Kent	64636	101402	Wayne	310655	516258
Keweenaw	494	566	Wexford	3138	5122
Gladwin	2666	2707			
			TOTALS	1,324,702	1,815,126

BIBLIOGRAPHY

BIBLIOGRAPHY

Books and Articles

Advisory Commission on Intergovernmental Relations. "Financing Schools and Property Tax Relief - A State Responsibility." Washington, D. C.: Advisory Commission on Intergovernmental Relations, 1973. Report A-40.

Alker, Hayward R. "A Typology of Ecological Fallacies." In Dogan, Mattei and Rokkan. Stein. Quantitative Ecological Analysis in the Social Sciences. Cambridge, Mass.: M.I.T. Press, 1969.

Bailey, Stephen. Schoolman and Politics: A Study of State Aid to Education in the Northeast. Syracuse, N. Y.: Syracuse University Press, 1962.

Bauer, Raymond and Gergen, Kenneth (eds.). The Study of Policy Formation. New York, N. Y.: The Free Press, 1968.

Bell, Wendell. "Economic, Family and Ethnic Status: A Empirical Test." American Sociological Review. Vol. 20, 1955. 45-52.

"Social Areas: Typology of Urban Neighborhoods." In Shussman, Marvin (ed.). Community Structure and Analysis. New York, N. Y.: Thomas Crowell, 1959.

Berke, Joel. "The Current Crises in School Finance: Inadequacy and Inequity." Phi Delta Kappan. September, 1971.

Berke, Joel and Callahan, John. "Serrano vs Priest: Mileston or Millstone for School Finance." Journal of Public Law, Vol. 21, No. 1, 1972.

Blalock, Herbert M., Jr. Social Statistics. New York, N. Y.: McGraw Hill, 1970.

Booms, Bernard H. and Haldorson, James R. "The Politics of Redistribution." American Political Science Review, September, 1973.

Bowles, Dean B. "The Power Structure in State Education Politics." Phi Delta Kappan. February, 1968.

Buchanan, James M. and Tullock, Gordan. The Calculus of Consent: Logical Foundations of Constitutional Democracy. Ann Arbor, Mich.: University of Michigan Press, 1962.

Burkehead, Jesse. Public School Finance: Economics and Politics. Syracuse, N. Y.: Syracuse University Press, 1963.

Dawson, Richard and Robinson, James A. "Inter-Party Competition, Economic and Welfare Policies in the American States." The Journal of Politics, Vol. XXV, 1963.

Deutsch, Karl; et. al. Political Community in the North Atlantic Area. Princeton, N. J.: Princeton University Press, 1957.

DeW. Lewis, Karen. "Educational Report/Federal Policy Toward School Finance Faces Review by Administration, Courts." National Journal, December, 1972.

Dogan, Mattei and Rokkan, Stein. Quantitative Ecological Analysis in the Social Sciences. Cambridge, Mass.: M.I.T. Press, 1969.

Downs, Anthony. An Economic Theory of Democracy. New York, N. Y.: Harper and Row, 1957.

Dror, Yehezkol. Public Policymaking Reexamined. San Francisco, Calif.: Chandler Publishing, 1968.

Duncan, Ottis D. "Review of Social Area Analyais by Shevky and Bell." American Journal of Sociology. Vol. 61, 1955.

Dye, Thomas R. "A Model for the Analysis of Policy Outcomes." In Sharkansky, Ira (Ed.). Policy Analysis in Political Science. Chicago, Ill.: Markaham Publishing, 1970.

Dye, Thomas R. "City Suburban Social Distance and Public Policy." In Dye, Thomas R. and Hawkins, Brett (Eds.). Politics in the Metropolis. Columbus, Ohio: Charles Merril Books Inc., 1967.

Dye, Thomas R. et. al. "Differentiation and Cooperation in a Metropolitan Area." Midwest Journal of Political Science, Vol. 7, No. 2, May, 1963.

Dye, Thomas R. Politics, Economics, and the Public: Policy Outcomes in the States. Chicago, Ill.: Rand McNally, 1966.

Dye, Thomas R. Understanding Public Policy. Englewood Cliffs, N. J.: Prentice Hall, 1972.

Fabricant, Solomon. The Trend of Government Activity in the United States Since 1900. New York, N. Y.: National Bureau of Economic Research, 1952.

Fisher, Glenn. "Determinants of State and Local Government Expenditures: A Preliminary Analysis." National Tax Journal, Vol. XIV, December, 1961.

Froman, Lewis A., Jr. "An Analysis of Public Policies in Cities." Journal of Politics, Vol. 29, 1967.

Fry, Brian R. and Winters, Richard F. "The Politics of Redistribution." American Political Science Review, Vol. 64, June, 1970.

Guthrie, James; Kleindorfer, George; Levin, Henry; and Stout, Robert. Schools and Inequality. Washington, D. C.: The Urban Coalition, 1969.

Hawkins, Brett W. "Life Style, Demographic Distance, and Voter Support of City-County Consolidation." Southwestern Social Science Quarterly, Vol. 58, September, 1972.

Hirsch, Werner Z. Analysis of the Rising Cost of Public Education. Washington, D. C.: Joint Economic Committee, 1959.

Hofferbert, Richard I. "The Relation Between Public Policy and Some Structural Variables in the American States." American Political Science Review, Vol. LX, March, 1966.

Iannaccone, Laurence. Politics in Education. New York, N. Y.: The Center for Applied Research, 1967.

Jacob, Herbert and Lipsky, Michael. "Outputs, Structure, and Power: An Assessment of Changes in the Study of State and Local Politics." In Hofferbert, Richard and Sharkansky, Ira (eds.). State and Urban Politics. Boston, Mass.: Little, Brown, and Company, 1971.

Johns, Roe and Morphet, E. L. Problems and Issues in Public School Finance. New York, N. Y.: Teachers College, Columbia Univeristy, 1952.

Kaufman, Walter and Greer, Scott. "Voting in a Metropolitan Community: An Application of Social Area Analysis." Social Forces, Vol. 38, March, 1960.

Keller, Ed. "Property Tax Relief and Local Control: Separable Issues." The Michigan Elementary Principle, Vol. 47, Summer, 1972.

Kirst, Michael. The Politics of Education at the State and Federal Level. Berkeley, Calif.: McCutchan Publishing, 1972.

Klein, L. R. An Introduction to Econometrics. Englewood Cliffs, N. J.: Prentice Hall, 1962.

Klingele, William E. "Curtailing Expenses in Michigan Public Schools." Michigan School Board Journal, Vol. 20, April, 1973.

Master, Nicholas A.; et. al. State Politics and the Public Schools: An Exploratory Analysis. New York, N. Y.: Alfred A. Knopf, 1964.

Menzel, Herbert. "Comment on Robinson's Ecological Correlations and the Behavior of Individuals." American Sociological Review, Vol. 15, October, 1950.

Michigan Education Association. "Tax Proposal Answers." Teachers Voice, Vol. 50, September, 1972.

Mitchell, Joyce and Mitchell, William C. Political Analysis and Public Policy. Chicago, Ill.: Rand McNally, 1969.

Mitchell, William C. "The Shape of Political Theory to Come: From Political Sociology to Political Economy." The American Behavioral Scientist, Vol. 11, November-December, 1967.

Olson, Mancur. The Logic of Collective Action. Cambridge, N. J.: Harvard University Press, 1965.

Pinner, Frank, et. al. Education and the State: Decision Making on the Reform of Education Finances in Michigan. Report to the Urban Coalition, Washington, D. C., 1971.

Ranney, Austin (ed.). Political Science and Public Policy. Chicago, Ill.: Markham Publishing, 1968.

Ranney, Austin. "The Utility and Limitations of Aggregate Data in the Study of Electoral Behavior." In Ranney, Austin (ed.). Essays On the Behavioral Study of Politics. Urbana, Ill.: University of Illinois Press, 1962.

Rao, Tohluri and Miller, Roger LeRoy. Applied Econometrics. Belmont, Calif.: Wadsworth Publishing, 1971.

Rees, Phillip. "Problems of Classifying Sub-Areas Within Cities." In Berry, Brian (ed.). City Classification Handbook of Methods and Applications. New York, N. Y.: Wiley, Inc., 1972.

Riker, William. The Theory of Political Coalitions. New Haven, Conn.: Yale University Press, 1962.

Robinson, W. S. "Ecological Correlations and the Behavior of Individuals." American Sociological Review, Vol. 15, June, 1950.

Ross, Robert. "Public Choice in American Politics: An Introduction." In Ross Robert (ed.). Introductory Readings in American Government: A Public Choice Perspective. Chicago, Ill.: Markham Publishing, 1971.

Rossmiller, Richard. Fiscal Capacity and Educational Finance. Gainsville: National Educational Finance Project, 1971.

Scheuch, Erwin K. "Social Context and Individual Behavior." In Dogan, Mattei and Rokkan, Stein (eds.). Quantitative Ecological Analysis in the Social Sciences. Cambridge, N. J.: M.I.T. Press, 1969.

Shapiro, Sherman. "Some Socio-Economic Determinants of Expenditures for Education." Comparative Education Review, Vol. VI, 1962.

Sharkansky, Ira and Hofferbert, Richard I. "Dimensions of State Politics, Economics and Public Policy." American Political Science Review, Vol. 63, September, 1969.

Shively, W. Phillips. "Ecological Inference: The Use of Aggregate Data to Study Individuals." American Political Science Review, Vol. 62, December, 1969.

Sullivan, John L. "A Note on Redistributive Politics." Unpublished paper, Iowa State University, 1972.

Thomas, J. Alan. School Finance and Educational Opportunity in Michigan. Lansing, Michigan: Michigan Department of Education, 1968.

Urban Coalition. Public School Finance: Who Pays and Who Benefits. Washington, D. C.: The Urban Coalition, 1972.

Usdan, Michael. The Political Power of Education in New York State. New York, N. Y.: The Institute for Administrative Research, Teachers College, Columbia University, 1963.

Van Arsdol, Maurice; Camilleri, Santo F.; and Schmid, Calvin. "The Generality of Urban Social Area Indices." American Sociological Review, Vol. 23, 1958.

Wade, L. L. and Curry, R. L. A Logic of Public Policy: Aspects of Political Economy. Belmont, Calif.: Wadsworth Publishing Co., 1970.

Walter, Benjamin and Wirt, Frederick. "The Political Consequences of Suburban Variety." Social Science Quarterly, Vol. 58, December, 1972.

Williams, Oliver. "Life Style Values and Political Decentralization in Metropolitan Areas." Social Science Quarterly, Vol. 48, December, 1967.

Williams, Oliver; et. al. Suburban Difference and Metropolitan Policies. Philadelphia, Pa.: University of Pennsylvania Press, 1965.

Wirt, Frederick and Kirst, Michael. The Political Web of Schools. Boston, Mass.: Little, Brown, and Company, 1972.

Wood, Robert. Suburbia: Its People and Their Politics. Boston, Mass.: Houghton Mifflin Company, 1958.

Zimmer, Basil and Hawley, Amos. Resistance to Reorganization of School Districts and Government in Metropolitan Areas. Providence, R. I., Brown University Press, 1966.

Documents

California Supreme Court. Serrano v Priest. 5 Cal. 3d 584, 487, p 2f, 1241, 96. Rptr. 601, 1971.

Journal of the House of Representatives, Lansing, Mi.: State of Michigan, No. 108, July 29, 1971.

Gongwer News Service. Lansing, Michigan. April 5, 1969; September 1. 1971; April 15, 1971; May 30, 1972; October 11, 1972; and February 10, 1973.

Mayor's Committee for Community Renewal. A Profile of Detroit: 1969. Detroit: City of Detroit, Michigan, 1970.

Michigan Chamber of Commerce. Special Report. April, 1972.

Michigan Department of Education. Local District Report: Explanatory Mateials for Assessment Report No. 6, 1971.

Michigan Department of Education. 1012 Bulletins (1960-1973).

Michigan State American Federation of Labor and Congress of Industrial Organizations. Press Release, October 17, 1972.

Michigan Supreme Court. Butcher v the Township of Grosse Isle. State of Michigan Supreme Court, No. 52935, June, 1971.

Office of the Governor. A Chronology of Educational Reform in Michigan. Lansing, Michigan: Office of Planning and Coordination, 1970.

Office of the Governor. Press Release, March 18, 1972.

Office of the Governor. "Special Message to the Legislature on Excellence in Education." April 12, 1971.

Interviews

Erickson, Kai. Director of Public Relations, Michigan Education Association. November 6, 1973, and February 9, 1973.

McKerr, Robert. Associate Superintendent for Finance, Michigan Department of Education. April 5, 1973.

Pastula, Richard. Special Assistant to the Governor. February 9, 1973.

Newspaper Editorials

Detroit Free Press. "C and D would Bring Equity in School Finance." November 5, 1972.

Detroit News. "No on Proposal C." October 4, 1972.

Grand Rapids Interpreter. "Clever Selling Job May Backfire on Proposal C at Ballot Box." October 19, 1972.

Jackson Citizen Patriot. "Legislature Key to Proposal C." October 25, 1972.

Lansing State Journal. "Yes on C but a No for D." October 31, 1972.

Macomb Daily. "Busing Cuts Big Swath in Statewide Balloting." November 13, 1972.

Muskegon Chronicle. "Problems Remain, but Vote Yes on Proposal C." October 26, 1972.

Saginaw News. "Proposal C Presents Tax Reform Opportunity." November 2, 1972.