A COMPARATIVE STUDY OF THE MEASURES OF FISCAL

ABILITY OF SCHOOL DISTRICTS OF SEVEN

SELECTED STATES IN THE MID-SOUTHWEST

By

CHARLES FREEMAN CLAYTON

Bachelor of Science in Education
Sterling College
Sterling, Kansas
1950

Master of Science
Ft. Hays Kansas State College
Hays, Kansas
1957

Specialist in Education
Emporia Kansas State Teachers College
Emporia, Kansas
1968

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
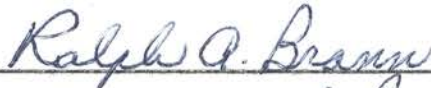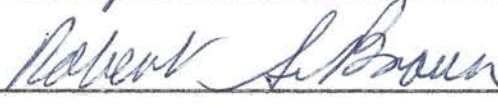DOCTOR OF EDUCATION
May, 1973

A COMPARATIVE STUDY OF THE MEASURES OF FISCAL

ABILITY OF SCHOOL DISTRICTS OF SEVEN

SELECTED STATES IN THE MID-SOUTHWEST

Thesis Approved:

Richard P. Jungers
Thesis Adviser

Ansel M. Sharp

Ralph A. Brann

Robert L. Brown

N. Durham
Dean of the Graduate College

ACKNOWLEDGEMENTS

The writer wishes to express his sincere appreciation to the many people who have contributed, directly and indirectly, to this dissertation. Special appreciation is extended to Dr. Richard Salmon, for his suggestions, encouragement, and invaluable assistance.

Dr. Robert Brown has been especially helpful in aiding the writer to design and critique the study. Appreciation is extended to Dr. Richard P. Jungers, chairman of the writer's advisory committee, for his thoughtful assistance. Appreciation is also expressed to the other members of the advisory committee, Dr. Ansel Sharp and Dr. Ralph Brann.

Appreciation is extended to the Texas Education Agency and the State Departments of Education for the states of Arkansas, Colorado, Kansas, Missouri, New Mexico, and Oklahoma for their assistance.

To my patient and helpful wife, Noretta, son Charles Jr., daughters Cheryl, Barbara, and Janice, my deepest appreciation for their encouragement and sacrifice. Without their help and consideration this dissertation would have been impossible.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

THE NATURE OF THE PROBLEM

Introduction

A major concern at all levels of education appears to be the problem of financing our American public education system. This is evidenced by recent articles, publications, and court decisions dealing with the problem of school finance. Court decisions question the very foundation of the financing of the public schools. Many of the publications indicate that if we are to provide equal educational opportunity for all, our present method of financing is inadequate.

The National Educational Finance Project (22, p. 3) states that financing of our educational systems must not only be adequate, it should also be provided by an equitable and progressive tax structure primarily based upon ability to pay as measured by income, wealth, and consumption. The concept of equity requires a distribution of the tax burden on the basis of ability to pay with persons in the lowest income groups paying little or no tax because they have a small taxpaying capacity. In addition the NEFP also indicates that the concept of equity requires a progressive overall distribution of taxes relative to the individual's income.

Most authorities in educational finance agree that the educational opportunity of every individual should be a function of the total

1

taxable wealth of the state and should not be limited to the taxing

ability of a local school district. It is not simply a matter of

acquiring the necessary money, but it is also a matter of obtaining it

in a fair and equitable manner that will place the burden on those best

able to bear it. Furthermore, once the money is available, it is

important that it is allocated in a manner which will insure an equal

educational opportunity for all children.

Great variations exist in the availability of funds for education

in the school districts of nearly every state. The variations are

primarily the result of the tremendous differences in the abilities of

local districts to finance education and the methods used by the states

to allocate their revenues for school support.

The National Educational Finance Project (22, p. 7) suggests that

wide variations in effort and in ability to support education are a

major obstacle to substantial equality of educational opportunity in

nearly all states.[1] First, there are great variations among the

states, regions and school districts in ability or fiscal capacity to

raise revenue and the amount of effort each governmental unit puts

forth to support education. Second, the amount of money available for

education will depend upon the size of the tax base in relation to the

number of pupils served and the tax rate levied. Therefore, differ-

ences in the amounts of money raised per pupil is the rule rather than

the exception. For example, a poor district with a limited tax base

can raise relatively little revenue even if a high tax rate is levied

while a wealthy district with a large tax base can raise substantial

---

[1]Hawaii has a complete state aid program. Therefore, no equaliza-
tion is necessary within the state.

revenue even though it levies a modest tax rate. Thus, the amount of
money available in each district becomes a fundamental factor in deter-
mining the quality of the educational program.

Educational opportunities are far from being equal as evidenced by
wide variations in the quality of public education among the states and
within the states as measured by differences in levels of per pupil
expenditure. The National Educational Finance Project (22, p. 6) indi-
cates that the dollar is not the only requirement for equality in
educational output. However, even though greater expenditures do not
absolutely assure higher quality, there is a strong argument that
higher quality is more expensive. Obviously, there are schools with
high costs and poor quality, but it is extremely difficult to find high
quality at a low cost.

Differences in educational needs of some children require differ-
ent experiences and expenditure if their educational opportunities are
to be equal. Consequently, the per pupil expenditure does not tell the
whole story of quality and equality in education, but it is a signifi-
cant index of difference among school districts.

Since school districts rely heavily on local tax revenue, school
expenditures are closely related to local wealth, the size of the tax
base, and other factors such as a community's willingness to tax for
support of public education. Property taxes have been the chief source
of local school support. Future Directions for School Financing (22,
p. 9) states that in 1970-71, 52 per cent of school revenue was pro-
vided by local sources and 98 per cent of the local school tax revenue
came from tax on property. The close tie between the property tax and
school spending often yields inequitable results. In several states,

according to Johns and Morphet (20, pp. 13, 14), more than one-half of
all revenues for support of schools comes from the property tax.
Therefore, in order to provide the most meager educational program,
the poorer districts are forced to exert a greater tax effort and still
spend less per pupil on schools.

With the spread of industrialization, local differences in wealth
and tax paying ability have been greatly accentuated. Furthermore,
residents in all districts, regardless of financial ability, have
insisted that they are entitled to substantial state funds. As a
result, wealthy districts often receive as much or even more revenue
from the state than the less wealthy districts. In such situations,
existing differences are either perpetuated or exaggerated. Recently,
states have become increasingly impressed with the need for the finan-
cial equalization of educational opportunities.

Recently, the judiciary in several states have generated consider-
able controversy by entering into the area of educational finance. The
Supreme Court of California was the first court to rule in this area
when it concluded (August 30, 1971) in the case of <u>Serrano v. Priest</u>
that the state's public school financing system denies children equal
protection guaranteed under the Fourteenth Amendment of the U. S.
Constitution because it produces wide disparities among school dis-
tricts in the amount of revenue available for education. In the words
of the Court (40, pp. 1, 2):

> We have determined that the funding scheme invidiously dis-
> criminates against the poor because it makes the quality of
> a child's education a function of the wealth of his parents
> and neighbors. Recognizing as we must that the right of an
> education in our public schools is a fundamental interest
> which cannot be conditioned on wealth, we can discern no
> compelling state purpose necessitating the present method of

financing. We have concluded, therefore, that such a system
cannot withstand constitutional challenge and must fall
before the equal protection clause.

In a similar case the United States District Court in Texas (38)
ruled the Texas public school financing system unconstitutional and
ordered the state school financing restructured to meet the guarantee
of equal protection under the law. The Texas case ruling was the first
one in which a federal court ruled in favor of removing public schools
from their dependence on local property taxes. However, an important
aspect that neither court addressed themselves centers on the measure-
ment of the relative taxpaying ability of the local school districts.
Authorities are in disagreement about the most appropriate measure to
determine the fiscal ability of a school district. Assessed valuations
on real property have been challenged as appropriate measures of the
school district's ability to pay. Some authorities recommend the use
of income estimates;[2] others have proposed that when a local tax base
is used to determine fiscal capacity, it should incorporate local
income tax, and the valuation of real property into an index. However,
Sharp and Sliger (41, p. 361) state that fiscal capacity of a school
district is usually based on property valuation although any indicator
or indicators of fiscal ability may be used.

The most appropriate means or method of supporting public educa-
tion is a critical issue that is compounded by the problem of equaliza-
tion of educational opportunity and the principle of local control of
education. This conflict between equalization and local control leads

----

[2]For example, the Rhode Island Distribution Formula by Benson
(pp. 188-190) in which he included household income as a measure of
fiscal ability.

to rationalization of inaction at local, state, and national levels of government. The problems, in some instances, are so critical that there is a grave question as to whether readjustments of existing provisions for school financing can prove adequate.

The NEA Committee on Educational Finance (30, p. 13) directed its attention to the problem of equalization of educational opportunity and indicated that every school district should receive sufficient financial support from the state to permit the maintenance of an acceptable state minimum program of education and to relieve the local property tax when this tax, upon which local initiative depends, is carrying an unfair share of the cost of government.

There are substantial variations in fiscal capacity of the states to raise revenue whether measures of per capita income, per capita valuation, or composite techniques are used. Salisbury (15, pp. 56-7) suggested that measure must come from all governmental levels to eliminate inadequacies resulting from the local problem of providing financial support of public schools. The demand of the public for equality of educational opportunity, regardless of location and local circumstances, must be met by a public policy decision to use the most appropriate measures of fiscal ability.

Statement of the Problem

An adequate or satisfactory method of measuring the fiscal capacity of school districts is a major problem in the development of state grants-in-aid to local school districts to bring about fiscal equalization of educational opportunity. Presently, equalized assessed valuation and assessed valuation are the measures most often used in the

determination of the fiscal ability of school districts; however, the
National Educational Finance Project (42) has made personal income data
within each school district available as a possible alternative.

The present study had two basic purposes. The first purpose was
to compare the relationships between per pupil expenditures in ADA and
various measures of fiscal ability of local school districts in select-
ed states. The second purpose was to examine the proposition that
personal income per pupil in ADA best explains the variation of per
pupil expenditure among local school districts.

Definition of Terms

The following are definitions and clarifications of terms as they
are applied throughout this study.

ADA. The acronym for average daily attendance, determined by the
school district's yearly total days attendance for all pupils divided
by the number of days the school district was in session.

ADM. The acronym for average daily membership is the school
district's yearly total days membership (all pupils) divided by the
number of days the school district was in sessions for the 1968-69
school year.

Expenditure. The figure derived by including only the current
expenses of school systems for the operation of the instruction pro-
gram. Amounts for school lunches and tuition payments to other systems
were excluded, as were amounts expended for capital outlay and debt
service. Expenditure of federal funds was also excluded.

Fiscal Equalization of Educational Opportunity. A term indicating
the raising of funds to bear upon all the people in all localities at

the same rate in relation to their taxpaying ability.

Per Pupil Expenditure. A figure obtained by dividing the total current expenditure of a school district by the number of pupils in ADA in the district.

Assessed Valuation. The assigned value given property by local or state assessors at a stated fractional value.

Per Pupil Assessed Valuation. A figure obtained by dividing the assessed valuation of a district by the number of pupils in ADA in the district.

Equalized Assessed Valuation. The assigned value given property by adjusting the property value of the district or county to the state average property assessment.

Per Pupil Equalized Assessed Valuation. A figure obtained by dividing the equalized assessed valuation by the number of pupils in ADA in the district.

Fiscal Capacity. A quantitative measure of the resources available in a taxing jurisdiction to raise revenue for public purposes.

Personal Income. The figure obtained from the Internal Revenue Service and compiled by the National Educational Finance Project. This figure was the current income received by persons from all sources, inclusive of transfers from government and business, but exclusive of transfers among persons.

Per Pupil Personal Income. The figure obtained by dividing the personal income per school district by the number of pupils in ADA in the district.

Limitations of the Study

1. The findings of this study may be affected by extremes such as high concentrations of industrial complexes and schools located on federal property. A school district with an extremely high per pupil valuation may have a very low per pupil expenditure. School districts whose boundaries are almost entirely on federal property may have a low assessed valuation and may have a high per pupil expenditure.

2. The findings may be affected by maximum levy limitation (tax lid) enacted by the state legislature. School districts would not be able to levy additional taxes on property, and the expenditure would not indicate the school district's desired efforts. Therefore, the findings would favor assessed valuation and not personal income.

3. The findings may be affected by limiting the study to school districts of 1500 ADA or above.

4. This study is based on 1968-69 school year data; therefore, these findings may not be applicable beyond this study without the addition of secondary research.

Assumptions of the Study

1. The general assumption of the study is that the information provided is reliable.

2. The basic assumption of the study is that the use of per pupil expenditure is the most significant index of differences of quality among school districts.

Summary and Organization of the Study

Chapter I has given an introduction to the investigation to be undertaken. It also included the statement of the problem, definition of terms, assumptions of the study, limitations of the study, and the organization of the study.

In Chapter II a review of the literature related to the problem being investigated is presented. The population studies, the instruments and procedures employed, and the techniques used to analyze the data are described in Chapter III.

Chapter IV contains a statistical analysis of the data. It contains the treatment of the data, the analysis of the results, and indications of the degree to which the relationships were found to exist. In Chapter V a general summary of the investigation and a discussion of the results including conclusions and recommendations are presented.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The review of literature for this study is presented in five

parts: financial equality of educational opportunity; a description

of the measures of fiscal capacity; tax efforts of local, state, and

national governments; school expenditures; and a summary.

Financial Equality of Educational Opportunity

The NEA Committee on Educational Finance (29, p. 13) in 1970

suggested that inequities in state school finance arise because we fail

to recognize that education represents only a part of the cost of local

government. School foundation laws do not consider the tax overburden.

States continue to tolerate tax-sheltered industries and inequality of

assessment. Foundation laws provide assistance to poor school dis-

tricts up to a minimum level of education and offer little incentive

for a more progressive program. Further, the property tax is a burden

on the taxpayers in many states while inequities exist between states

because of variations of wealth and taxation. Many of the inequities

could be reduced by increasing state and federal aid and by placing

less dependence on the local property tax. Some authorities including

Corey (9, p. 113) go a step further and state that the property tax is

carrying an unfair share of the cost of government.

Strayer and Haig (43, p. 162) were among the first to advocate the principle of Equalization of Educational Opportunity in the early part of this century.[1] They assumed that the state should insure equal educational facilities within its borders at a uniform tax effort throughout the state. In order to accomplish equalization, they proposed the establishment of schools sufficient to provide (1) equalized educational opportunities to some minimum level, (2) the raising of funds to bear upon all the people in all localities at the same rate in relation to their taxpaying ability, and (3) adequate supervision and control by the State Department of Education.

However, there were some contemporaries of Strayer and Haig who disagreed with the proponents of equalization formulas. For example, Morrison (3, p. 503) in 1930 advocated complete state support and vehemently stated that all other plans would be useless and doomed to failure. History has proven that Morrison was not entirely in error.[2]

An increasing number of sophisticated methods of distributing state aid have been advocated through the years. Weiss (45, p. 29) states that flat grants were the earliest form of state aid, but that this method of allocation discriminates in favor of wealthier districts. John and Morphet (20, pp. 271-73), on the other hand, maintain

---

[1]The modern approach to state aid by Strayer and Haig dates from the work of the Educational Finance Inquiry Commission (1921-24). Strayer and Haig prepared two pages containing the "conceptual basis" of much of the present-day practice in equalization.

[2]Morrison's state support program is supported by a study made by Briley, William P., *Status and Impact of Equal Finance Programs* (Gainesville: National Finance Project, 1971), pp. 49-118. A statewide program can work if the legislature is willing or if so compelled by court to do so.

that there is considerable equalization in flat grants, especially
through weighting.

According to Weiss (45, p. 30) foundation plans are the most
common forms of state school support, but they also have serious defi-
ciencies. For instance, foundation support levels are often quite
inadequate, in some cases well below the spending levels that most
districts support voluntarily, and state legislatures frequently fail
to revise support levels upward in pace with rising costs.

Benson (3, p. 148) explains the "percentage equalizing grant"[3] as
a general-purpose aid distributed in such a way that the state pays the
local authorities a share, or percentage, of locally determined school
expenditures. The share is larger in poor districts than in rich dis-
tricts; hence, the grant is said to have equalizing effects. Weiss
(45, p. 36) maintains that

> . . . percentage equalization plans in practice hardly do any
> better in terms of equalizing effects than foundation plans.
> In implementation, the excellent theoretical plan is usually
> 'adorned . . . with devastating refinements' to such a degree
> that it is reduced to merely 'a labyrinth of false promises';
> this result is generally quite intentional, reflecting polit-
> ical unwillingness to legislate a truly equalizing program.

As can be seen, state school aid programs vary widely in design
and effort and reflect broad objectives. Many state programs are
structured to insure some minimum level of educational provision.
Another basic objective is to stimulate local educational expenditures
for either general or specific purposes. Weiss (45, p 27) suggests
that there are inherent conflicts between equalization and stimulation

---

[3]If the state is using a percentage equalizing grant, the ineffi-
cient districts are able to share their extra expense with all the
taxpayers of the state.

of local spending levels. The conflict lies between the objective of stimulating local expenditure and the goal of property tax relief. The principle concern is the impact that state aid programs have on disparities in local tax effort and current expenditures per pupil. State governments have been moving in the direction of increased emphasis on "equalization" in their school aid allocation; but local effort and spending levels are closely related to local wealth.

The wealth, both among and within states, varies considerably. Munse's suggested equalization program (28, p. 95) recognizes variations in local financial ability or capacity by providing relatively greater state support where there is less local wealth. During pioneer days there was justification for the contention that the best measure of the ability of the people in each state was the per capita wealth represented by the value of property in the state. However, property as a source of income of the people has rapidly declined in relative importance.

Measures of Fiscal Capacity

The wealth both among and within states varies considerably. These variations have definite implications for the educational opportunities that can be provided in the future and may reflect a lack of attention devoted to the development of resources in the past. Before conclusions can be reached regarding variations in ability, it is necessary to consider the methods used in determining or measuring fiscal capacity.

Fiscal capacity is a quantitative measure of the resources available to raise revenue for school districts. Peterson (37, p. 52)

states:

> There are essentially two approaches to measuring fiscal
> capacity. One approach uses indicators of economic activity,
> notably measures of the flow of resources out of which state
> and local taxes can be paid. The other approach evaluates
> the taxable resources--the tax bases--available within the
> state and estimates the amount of revenue that can be pro-
> duced if they are subjected to various levels of taxation.

Property valuations, the economic index, and income are the three major

measures of fiscal ability. In addition to the economic index, other

combinations of the various ability measures have been considered.

Mort and Reusser (26, pp. 544, 545) state that it is impossible to

gain an adequate concept of a state's taxing system merely by listing

the various types of taxes that are levied and their yield over a

period of years. It is necessary to consider the total ability and

income of a state and the extent to which the tax structure is designed

to tap that wealth and income. The various types of wealth within a

state perhaps should be viewed in the light of their income-producing

capacity. It is important to distinguish between taxpaying capacity

and tax effort. Newcomber (26, p. 545) states that the taxpaying

capacity is a measure of a state's ability to pay taxes, and the tax

effort is a measure of the extent to which a state has utilized its

taxpaying capacity. No absolute standard exists for either taxpaying

capacity or tax effort. It is also reasonable to assume that any

state falling below the national average for any acceptable measure of

tax effort should be expected to contribute further to the support of

government functions if such support seems desirable.

There has been much research regarding the ability of the states

and of local school districts to support education. According to a

report published by the National Educational Finance Project (19,

pp. 185-7), some early studies on this subject were those by Norton,
Chism, and Cornell. The National Education Finance Project reports
that wide variations have elicited serious concern for the development
of models for financing education.

> Most efforts to quantify the fiscal capacity of states
> have employed some measure of income, generally personal
> income, as the base for measuring fiscal capacity, although
> the yield of either a representative or a 'model' state tax
> system also has been employed. Income has not usually been
> employed to quantify the fiscal capacity of local govern-
> mental units such as school districts because (1) data con-
> cerning personal income seldom is easily available for local
> units of government, and (2) local units of government
> generally have not had direct access to income as a tax base.

> A number of recent studies have dealt with the fiscal
> capacity and tax effort of school districts and other local
> governmental units. Peterson and his associates were able
> to show clear differences in fiscal capacity and educational
> need in school districts having varying economic and demo-
> graphic characteristics, particularly when other costs of
> local government were considered. Hogan studied the ability
> of local governments in New York State to finance local
> public services, and Lindman illustrated the equity problems
> involved in using the local property tax base to support
> both public schools and other governmental services.

> There is a substantial body of contemporary literature
> dealing with fiscal capacity of the states. Foremost among
> recent studies is that of the Advisory Commission on Inter-
> governmental Relations, which yielded comparative data con-
> cerning the relative fiscal capacity and tax effort of the
> states based upon income flows and upon the yield of a
> representative tax system. The National Educational Associa-
> tion publishes annually comparative data concerning the level
> of personal income and tax effort of the various states.
> Other studies worth noting include those reported by Maxwell,
> Break, and Martin.

Property Valuations

According to Mort and Reusser (26, pp. 509-516) measures of fiscal
ability of school districts are needed in order to assess vigor of
local support and to determine an equitable basis for distributing

state aid. Consequently the measures of ability should be in terms of the ability of the school district to pay taxes under the state tax system. If a single measure such as the property tax is the sole or chief tax base, the ability measure must be either a direct or indirect measure of the ability of that tax base to pay taxes when uniformly applied. If tax levies on other tax bases are permitted, the ability to pay taxes on such bases must be considered in obtaining the ability measure.

The concept underlying fair ability measures is simple, but its achievement in practice is not easy. No other function of government has been held so closely in the control of relatively small governmental units in the state as the assessment of property. The result is that what may be considered fair assessment in one section of the state may not be considered fair in another section of the state. Accordingly, data from the assessment rolls are not directly usable for comparing communities with respect to their ability to support schools. Neither are the tax rates based on these assessment comparable.

Mort and Reusser (26, pp. 510-511) further state that a consideration of the problem of measuring relative ability, then, may take the form of considering the means of getting either fair assessments of property or adequate estimates of fair assessments. Johns and Morphet (pp. 180-181) suggest that if all property in every state were assessed at full value, or even at a uniform percentage of full value, the problem of determining local ability would be much simpler than it is under present conditions.

Equalized Assessed Valuation

Weiss (45, p. 12) states that equalized assessed valuation re-
flects property values expressed on an "equalized" basis within each
state on some fixed ratio to full market value. The adequacy of
equalized valuation per pupil as a measure of ability to pay for
schools is affected by the distribution of governmental responsibili-
ties within a particular state, and the revenue requirements to finance
non-school public services in any given community. Despite its limita-
tions, equalized property valuation is appropriate to use in describing
existing disparities in local fiscal capacity.

Economic Index

Another measure of fiscal capacity that is used by a few states is
the economic index. Cornell (8) first introduced the idea of an
economic index as a measure of local ability, and he published such
an index for counties in New York. His measure was devised to check
the validity of equalized valuation as reported by the state agency and
not as a measure of taxpaying ability for use in apportioning state
funds.

Johns (18) devised the first economic index of taxpaying ability
used in apportioning state funds in 1938 for the state of Alabama.
Johns (34, pp. 96-99) indicates that the first step in developing an
index is to select the dependent variable.[4] The second step is to
select independent variables such as retail sales, personal income

---

[4]Johns used equalized valuation as the dependent variable.

paid, number of gainfully employed workers, value of farm productivity,

valuation of public utilities, and proceeds from auto license tag

sales. The third and final step is to select a mathematical method

for determining the appropriate weights to assign to the independent

variables. A number of states, including Florida, Texas, and Alabama,

have used the economic index as a method for determining the taxpaying

ability of the local school districts.

Both Johns (33, p. 99) and Cornell (32, p. 91) suggest that the

economic index is not as accurate a method as the equalized valuation

of property. The main advantage of the economic index is that it is

free from such manipulation as the under assessment of property to

increase state aid. However, the limitations seem to be much greater

than the advantage, and several states have reverted to equalized

evaluation as a measure of local ability. Other authorities are

recommending personal income as a measure of fiscal ability.

Personal Income

According to James, Thomas, and Dyck (17, p. 8) the argument

advanced for personal income as a measure is that taxes are usually

paid out of current income, and therefore income is a more realistic

indicator of the ability to pay taxes than is the amount of property

owned. Musgrave (28, p. 160) sums up the ability-to-pay principle.

> Perhaps the most widely accepted principle of equity in
> taxation is that people in equal positions should be treated
> equally. This principle of equality, or horizontal equity,
> is fundamental to the ability-to-pay approach, which requires
> equal taxation of people with equal ability.

Johns and Morphet (20, p. 179) further state that even when the person-

al income per child of school age is used as a measure, there are

considerable differences in the ability of respective districts and
states to support schools. Benson (3, pp. 192-193) mentions that
personal income per capita varies substantially among the states, and
the differences from one group of states to another are quite stable
over a period of time. The five top-ranking states in 1966 were among
the six highest in 1948, and the five bottom-ranking states in 1966
were among the six lowest in 1948. Therefore, there is a certain
stability in the ordering of states at the extremes of the income
distribution.

Newcomber (26, p. 545) agrees that the higher the per capita
income of a group of taxpayers, the greater their ability to contribute
in taxes. However, costs of living may vary from one area to another
and equal per capita incomes will not represent equal ability if the
incomes are not equally stable. Johns and Morphet (20, pp. 178-179)
also raise questions about the use of personal income as a measure.
They state that since people throughout the United States must pay the
federal income tax, the amount paid by individuals should be deducted
from the personal income in each state to determine the ability to
support schools. Furthermore, before the people of a state can support
other than incidental education, they must have an income above that
required to provide the bare necessities of living.[5] Burke (4, pp.
655-656) is one of the strongest opponents of income as a measure of
wealth. He agrees that the measurement of income, in theory at least,

---

[5]The NEFP recently developed a net personal income formula by
making two deductions from total personal income: 1) $750 for each
person for food, clothing, and shelter, and 2) the amount of personal
income paid as a tax to the federal government. On a national basis
this net personal income amounts to 69.55 per cent of personal income.

would seem to be the nearest approach that could be made to the determination of state or local taxpaying ability. However, if it could be measured for a state or local unity, its usefulness as an index of ability would be very limited. Fluctuating income, different standards of living, geographic differences in non-monetary income, and other such factors combined with differences in the price level of like goods in different markets, result in the same money income representing different amounts of real income and taxable capacity. Furthermore, the use of income as the sole measure of relative fiscal capacity assumes that all production of goods and services enters the free market. This ignores the family, the farm, the neighborhood, and other institutions where goods and services are produced without any monetary exchange.

In questioning personal income as a sole measure, an article in School Management (10, p. 122) suggests that although per capita personal income tells how much money is available, schools do not levy taxes against income. Whether right or wrong, almost every school district in the United States gets the bulk of its local income by levying taxes on property. It is suggested that a more practical, but by no means perfect, index can be constructed by studying the relationship between a district's property value and the amount of income it raises locally; in other words, measuring a district's taxable resources and the amount of money it raises against these resources.

Governmental Tax Efforts

Benson (3, p. 92) states that property taxes supplied 87.7 per cent of the total tax revenues of all local governments in 1962, a

ratio practically unchanged since 1900. Corey (18, p. 7) suggests that

financing such a large proportion of the local budgets may no longer

be workable because, according to Mort and Reusser (26, p. 427), the

property tax has become less representative of the wealth of the commu-

nity. Further, Johns and Thomas (21, p. 5) indicate that property

taxes are reaching their limit in many school districts and the tradi-

tional sources of revenue are unable to provide the needs of society.

On the other hand, Childress and Ostrander (15, p. 421) maintain

that the property tax is of vital importance for schools due to the

magnitude of its yield. Burke (4, p. 254) states that the property tax

is and will continue to be an important source of local tax support for

schools. In agreement Sharp and Sliger (41, p. 314) state that:

> In the final analysis, although the tax has been described
> as one that is wrong in theory and unworkable in practice,
> the property tax, most likely in the classified form, will
> continue to have a substantial place in the American tax
> system.

The National Educational Finance Project article "Alternative Tax

Sources" (13, p. 316) states that the inherent advantages of personal

income taxation are well known.

> Income taxes along are directly related to the most gener-
> ally accepted measure of tax capacity and are adjustable on
> the basis of circumstances affecting tax capacity at given
> income levels, such as numbers of dependents, medical
> expense, and the like.

It is suggested that only the income tax can provide effective progres-

sion in the overall tax structure. Most authorities agree that a

properly designed income tax would have minimum distorting effect on

the economy, provided all income is treated in a uniform fashion.

Furthermore, unlike most other taxes, the rates of the personal income

tax can be varied periodically in light of changing business conditions

and inflationary pressures.

Sharp and Sliger (41, p. 231) state:

> The personal income tax is the blood and guts of the federal
> tax system in the United States. It provides substantially
> more revenue at the federal level than any other tax. It is
> estimated that in fiscal 1968 the federal personal income
> tax produced approximately 51 per cent of the total federal
> revenues, with the total tax take from this source approxi-
> mating $78.1 billion. The personal income tax also provides
> considerable revenue at the state level of government. In
> fiscal 1967, it brought in $4.9 billion. Though not of too
> great an impact dollarwise at the local level, some use has
> been made of a version of the personal income tax in certain
> metropolitan areas.

Childress and Ostrander (15, p. 413) imply that there has been a reluc-

tance to increase state income taxes while the federal rates remain

high. Burke (4, p. 343) suggests that the income tax should be the

foundation of a state tax structure.

School Expenditures

A 1970 publication of the NEA Committee on Financing Public

Schools (35, pp. 22-23) presents a survey on the financing of schools

for the past ten years. The study demonstrates that within nearly

every state there are wide variations in the amount of current expendi-

ture per pupil. Wise (47, p. 121) suggests that it is unlikely that

price-level differences alone account for the wide variations found in

educational expenditures. Nevertheless, these variations reflect dif-

ferences in the provision of educational opportunities. Although it

must be recognized that different districts may employ their resources

with different degrees of efficiency, it is important to recognize the

kinds of resources which districts have available.

An article in the School Management (10) reported the results of a

survey of educational expenditures in 1965-66 throughout the nation.

The unit of analysis employed was the "expenditure pupil unit." The study indicates that the following factors vary with the level of expenditure: the salaries of professional personnel, the number of professional personnel per thousand students, and the expenditures on textbooks and teaching materials.

Jerry Miner (25, p. 23), in discussing an economic theory, states that:

> A complete theory of expenditures for public education, in the context of a consumer-directed market economy, must explain several aspects of educational spending. The theory should provide a framework for determining whether educational services should be produced privately or publicly. It must suggest, on the basis of a concern for proper allocation of resources, redistribution of income, and economic stabilization, the proper amount of government contributions for educational outlays, and the pattern of taxes for raising these revenues. Finally, if education is to be publicly produced as well as financed, the theory must indicate which level of government is to be responsible for its production.

According to Swearingen, Sorenson, and Jungers (15, p. 25) the problem related to the allocation of resources for education would be incomplete without considering some aspects of economic theory as related to education.

> Until recently, few economists were inclined to view spending for education as a capital investment. During the last decade a growing number of economists has written extensively about the allocation of resources for education and this impact on society. Development of this concept can be found in the writings of a number of economists.

Summary

The literature reveals that a considerable amount of controversy exists as to what constitutes the best measure of fiscal capacity of a school district. Many authorities advocate that the property valuations are still a major determinant of fiscal ability. Some

authorities suggest that personal income is the best indicator of
fiscal capacity of a school district; whereas other authorities main-
tain that a combination of wealth measures should be utilized.

Evidence indicates that property valuation and per pupil expendi-
ture vary substantially within the state and among the states. Almost
all writers in the area of school finance agree that there is a need
for financial equality of educational opportunity. The question is,
what wealth measure should be used to bring about equalization.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

The design and methodology of this study is described in a series

of four sections. Specifically, this chapter contains a description of

the sample, the source of the data, the organization of the data, and

the statistical technique utilized.

Description of the Sample

The sample for this study included school districts in states in a

geographical area referred to as the Mid-Southwest. The sample is

composed of Oklahoma and all its contiguous states. Specifically, the

selected states are as follows: Oklahoma, Texas, Arkansas, Missouri,

Kansas, Colorado, and New Mexico,

A complete list of all school districts with an ADA of 1500 or

more was secured from the state department of education of each of the

seven states. The total sample included 602 school districts distrib-

uted as follows: Arkansas, 63; Colorado, 43; Kansas, 65; Missouri,

104; New Mexico, 32; Oklahoma, 51; and Texas, 244. A subsample includ-

ed the states of Kansas, Arkansas, Oklahoma, and New Mexico.

The states were chosen because of the author's interest in this

region of the United States. The selected states should have the same

characteristics since they are in the same geographical area.

26

Source of the Data

Per pupil assessed valuation was obtained from the selected sample data received from the state departments of education and from the National Educational Finance Project. The per pupil equalized assessed valuation data for Kansas, New Mexico, Arkansas, and Oklahoma were obtained from the National Educational Finance Project. Per pupil assessed valuation data and per pupil equalized assessed valuation data were for the 1968-1969 school year.

The per pupil personal income data were obtained from a 1971 NEFP publication Personal Income by School Districts in the United States.[1] The publication lists the adjusted gross personal income per pupil for every school district in the United States.

The total expenditures data for the 1968-1969 school year for each school district were obtained from the selected sample state departments of education reports and records. Amounts for school lunches, tuition payments to other districts, capital outlay, and debt service were excluded as were federal funds allocated to the school districts

---

[1] The National Educational Finance Project has made the first analysis of personal income data by local public elementary and secondary school districts in the United States. The advent of Zip Codes has made this possible. Using the Zip Code as a key, the Internal Revenue Service Master File of Zip Code Area Data which was based on the complete Individual Master File of Income Tax Returns for 1966 filed during the calendar year 1967 was merged with the United States Office of Education Master File of the Universe of Public and Nonpublic Elementary and Secondary Day Schools 1968-69. The University of Tennessee Computing Center made available the necessary computing facilities to complete the directory.

for the 1968-1969 school year.[2] The current expenses for each school

district were divided by the corresponding year's ADA or ADM which

yielded per pupil current expenditure. To obtain the information on

per pupil expenditure, it was necessary to visit the state departments

of education in Missouri, Oklahoma, Arkansas, and Texas.

The Economic Index of Texas posed a problem in making a comparison

with other measures or indicators of fiscal ability. The economic

index data were calculated by the Texas Education Agency to approximate

each county's percentage of statewide taxpaying ability and were a

measure of that county's ability to support schools in relation to that

of other counties in the state. Each county is then given a required

local fund assignment and each school district is given a portion of

the county assignment. The finance section of the Texas Education

Agency provided the writer the district fund assignments which were

divided by the district's ADM to get per pupil economic index fund

assignments. Per pupil adjusted economic index fund assignments were

used in this study to represent a measure of fiscal ability.

Organization of the Data

The data for expenditure were ranked by school district from the

smallest per pupil expenditure to the largest per pupil expenditure for

each of the seven states. The means and medians were determined for

each state as were the 90th, 75th, 25th, and 10th percentiles. The

data for expenditure for the total sample were ranked by school

---

[2]Current transactions commonly called current expense, is the
total of all expenditure made during a given period of time, except
expenditures for capital outlay and debt service. Tuition payments and
federal allocations or expenditure are also extracted.

districts from the smallest per pupil expenditure to the largest per pupil expenditure. The mean and median were determined for the total sample as were the 90th, 75th, 25th, and 10th percentiles.

The data for personal income were ranked by school district from the smallest per pupil personal income to the largest per pupil personal income for each of the seven states. The means and medians were determined for each state as were the 90th, 75th, 25th, and 10th percentiles. The data for personal income for the total sample were ranked by school district from the smallest per pupil personal income to the largest per pupil personal income. The mean and median were determined for the total sample as were the 90th, 75th, 25th and 10th percentiles.

The data for assessed valuation were ranked by school district from the smallest per pupil assessed valuation to the largest per pupil assessed valuation to the largest per pupil assessed valuation for each of the seven states. The means and medians were determined for each state as were the 90th, 75th, 25th, and 10th percentiles. The data for assessed valuation for the total sample were ranked by school district from the smallest per pupil valuation to the largest per pupil assessed valuation. The mean and median were determined for the total sample as were the 90th, 75th, 25th, and 10th percentiles.

The data for equalized assessed valuation for Kansas, Arkansas, Oklahoma, and New Mexico were ranked by school district from the smallest per pupil equalized assessed valuation to the largest per pupil equalized assessed valuation for each of the four states. The means and medians were determined for each state as were the 90th, 75th, 25th, and 10th percentiles. The data for equalized assessed valuation

for the total sample were ranked by school district from the smallest
per pupil equalized assessed valuation to the largest per pupil equal-
ized assessed valuation. The mean and median were determined for the
total sample as were the 90th, 75th, 25th, and 10th percentiles.

The data for the economic index of Texas were ranked by school
district from the smallest per pupil adjusted economic index fund
assignments to the largest adjusted economic index fund assignments.
The mean and median were determined for each state as were the 90th,
75th, 25th, and 10th percentiles.

Statistical Technique

The purposes of this study were (1) to compare the relationships
between per pupil expenditure in ADA and various measures of fiscal
ability of local school districts in selected states, and (2) to
examine the proposition that personal income per pupil in ADA best
explains the variation of expenditure among local school districts.
Ranking, rank correlation, ratios, and correlations provided the tech-
niques for analyzing the data.

The data for expenditure were placed in a distribution table show-
ing per pupil expenditure for each of the seven states and the total
sample at the 90th, 75th, 25th, and 10th percentile levels. The ratio
of the school district with the highest per pupil expenditure to the
school district with the lowest per pupil expenditure for each of the
seven states and the total sample was determined as were ratios of the
90th to the 10th percentile for each state and the total sample and
ratios of the 75th to the 25th percentile for each state and the total
sample. The statistical data were analyzed in relation to the range of

variation within states and between states.

The data for assessed valuation were placed in a distribution table showing per pupil assessed valuation for each of the seven states and the total sample at the 90th, 75th, 25th, and 10th percentile levels. The ratio of the school district with the highest per pupil assessed valuation to the school district with the lowest per pupil assessed valuation for each of the seven states and the total sample was determined as were ratios of the 90th to the 10th percentile for each state and the total sample and ratios of the 75th to the 25th percentile for each state and the total sample. The statistical data were analyzed in relation to the range of variation within states and between states.

The data for equalized assessed valuation were placed in a distribution table showing per pupil equalized assessed valuation for each of the four states and the total sample at the 90th, 75th, 25th, and 10th percentile levels. The ratio of the school district with the highest per pupil equalized assessed valuation to the school district with the lowest per pupil equalized assessed valuation for each of the four states and the total sample was determined as were ratios of the 90th to the 10th percentile for each state and the total sample and ratios of the 75th to the 25th percentile for each state and the total sample. The statistical data were analyzed in relation to the range of variation within states and between states.

The data for the economic index of Texas were placed in a ratio table. The ratio of the school district with the highest per pupil adjusted economic index fund assignments to the school district with the lowest per pupil adjusted economic index fund assignments was

determined as were ratios of the 90th to the 10th percentile and ratios of the 75th to the 25th percentile. The statistical data were analyzed in relation to the range of variation within the state.

The medians for expenditure per pupil and the three measures of fiscal ability, personal income per pupil, assessed valuation per pupil, and equalized assessed valuation per pupil for each of the selected states and the total sample were placed in a table. The per pupil medians were ranked by state from the largest to the smallest for expenditure per pupil as were two of the measures of fiscal ability, assessed valuation per pupil and personal income per pupil. A rank order correlation coefficient was determined between the per pupil medians for expenditure and the per pupil medians for assessed valuation. A rank order correlation coefficient was determined between the per pupil medians for expenditure and the per pupil medians for personal income.

The means for expenditure per pupil and the three measures of fiscal ability, personal income per pupil, assessed valuation per pupil, and equalized assessed valuation per pupil for each of the selected states and the total sample were placed in a table. The per pupil means were ranked by state from the largest to the smallest for expenditure per pupil as were two of the measures of fiscal ability, assessed valuation per pupil and personal income per pupil. A rank order correlation coefficient was determined between the per pupil medians for expenditure and the per pupil medians for personal income. The statistical method used was the Spearman rank difference correlation technique (Guilford, p. 306).

The statistical technique used to compare the relationships between per pupil expenditure in ADA and the various measures of fiscal ability was the Pearson product moment technique (Guilford, pp. 91-112). Correlation matrix tables were made for each state showing the correlation coefficients and whether the coefficients were significant at the .05 or .01 level. A multiple correlation (Guilford, p. 409) between expenditure and all the measures of fiscal ability of each of the states was computed to determine if a single measure of a combination of measures had the highest correlation coefficient.

The second major purpose of the study was to examine the proposition that personal income per pupil in ADA best explains the variations in per pupil expenditure among the school districts. A correlation matrix table was made for the total sample showing the correlation of expenditure with each of the two measures of fiscal ability, assessed valuation and personal income. A multiple correlation was computed to determine if a single measure or a combination of measures had the highest correlation coefficient.

CHAPTER IV

STATISTICAL ANALYSES

The purpose of this chapter is to present a detailed description

of the statistical treatment of the data and a statement of the results.

Specifically, two major purposes are (1) to compare the relationships

between per pupil expenditures in ADA and various measures of fiscal

ability of local school districts in selected states, and (2) to

examine the proposition that personal income per pupil in ADA best

explains the variation of per pupil expenditure among local school

districts.

Analysis of Per Pupil Expenditure

The "current expenditure" as used in this study was collected for

602 school districts distributed among the sampled states as follows:

Arkansas, 63; Colorado, 43; Kansas, 65; Missouri, 104; New Mexico, 32;

Oklahoma, 51; and Texas, 244. Variations of expenditures are shown at

selected percentile levels. The current per pupil expenditure data for

school districts at the highest and lowest levels as well as at the

90th, 75th, 25th, and 10th percentiles for each of the states are

presented in Table I.

The range of variation within states as well as for the total

sample is illustrated in Table I. Three states have interquartile

ranges exceeding $120 or twice that of the lowest state Arkansas which

34

TABLE I

DISTRIBUTION OF THE 1968-1969 CURRENT PER PUPIL EXPENDITURE IN
DOLLARS FOR SCHOOL DISTRICTS OF THE SAMPLE STATES AT SELECTED
PERCENTILE LEVELS AND DISTRIBUTION OF THE RATIO BETWEEN
THE KEY PER PUPIL EXPENDITURE LEVELS

	Highest	Lowest	90th %ile	75th %ile	25th %ile	10th %ile	Ratio of High/Low	Ratio of 90th/10th	Ratio of 75th/25th
Arkansas	531	307	427	392	336	316	1.72	1.35	1.16
Colorado	767	238	726	662	507	435	3.21	1.66	1.30
Kansas	883	422	698	620	525	503	2.08	1.38	1.18
Missouri	1598	406	726	649	518	485	3.93	1.49	1.25
New Mexico	869	488	652	599	522	500	1.78	1.30	1.14
Oklahoma	569	386	519	496	433	396	1.47	1.31	1.14
Texas	977	213	623	545	422	387	4.58	1.60	1.29
Total	1598	213	662	581	427	382	7.49	1.73	1.35

has an interquartile range of less than $60. One easily understood
index is the ratio between key expenditure levels. Several such ratios
are shown in Table I. It can be seen that Texas has a ratio between
the highest and lowest expenditure per pupil exceeding 4.5 to 1 whereas
Arkansas has a ratio of 1.7 to 1. The ratios between the 90th and 10th
percentiles are at least 1.50 in Texas and Colorado. The interquartile
ratio exceeds 1.25 in Colorado, Missouri, and Texas. In these three
states the top quarter of the school districts are being supported at
a level exceeding 125 per cent of the lowest quarter of the school
districts.

Analysis of Personal Income Per Pupil

Data on per pupil personal income are included for all 602 school
districts in the total sample. Per pupil personal income is shown at
selected percentile levels. In Table II the data on personal income
per pupil for school districts at the highest and lowest levels as well
as at the 90th, 75th, 25th, and 10th percentiles for each of the states
are presented. Illustrated is the range of variations within states
and for the total sample. Four states have interquartile ranges ex-
ceeding $2500 or almost twice that of the lowest state Texas which has
an interquartile range of $1300.

The ratio between per pupil personal income for school districts
is shown at key percentile levels. Texas has a ratio between high and
low personal income per pupil exceeding 65 to 1 and Oklahoma has a
ratio exceeding 46 to 1. However, New Mexico has a ratio slightly
exceeding 4 to 1 and Kansas a ratio greater than 12 to 1. The ratio
between the 90th and 10th percentile is 4.8 to 1 for Missouri and

TABLE II

DISTRIBUTION OF THE 1968-1969 PER PUPIL PERSONAL INCOME IN DOLLARS
FOR SCHOOL DISTRICTS OF THE SAMPLE STATES AT SELECTIVE PERCENTILE
LEVELS AND DISTRIBUTION OF THE RATIOS BETWEEN THE KEY
PER PUPIL PERSONAL INCOME LEVELS

	Highest	Lowest	90th %ile	75th %ile	25th %ile	10th %ile	Ratio of High/Low	Ratio of 90th/10th	Ratio of 75th/25th
Arkansas	11500	588	9334	7764	4941	2374	19.68	3.93	1.57
Colorado	13622	482	12773	8812	6731	5181	28.26	2.46	1.30
Kansas	26052	2134	12436	9939	7551	4954	12.20	2.51	1.31
Missouri	94072	2041	21855	12770	6279	4467	46.09	4.89	2.03
New Mexico	10730	2626	7835	6948	4296	3235	4.08	2.42	1.61
Oklahoma	37326	572	10048	8302	5666	3646	65.25	2.75	1.46
Texas	53448	574	10318	6710	5496	3985	70.88	2.58	1.22
Total	94072	482	11706	9043	5828	3901	191.20	3.00	1.55

almost 4 to 1 for Arkansas whereas New Mexico has a ratio of less than

2.5 to 1. The interquartile ratio slightly exceeds 2 to 1 in Missouri

and over 1.5 to one in Arkansas, whereas Texas has an interquartile

ratio of slightly over 1.2 to 1. In three states, Arkansas, Missouri,

and New Mexico, the top one-quarter of the school districts have over

150 per cent more personal income per pupil than the lowest quarter of

the school districts. The wealthy school districts have at least one

and one-half times the fiscal capacity as measured by personal income

as the less wealthy school districts. The same is true for the total

sample because the interquartile ratio is greater than 1.5 to 1.

Analysis of Assessed Valuation

Variation in assessed valuation is shown at selected percentile

levels. Presented in Table III is the assessed valuation per pupil for

school districts at the highest and lowest levels as well as at the

90th, 75th, 25th, and 10th percentiles for each of the states. Texas

has the school district with the largest per pupil assessed valuation

($71,311) and Texas has the largest interquartile range ($11,483).

Arkansas has an interquartile range of less than $2400.

Texas has a ratio between the highest and lowest assessed valua-

tion per pupil exceeding 45 to 1 whereas Missouri has a ratio of only

8.5 to 1. The ratios between the 90th and 10th percentiles are at

least 5 to 1 in New Mexico and Texas. The interquartile ratio exceeds

2 to 1 in Missouri, New Mexico, and Texas. In other words, in these

states the top one-quarter of the school districts have a fiscal abil-

ity based on assessed valuation exceeding 200 per cent of the lowest

quarter of the school districts. The wealthy districts have at least

TABLE III

DISTRIBUTION OF THE 1968-1969 PER PUPIL ASSESSED VALUATION IN
DOLLAR FOR SCHOOL DISTRICTS OF THE SAMPLE STATES AT SELECTED
PERCENTILE LEVELS AND DISTRIBUTION OF THE RATIOS BETWEEN THE
KEY PER PUPIL ASSESSED VALUATION LEVELS

	Highest	Lowest	90th %ile	75th %ile	25th %ile	10th %ile	Ratio of High/Low	Ratio of 90th/10th	Ratio of 75th/25th
Arkansas	8089	737	6879	5295	3471	2979	10.97	2.30	1.52
Colorado	26557	1854	14640	9563	6561	4046	14.32	3.61	1.45
Kansas	37415	200	16288	12103	8080	4836	187.07	3.36	1.49
Missouri	26007	3057	13344	10841	5413	4316	8.50	3.09	2.00
New Mexico	25264	1771	16331	9313	4571	3046	14.26	5.36	2.03
Oklahoma	8062	958	6800	5631	3038	2054	8.41	3.31	1.85
Texas	71311	1582	32145	21723	10240	6308	45.07	5.09	2.12
Total	71311	200	23259	14564	5336	3693	356.55	6.29	2.72

twice the fiscal ability as measured by assessed valuation as the poorer districts. The same is true for the total sample because the interquartile ratio is greater than 2.7 to 1.

Analysis of Equalized Assessed Valuation

The equalized assessed valuation information was secured from information compiled by the National Educational Finance Project for 210 school districts: Arkansas, 62; Kansas, 65; New Mexico, 32; and Oklahoma, 51. Equalized assessed valuation data were not available for Colorado, Missouri, and Texas.

The range of variations within states is illustrated in Table IV. An analysis of variations in equalized assessed valuation is shown at selected percentile levels. New Mexico has the school district with the highest per pupil equalized assessed valuation ($126,326) and has the largest interquartile range of $13,750. Kansas has the school district with the lowest per pupil equalized assessed valuation $195 and the smallest interquartile range, $4,507. The Kansas district is unusual because most of the district is on federal property.

Kansas has a ratio between high and low per pupil equalized assessed valuation of 182 to 1 whereas Arkansas has a ratio between high and low per pupil equalized assessed valuation of slightly over 10 to 1. The ratios between the 90th and 10th percentiles are at least 6 to 1 for New Mexico. The interquartile ratio exceeds 1.5 to 1 in all four states. In other words, in all the states the top one quarter of the school districts have a fiscal ability based on equalized assessed valuation exceeding 150 per cent of the bottom quarter of the school districts. The wealthy districts have 1.5 times the fiscal

TABLE IV

DISTRIBUTION OF THE 1968-1969 PER PUPIL EQUALIZED ASSESSED VALUATION
IN DOLLARS FOR SCHOOL DISTRICTS OF THE SAMPLE STATES AT SELECTED
LEVELS AND DISTRIBUTION OF THE RATIOS BETWEEN THE KEY
PER PUPIL EQUALIZED ASSESSED VALUATION LEVELS

	Highest	Lowest	90th %ile	75th %ile	25th %ile	10th %ile	Ratio of High/Low	Ratio of 90th/10th	Ratio of 75th/25th
Arkansas	39339	3683	33067	27460	17483	15646	10.68	2.11	1.57
Kansas	35662	195	17286	12028	7521	6365	182.88	2.71	1.59
New Mexico	126320	5898	63263	31711	17961	10299	21.41	6.14	1.76
Oklahoma	44936	2050	36384	29253	16215	10401	21.92	3.49	1.80
Total	126320	195	33067	26948	10365	7521	647.79	4.39	2.60

ability as measured by equalized assessed valuation as the poorer

school districts.

Analysis of Economic Index of Texas

The Texas State Teachers Association publication Texas Minimum

Foundation School Laws (44, p. 68) states:

(a) The state commissioner of education, subject to approval
by the State Board of Education shall, not later than the
first week in March of each year, calculate an economic index
of the financial ability of each county to support the
Foundation School Program. This index shall be calculated to
approximate each county's percentage of statewide taxpaying
ability and shall constitute for the purpose of this subchap-
ter a measure of that county's ability, in relation to that
of other counties in the state, to support schools.

(b) The economic index for each county shall be based
upon and determined by the following weighted factors:

(1) assessed property valuation of the county, weighted
by twenty;

(2) scholastic population of the county, weighted by
eight; and

(3) income for the county as measured by value added by
manufacture, value of minerals produced, value of agricul-
tural products, payrolls for retail establishments, payrolls
for wholesale establishments, and payrolls for service
establishments, all weighted collectively by seventy-two.

The adjusted local fund assignments for each district was provided

by the Texas State Department of Education for 1968-1969. These

figures were divided by the ADM per school district to get the per

pupil adjusted economic index figures used in this study.

The per pupil adjusted economic index fund assignments for key

percentile levels are as follows: highest, $442.00; 90th, $117.16;

75th, $74.68; Median, $46.17; 25th, $29.82; 10th, $19.35; and low,

$6.36. The information illustrates the range of variation for the

allocation of funds within the state.

As can be seen in Table V, the ratio between the highest and

lowest school districts in per pupil adjusted economic index fund

assignments is 69.5 to 1. The ratio between the 90th and 10th percen-

tiles was over 6 to 1. The interquartile ratio is 2.5 to 1. In other

words, the top one-quarter of the school districts have a fiscal abil-

ity based on the economic index exceeding 250 per cent of the bottom

quarter of the school districts. The wealthy school districts have at

least 2.5 times the fiscal ability as measured by the economic index as

the poor school districts. Table V shows that at all levels of compar-

son, variations are not as great for assessed valuation as for the

economic index.

TABLE V

RATIOS BETWEEN SELECTED PERCENTILE LEVELS FOR THE DOLLAR
PER PUPIL ADJUSTED ECONOMIC INDEX FUND ASSIGNMENTS AND
FOR THE DOLLAR PER PUPIL ASSESSED VALUATION FOR THE
STATE OF TEXAS FOR THE 1968-1969 SCHOOL YEAR

	Ratio of Highest to Lowest	Ratio of 90th to 10th	Ratio of 75th to 25th
Assessed Valuation	45.07	5.09	2.12
Economic Index	69.49	6.05	2.50

Personal Income Comparisons

Missouri has the school district with the highest per pupil expenditure (Table I: $1,598.93) and the school district with the highest personal income per pupil (Table II: $94,072). Colorado has the school district with the lowest personal income per pupil (Table II) and the school district with the second lowest expenditure per pupil (Table I). The median expenditure for Colorado (Table VI: $529.32) is closest to the median for the entire sample (Table VI: $505.98).

Texas has the largest ratio of highest to lowest for per pupil personal income (Table II: 65.25 to 1) and the largest ratio of highest to lowest for per pupil expenditure (Table I: 4.58 to 1). Colorado has the same interquartile range (Table II: 1.30 to 1) for personal income per pupil and expenditure per pupil (Table I).

Medians of Measures of Fiscal Ability Per
Pupil and Expenditure Per Pupil

The medians for expenditure per pupil, personal income per pupil, assessed valuation per pupil, and equalized assessed valuation per pupil are illustrated by Table VI. Arkansas has the lowest median expenditure per pupil ($357) and Missouri has the highest median per pupil expenditure ($581). New Mexico has the lowest median personal income per pupil ($5315) and Missouri has the highest median personal income per pupil ($9530). Oklahoma has the lowest per pupil median assessed valuation ($3985) and Texas has the highest median assessed valuation per pupil ($14,362). Kansas has the lowest median equalized

assessed valuation per pupil ($9398) and New Mexico has the highest

median equalized assessed valuation per pupil ($28988).

TABLE VI

THE MEDIANS OF VARIOUS MEASURES OF FISCAL ABILITY
AND EXPENDITURE FOR THE SAMPLE STATES
ON A PER PUPIL PER DOLLAR BASIS

	Personal Income Per Pupil	Assessed Valuation Per Pupil	Equal Assessed Valuation Per Pupil	Expenditure Per Pupil
Arkansas	6210	4264	21796	357
Colorado	7861	7658		529
Kansas	9153	9405	9398	561
Missouri	9530	7359		581
New Mexico	5315	6387	28988	545
Oklahoma	7309	3985	22028	452
Texas	7406	14362		473
Total	6710	8999	21001	505

Means of Measures of Fiscal Ability Per

Pupil and Expenditure Per Pupil

In Table VII the means for expenditure per pupil, personal income

per pupil, assessed valuation per pupil, and equalized assessed valua-

tion per pupil are shown. Arkansas has the lowest mean expenditure per

pupil ($367) and Missouri has the highest mean expenditure per pupil

($591). New Mexico has the lowest mean personal income per pupil

($5566) and Missouri has the highest mean personal income per pupil

($11,988). Oklahoma has the lowest mean per pupil assessed valuation

($4251) and Texas has the highest mean assessed valuation per pupil

($17,261). Three states have the same mean rank for expenditure,

income, and assessed valuation.

TABLE VII

THE MEANS OF VARIOUS MEASURES OF FISCAL ABILITY
AND EXPENDITURES FOR THE SAMPLE STATES ON A
DOLLAR PER PUPIL BASIS

	Personal Income Per Pupil	Assessed Valuation Per Pupil	Equal Assessed Valuation Per Pupil	Expenditure Per Pupil
Arkansas	6238	4383	22058	367
Colorado	7881	8368		557
Kansas	9223	10648	10768	585
Missouri	11988	8862		591
New Mexico	5566	7912	31346	573
Oklahoma	7660	4251	34471	449
Texas	7590	17261	22955	495
Total	7721	6435		516

Rank Order Correlation of Means and Medians

The per pupil means and medians shows by Table VIII are ranked numerically by state from the largest to the smallest for expenditure per pupil as are two of the measures of fiscal ability, assessed valuation per pupil and personal income per pupil. The rank order according to the size of the mean for per pupil assessed valuation is not the same rank order according to the size of the median for per pupil assessed valuation; in like manner, the same is true for the rank order of per pupil personal income.

The rank order of the per pupil means and medians for expenditure per pupil were compared with the rank order per pupil of the two measures of fiscal ability, assessed valuation per pupil and personal income per pupil. The statistical technique used was the Spearman rank difference correlation technique (Guilford, p. 306). Per pupil personal income has a higher rank order correlation coefficient for the mean (r = .608) than for per pupil assessed valuation (r = .572). Similarly, per pupil personal income has a higher rank order correlation coefficient for the median (r = .643) than for per pupil assessed valuation (r = .465). The rank order correlations indicate the highest relationship between personal income per pupil and expenditure per pupil for the various states.

TABLE VIII

THE MEANS AND MEDIANS PER DOLLAR FOR PER PUPIL EXPENDITURE,
AND FOR PER PUPIL PERSONAL INCOME, AND PER PUPIL
ASSESSED VALUATION FOR THE SELECTED STATES
FOR 1968-1969 RANKED NUMERICALLY
FROM THE LARGEST TO THE SMALLEST
WITH RANK ORDER CORRELATIONS

	Means Rank Order			Medians Rank Order		
	Expenditure Per Pupil	Assessed Valuation Per Pupil	Personal Income Per Pupil	Expenditure Per Pupil	Assessed Valuation Per Pupil	Personal Income Per Pupil
Missouri	1	3	1	1	4	1
Kansas	2	2	2	2	2	2
New Mexico	3	5	7	3	5	7
Colorado	4	4	3	4	3	3
Texas	5	1	5	5	1	4
Oklahoma	6	6	4	6	6	5
Arkansas	7	7	6	7	7	6
Spearman Rank Correlations		.572	.608		.465	.643

Correlation With Expenditure

The first major purpose of the study was to compare the relationship between per pupil expenditures in ADA and various measures of fiscal ability. One statistical technique used was the Pearson product moment technique (Guilford, pp. 91-112). This section presents the correlation results by states and for the total sample.

The correlations for Arkansas are presented in Table IX. Expenditure as shown by the multiple correlation (R = .7612) has the highest correlation with a combination of personal income and the other two variables. Expenditure has a higher correlation (r = .73) with assessed valuation than with the other variables. Personal income has a higher significant correlation with expenditure than with the other variables. All correlations are significant at the .01 level.

TABLE IX

CORRELATION MATRIX (PEARSON PRODUCT
MOMENT), ARKANSAS

	Assessed Valuation	Equalized Assessed Valuation	Personal Income
Expenditure	.7282 **	.6384 **	.5406 **
Assessed Valuation		.9320 **	.5088 **
Equalized Assessed Valuation			.4573 **

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .7612 **

It can be seen from Table X, the data for Colorado, that expenditure as shown by the multiple correlation (R = .6235) has the highest correlation with a combination of personal income and assessed valuation. Expenditure has a higher correlation with assessed valuation

than with personal income. Personal income has a higher correlation
with expenditure than assessed valuation. All correlations are signif-
icant at the .01 level.

TABLE X

CORRELATION MATRIX (PEARSON PRODUCT
MOMENT), COLORADO

	Assessed Valuation	Personal Income
Expenditure	.5509 **	.4848 **
Assessed Valuation		.3928 **

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .6235 **

The data for Kansas in Table XI indicates that expenditure as
shown by the multiple correlation (R = .7388) has the highest correla-
tion with a combination of personal income and the other two variables.
Expenditure has a high correlation with equalized assessed valuation
(r = .7169) than with the other three variables. The correlation with
assessed valuation is significant at r = .6935.

According to the table there appears to be an inverse relationship
between the personal income and assessed valuation. In like manner,
personal income per pupil in ADA and expenditure per pupil in ADA
appears to be inversely related.

TABLE XI

CORRELATION MATRIX (PEARSON PRODUCT
MOMENT), KANSAS

	Equalized Assessed Valuation	Assessed Valuation	Personal Income
Expenditure	.7169 **	.6935 **	-.0481
Equalized Assessed Valuation		.8674 **	.1272
Assessed Valuation			-.0245

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .7388 **

It can be seen from Table XII, the data for Missouri, that expenditure as shown by the multiple correlation (R = .4146) has the highest correlation with a combination of personal income and assessed valuation. Expenditure has a higher correlation with assessed valuation than with personal income. Personal income has a higher correlation with assessed valuation of (r = .4547) than with expenditure. All correlations are significant at the .01 level.

According to Table XIII, the data for New Mexico, expenditure as shown by the multiple correlation of (R = .4736) has the highest correlation with a combination of personal income and the other two variables. Expenditure has a high correlation with assessed valuation (r = .4048) than with personal income. Personal income has a higher correlation with expenditure than with the other variables; but the

correlation is low. There appears to be an inverse relationship between personal income and assessed valuation.

TABLE XII

CORRELATION MATRIX (PEARSON PRODUCT MOMENT), MISSOURI

	Assessed Valuation	Personal Income
Expenditure	.4050 **	.2630 **
Assessed Valuation		.4547 **

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .4146 **

TABLE XIII

CORRELATION MATRIX (PEARSON PRODUCT MOMENT), NEW MEXICO

	Assessed Valuation	Equalized Assessed Evaluation	Personal Income
Expenditure	.4048	.3135	.2174
Assessed Valuation		.7457 **	-.0581
Equalized Assessed Valuation			.1299

* Significant at .05 level.
** Significant at .01 level.
Multiple Correlation Coefficient (R) = .4736

It can be seen from Table XIV for Oklahoma that expenditure as shown by the multiple correlation (R = .4803) has the highest correlation with a combination of personal income and the other two variables. Expenditure has a higher correlation with assessed valuation (r = .4563) than with the other variables. Personal income is almost as closely correlated with assessed valuation as with expenditure (r = .1695 to r = .1652). However, the correlations or relationships are extremely low and not significant.

TABLE XIV

CORRELATION MATRIX (PEARSON PRODUCT
MOMENT), OKLAHOMA

	Assessed Valuation	Equalized Assessed Valuation	Personal Income
Expenditure	.4563 **	.4520 **	.1652
Assessed Valuation		.8689 **	.1695
Equalized Assessed Valuation			.1041

*Significant at .05 level.

**Significant at .01 level.

Multiple Correlation Coefficient (R) = .4803 **

According to Table XV, the data for Texas, expenditure as shown by the multiple correlation (R = .6955) has the highest correlation with a combination of personal income and the other two variables. Expenditure has a higher correlation with assessed valuation than with the other two variables. The economic index used as an indicator of fiscal ability has a lower correlation with expenditure than either assessed valuation or personal income. Personal income has the lowest correlation (r = .1157) with the economic index. Personal income has a higher correlation with assessed valuation than with the other variables.

TABLE XV

CORRELATION MATRIX (PEARSON PRODUCT MOMENT), TEXAS

	Assessed Valuation	Economic Index	Personal Income
Expenditure	.7942 **	.5780 **	.1861 *
Assessed Valuation		.6907 **	.2614 **
Economic Index			.1157

* Significant at .05 level,

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .6955 **

It can be seen from Table XVI that expenditure as shown by the
multiple correlation has the highest correlation with personal income
and assessed valuation. Expenditure has a higher correlation with
assessed valuation than with personal income. Personal income differs
very little in the correlations or relationships between personal
income and assessed valuation and between personal income and expendi-
ture. All correlations are significant at the .01 level.

TABLE XVI

CORRELATION MATRIX (PEARSON PRODUCT
MOMENT), TOTAL SAMPLE

	Assessed Valuation	Personal Income
Expenditure	.5794 **	.3538 **
Assessed Valuation		.3434 **

* Significant at .05 level.

** Significant at .01 level.

Multiple Correlation Coefficient (R) = .6024 **

Personal Income and Variation in Expenditure

The second major purpose of this study was to examine the proposi-
tion that personal income per pupil in ADA best explains the variation
of per pupil expenditure among local school districts. The correlation

of expenditure with each of the other measures of fiscal ability used in this study is shown by Table XVI. In addition, multiple correlation is shown.

Personal income had the lowest correlation with expenditure of any of the measures of fiscal ability in every state and for the total sample. However, the correlation coefficients were significant at the .01 level for the total sample (Table XVI) and in Arkansas (Table IX), Colorado (Table X), and Missouri (Table XII). The correlation coefficient was significant at the .05 level for Texas (Table XV).

The proposition that personal income per pupil best explains the variation of per pupil expenditure among local school districts is rejected because of the measures used, personal income per pupil least explains the variations in pupil expenditure. Assessed valuation best explains the variation in per pupil expenditure as expenditure has a higher correlation with assessed valuation than with the other variables. The correlation coefficients for all states and the total sample were significant at the .01 level.

Summary

This chapter reveals that in three states the top quarter of the school districts are being supported at an expenditure level exceeding 125 per cent of the lowest quarter of the school districts. In three states the top one-quarter of the school districts have over 150 per cent more personal income than the bottom quarter. It was found that in three states the top one-quarter of the school districts have a fiscal ability based on assessed valuation exceeding 200 per cent of the lowest quarter of the school districts. In all four states the

top one-quarter of school districts have a fiscal ability based on

equalized assessed valuation exceeding 150 per cent of the bottom

quarter of the school districts. At all levels of comparison, varia-

tions are not as great for assessed valuation as for the economic

index.

When the seven states are ranked according to the size of the

median and mean, there appears to be a higher rank order correlation

between expenditure and personal income than between expenditure and

assessed valuation. Expenditure as shown by the multiple correlation

has the highest correlation with personal income and assessed valua-

tion. Expenditure has a higher correlation with assessed valuation

than with personal income. The study also reveals that assessed valu-

ation and not personal income better explains the variation in per

pupil expenditure.

CHAPTER V

SUMMARY AND CONCLUSIONS

General Summary of the Investigation

The investigation examined the measures of fiscal ability to
determine the most appropriate or best measures of fiscal ability and
attempted to determine if per pupil personal income best explained
variations in per pupil expenditure.

Six hundred two school districts with 1500 ADA or more were in-
cluded in the study in seven states of the Mid-Southwest. Personal
income per pupil, assessed valuation per pupil, equalized assessed
valuation per pupil, per pupil Economic Index fund assignments, and
per pupil expenditure were obtained from the National Educational
Finance Project and the state departments of education. The data for
expenditure and the measures of fiscal ability for each of the selected
states and the total sample were examined through the use of percen-
tiles, ratios, means, medians, Spearman rank difference correlation
technique, and the Pearson product moment correlations.

Summary of Results

The first part of the study sought to compare the relationships
between per pupil expenditures in ADA and various measures of fiscal
ability of local school districts in selected states. It can be
concluded that:

1. Expenditure as shown by the multiple correlation coefficient had a higher correlation with a combination of personal income and the other measures of fiscal ability in each of the selected states and for the total sample except Texas which had the highest correlation with assessed valuation.

2. Expenditure had a higher correlation with assessed valuation than with the other variable or variables for the total sample and in every state except for Kansas. In Kansas expenditure had a higher correlation with equalized assessed valuation. The correlation coefficients for all states and the total sample were significant at the .01 level except for New Mexico.

3. Expenditure had a higher correlation with assessed valuation than equalized assessed valuation in each of the selected states except Kansas which had the highest correlation with equalized assessed valuation.

4. Per pupil expenditure had a higher correlation with assessed valuation than with personal income.

5. The Economic Index used as an indicator of fiscal ability in Texas does not have as high a correlation with expenditure as assessed valuation.

The results of the second part of the study sought to determine if per pupil personal income best explains variation in per pupil expenditure. It can be concluded that:

1. Personal income had the lowest correlation with expenditure of any of the measures of fiscal ability in each of the selected states and for the total sample and least explains the

variations in per pupil expenditure.

2. Personal income had a higher correlation coefficient with expenditure than with the measures of fiscal ability and is significant for the total sample at the .01 level.

3. Personal income had a higher correlation with assessed valuation than with expenditure in Missouri, Texas, and Oklahoma.

4. The study reveals very little difference in the correlation of relationship between personal income and assessed valuation and between personal income and expenditure.

Concluding Statements

Presently, assessed valuation best explains the variations in per pupil expenditure in every state and in the total sample. The study reveals that expenditure has a higher correlation with a combination of personal income and other measures of fiscal ability.

Although personal income was significant as a single measure, it did not correlate with expenditure as well as assessed valuation. The study may have been affected by the statutory limitations on the property tax. If local effort had not been restricted, there might have been a closer relationship between expenditure and personal income.

The results of this study are offered as an attempt to aid in the understanding of some of the problems of school finance. It is hoped that the results of this study will serve a useful purpose by benefiting those who are interested in finding additional sources of revenue for our schools and in future deliberation on the property tax. A combination of personal income and other measures of fiscal ability

might be the most adequate or satisfactory method of measuring the
fiscal capacity of school districts or states in the development of
state grants-in-aid to local school districts to bring about fiscal
equalization of educational opportunity.

Recommendations

Authorities are in disagreement about the most appropriate meas-
ures to determine the fiscal ability of a school district and the
property tax is being challenged in court in terms of "equal protection"
and "assessment". It is with this in mind that the following recom-
mendations are given:

1. A study to explore the possibility of using a combination of
    personal income and per pupil assessed valuations as a measure
    of fiscal ability in the development of state grants-in-aid to
    local school districts to bring about fiscal equalization of
    educational opportunity.[1]

2. A study of expanded use of personal income as a major source
    of school revenue.

3. A study utilizing a combination of measures of fiscal ability
    including personal income in conjunction with state equaliza-
    tion formulas to allocate state aid.

4. State studies designed toward equalizing the assessment of
    property.

---

[1]Texas had a higher correlation between expenditure and assessed
valuation than between expenditure and a combination of assessed valua-
tion and personal income.

BIBLIOGRAPHY

(1) Adams, Henry A. The Science of Finance. New York: Henry Holt
        and Company, 1905.

(2) Benson, Charles S. The Cheerful Prospect: A Statement on the
        Future of Public Education. Boston: Houghton Mifflin
        Company, 1965.

(3) Benson, Charles S. The Economics of Public Education. Boston:
        Houghton Mifflin Company, 1968.

(4) Burke, Arvid J. Financing Public Schools in the United States.
        New York: Harper Brothers, 1957.

(5) Burkhead, Jesse. State and Local Taxes for Public Education.
        Syracuse: Syracuse University Press, 1963.

(6) Congressional Quarterly Service. Federal Role in Education,
        Washington, D. C.: Congressional Quarterly, Inc., 1965.

(7) Corbally, John E., Jr. School Finance, Boston: Allyn and
        Bacon, 1962.

(8) Cornell, Francis G. A Measure of Taxpaying Ability of Local
        School Administration Units. New York: Teachers College,
        Columbia University, 1936.

(9) Corey, Arthur F. "Financial Implications of Issues and Trends in
        Education." Phi Delta Kappan, 42 (October, 1960), 7.

(10) "Cost of Education Index." School Management (January, 1966).

(11) Cronin, Joseph M. "School Finance in the Seventies: The
        Prospect for Reform." Phi Delta Kappan, 51 (November,
        1969), 122.

(12) Cubberly, Ellwood P. School Funds and Their Apportionment. New
        York: Teachers College, Columbia University, 1905.

(13) Due, John. "Alternative Tax Sources for Education." Economic
        Factors affecting the Financing of Education. National
        Educational Finance Project in Gainesville, Florida, 1970.

(14) Galbraith, J. K. American Capitalism. Boston: Houghton Mifflin
        Company, 1967.

(15) Gauerke, Warren E., and Jack R. Childress. The Theory and
        Practice of School Finance. Chicago: Rand McNally and
        Company, 1967.

(16) Hanna, Lyle. Preparing Proposals for Government Funds. Engle-
        wood Cliffs, New Jersey: Prentice-Hall, Inc., 1969.

(17) James, H. Thomas, J. Alan Thomas, and Harold J. Dyck. Wealth,
        Expenditures and Decision-Making for Education. Stanford:
        School of Education, Stanford University, 1963.

(18) Johns, Roe L. An Index of the Financial Ability of Local Systems
        to Support Public Education. Montgomery, Alabama: Alabama
        State Department of Education, 1938.

(19) Johns, Roe L. National Educational Finance Project. Gaines-
        ville, Florida, 1970.

(20) Johns, Roe L., and Edgar L. Morphet. The Economics and Financing
        of Education. Englewood Cliffs, N. J.: Prentice-Hall,
        Inc., 1969.

(21) Johns, Roe L., Kern Alexander, and Richard Rossmiller. Dimen-
        sions of Educational Need. Gainesville, Florida: National
        Educational Finance Project, 1969.

(22) Johns, Roe L., Kern Alexander, and Richard Rossmiller. Future
        Directions for School Financing. Gainesville, Florida:
        National Educational Finance Project, 1971.

(23) Lieberman, Myron. "Equality of Educational Opportunity."
        Harvard Educational Review, XXIX (Summer, 1959), 167-83.

(24) Lowell, C. Stanley. "Church Wealth and Tax Exemptions." Phi
        Delta Kappan, 50 (May, 1969), 534.

(25) Miner, Jerry. The Economics and Politics of Public Education.
        Syracuse: Syracuse University Press, 1963.

(26) Mort, Paul R., and Walter C. Reusser. Public Finance. New York:
        McGraw-Hill Book Company, Inc., 1951.

(27) Munse, Albert R. State Programs for Public School Support.
        Washington: Government Printing Office, 1965.

(28) Musgrave, Richard A. The Theory of Public Finance. New York:
        McGraw-Hill Book Company, 1959.

(29) National Educational Association, Commibbee on Educational
        Finance. A Time for Priorities: Financing the Schools for
        the 70's. Washington, D. C.: the Association, 1970.

(30) National Education Association, Committee on Educational Finance. Financial Status of the Public Schools, 1966. Washington, D. C.: the Association, 1966.

(31) National Education Association, Committee on Educational Finance. Financial Status of the Public Schools, 1970. Washington, D. C.: the Association, 1965.

(32) National Education Association, Committee on Educational Finance. Problems and Opportunities in Financing Education. Washington, D. C.: the Association, 1965.

(33) National Education Association, Committee on Educational Finance. Trends in Financing Public Education. Washington, D. C.: the Association, 1965.

(34) National Education Association, Research Division. Estimates of School Statistics, 1967-68. Washington, D. C.: the Association, 1967.

(35) National Education Association, Special Project. Financing the Public Schools 1970. Washington, D. C.: the Association, 1970.

(36) National School Board Association, Proceedings of the 1968 Workshop. State School Finance Laws Handbook. Washington, D. C.: the Association, 1970.

(37) Peterson, LeRoy J., and others. Economic Impact of State Support Models on Educational Finance. Madison, Wisconsin: The University of Wisconsin, 1963.

(38) Rodriguez, Demetrio P., et al., V. San Antonio Independent School District, United States District Court Western District of Texas, San Antonio Division, Civil Action No. 68-175-SA (December 23, 1971).

(39) Salmon, Richard G. "The Equalization of the Financial Support of the Public Schools in Nine Selected States." (Ed.D. thesis, University of Florida, 1969).

(40) Serrano v Priest, 5-Cal. 3rd 384, Supreme Court of the State of California 938254, Section D Los Angeles 29820, (August 30, 1971).

(41) Sharp, Ansel M., and Bernard F. Sliger. Public Finance. Austin: Business Publications, Inc., 1970.

(42) Stollar, Dewey H., and Gerald Boardman. Personal Income by School Districts in the United States. Gainesville, Florida: National Educational Finance Project, 1971.

(43) Strayer, George D., and Robert M. Haig. _The Financing of Education in the State of New York_, 1923.

(44) Texas State Teachers Association. _Texas Minimum Foundation School Laws_. Austin: the Association, 1971.

(45) Weiss, Steven J. _Existing Disparities in Public School Finance and Proposals for Reform_. Boston: Federal Reserve Bank of Boston, 1970.

(46) Weissinger, et al., and Vulcan Realty and Investment Company, et al., v. Boswell, United States District Court for The Middle District of Alabama, Northern Division, Civil Action No. 2577-N, (June 29, 1971).

(47) Wise, Arthur E. _Rich Schools Poor Schools, The Promise of Equal Educational Opportunity_. Chicago: The University of Chicago Press, 1967.

APPENDIX

DATA FOR THE SEVEN STATES IN THE SAMPLE

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
ARKANSAS					
Fayetteville	11,570	6,879	33,023	2,439,072	4,900
Little Rock	11,442	8,065	39,090	12,072,356	22,733
Harrison	10,105	4,437	24,746	749,034	2,180
Fort Smith	10,093	6,749	33,067	5,018,738	11,884
Benton	10,068	3,599	17,409	1,300,396	3,582
Russellville	9,334	3,854	20,115	980,995	3,009
Searcy	9,319	5,965	30,310	936,087	2,277
Conway	9,229	4,201	22.853	1,008,234	3,005
Stuttgart	9,225	6,981	35,398	974,595	2,620
Hot Springs #134	9,152	5,944	33,169	2,442,562	5,713
El Dorado #351	9,054	6,973	32,935	2,943,232	6,267
N. Little Rock	8.880	5,616	27,460	4,995,878	11,871
Jonesboro	8,626	5,288	25,705	1,775,869	4,807
Batesville	8,561	4,280	22,288	634,859	1,850
Mountain Home	7,764	5,295	28,256	627,234	1,577
Texarkana	7,535	4,258	22,719	2,422,140	6,080
Magnolia	7,471	7,269	35,646	1,104,761	3,013
Dollarway	7,406	2,997	14,151	1,049,538	3,045
Pine Bluff	7,406	6,325	30,643	3,822,762	8,944
Watson Chapel	7,406	2,419	11,824	1,064,992	3,453
Arkadelphia	7,357	5,938	28,481	1,112,495	2,510
Grossett	7,107	8.089	39,339	1,389,555	3,059
Rogers	7,066	4,755	23,869	1,267,483	3,230
Pulaski Co. Special	6,949	3,471	17,436	8,878,816	24,043
Siloam Springs	6,878	4,689	23,899	628,849	1,678
Morrilton #495	6,707	4,059	21,703	770,450	2,225
Bentonville	6,595	4,271	20,835	645,765	1,823
Springdale	6,590	4,522	23,059	2,048,221	5,477
DeWitt	6,586	5,968	30,953	739,465	1,833

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Sheridan	6,474	4,272	21,127	605,520	1,687
Malvern	6,358	4,321	21,625	1,149,412	3,084
Fairview	6,063	4,280	22,323	729,587	2,054
Camden	6,063	3,523	17,483	894,583	2,814
VanBuren	5,967	n.a.	n.a.	874,774	2,765
McGehee	5,885	3,910	20,500	531,898	1,521
Hope	5,877	4,210	21,643	926,439	2,628
Paragould	5,838	4,453	23,709	614,584	1,652
Newport	5,831	5,231	26,948	1,064,153	2,800
Warren #113	5,783	3,404	17,158	749,393	2,141
West Memphis	5,763	3,093	16,270	1,987,267	6,689
Wynne	5,758	3,675	18,992	911,859	2,835
Gosnell	5,524	737	3,683	638,296	1,510
Blytheville	5,524	3,849	18,932	1,943,456	5,501
Trumann	5,433	3,441	17,715	624,950	1,984
Lonoke	5,124	4,210	22,219	558,925	1,586
Oscela	5,110	4,533	21,890	893,100	2,377
Brinkley	5,082	3,599	17,513	692,831	1,998
Monticello	4,941	2,979	15,381	565,998	1,717
Helena-West Helena	4,615	5,615	28,589	2,369,935	6,443
Ashdown	4,595	3,290	17,859	588,368	1,702
Cabot	4,227	2,971	15,646	586,986	1,818
Forrest City	3,914	4,034	20,591	2,020,474	6,008
Lake Village #111	3,886	4,228	21,055	657,885	1,826
Dumas	3,696	3,138	17,169	816,360	2,557
Marion	2,391	3,481	20,558	658,221	1,893
Marianna	2,516	3,012	16,012	1,847,890	5,511
Eudora	2,374	4,757	23,515	661,085	1,710
Hughes	2,230	3,063	16,285	647,588	2,105
Earle	2,183	2,817	16,437	550,061	1,588
Marvell	2,115	2,513	13,715	618,725	1,974

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Bryant	1,397	4,489	22,748	519,612	1,663
Technical	588	4,422	22,745	588,684	1,586
COLORADO					
Fremont	13,622	7,722	(Data not	1,559,606	2,901
Englewood	13,620	8,999	available)	3,970,446	5,911
Cherry Creek	13,282	9,563		4,655,152	6,256
Denver	12,773	14,640		62,082,621	86,987
Boulder	10,910	10,051		13,556,529	19,634
Cheyenne Mt.	9,488	13,218		1,563,696	2,038
Jefferson County	9,354	7,409		29,696,212	56,849
Littleton	8,940	6,929		9,175,728	15,299
Greeley	8,899	7,464		5,234,566	9,268
Roaring Fork	8,865	9,161		1,239,597	2,652
Colorado Springs	8,812	8,270		15,386,991	28,012
Harrison	8,793	4,046		1,731,489	4,672
St. Vrain Valley	8,553	8,982		4,549,603	8,771
Mesa Co. Valley	8,544	8,324		7,512,223	11,834
Fort Morgan	8,492	10,122		2,144,867	3,196
Poudre	8,483	8,798		7,176,047	10,813
Adams-Arapahoe	8,389	26,557		8,657,092	17,061
Durango	8,293	9,802		2,092,483	3,440
Pueblo City	8,148	6,693		12,769,531	24,422
Valley	8,115	12,111		2,727,734	3,946
Lake County	7,942	21,192		1,613,467	2,221
Brighton	7,861	7.195		1,838,801	3,386
Thompson	7,657	8,849		2,866,194	5,522
East Otero	7,414	6,209		1,321,009	2,629
Academy	7,344	2,812		1,629,531	3,736
Trinidad	7,104	4,658		1,006,806	2,312

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Douglas County	7,101	10,216	(Data not	1,416,267	2,076
Moffat Co.	7,037	16,011	available)	1,243,762	1,686
Westminister	6,851	4,360		7,226,369	14,976
Mapleton	6,890	6,909		3,468,279	6,819
Lamar	6,873	7,845		1,158,199	2,270
Eastlake	6,840	5,030		5,817,899	11,435
Alamosa	6,731	7,419		1,151,086	2,262
Montrose County	6,352	6,561		2,038,150	3,874
Delta County	6,329	7,521		1,887,287	3,359
Pueblo County Rural	5,953	6,683		2,022,983	3,828
Montezuma-Cortez	5,349	6,727		1,468,946	2,775
Rocky Ford	5,324	7,658		974,008	2,055
Monte Vista	5,298	6,826		782,136	1,620
Adams City	5,181	5,713		4,502,282	7,742
Fountain	5,135	1,854		643,014	2,691
Security	3,678	2,965		2,324,531	6,543
Sheridan	492	5,182		1,161,666	2,077
KANSAS					
Prairie #44	26,052	13,225	19,867	1,439,898	2,082
Corinth #32	18,981	11,143	16,529	1,431,130	1,986
Linwood #1	16,388	10,993	16,723	1,155,594	1,775
Shawnee #27	15,861	6,789	9,963	1,081,321	2,090
Shawnee Mission #6	13,650	11,497	16,972	11,414,091	18,396
Pittsburg #250	12,724	8,353	8,816	1,494,048	2,932
Atchison	12,633	9,427	7,816	1,143,715	2,241
Topeka	12,240	6,941	6,941	11,822,804	22,514
Coffeyville	11,706	7,696	6,410	1,786,038	3,671
One Hundred Ten	11,149	3,669	5,403	3,664,217	6,502
Lawrence	11,112	11,780	10,365	4,379,323	7,374

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Emporia	11,048	12,780	9,761	2,004,818	3,585
Olathe	11,001	5,405	7,521	2,377,136	4,112
Wichita	10,747	8,559	7,098	37,080,031	62,433
Hutchinson	10,293	7,801	6,994	4,202,525	7,973
Winfield	10,051	10,877	10,042	1,444,626	2,581
Manhattan	9,939	10,158	9,218	2,842,546	5,138
McPherson	9,853	12,103	10,984	1,556,368	2,635
Pratt	9,901	16,093	13,228	1,075,591	1,791
El Dorado	9,812	10,085	9,212	1,643,385	2,876
Kansas City	9,787	5,326	7,268	15,107,763	21,325
Augusta	9,753	9,211	8,483	915,832	1,819
Newton	9,719	9,022	7,710	1,985,008	3,761
Parsons	9,717	8,305	7,617	1,202,881	2,485
Leavenworth	9,539	6,190	5,409	2,686,163	4,935
Independence	9,450	10,253	8,771	1,316,123	2,561
Great Bend	9,435	13,723	11,278	2,608,704	4,248
Fort Scott	9,432	10,823	9,398	1,161,546	2,182
Concordia	9,431	14,015	11,835	1,066,942	1,816
Wellington	9,374	8,919	9,668	1,242,384	2,267
Abilene	9,211	10,612	8,914	971,136	1,720
Ft. Larned	9,137	20,733	16,517	1,212,760	1,588
Ottawa	9,153	9,405	8,359	1,236,098	2,512
Russell	9,043	24,958	20,948	1,903,928	2,155
Bonner Springs	8,830	4,290	6,321	1,427,811	2,025
Chanute	8,817	9,042	7,935	1,112,993	2,459
Liberal	8,766	10,147	10,044	2,051,526	3,564
Hays	8,659	10,158	11,796	1,833,685	3,386
Arkansas City	8,640	9,143	8,340	1,813,255	3,595
Turner	8,552	2,968	4,277	2,618,829	4,949
Dodge City	8,392	11,553	10,350	2,008,479	3,882
Valley View	8,372	7,118	10,484	1,793,967	3,351

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Clay Center	8,335	13,964	12,767	1,256,390	1,984
Nickerson	8,006	8,766	8,832	1,068,651	1,728
Scott City	7,954	18,808	20,345	968,778	1,523
Salina	7,909	7,389	6,491	4,515,288	9,494
Garden City	7,881	11,895	12,028	2,340,258	4,232
Iola	7,715	8,221	6,949	985,201	1,927
Seaman	7,551	8,080	9,570	1,685,127	2,827
Derby	7,528	8,593	8,897	2,770,036	5,413
Columbus	7,390	12,005	14,525	953,995	1,459
Valley Center	7,276	6,965	7,139	854,506	1,582
Ulysses	7,271	37,415	35,662	1,287,192	1,560
Goodland	7,189	11,225	11,620	988,695	1,670
Kingman	6,967	25,146	22,835	1,024,071	1,543
Buhler	6,360	13,463	13,591	1,159,958	1,732
Junction City	5,826	4,287	4,398	3,431,584	6,256
Haysville	4,966	8,669	8,454	2,422,397	3,659
De Soto	4,951	4,346	6,539	914,173	1,614
Chapman	4,889	16,353	14,745	1,172,783	1,578
Ft. Leavenworth	4,446	200	195	1,117,847	2,197
Altamont	4,425	8,672	10,269	1,098,721	1,750
Andal	3,894	16,945	17,902	1,032,925	1,687
Tecumseh	2,295	16,223	17,600	1,403,415	1,730
Washburn	2,134	3,219	3,876	1,909,397	3,279

MISSOURI

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Saline	94,072	6,273	(Data not	1,353,242	2,198
Rockwood R-6	67,271	11,691	available)	4,659,102	6,883
Clayton	40,561	43,785		3,368,811	2,232
Jennings	33,047	21,471		2,492,899	2,726
Ladue	31,817	26,007		6,445,406	5,761

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Richmond-Hts Maplewood	28,015	17,522	(Data not available)	2,135,977	2,727
Brentwood	25,093	23,526		1,563,487	1,610
Bayless #102	24,136	11,918		1,545,872	2,528
Affton #101	24,136	17,235		3,380,787	4,017
University City	21,855	16,470		6,521,379	7,074
Kirkwood	21,514	13,032		6,962,685	9,079
Center #58	20,962	11,218		3,510,320	5,219
Festus R-6	19,616	4,204		1,179,785	2,297
Park Hill R-5	16,927	7,776		2,707,904	4,704
Wellston	15,777	12,025		1,190,674	1,823
Washington	15,757	11,484		1,521,837	2,195
Webster Groves	15,399	13,200		5,861,302	7,616
Jefferson City	15,280	12,825		3,111,766	5,483
Riverview Gardens	14,858	10,841		5,509,016	8,683
Mehlville	13,875	12,377		5,769,148	9,026
Lindbergh	13,830	13,344		7,266,957	10,383
Normandy	13,458	12,567		5,807,511	8,016
Kansas City #33	13,441	13,983		46,183,044	63,728
Rittenour	13,290	10,296		7,799,281	12,334
St. Louis City	12,950	17,877		70,950,610	97,716
Columbia	12,770	10,540		5,741,771	9,202
Warrensburg	12,282	9,003		1,045,515	1,734
Cape Girareau #63	12,277	10,260		3,208,620	5,031
St. Charles	12,274	7,821		4,445,416	6,972
Francis Howell	12,274	6,035		1,740,746	3,476
Franklin Co. R-3	12,073	5,033		1,058,125	2,275
Raytown C-2	11,901	5,762		8,184,452	14,678
Sedalia #200	11,794	7,835		2,159,861	4,464
Ferguson	11,482	9,287		10,899,573	16,782
Kirksville	11,237	9,733		1,680,895	2,565
Fort Osage R-1	11,120	4,869		1,935,617	3,756

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Independence #30	11,120	5,571	(Data not	7,511,495	14,729
North Kansas City	11,013	10,188	available)	10,999,579	19,226
Saint Joseph	10,824	7,662		7,517,855	15,006
Berkeley	10,796	17,088		3,296,749	4,950
Hancock Place	10,753	11,164		1,231,495	2,079
Mexico #59	10,572	7,382		1,997,338	3,217
Springfield R-12	10,561	9,059		13,273,604	23,132
Joplin R-8	10,439	8,868		4,933,974	8,344
Liberty #53	10,241	6,772		1,817,659	3,242
Clinton	10,173	6,902		932,049	1,674
Rolla #31	10,155	7,228		1,885,782	3,032
Chillicothe	10,134	9,170		1,599,651	2,421
Fulton #58	9,743	6,785		1,227,046	2,169
Perryville #32	9,655	7,237		928,565	1,516
Parkway	9,561	11,181		9,916,599	14,888
Richmond	9,551	6,859		1,029,442	1,818
Hannibal	9,510	8.090		2,249,962	4,119
Moberly	9,388	7,712		1,644,695	2,634
Grandview	8,952	6,758		2,789,395	4,795
Lee's Summit	8,810	8,848		2,923,743	4,971
Brookfield R-3	8,729	7,927		9,096,288	1,519
Carthage R-9	8,346	7,594		1,735,113	3,207
Jackson R-2	8,302	7,906		1,174,419	2,272
Lebanon R-3	8,273	5,376		1,612,261	2,562
Nevada R-5	8,190	8,148		1,312,291	2,167
Ft. Zumwalt	7,867	7,328		2,183,522	3,801
Blue Springs	7,710	5,534		1,312,872	2,652
Excelsior Springs	7,677	6,184		1,418,024	2,614
Sikeston R-6	7,640	5,110		2,437,225	4,247
Webb City	7,524	6,199		1,210,579	2,361
Popular Bluff	7,324	5,008		2,818,230	4,935

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Flat River	7,303	7,025	(Data not	1,144,853	2,078
North County	7,221	5,503	available)	1,121,018	2,161
Hazelwood	7,200	10,078		12,653,856	19,080
McDonald Co.	7,188	4,761		895,762	1,921
De Soto #73	7,017	3,882		950,916	1,986
Neosho R-5	7,017	5,473		1,756,714	3,129
Sullivan C-2	6,896	4,741		760,863	1,719
Farmington	6,894	5,413		1,259,484	2,432
Union R-11	6,867	5,424		1,075,988	2,026
West Plains	6,710	4,573		1,336,330	2,241
Fox C-6	6,504	3,533		2,701,755	6,300
Pattonville	6,279	13,236		7,060,578	10,090
Troy R-3	6,200	7,816		968,319	1,695
Dexter R-3	6,173	5,336		1,012,685	1,888
Lewis County C-1	6,023	8.094		858,890	1,614
Wentzville	5,844	6,844		1,131,933	2,072
Savannah R-3	5,724	6,411		1,064,664	1,964
Kenneth	5,713	4,818		1,281,417	2,569
Belton #124	5,704	4,228		1,931,268	2,672
Caruthersville	5,576	3,693		1,122,994	1,932
Fredericktown	5,527	5,299		858,276	1,712
Charleston	5,343	6,637		1,815,146	2,666
Camdenton R-2	5,340	13,232		1,042,847	1,724
Owensville	5,321	7,336		747,892	1,539
Potosi R-3	4,861	8,202		1,342,272	2,329
Dunklin R-5	4,045	5,056		902,522	1,792
Hickmanmills	4,576	5,175		6,567,828	12,974
Mountain Grove	4,467	4,316		797,329	1,543
Hillsboro R-3	4,080	4,599		921,493	1,834
Doniphan	3,672	3,514		774,457	1,640
Ava R-1	3,653	4,548		893,200	1,501

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
New Madrid Co.	3,626	7,761	(Data not	3,233,802	4,642
Haytir R-2	3,610	3,057	available)	825,284	1,572
East Prairie R-2	3,550	6,559		996,356	1,690
Willard	2,564	5,672		770,219	1,897
Waynesville R-6	2,513	3,101		2,782,621	4,665
Northwest Center	2,041	4,266		2,275,131	4,932
NEW MEXICO					
Los Alamos	10,730	5,504	18,330	4,001,588	4,604
Albuquerque	8,404	4,576	28,601	38,255,537	73,863
Santa Fe City	8,051	7,578	30,312	5,396,567	10,321
Carlsbad	7,835	11,075	55,375	4,183,279	7,082
Farmington	7,628	6,260	31,301	3,390,695	6,456
Hobbs	7,183	10,142	60,850	4,802,521	8,008
Portales	7,140	4,564	18,254	1,503,552	2,797
Raton	7,107	5,936	23,743	961,886	1,755
Roswell	6,948	7,536	30,145	5,533,872	9,580
Silver City	6,919	9,313	31,013	1,585,200	2,831
Clovis	6,670	5,737	22,948	4,386,252	8,157
Artesia	5,809	16,331	81,656	2,550,101	3,949
Las Cruces	6,528	4,255	17,020	7,420,633	14,824
Tucumcari	6,198	7,912	31,650	1,208,987	2,065
Alamogordo	5,695	3,514	14,054	4,871,769	9,221
Lovington	5,328	20,575	123,452	2,088,228	3,213
Grants	5,306	6,514	26,057	2,688,217	4,902
Socorro	5,264	5,394	17,961	1,058,753	1,983
Cobre	4,978	18,998	63,263	1,678,357	2,704
Aztec	4,889	8,865	44,323	1,068,442	1,796
Belen	4,424	7,344	29,375	1,591,198	3,055
Espanola	4,390	1,771	5,898	2,858,385	5,639

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Gallup	4,358	5,566	27,828	6,800,371	9,759
Deming	4,296	9,523	31,711	1,787,177	3,662
Taos City	3,901	2,562	8,530	1,428,904	2,903
Las Vegas West	3,610	3,090	10,288	1,316,932	2,645
Las Vegas City	3,500	5,036	16,769	1,470,189	2,712
Los Lunas	3,258	3,046	12,182	1,494,549	2,821
Bloomfield	3,235	25,264	126,320	1,073,624	1,554
Gadsden	2,956	7,643	30,572	1,933,083	3,862
Central	2,969	9,622	48,112	2,121,919	3,303
Bernalillo	2,626	2,158	8,632	1,576,241	2,417

OKLAHOMA

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Crooked Oak	37,326	3,038	14,043	1,136,241	2,722
Western Heights	21,635	6,832	31,588	1,167,940	2,581
Bartlesville	12,428	6,800	30,632	4,080,985	7,975
Norman	10,359	418	2,050	3,468,985	7,731
Stillwater	10,048	5,084	29,837	1,899,336	4,241
Miami	10,038	5,734	28,915	1,415,823	2,923
Ponca City	9,994	7,762	44,396	3,238,225	6,403
Duncan	9,914	4,519	23,424	2,187,504	4,271
Ada	8,858	6,649	38,817	1,259,977	2,279
Guymon	8,503	7,603	44,936	1,061,088	2,079
Woodward	8,443	6,081	29,505	1,224,311	2,623
Tulsa City	8,319	8,062	29,565	38,360,666	71,197
El Reno	8,302	3,620	20,496	1,216,936	2,673
Muskogee City	8,284	4,546	22,028	3,866,244	8,829
Edmond	8,256	5,111	23,627	1,581,302	3,774
Ardmore City	8,179	3,868	20,105	1,945,496	4,298
McAlester	8,094	2,768	18,420	1,768,869	4,082
Shawnee	8,042	3,086	21,238	2,194,982	4,338

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Chickasha	7,935	3,879	19,762	1,610,890	3,180
Seminole	7,829	3,778	21,967	741,628	1,512
Blackwell	7,808	4,768	28,229	912,877	2,157
Clinton	7,781	4,815	29,253	954,462	2,173
Sapulpa	7,617	3,334	17,716	1,692,431	3,896
Yukon	7,500	4,050	22,935	875,393	2,234
Durant	7,331	3,488	24,394	1,043,841	2,101
Okmulgee	7,309	3,797	21,536	1,603,294	3,502
Claremore City	7,291	3,211	17,960	901,059	2,291
Elk City	7,260	4,645	22,938	812,191	1,709
Pryor City	7,091	4,963	36,384	932,236	2,207
Midwest City	7,079	2,740	12,667	7,676,433	16,911
Lindsay	6,778	6,236	37,430	733,065	1,527
Guthrie	6,686	4,788	27,096	1,081,821	2,638
Lawton	6,647	2,781	16,030	8,513,573	18,480
Broken Arrow	6,576	4,549	16,682	1,633,124	3,746
Pauls Valley	6,493	3,985	23,921	916,825	1,751
Altus	5,975	3,058	15,615	2,503,725	5,120
Sand Springs	5,974	3,992	14,638	1,761,346	4,444
Oklahoma City	5,931	6,415	29,657	32,606,644	65,700
Anadarko	5,666	3,012	18,446	972,865	1,988
Hugo	5,331	2,641	23,898	669,208	1,613
Owasso	4,705	2,836	10,401	749,209	1,938
Sallisaw	4,690	1,698	8,531	748,968	1,711
Idabel	4,570	2,054	15,899	863,282	1,944
Tahlequah	4,536	2,059	11,747	1,139,166	2,401
Moore	4,305	3,309	16,215	3,079,085	7,075
Jenks	3,832	6,376	23,381	728,887	1,616
Choctaw	3,646	1,824	8,434	1,193,280	3,208
Catoosa	3,150	3,900	21,815	713,221	1,596
Putnam City	2,774	5,677	27,097	6,907,859	16,286

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Enid	1,982	5,631	33,358	4,622,340	8,891
Burns Flat	572	958	7,051	859,613	1,509
TEXAS					
Highland Park	53,448	41,577	(Data not	3,168,866	5,024
Houston	25,890	20,252	available)	102,934,432	199,425
Alamo Heights	24,981	26,126		2,805,368	4,658
Port Arthur	14,412	23,722		8,253,175	14,784
Fort Worth	18,438	15,879		36,828,512	73,005
Brownfield	14,459	21,723		1,458,637	2,743
South Park	12,995	30,516		7,573,386	11,787
West Orange Cove	12,662	43,681		4,665,611	6,454
Midland	11,949	20,939		9,122,543	16,630
Judson	11,930	16,752		839,650	1,605
Pasadena	11,794	16,726		15,098,022	29,917
Dallas	11,759	23,224		71,842,757	137,581
Humble	11,651	28,813		1,023,258	1,901
Conroe	11,630	31,697		3,355,002	5,653
Spring Branch	11,443	20,801		15,152,986	28,949
Tyler	11,357	23,067		7,320,345	14,690
Chapel Hill	11,357	10,711		734,668	1,840
Klein	11,042	32,218		960,324	1,550
Sherman	10,920	18,297		2,934,666	6,202
Texas City	10,804	24,395		4,058,852	6,624
Galveston	10,719	20,114		6,081,566	11,105
Goose Creek	10,711	27,773		7,162,049	11,491
Graham	10,631	15,323		941,846	2,071
Richardson	10,318	23,308		10,522,787	22,624
Pampa I.S.D.	10,255	19,256		2,775,989	5,462
Cuero	10,049	15,716		922,083	1,919

School District	Personal In-come Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valu-ation Per ADA	Current Expenses	ADA
Wichita Falls	10,031	14,219	(Data not	8,458,488	17,143
Borger	10,244	22,325	available)	2,204,334	4,010
Vernon	10,030	13,535		1,125,023	2,401
Cleburne	9,772	13,546		1,539,099	3,691
Amarillo	9,970	19,685		13,016,174	27,985
Dimmitt	9,890	23,515		994,867	1,607
North East	9,759	17,447		11,364,627	22,468
Lufkin	9,751	9,384		2,316,295	6,074
Kerrville	9,706	16,909		1,397,767	2,612
Sweetwater	9,687	16,017		1,256,310	3,055
Denton	6,632	18,705		3,135,884	6,024
A & M Cons.	9,630	21,032		1,030,178	2,105
Lake Worth	9,624	7,314		682,619	1,729
Northwide	9,609	11,933		6,588,368	13,735
Waco	9,570	13,159		8,641,261	17,121
Dickinson	9,542	38,794		2,149,545	3,334
Austin	9,533	21,253		24,008,076	44,034
Arlington	9,474	19,292		7,811,400	16,914
Tulia	9,404	28,151		1,036,973	1,787
Gainesville	9,338	14,746		1,240,414	2,660
Longview	9,298	13,642		4,327,428	8,844
Pinetree	9,298	22,051		1,386,559	2,644
Irving	9,277	15,616		9,530,883	19,670
Galena Park	9,195	19,394		5,918,312	10,286
San Antonio	9,103	10,244		29,054,739	68,837
Castleberry	9,066	7,764		1,505,834	3,848
Hillsboro	9,064	13,317		717,633	1,525
Everman	9,049	10,342		978,099	2,552
Perryton	9,048	32,810		1,373,987	2,247
McKinney	8,965	12,400		1,519,624	3,408
Schrtz-CBLO-Univ Cy	8,945	12,215		1,159,538	2,812

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Kilgore	9,929	22,290	(Data not	1,874,727	3,153
Birdville	8,926	11,127	available)	5,143,975	12,227
Taylor	8,924	10,616		886,640	2,109
Big Spring	8,859	19,908		3,839,748	6,923
LaPorte	8,741	46,134		2,392,539	3,270
Brownwood	8,716	12,679		1,579,742	3,188
Lubbock	8,710	19,126		14,925,286	30,796
Bay City	8,700	28,548		2,466,253	3,878
Stephenville	8,652	10,240		765,649	1,625
Greenville	8,634	12,237		2,173,661	5,085
Garland	8,608	13,138		6,467,984	16,543
Plano	8,602	18,554		1,871,437	3,305
Nacogdoches	8,593	9,055		1,756,818	4,151
Weatherford	8,562	14,696		1,530,084	3,062
Henderson	8,537	10,761		1,491,446	2,967
Corsicana	8,537	11,916		1,994,614	4,304
Clear Creek	8,528	38,773		5,240,995	7,155
Temple	8,480	13,929		3,034,991	6,908
White Settlement	8,393	6,056		1,185,717	3,029
Corpus Christi	8,364	12,984		19,305,027	40,972
Waxahachie	8,362	9,024		1,189,478	3,091
Abilene	8,334	14,564		8,328,441	17,214
Victoria	8,318	18,361		5,371,550	10,881
San Angelo	8,292	14,028		6,643,623	13,348
Comal	8,218	34,078		841,250	1,505
Canyon	8,212	21,635		1,286,609	2,433
Brazpsport	8,153	36,162		6,447,402	9,448
Flourbluff	8,140	20,461		1,102,653	1,989
Northeast Houston	8,140	9,902		4,957,178	12,292
Paris	8,105	10,857		1,843,986	4,316
Dumas	8,164	40,121		1,990,391	3,178

School District	Personal In- come Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valu- ation Per ADA	Current Expenses	ADA
Ector	8,032	26,517	(Data not	12,292,063	23,180
Channelview	8,021	14,462	available)	1,344,648	2,851
Duncanville	8,016	15,407		1,436,858	3,541
Denison	8,012	10,036		2,491,640	5,630
Beaumont	8,001	20,097		7,397,224	13,569
Grand Prairie	7,982	12,891		4,082,518	8,879
Hurst-Euless-Bedford	7,960	14,145		5,783,837	13,198
Santa Fe	7,958	16,755		851,452	1,637
Belton	7,951	6,021		1,127,678	2,567
Banham	7,891	13,714		841,203	1,824
Ennis	7,890	12,725		1,197,429	2,786
New Braunfels	7,872	16,131		1,758,695	3,442
Colorado	7,864	26,346		949,971	1,589
Lamesa	7,812	17,758		1,454,312	3,138
Sulphur Springs	7,803	11,874		1,160,250	2,769
Grapevine	7,773	15,708		995,550	2,005
Lancaster	7,748	9,460		960,872	2,385
Monhans-Wcktt-Pyote Isd	7,747	23,937		1,648,811	2,922
Plainview	7,729	14,181		2,845,606	6,106
Kermit	7,661	39,142		1,629,269	2,345
Alvin	7,562	36,162		2,447,035	4,170
Jacksonville	7,550	13,492		1,469,017	2,996
Muleshoe	7,536	15,496		865,882	1,798
Texarkana	7,535	10,411		2,961,357	6,410
Liberty-Eylau	7,535	5,051		915,524	2,387
Gladewater	7,519	59,839		1,318,257	1,682
Mineral Wells	7,495	8,395		1,927,758	4,464
Columbia-Brazoria	7,494	23,259		2,442,219	2,498
Athens	7,470	8,088		1,073,038	2,446
Levelland	7,465	24,769		1,726,839	3,011
Lewisville	7,456	16,908		1,296,514	2,578

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Atlanta	7,450	10,133	(Data not	996,146	1,990
De Soto	7,416	13,343	available)	657,737	1,514
Nederland	7,409	19,507		3,019,346	5,458
Bryan	7,404	9,800		3,251,030	7,857
Littlefield	7,383	12,767		861,686	1,883
Andrews	7,368	71,311		2,754,027	2,843
Snyder	7,359	60,914		2,551,947	3,296
Slaton	7,290	10,287		696,179	1,779
El Paso	7,246	10,248		26,897,615	53,790
Burleson	7,245	10,536		1,019,822	2,434
Mesquite	7,230	14,073		5,545,972	14,200
Aldine	7,201	10,240		7,170,081	16,198
Huntsville	7,120	11,819		1,630,162	3,075
Terrell	7,101	9,423		1,183,618	2,900
Vidor	7,097	13,042		2,177,558	4,987
Robstown	7,085	6,969		1,787,565	4,613
Palestine	7,055	7,670		1,691,672	3,617
Mt. Pleasant	6,949	12,458		1,340,033	2,688
Sweeney	6,955	46,465		1,380,255	1,728
Liberty	6,937	22,273		1,036,520	2,301
Floydada	6,928	21,166		912,846	1,590
Arkansas Pass	6,910	29,395		703,951	1,736
Lampasas	6,898	11,181		732,647	1,502
San Marcos	6,898	11,135		1,830,600	3,875
Pearland	6,984	22,437		1,374,838	2,339
Beeville	6,835	10,491		1,860,113	3,890
Angleton	6,828	20,701		1,915,089	3,750
Gilmer	6,757	7,518		862,890	1,962
Daingerfield	6,748	12,485		897,274	1,955
Brenham	6,723	11,169		1,450,903	3,150
Carrollton	6,698	18,575		2,510,542	7,570

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Seguin	6,696	11,316	(Data not	1,986,580	4,332
East Central	6,632	11,664	available)	961,423	2,443
Aransas	6,613	29,295		1,035,536	1,736
Kingsville	6,591	19,333		2,978,251	5,715
El Campo	6,562	18,008		1,979,896	3,659
La Marque	6,493	26,971		3,758,306	6,308
Cameron	6,486	8,533		593,794	1,552
Silsbee	6,477	12,079		1,464,664	3,429
Center	6,459	4,205		780,320	2,021
Rockdale	6,435	15,609		659,634	1,556
Mexia	6,421	14,719		920,932	1,823
Deer Park	6,389	63,263		4,575,442	5,125
Taft	6,366	19,902		867,994	1,907
Cleveland	6,337	14,727		886,634	2,134
Wharton	6,270	19,363		1,735,886	2,792
San Felipe	6,213	1,582		1,614,696	4,596
Fort Stockton	6,200	34,139		1,749,719	2,597
Hitchcock	6,135	14,790		760,528	1,666
Edna	6,133	14,421		951,486	1,882
Kileen	6,052	3,639		4,545,994	10,199
Pleasanton	6,006	16,584		849,559	1,803
Iowa Park	6,001	10,127		734,594	1,757
Calhoun	5,930	33,627		3,002,452	5,093
Sinton	5,901	25,776		1,277,836	2,286
Bridge City	5,897	30,706		1,598,379	2,543
Herford	5,888	17,111		2,170,599	4,087
Alice	5,863	11,332		2,633,380	6,010
Lamar	5,857	24,798		1,613,655	5,967
Fort Bend	5,828	27,397		979,497	3,622
Seminole	5,767	33,392		1,445,698	1,900
McAllen	5,754	10,420		5,673,712	9,959

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Jasper	5,751	6,870	(Data not	1,170,913	2,773
Uvalde	5,654	8,996	available)	1,614,696	3,142
Carthage	5,496	15,867		1,329,200	2,632
Southside	5,472	5,335		657,980	1,746
Clarksville	5,440	5,633		791,283	1,740
Gregory-Portland	5,429	32,145		1,500,937	2,761
Azle	5,419	9,999		950,100	2,236
Benavides	5,360	46,314		1,250,716	1,687
Harlingen	5,328	11,302		3,917,416	9,198
Gonzales	5,322	13,387		1,230,211	2,138
Crosby	5,318	19,963		897,814	1,962
Brooks	5,316	35,111		1,421,842	2,227
Wilmer-Hutchins	5,315	12,425		1,621,232	3,951
Livingston	5,277	8,104		786,284	1,714
Crockett	5,255	7,425		954,940	2,017
Connally	5,225	4,045		751,588	1,968
Pittsburg	5,163	5,263		774,503	1,926
Kirbyville	5,139	8,213		675,583	1,537
Edgewood	5,009	2,347		6,226,505	19,514
Eagle Mt. Saginaw	4,979	27,394		1,128,796	1,859
Cypress-Fairbanks	4,976	27,078		3,114,773	4,697
Marlin	4,940	9,696		1,010,407	2,452
Floresville	4,917	10,423		666,074	1,583
LaVega	4,808	8,016		1,635,807	3,876
Calallen	4,792	21,234		960,903	1,777
Tuloso-Midway	4,792	31,858		579,400	1,637
Pecos	4,787	18,804		1,763,924	3,714
Ysleta	4,778	8,759		10,471,139	25,922
Laredo	4,723	5,141		6,519,049	15,794
Hearne	4,711	5,569		629,232	1,602
Brownsville	4,640	7,145		5,326,152	15,049

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Lockhart	4,587	9,109	(Data not	877,876	2,141
Harlandale	4,469	5,591	available)	5,865,568	14,666
Hardin-Jefferson	4,433	23,931		961,103	1,684
Mansfield	4,408	8,614		379,218	1,777
Copperas Cove	4,223	4,737		1,014,727	2,515
Burkburnett	4,079	4,011		1,463,300	3,222
Raymondville	4,035	10,183		1,398,626	2,785
Edinburg	4,004	14,362		2,990,861	6,740
Weslaco	3,985	5,911		1,878,024	5,035
Pearsall	3,979	11,819		832,643	1,926
South San Antonio	3,831	8,150		2,741,854	6,408
Novasota	3,828	7,306		924,214	2,224
Port Neches	3,719	23,949		3,509,325	6,310
New Caney	3,656	18,167		799,417	1,510
Pharr-San Juan Alamo	3,643	9,285		3,072,213	7,456
Eagle Pass	3,641	11,786		1,987,868	4,642
Gatesville	3,591	8,534		1,014,727	1,732
San Benito	3,518	5,188		1,790,331	4,999
Mercedes	3,447	5,120		1,141,533	3,185
Mission	3,408	6,152		1,415,038	3,959
Mathis	3,399	10,288		842,772	2,088
Southwest	3,258	6,308		843,880	2,207
Carrizo Springs	3,148	8,705		687,783	1,823
Sheldon	3,027	34,489		1,237,683	2,064
Rio Grande City	2,925	14,120		1,966,822	2,650
Donna	2,621	5,322		1,130,496	3,146
Crystal City	2,597	6,183		881,063	2,519
Marshall	2,215	10,394		2,791,486	6,573
Del Valle	1,324	13,484		1,240,414	2,474
LaJoya	923			778,076	1,519

School District	Personal Income Per ADA	Assessed Valuation Per ADA	Equalized Assessed Valuation Per ADA	Current Expenses	ADA
Edcouch-Elsa	891	3,805	(Data not available)	866,127	2,447
Little Cypress	754	24,056	available)	1,201,166	2,093

VITA

Charles Freeman Clayton

Candidate for the Degree of

Doctor of Education

Thesis: A COMPARATIVE STUDY OF THE MEASURES OF FISCAL ABILITY OF
SCHOOL DISTRICTS OF SEVEN SELECTED STATES IN THE MID-SOUTHWEST

Major Field: Educational Administration

Biographical:

Personal Data: Born at Moundvalley, Oklahoma, the son of Mr. and
Mrs. Raymond A. Clayton, Sr.

Education: Attended Adams Elementary School near Pawhuska, Okla-
homa, and Wynona High School of Wynona, Oklahoma; graduated
from Chase High School, Chase, Kansas in 1945; received the
Bachelor of Science degree from Sterling College, Sterling,
Kansas in 1950; received the Master of Science in School
Administration from Ft. Hays Kansas State College, Hays,
Kansas in 1957; received the Specialist in Education from
Emporia Kansas State Teachers College, Emporia, Kansas in
1968; completed requirements for the Doctor of Education
degree at Oklahoma State University, Stillwater, Oklahoma in
May, 1973.

Professional Experience: Appointed teacher and coach for the Long
Island Grade School in Long Island, Kansas in 1950; appointed
grade school principal, coach, and teacher for the Morrow-
ville Grade School in Morrowville, Kansas in 1952; appointed
grade principal and coach for the Bogue Grade School in
Bogue, Kansas in 1954; appointed superintendent of schools
and high school principal for the Lyndon Unified District
#421 in Lyndon, Kansas in 1964; appointed superintendent of
schools for Wagoner Public Schools in Wagoner, Oklahoma in
1971.