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AN ANALYSIS OF THE RELATIONSHIP BETWEEN THE LOCAL WEALTH AND DISTRIBUTION OF STATE SUPPORT FOR THE SCHOOL DISTRICTS OF OKLAHOMA DURING THE 1977-78 SCHOOL YEAR

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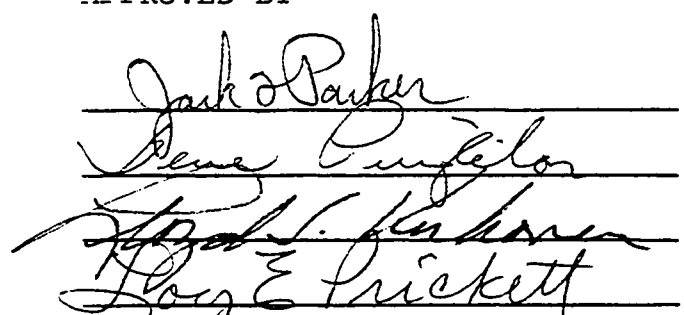
APPROVED BY



DISSERTATION COMMITTEE

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TABLE OF CONTENTS

TABLE OF CONTENTS--Continued

LIST OF TABLES

AN ANALYSIS OF THE RELATIONSHIP BETWEEN THE LOCAL WEALTH AND DISTRIBUTION OF STATE SUPPORT FOR THE SCHOOL DISTRICTS OF OKLAHOMA DURING THE 1977-78 SCHOOL YEAR

CHAPTER I

THE PROBLEM

Introduction

The intervention of the courts, the involvement of the Federal Government, and activity on the part of the states relative to school financing provide evidence that school finance is an important national issue. The issue of school finance involves educators, legislators, parents, and students.

Judicial involvement can be traced from the lower trial courts of the states through the Federal Judiciary System. Two cases addressed to the court were the San Antonio Independent School District v. Rodriguez[1] and Serrano v. Priest.[2]

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[1]Rodriguez v. San Antonio Independent School Dist., 337 F. Supp. 280 (W.D. Tex. 1971), rev'd 411 U.S. 1, 93 S.Ct. 1278, 36 L. Ed. 2d 16 (1973).

[2]Serrano v. Priest, 5 Cal. 3d 584, 96 Cal. Rptr. 601, 487 P. 2d 1241 (1971), subsequent opinion, 45 U.S.L.W. 2340 (Dec. 30, 1976).

Plaintiffs in the Serrano v. Priest case alleged that the quality of a child's education was dependent upon the local tax base and was therefore discriminatory against the poor. They further alleged that the system was in violation of the equal protection clause provided in the United States Constitution and the California Constitution because education was a fundamental interest guaranteed by the California Constitution. The trial court ruled the "California System was not necessary to the accomplishment of any compelling State interest and was therefore invalid." An appeal to the appellate court was denied and the California Supreme Court upheld the findings of the lower court.

In the Rodriguez case, a Texas Federal District Court applied the rationale of the Serrano case and rendered that the Texas system of financing public education was in violation of the Fourteenth Amendment of the United States Constitution, the equal protection clause. The decision of this court was based on the findings that the Texas public school finance system relied heavily upon local property taxes which benefited more affluent school districts and created great disparities in per pupil expenditures.

In a five to four decision the United States Supreme Court reversed this decision. The findings of the highest Court were that education was not a fundamental interest of the Federal Constitution and was therefore a matter that should be resolved at the State level. The conclusion of the Court was based on the interpretation of the majority that education was

not among the rights afforded explicit protection under the Constitution; nor did the Constitution guarantee "the most effective free speech" or "the most informed electoral choice."

In 1973, the Supreme Court of the State of New Jersey was confronted with the Robinson v. Cahill case. This court found that the method of school financing was in violation of the State constitutional provision which guaranteed a "thorough and efficient system of free public schools."[1] The findings of this court were based on the dependence upon local property taxes and the fact that portions of State aid were allocated to school districts without regard to local wealth. This created disparity in per pupil expenditures which prohibited fulfillment of the constitutional guarantee.

Other similar cases, such as the Kinnear[2] case in Washington State and the Horton[3] case in Connecticut, have been attended to by the judiciary system with the result that school finance systems were unconstitutional. However, the courts have also ruled that some State school finance systems, such as Idaho[4] and Oregon[5], were constitutional. Other states, including

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[1]Robinson v. Cahill, 62 N.J. 473, 303 A. 2d 273 (1973), cert.den. 414 U.S. 976, 94 S.Ct. 292, 38 L.Ed. 2d 219 (1973).

[2]Northshore School District v. Kinnear, 84 Wash, 2d 685, 530 P. 2d 178 (1974).

[3]Horton v. Meskill, 31 Conn. Sup. 377, 332 A. 2d 813 (Hartford County Superior Court, 1974).

[4]Thompson v. Engelkind, 96 Ida. 793, 537 P. 2d 635 (Idaho Supreme Court, 1975).

[5]Olsen v. State, 276 Or. 9, 554, p. 2d 139 (1976).

Georgia[1], New York[2], and West Virginia[3], have pending litigation relative to the system of funding public education.

Interest on the part of the Federal Government indicates that the financing of public education has been more than a local issue. Section 842 of Public Law 93-380, as amended by Public Law 94-482, provided financial assistance to states for the development of State equalization plans.[4] To date, the United States Department of Health, Education, and Welfare has approved forty-six of the fifty states to participate in this program, at a cost of $12,750,000 to the Federal Government. All participating states have been actively evaluating existing systems of school financing and have been developing alternatives where inequities have been observed.[5]

One of the states participating in the study of State finance systems was Oklahoma. The purpose of the Oklahoma study was to provide alternative approaches to systems of

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[1]Thomas v. Stewart, Docket No. 8275 (Polk Co. Superior Ct.).

[2]Board of Education, Levittown v. Nyquist, Index No. 8208/74 (Nassau Co. Supreme Court).

[3]Pauley v. Kelly, Docket No. 75-1268 (Superior Court, Kanawha County).

[4]U.S., Congress, House, Hearings Before The Subcommittee on Elementary, Secondary, and Vocational Education of the Committee on Education and Labor, H.R. 1138, 95th Cong., 1st sess., 1977, pp. 3-22.

[5]Interview with Dexter Majors, U.S. Dept. of Health, Education and Welfare. (Washington, D.C., April 1978).

financial support for education. Alternatives presented in this study included:

1. Modifications in the present formula for distribution.
2. An overview of and recommendations for a system of "full-state funding."
3. An overview of and recommendations for revenue averaging.
4. Funding for capital outlay purposes.[1]

The Oklahoma study did not involve identification of funding disparities or inequities in the present system, if they existed. The report of this study was submitted to the United States Department of Health, Education, and Welfare, Office of Education; the Oklahoma State Legislature; and the Governor of Oklahoma on September 29, 1978.[2]

Another indicator of the concern about school financing is the activity on the part of many states aimed at school finance reform. There have been significant changes in the states of New Jersey, Connecticut, Ohio, Iowa, and South Dakota. These changes have ranged from immediate revision in funding schemes to reform measures implemented over a period of time. Minor changes have been implemented in Illinois, Kentucky,

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[1]Oklahoma State Department of Education. Report of the Oklahoma School Finance Equity Committee (September, 1978).

[2]Ibid.

New Mexico, Colorado, and Washington. The changes have ranged from the adoption of pupil weighting systems to increased foundation support levels.[1]

The intervention of the courts, the involvement of the Federal Government, and activity of states relative to school finance indicate that the concern for equitably financing education has been a national issue. Most of the concern has focused on equalizing distribution of fiscal resources. The questions are directed to whether or not the level of educational expenditures of a school district is dependent upon the local tax base, or to whether or not the State system of distribution equalizes disparities in levels of expenditures attributed to low tax bases.[2]

Background Information

The Oklahoma Legislature enacted a statutory intent statement identifying the purpose of State support in Oklahoma Statutes 70 O.S. 18-101. This statute provided, in part:

> 8. The system of public school support should effect a partnership between the state and each local district, with each participating in accordance with its relative ability. The respective abilities should be combined to provide a financial plan between the state and the local school

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[1]Allen Odden, John Augenblick & Phillip E. Vincent, School Finance Reform in the States, 1976-1977; An Overview of Legislative Actions, Judicial Decisions and Public Policy Research (Denver: Education Commission of the States, 1976), pp. 4-10.

[2]U.S. Dept. of Health, Education and Welfare, Plain Talk about School Finance, by Margaret E. Goertz, Jay H. Moskowitz & Judy G. Sinkin, National Institute of Education (Washington, D.C.: Government Printing Office, 1976), pp. 8-9.

district that will assure full educational opportunities for every child in Oklahoma.

9. State support should be extended to all local districts regardless of wealth, for this not only develops a sense of broader responsibility, but also creates flexibility taxwise permitting the exercise of local initiative. State support should, to assure equal educational opportunity, provide for as large a measure of equalization as possible among districts. The taxing power of the state should be utilized to raise the level of educational opportunity in the financially weakest districts of the state.[1]

The issue investigated in this study was equalization of funding for education. The intent statement of the Legislature relative to State support indicates that consideration is to be given to the ability of the local school district to provide local funding for education. The stated intent of the Legislature is that State support should result in as much equalization as possible.

The basis for determining the ability of a school district to provide funding for education in Oklahoma was ad valorem property which included real, personal, and public service property. The assessed values for these types of property were used for taxation purposes rather than true value. County assessors were elected to perform this function. The assessment of property was limited in Oklahoma to a maximum of thirty-five percent of the true value of property. In 1976, pursuant to an order by the Oklahoma State Supreme Court, all county assessors were required to adjust assessment ratios to a variant of nine to fifteen percent on real and personal

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[1] Oklahoma Statutes (1971), 70 O.S. 18-101.

property. This action was to insure greater equalization of assessment practices. Homestead exemption provisions provided for an exemption of $1,000 on the assessed value of property if claimed by the property owner. Local fiscal capacity of a school district was contingent upon the assessed value of property contained within the school district boundaries.[1]

House Bill No. 1001, First Session, First Extraordinary Session, 1977, provided an appropriation for the support of public education in Oklahoma for the 1977-78 school year in the amount of $321,951,961. This appropriation bill provided for nine line-item appropriations that were allocated directly to the school districts of Oklahoma. Of this appropriation, $175,732,515 was appropriated through the State Aid Formula. The remaining funds were appropriated through eight flat-grant, line-item appropriations for specific purposes.[2]

Statement of Problem

The problem investigated in this study was to determine the degree to which legislative appropriation to the public schools of Oklahoma in 1977-78 contributed to equity in funding among school districts. Specific questions to which answers were sought included:

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[1]Jack F. Parker & Gene Pingleton, Financing Education in Oklahoma, (Oklahoma City, Okla., Oklahoma State School Board Assoc., 1978), pp. 6, 31-38.

[2]Oklahoma, Session Laws, 1977, Thirty-sixth Legislature, First Regular Session, First Extraordinary Session, Chapter 1, pp. 1017-1027.

1. What was the relationship between the fiscal ability of the school districts and the distribution of the various categories of State support in Oklahoma during the 1977-78 school year?

2. What effect did the sum of the methods of distribution have on equitably financing the public schools of Oklahoma during 1977-78?

3. Did some methods of allocation contribute more significantly to equalization than others? Which methods provided for the greatest and least degrees of equalization?

Hypotheses to be Tested

In order to investigate the problem, the following hypotheses were formulated and tested:

Ho_1 There is a significant negative relationship between per capita valuation and per capita foundation aid, 1977-78.

Ho_2 There is a significant negative relationship between per capita valuation and per capita incentive aid, 1977-78.

Ho_3 There is a significant negative relationship between per capita valuation and per capita transportation, special education, and vocational education aid, 1977-78.

Ho_4 There is a significant negative relationship between per capita valuation and per capita employees' salary increase aid, 1977-78.

Ho_5 There is a significant negative relationship between per capita valuation and per capita teacher salary increase, 1977-78.

Ho_6 There is a significant negative relationship between per capita valuation and per capita support personnel salary increase, 1977-78.

Ho_7 There is a significant negative relationship between per capita valuation and per capita new special education and gifted and talented programs aid, 1977-78.

Ho_8 There is a significant negative relationship between per capita valuation and per capita minimum revenue guarantee aid, 1977-78.

Ho_9 There is a significant negative relationship between per capita valuation and per capita elementary counseling aid, 1977-78.

Ho_{10} There is a significant negative relationship between per capita valuation and per capita State aid, 1977-78.

After these hypotheses were tested, those that were accepted were subjected to further analytical procedures. The accepted hypotheses were examined to determine whether or not any significant differences existed among them for the purposes of identifying greater potential to equalize.

Theoretical Framework

The theoretical framework for this study was based on the work done through the National Educational Finance Project (NEFP). The United States Office of Education initiated the NEFP in June, 1968. Two purposes of the National Educational Finance Project were to:

1. Evaluate present state and federal programs for financing of education, and
2. Construct alternative school finance models, both state and federal, and analyze the consequences of each.[1]

In the final publication of the National Educational Finance Project, Educational Need in the Public Economy, the concept of equitably financing education was summarized. Four

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[1]National Educational Finance Project, Alternative Programs for Financing Education (Gainsville: National Educational Finance Project, 1971), p. 346.

characteristics of equity were identified: Fiscal capacity, tax effort, educational needs, and cost of delivery.[1]

The aspect of fiscal capacity related to the ability of the school district to raise revenue locally for the support of education. Disparity among school districts with regard to ability to raise local revenue should be properly measured and fully equalized through the system of State support. States are responsible for these inequities and possess the power to eliminate such inequities. These inequities in fiscal capacity may be reduced by distributing State support in a manner which will inversely proportion State aid with regard to local wealth.[2]

Tax effort related to the local tax rate assumed by the school district's taxpayers. A lack of effort on the part of local taxpayers should not be compromised through a formula for distribution of State support.[3]

The system of State support should provide for educational programs tailored to the individual educational needs of the children comprising a school district. Therefore, children with special and various needs should be identified. Funding based on cost variations of programs should be made available for meeting these needs.[4]

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[1]Kern Alexander and K. Forbis Jordan, Educational Need in the Public Economy (Gainesville: The University Presses of Florida, 1976), p. 337.

[2]Ibid.

[3]Ibid.

[4]Ibid.

The cost of offering educational experiences and programs is not standard among school districts. This may result from such factors as geographic location, climate, or demography. The cost of delivery must be considered to provide maximum equity in treatment.[1]

The first objective of State support as it relates to these characteristics should be to eliminate the disparities in fiscal capacity with consideration given to maximum tax effort available to the school district. Once this objective has been accomplished, State support should be utilized to provide funding for cost variations according to the needs of children and cost of delivery.[2]

The National Educational Finance Project developed a typology for the purpose of evaluating the various methods of allocation. The typology provided five levels of equalization for evaluating the equity of distribution of State support. The typology was a continuum ranging from no equalization, the zero level, to the highest level of equalization, level four.[3] The levels and criteria established for each level follows:

1. Level O of Equalization: The differences in fiscal capacity are the same as they were or greater after allocation of State funds.[4] Level Zero provides for no equalization.

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[1]Ibid.

[2]Ibid.

[3]National Educational Finance Project, Alternative Programs for Financing Education, pp. 231-264.

[4]Ibid., p. 239.

2. Level 1 of Equalization: State funds are allocated on a flat-grant basis and do not consider cost variations or fiscal capacity.[1]

3. Level 2 of Equalization: This level recognizes cost variations and ignores fiscal capacity.[2]

4. Level 3 of Equalization: The disparities in fiscal capacity are equalized and cost variations are disregarded at this level.[3]

5. Level 4 of Equalization: At this level disparities resulting from fiscal capacity are equalized and cost variations are recognized.[4]

These five levels of equalization were applied to existing systems of State funding for the purpose of evaluating levels of equity. Also, alternative systems of distribution were evaluated in terms of equity through the typology.[5]

The Oklahoma system of allocation consisted primarily of three methods for distribution of State support. These included Foundation Aid, Incentive Aid,and flat grants. These types of distribution systems were evaluated by the typology.

The flat grant system distributed State support to school districts on a per pupil unit or unit basis. Two types of flat grants were investigated in the National Educational Finance Project study. One flat grant proposal allocated State funds without taking into consideration the variations in unit cost or local wealth. The other system considered unit cost variations and ignored local wealth. The National Educational Finance Project found that the flat grant system which ignored

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[1]Ibid. [2]Ibid., p. 240.

[3]Ibid. [4]Ibid.

[5]Ibid., pp. 231, 265.

cost variation and wealth "provides the least financial equalization for a given amount of state aid of any of the state-local support models tested."[1] This form of flat grant was classified by the typology as Level 1.[2] The system that considered unit cost variation was more equitable, but it did not "equalize financial resources as well as the equalization models providing for cost differentials and variations in wealth."[3] Flat grants recognizing differences in unit cost were classified in Level 2.[4]

The Strayer-Haig Foundation Formula was classified as either Level 3 or Level 4 by the National Educational Finance Project. If the formula disregarded cost variations, it was classified as Level 3. However, if cost variations were recognized, they were classified as Level 4.[5]

Percentage equalizing or State aid ratio formulas were classified by the typology as either Level 3 or 4. The Level 3 program ignores cost variation while Level 4 considered cost variation.[6]

> Equalization models under which necessary unit cost differentials are provided for in computing the cost of the educational program equalized and which take into consideration differences in the wealth of local school districts in computing state funds needed by a district are the most efficient models examined for equalizing financial resources in states which use a state-local revenue model for financing schools.[7]

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[1] Ibid., p. 346.

[2] Ibid., p. 241.

[3] Ibid., p. 346.

[4] Ibid., p. 241.

[5] Ibid., p. 242.

[6] Ibid., p. 243.

[7] Ibid., p. 346.

The National Educational Finance Project evaluated and analyzed the various distribution systems. Levels of equity attainable from allocation systems were established by the National Educational Finance Project.[1]

Significance of the Study

The interest in equalizing school finance is evident. This study can serve as a starting point for educators and legislators in efforts directed to reform. The study can serve as an evaluation of the degree of equity of the current system. If equity existed, the methods of allocation which provided for equity could be identified. If inequities existed, they could also be identified. These identifications may indicate areas of the present system that require immediate attention with regard to equity and, also, point out areas that could be utilized to eliminate inequities should they exist.

Operational Definitions

Ad Valorem Tax. A tax on real, personal, and public service property.[2]

Allocation. The distribution of legislative appropriations.[3]

Apportion. The division of tax yields.[4]

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[1]Ibid., pp. 231-349.

[2]Oklahoma Statutes (1971), 68 O.S. 2404.

[3]Webster's Third New International Dictionary of the English Language, Unabridged (1966), s.v. "allocation."

[4]Ibid., p. 105.

Appropriation. Funding that has been set aside by the legislature for a specific purpose.[1]

Assessed Valuation. That portion of the value of property used for taxing purposes.[2]

Average Daily Attendance. The arithmetic average of the total number of students in attendance during the school year.[3]

Expenditures. Spent revenue.[4]

Flat Grants. Line-item appropriations outside the State Aid Formula.[5]

Foundation Aid. A distribution formula that guarantees a minimum level of per pupil expenditures to all school districts in a State through a combination of State aid and locally raised revenues.[6]

Funds. Financial resources available to a school district.[7]

Incentive Aid. A percentage equalizing formula designed to assure that the State would support a percentage of locally determined expenditures.[8]

Per Capita. An amount representative for each pupil.[9]

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[1]Ibid., p. 106.

[2]Oklahoma Statutes (1971), 68 O.S. 2431.

[3]Oklahoma Statutes (1971), 70 O.S. 1-121.

[4]Webster, s.v. "expenditures."

[5]Oklahoma, Session Laws, 1977, Thirty-sixth Legislature, First Regular Session, First Extraordinary Session, Chapter 1, pp. 1017-1027.

[6]Goertz, Moskowitz, and Sinkin, Plain Talk About School Finance, p. 60.

[7]Webster, s.v. "funds."

[8]Goertz, Mokowitz, and Sinkin, Plain Talk About School Finance, p. 19.

[9]Webster, s.v. "per capita."

Revenue. The yield from taxes and other sources of income that accrue to a school district.[1]

State Support. Appropriations provided by the State through the legislature for public schools.[2]

Valuation. The act of estimating value of property.[3]

Limitations of the Study

The major limitations of the study included:

1. Ad valorem taxes were limited to the system of administering ad valorem taxes in 1977-78.
2. State appropriated revenues were limited to the following provisions of House Bill No. 1001, Second Session, First Extraordinary Session, 1977:
   a. Financial support of schools
   b. New special education and gifted and talented
   c. Teachers' salary increase, 1977-78
   d. Support personnel salary increase, 1977-78
   e. Previous year's salary increase
   f. Elementary counseling
   g. Minimum revenue guarantee
3. The findings and conclusions were limited to the populations of the study, and inference to other State systems cannot be made.

Organization of the Study

The introduction, background information, statement of problem, hypotheses to be tested, theoretical framework, significance of the study, operational definitions, assumptions, limitations of the study, and organization of the study have been presented in Chapter I. Chapter II contains the selected

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[1]Ibid., p. 1942.

[2]Oklahoma Statutes (1971), 70 O.S. 18-101.

[3]Webster, s.v. "valuation".

review of literature. The methodology is presented in Chapter III. Chapter IV contains the analysis and interpretations of data. The summary, findings, conclusions, implications, and recommendations are presented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Literature reviewed in this chapter was selected on the basis of its relevance to the problem under study. The related literature was classified into four categories which addressed educational finance. The categories included: historical development of the theory of State support; research on school finance; court cases related to school finance; and a statutory review of Oklahoma school finance.

Historical Development of the Theory of State Support

The theory of State support for public education was initiated by Cubberly in his monograph entitled School Funds and Their Apportionment in 1905. Cubberly's work set forth what he considered the basic responsibility of the State to provide education for the children of the State. He indicated that inherent in their basic responsibility for education was the responsibility to provide State money to help support education.

> Theoretically, all children of the state are equally important and are entitled to have the same advantages; practically this can never be quite true. The duty of the state is to secure for all as high a minimum of good instruction as is possible, but not to reduce all to this minimum; to equalize the advantages to all as nearly as can be done with the

> resources at hand; to place a premimum on those local efforts which will enable communities to rise above the legal minimum as far as possible; and to encourage communities to extend their educational energies to new and desirable undertakings.[1]

Cubberly established the concepts of equal educational opportunities, the reward for local effort, and incentives for innovations.[2] Cubberly's ideas, in part, served as a foundation for subsequent theorists.

In 1921, Updegraff added to the theory of State support through a survey of financial support of rural schools in New York State. Updegraff subscribed to most of the concepts set forth by Cubberly. Principles developed by Updegraff resulted in the establishment of criteria for evaluating the efficiency of State support. The criteria included the following:

1. The efficient participation of citizens in the responsibilities of citizenship should be promoted by making the extent of the state's contribution dependent upon local action.

2. The state should neither be timid nor autocratic in withholding state funds because of deficiencies in local action.

3. Special grants should be provided to encourage the introduction of new features into schools.

4. The districts should receive support in inverse proportion to their valuation per teacher unit.

5. Efficiency in the conduct of schools should be promoted by increasing the state grant whenever the true tax rate is increased and by lowering it whenever the local tax is decreased.

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[1]Ellwood P. Cubberly, School Funds and Their Apportionment (New York: Teachers College, Columbia University, 1905), p. 17.

[2]Ibid., pp. 250-254.

6. The plan of state aid should be so framed that it will measure precisely the elements involved and will respond promptly and surely to any change in the local districts.[1]

Updegraff developed a distribution formula which functioned within these requirements for efficiency of State support. The formula consisted of a sliding scale upon which the State aid per teacher unit increased or decreased, depending upon the true valuation per teacher unit. This method not only incorporated the concepts of equal educational opportunity, but also provided reward to school districts for additional effort. Updegraff also introduced the notion of the teacher unit to the distribution of State support.[2]

The Financing of Education in the State of New York was a collective research effort conducted by Strayer and Haig in 1923. In the "Report of the Educational Finance Inquiry Commission," Strayer and Haig addressed the attainment of equal educational opportunity.

> To establish schools or make other arrangements sufficient to furnish the children in every locality within the state with equal educational opportunities up to some prescribed minimum. To raise the funds necessary for this purpose by local or state tax adjusted in such a manner as to bear upon the people in all localities at the same rate in relation to their tax-paying ability. And to provide adequately

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[1]Harlan Updegraff, Rural School Survey of New York State: Financial Support (Ithaca: by the Author, 1922), pp. 117-118.

[2]Ibid., pp. 134-155.

> either for the supervision and control of all the schools, or for their direct administration, by a state department of education.[1]

With these requirements in mind, Strayer and Haig developed a conceptual model for State support which has been known as the Minimum Foundation Program. The Minimum Foundation Program provided for equalization of tax burden as well as educational opportunity.[2]

Mort used the concepts provided by Strayer and Haig as a foundation for his work which commenced in 1924. In his dissertation, The Measurement of Educational Need, Mort suggested what should be included in a State assured program.

1. An educational activity found in most or all communities throughout the state is acceptable as an element of an equalization program.

2. Unusual expenditures for meeting the general requirements due to causes over which a local community has little or no control may be recognized as required by the equalization program. If they arise from causes reasonably within the control of the community they cannot be considered as demanded by the equalization program.

3. Some communities offer more years of schooling or a more costly type of education than is common. If it can be established that unusual

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[1]George D. Strayer and Robert Murray Haig, Report of the Educational Finance Inquiry Commission, Vol. 1: The Financing of Education in the State of New York (New York: MacMillian Co., 1923), p. 174.

[2]Ibid., pp. 174-175.

> conditions require any such additional offerings, they may be recognized as part of the equalization program.[1]

Mort defined a satisfactory equalization program as follows:

> A satisfactory equalization program would demand that each community have as many elementary and high school classroom teachers or teacher units, or their equivalent, as is typical for communities having the same number of children to educate. It would demand that each of these classrooms meet certain requirements as to structure and physical environment. It would demand that each of these classrooms be provided with a teacher, course of study, equipment, supervision, and auxiliary activities meeting certain minimum requirements. It would demand that some communities furnish special facilities, such as transportation.[2]

The weighted pupil concept was suggested by Mort as a method to more accurately and simply measure educational needs. The desirability of the weighted pupil concept was addressed by Mort as follows:

> The weighted elementary pupil unit has proved to be the most satisfactory measure of educational need thus far developed. The concept of the weighted elementary pupil is a simple one. Under like conditions expenditures in education vary rather closely with the number of pupils. Accordingly, it is reasonable to assume that larger expenditures per pupil will give better returns if there is a relationship between expenditure level and the quality of education.[3]

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[1]Paul R. Mort, The Measurement of Educational Need (New York: Teachers College, Columbia University, 1924), pp. 6-7.

[2]Ibid., p. 8.

[3]Paul R. Mort, Walter C. Reusser and John W. Polley, Public School Finance (New York: McGraw-Hill Book Company, Inc., 1960), pp. 47-48.

Mort conducted a national survey in 1931, "State Support for Public Education", which provided a summary of the condition of State support in 1931-32. His findings were as follows:

1. In all but a few states, the actual minimum status of education was determined by the economic ability of local districts to support schools rather than the social needs for education.

2. The minimum program actually guaranteed was in nearly every state far below the program provided in communities of average wealth.

3. An analysis of the methods used by the different states to measure educational need revealed that no state was using as refined measures as were available. Measures in use were inequitable in one or more of the following respects: Treatment for variation of size of school, treatment of districts of the same size, caring for the higher costs of high schools, caring for non-residence, consideration of costs of living, consideration of transportation, and consideration of capital outlays.[1]

Mort's contributions to the theory of State support were quite extensive. Among the more important of these were State-assured minimum, satisfactory minimum, measurement of educational needs, and an evaluation of minimum program.

Morrison contributed to the theory of State support in 1930 in his book, School Revenue. He noted that the inequities of wealth contributed to the inequities of educational opportunity. He also contended that, constitutionally, schools were a State responsibility and that the local school districts had failed to provide efficient and equitable educational programs.

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[1]Paul R. Mort, State Support for Public Schools (New York: Teachers College, Columbia University, 1931), pp. 3-10.

> Our extended analysis of the nature of the state school as a civil institution of its economic and financial foundations, of the requirements of a modern system of taxation, of the consequences of a fiscal and political structure founded on the school district in its various territorial forms, leads us unerringly to the conclusions that the several states themselves are the appropriate fiscal and administrative units in the support and conduct of the citizenship school which has long been held to be the cornerstone of our policy as a self-governing state.[1]

On this basis, Morrison proposed a model for financing public schools which abolished all local school districts and suggested the State assume full responsibility for financing and administration of the schools. He further proposed that a State income tax for schools be implemented and that State distribution would insure equal educational systems.[2]

Many of the State support theorists agreed that the State should establish and guarantee minimum programs. However, they did not agree on some of the other elements of the State's role in financing education.

Cubberly and Updegraff had proposed a method for distribution of State school funds based on rewards for local tax effort. The reward-for-effort idea was attacked by subsequent theorists.

Strayer and Haig emphasized equity of tax burden rather than an incentive concept.

> Any formula which attempts to accomplish a double purpose of equalizing resources and rewarding effort

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[1]Henry C. Morrison, School Revenues (Chicago: University of Chicago Press, 1930), p. 214.

[2]Ibid., pp. 130-163; 195-201.

> must contain elements which are mutually inconsistent. It would appear to be more rational to seek to achieve local adherence to proper educational standards by methods which do not tend to destroy the very uniformity of effort called for by the doctrine of equality of educational opportunity.[1]

On the other hand, Mort favored stimulating local initiative.[2] This was consistent with the concept proposed by Cubberly and Updegraff as a method of satisfying one of the demands of the efficiency principle.

Mort's concept allowed school districts to participate in the minimum program on a variable scale based on a uniform level of taxation. However, it also allowed districts desiring a quality program to levy a higher rate of tax which would increase the level of State aid beyond the minimum program. This, Mort contended, would stimulate local initiative rather than demand extra effort for participation in State Aid.[3]

Morrison's ideas represented a position with which, initially, all other theorists of his time disagreed. His advocacy of full-state assumption of the responsibility for education was not well received. He theorized that State equalization plans had failed and that these types of measures would continue to fail to meet educational needs and requirements for equity of tax burden. Full-state assumption is still not acceptable to many finance theorists, but it has greater

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[1]Strayer and Haig, The Financing of Education in the State of New York, p. 175.

[2]Mort, State Support for Public Education, pp. 3-10.

[3]Ibid., p. 1.

acceptance than ever before. Hawaii currently operates and finances its schools as a single State function; a few States are in large part funded at the State level; and many States are now exploring the idea of full-state funding in an effort to attain equity of educational opportunity and equity of tax burden.[1]

These early theorists were not the only individuals who have contributed to the theory of State support. However, their principles, concepts, and methodologies have served as the framework for many of the various systems in existence today. They have clearly become known as "the principal contributors to the theory of state school financing."[2]

The development of theory did not begin and end with the principal contributors. Subsequent contributors were referred to by R.L. Johns as "the developers and disseminators."[3] They include Johns, Morphet, Lindman, James, and Guthrie.

Johns and Morphet were students of Strayer and Mort. Both were also employed by State Departments of Education at one time. Their associations resulted in collective research

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[1]R.L. Johns, "State Financing of Education," Education in the States: Nationwide Development Since 1900, ed. Edgar Fuller and Jim B. Pearson (Washington, D.C.: Council of Chief State School Officers, National Education Association of the United States, 1969), pp. 192-193.

[2]Ibid., p. 193.

[3]Ibid.

and contributions. One of the ideas Johns and Morphet advanced was a budget system which would measure educational need. This system was called the adjusted classroom unit.

> The chief problem with the weighted pupil unit is that it is difficult to interpret to legislators and other laymen. The adjusted classroom unit, although it is directly related in its derivation to the weighted pupil unit, is much easier for laymen and even teachers to understand. They can readily see the relationship between the numbers of teachers needed and program of services or facilities to be provided. This relationship is not so obvious in the case of the weighted pupil unit.[1]

The adjusted classroom unit was divided into four categories: instruction, transportation, other current expenses, and capital outlay. Using average practice as definitive criteria, the cost of these categories was expressed in terms of instructional unit or classroom unit. The calculation was based on Mort's weighted pupil concept. The system based educational need on educational services. The more instruction and services a school district provided, the greater the State funds would be. Increased local effort was not required, which in their view created greater incentive to offer additional services.[2]

> If all property were assessed at full value, or even at a uniform percentage of full value, in every state the problem of determining local ability would be much simpler than it is under present conditions. However, the assessment practices in most states are

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[1] R.L. Johns and Edgar L. Morphet, Financing the Public Schools (Englewood Cliffs, N.J.: Prentice-Hall, 1960), p. 279.

[2] Ibid., pp. 277-292.

> far from uniform...Such variations result in many complications, not only in attempts to determine local ability, but in devising an equitable and satisfactory plan for financing public schools...[1]

Recognizing the problem in determining local ability, Johns developed an economic index to be applied in states where equalized assessments were not available. As a consultant, he assisted states in modifying the ad valorem systems to provide for greater equity.[2]

The potential of the foundation aid formula was challenged by Lindman.

> If the amount of funds in the state equalized foundation program is adequate, there will be little local supplementation...But if the foundation program is inadequate, relatively large amounts of school income will have to come from unequalized local supplementation. Thus, the foundation program may or may not effectively equalize public school support since it is dependent upon the adequacy of the foundation program amounts and the resulting need for local supplementation.[3]

Since program costs vary from district to district, Lindman developed an equalized variable matching formula which rewarded local districts assuming greater local tax efforts. The inequalities of the system were the result of taxpayers unwilling to tax themselves locally for public schools.[4]

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[1]Ibid., p. 155.

[2]R.L. Johns, "State Financing of Education," Education in the States: Nationwide Development Since 1900, p. 196.

[3]Erick L. Lindman, Dilemmas of School Finance (Arlington, Virginia: Educational Research Service, Inc., 1975), p. 10.

[4]Ibid., pp. 11-15.

Lindman also dealt with the problem of municipal overburden.

> Non-school property tax rates may affect the school finance policy of various communities. For example, it may be unrealistic to expect large cities that have excessive tax burdens for non-school purposes to offer substantial increases in local tax contributions for the support of public schools.[1]

Consequently, Lindman developed a correction factor to be applied to State Aid formulas which would recognize non-school taxes assumed by local property taxpayers.[2]

Dissatisfied with the equalization models developed by the early theorists, James asserted in his dissertation:

> Any observation of the operational aspects of school support programs will indicate that no foundation programs is really equalizing either educational burdens or benefits, nor could be made to do so as it is presently defined.[3]

The local property tax for foundation aid purposes was looked upon by James as a State tax. However, he recognized that without a State mandated minimum, many local districts would reduce their local effort as the State contributions increased, the end result being no increase in equal educational opportunities. He further theorized that the role of the State was:

> To minimize the power of communities to make decisions about resource allocation to education

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[1] Ibid., p. 34.

[2] Ibid., pp. 34-44.

[3] H. Thomas James, "Toward a Unified Concept of State School Finance Systems" (Ph.D. dissertation, University of Chicago, 1958), pp. 19-20.

> which would reduce services below the level defined by the state as minimal, and to maximize the power of communities with high value to achieve their aspirations.[1]

James supported the idea of the State assuming as large a portion of the school support as was possible with local support. Sales tax and income tax would provide the revenue needed for the State contribution.[2]

Equal educational opportunity was defined by Guthrie in the following manner:

> Equality of opportunity implies strongly that a representative individual of any racial or social grouping has the same probability of succeeding as does a representative individual of any other racial or social grouping. Stated in another way, given equality of opportunity, there should be a random relationship between the social position of parents and the lifetime attainments of their offspring.
>
> We believe strongly that the task of the school is to equalize opportunities among different social groupings by the end of the compulsory schooling period.[3]

Guthrie further asserted that equalization of dollars will not facilitate attainment of equal educational opportunity. He contended that more dollars had to be expended on children

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[1]H. Thomas James, School Revenue Systems in Five States, (Stanford, California: School of Education, Stanford University, 1961), p. 7.

[2]H. Thomas James, J. Alan Thomas, and Harold J. Dyck, Wealth, Expenditures and Decision-Making for Education (Stanford, California: School of Education, Stanford University, 1963), p. 42.

[3]James W. Guthrie, et al., Schools and Inequality (Cambridge, Massachusetts: MIT Press, 1971), p. 139.

with the least opportunity, "those from the lower socio-economic strata."[1]

He developed a conceptual system of distribution which addressed needs resultant from socio-economic backgrounds of children. Under his proposal the State would determine the expenditure requirement for each level of the socio-economic strata. The per pupil requirement was inversely related to the socioeconomic strata of the individual child. Thus, larger expenditure requirements were directed toward the disadvantaged to facilitate greater equality of educational opportunity.[2]

Selected School Finance Research

Substantial amounts of research have been concerned with evaluation of individual State's system of school finance under some definition of equity. Other research projects have dealt with either selected groups of states or the entire public school system of the United States. The purpose of this section was to identify some of these projects and their findings.

When considering systems of State support to facilitate equal educational opportunity the term sparsity is sometimes interjected. In 1975 the Florida Legislature enacted a recommendation proposed by Johns in his study An Index of Extra

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[1] Ibid.

[2] Ibid., pp. 140-157.

Costs of Education Due to Sparsity of Population. In this study Johns stated:

> ... Districts with a small pupil population must operate small schools. The cost per pupil for an equivalent educational program is much greater in a small high school than in a large high school. This is due to the fact that small high schools must operate with lower pupil teacher ratios than large high schools in order to provide the units or courses needed by high school pupils. Low pupil teacher ratios require higher per pupil costs than higher pupil teacher ratios other things being equal...
>
> ... ,the diseconomies of scale (extra costs) of sparsely populated districts seem to be associated with the total pupil population of the district, the dispersion of pupils over the district and the area of the district. Therefore, the measure of pupil sparsity of districts should be associated with all these factors.[1]

Keeping these factors in mind, Johns developed a formula which gave special consideration to sparsely populated school districts. Specifically, the formula was developed for states with large school units. Therefore, it could not have been readily adapted to states with small school units.[2] An important point noted by Johns for the development of sparsity factor was that it is not intended to "encourage the establishment of or continuance of unnecessary, small inefficient districts."[3]

Another idea that has been considered in efforts directed toward equalization of educational opportunity has been pupil weights to compensate for educational needs of children.

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[1]R.L. Johns, "An Index of Extra Costs of Education Due to Sparsity of Population," Journal of Education Finance 1 (Fall 1975): pp. 168-169.

[2]Ibid., p. 202.

[3]Ibid.

In "Pupil Weightings Investment Differentials," McLure examined special weights for special education and vocational education programs. He subdivided special education weights into five categories which provided for the amount of time the special education child spent in the special education classroom. Vocational education weights consisted of eighteen cost differential categories. Program cost analyses were used to determine cost differential when the full-time equivalency was compared to regular programs.[1]

> This structure has advantages for operation: flexibility in the designation of programs and in the functioning of teachers and supportive staff, and simplification of state and federal funding methods. Advantages for analysis and public understanding are as follows: (1) it provides a basis for more thorough understanding of educational components, (2) it improves the knowledge of pupil needs, (3) it identifies further needed information on a longitudinal basis, and (4) it provides a basis for analyzing variable investments in individuals as they move through educational systems.[2]

School district reorganization has been another topic of discussion relative to school finance reform. In his study entitled, "Fiscal Implications of School District Reorganization," Webb stated,

> The concern for school district reorganization is more than just a concern about the total number of school districts in the nation or in a particular state. Behind the numbers lies a concern about the

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[1]William P. McLure, "Pupil Weighting Investment Differentials," Journal of Education Finance 2 (Summer 1976): pp. 72-82.

[2]Ibid., p. 82.

> rising costs of education and the ineffectiveness and inefficiency of the large number of small school districts...
>
> What is optimum in one state may not be optimum or even possible in another state.[1]

Using the State of Colorado for case study purposes, Webb investigated the possibility of reorganizing the school districts of Colorado. He developed three solutions for possible reorganization. These solutions were analyzed to determine the effect each had on equalization of tax bases in the State. Enrollment and distance constraints were used as parameters in development of the proposed solutions. The findings of the study indicated that:

> In states with a large number of small school districts, such as the Colorado case study examined in this paper, reorganization would seemingly result in significant economies of scale and equalization of the tax bases which support the schools.[2]

School district reorganization was also examined in nine states by James, Kelly, and Garms in 1966. The study included 577 districts with enrollments ranging from 1,500 to 846,616. The findings indicated that the optimum school district size varies from State to State when the only factor considered was expenditure per child.[3]

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[1] L. Dean Webb, "Fiscal Implications of School District Reorganization," Journal of Educational Finance 4 (Winter 1979), pp. 342,343.

[2] Ibid., p. 357.

[3] U.S. Department of Health, Education, and Welfare, Determinants of Educational Expenditures in Large Cities of the United States, by H. Thomas James; James A. Kelly; and Walter I. Garms, Project No. 2389 (Stanford: School of Education, Stanford University, 1966), pp. 69-110.

The responsibility of the State to provide for equalization of educational opportunity usually included methods of distributing revenues to individual school districts. One proposed method of distribution has been district power equalizing.

> The philosophy behind power equalizing is the same as that behind percentage equalizing: The ability to raise money should be equalized, but the decision as to how much money to raise should be left to the local district. Under power equalizing, the state establishes a schedule of tax rates, with an amount per pupil guaranteed to a district for each level of tax..., and amounts to a guarantee of a certain number of dollars per mill levied.[1]

District power equalizing possesses an underlying principle which has assured every school district in a State the same yield of revenue per pupil, regardless of wealth, at a specified tax rate. Thus, minimum and maximum levels of expenditures have been established under this plan. The expenditure level for the local school district was contingent upon the tax rate assumed by the electorate of the school district.[2]

District power equalizing has the potential to equalize school districts' revenues with regard to tax effort and fiscal capacity. Guthrie's proposal on district power equalizing also addressed the two other aspects of equal educational opportunity:

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[1]Walter I. Garms, James W. Guthrie, and Lawrence C. Pierce, School Finance The Economics and Politics of Public Education (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978), p. 198.

[2]James W. Guthrie, Equity in School Financing: District Power Equalizing (Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975), pp. 5-10.

(1) educational needs, and (2) cost of delivery. Incorporated in his conceptualization of district power equalization were allowances for cost of living, school construction, transportation, and pupil weighting.[1]

The inequities of most ad valorem systems have been detrimental to the potential of district power equalizing. Equitable administration of such revenue systems must be mandatory for district power equalizing to achieve its optimum.[2]

> Unless such tax practice inequities are removed, then no conceivable school finance plan, be it DPE (District Power Equalizing) or FSA (Full State Assumption), can bring about equity and fiscal neutrality.[3]

Although district power equalizing has been associated with the property tax as a means of support for public education, it has not been limited to this source of revenue. Guthrie proposed application of this distribution model to systems that utilized the personal income tax in conjunction with ad valorem for school purposes. He referred to it as Progressive District Power Equalizing.

> Under such a plan, all property would be taxed at a minimum rate levied statewide. Beyond that, districted-selected per pupil expenditure levels would be accompanied by varying levels of personal income taxation levied on residents... In this way, each household would contribute the same proportion of income to school support, but absolute dollar amount of tax payments would be equitably adjusted.[4]

The primary purpose of this proposal was to provide a certain amount of protection for low and fixed income residents.

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[1] Ibid., pp. 12-18.

[2] Ibid., pp. 19-20

[3] Ibid., p. 20.

[4] Ibid., p. 21.

District power equalizing was also addressed by Beck in "The Effects of Power Equalizing School Aid Formulas with an Income Factor." His study revealed that the concept could not be applicable universally.

> To achieve some measure of greater equality in expenditures without complete sacrifice of these values, including an income adjustment in a power equalizing formula, may be useful in some states. But it may be of no help, or possibly even counter-productive, in others.[1]

Beck's proposal was used to adjust ad valorem taxes on the basis of family income. The end result was seen as a more accurate assessment of district wealth. Provisions were made for educational needs and costs of delivery through weighted pupils and cost of living factors.[2]

Another recently proposed alternative for school finance reform has been full-state assumption. As stated earlier, Morrison introduced this concept early in the era of the theorists.

Variations in property wealth, variations in the quality of public education, and variations in tax effort among school districts and states has focused attention on Federal, State, and local partnership schemes for financing education. Johns asserted that:

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[1]John H. Beck, "The Effects of Power Equalizing School Aid Formulas with an Income Factor," Journal of Educational Finance 5 (Summer 1979): p. 74.

[2]Ibid., pp. 55-74.

> Only a system of complete state and federal funding or largely state and federal funding of the public schools can meet the needs of the times.[1]

Benson, Goldfinger, Hoachlander, and Pers stated that, "The simplest plan to insure financial equality will control how much is spent at the state level."[2] Even if the system of full-state assumption meets fiscal neutrality criteria, it must take into account the elements of educational need and cost of delivery to facilitate equal educational opportunity.

> The state may recognize these different needs and still satisfy the equity principle, but it must do so uniformly across the state. If a state chooses such a financing plan, we say that it has assumed the full costs of public education, or adopted a full state assumption (FSA) plan.[3]

The superficial goal of full-state assumption has been to fiscally equalize school districts. However, the primary goal of full-state assumption is: "that people in similar circumstances will be treated similarly."[4] In order to assure that different amounts of money will be spent on different children the State distribution system must consider two variables: "(1) learning requirements of individual students, and (2) prices of educational goods and services (the purchased inputs of the educational process)."[5]

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[1] R.L. Johns, Full State Funding of Education (Pittsburg: University of Pittsburg Press, 1973), p. 56.

[2] Charles S. Benson et al., Planning for Educational Reform (New York: Dodd, Mead and Company, 1974), p. 48.

[3] Ibid.

[4] Ibid., p. 49.

[5] Ibid.

The source of revenue for support of a full-state assumption program would not have to undergo dramatic revision. Even though the income tax and sales tax have been alternatives, Benson recommended a statewide property tax with a circuit breaker. A uniform rate established through State administration of ad valorem taxes would assure that localities would provide approximately the same amount as had been collected from them previously. The circuit breaker would protect low income families from paying a disproportionate share of taxes for school support.[1]

Although full-state assumption avoids some of the contributors to inequity, such as variation in capacity and tax effort, as of this time it has not emerged as the perfect plan for financing public education. Benson stated:

> Specifically, we know far too little about the relationship between school expenditures and educational outcomes. As a secondary point, we are woefully ignorant about the difference in prices that different school systems must pay for the goods and services they need to run their program.[2]

Thus, until these obstacles have been overcome, full-state assumption may not be effectively implemented to attain more equal educational opportunities.

Several research studies have been conducted that directly relate to Oklahoma. Among these are doctoral studies by Burdick, Jenkins, Fenimore, Williams, and Fraley.

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[1]Ibid., pp. 50; 77-82.

[2]Idem, Equity in School Financing: Full State Funding (Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975), p. 28.

In 1967, Burdick conducted a study entitled A Distribution Program for State Support of Current Expense for Public Education in Oklahoma. The purpose of the study was to develop an alternative distribution system for State support. The alternative system for distribution developed provided for Foundation Aid and Incentive Aid programs.

The Foundation Aid program was to be based on weighted pupils with modified chargeable income factors. The chargeable income was to consist of 27 mills levied on an equalized assessed valuation, the preceding year's collections from auto license and farm truck tax, and one-half of the Public Law 874 funds. Participation in the foundation program was restricted to Independent school districts.[1]

The proposed Incentive Aid program was a percentage equalizing formula. The incentive program served as a vehicle to distribute State support above the foundation program. Average daily membership was used to calculate the proposed distribution system. The State allocation to a school district was reduced by fifty per cent of the Public Law 874 funds received by that district.[2]

A similar research project was conducted in 1970 by Owen R. Jenkins. He proposed to develop a State and local distribution system which was supported by criteria for a finance

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[1]Larry Gene Burdick, "A Distribution Program for State Support of Current Expense for Public Education in Oklahoma" (Ed.D. dissertation, Oklahoma State University, 1967), pp. 77-88.

[2]Ibid., pp. 89-92.

plan which would assure adequate educational programs for all children in the State of Oklahoma. The recommendations of this study included a Foundation Aid program, an Incentive Aid program and a capital outlay proposal.

The foundation program income consisted of 29 mills levied on the net assessed valuation, county wide. These were to be distributed to the schools of the county on an average daily membership basis. The existing constitutional limitations on ad valorem were to be repealed and re-established by the Legislature. All State dedicated revenues would accrue to the State for funding the Foundation Aid program.[1]

The Incentive Aid component was five dollars times an assumed incentive mill levy of ten mills. The capital outlay aspect would have provided fourteen per cent of the foundation aid allocation per school district.[2]

In 1974, Fenimore compared the State Aid program of 1970-71 to that in 1971-72. In An Investigation and Analysis of the State Aid Program to Education in Oklahoma, it was hypothesized that "there is no significant difference in the amount of State aid received per student in average daily attendance by school districts of different sizes, different evaluations, per capita."[3]

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[1]Owen Rodman Jenkins, "A State-Local Plan for the Support of the Public Schools of Oklahoma" (Ed.D. dissertation, University of Oklahoma, 1970), pp. 149-150.

[2]Ibid., p. 150.

[3]Jack Curtis Fenimore, "An Investigation and Analysis of the State Aid Program to Education in Oklahoma" (Ed.D. dissertation, Oklahoma State University, 1974), p. 4.

A significant difference was observed in Incentive Aid for 1971-72 over 1970-71 for all sizes of school districts. It was also observed that only in the cases of large school districts was more Foundation Aid received in 1971-72 than in 1970-71.[1]

In 1975, Williams investigated the relationships between the potential revenue of school districts and the revenue received from basic State Aid, flat grants, Foundation Aid, Incentive Aid, and total State Aid for the 1972-73 school year.[2] He analyzed these relationships for Independent and Dependent school districts. The findings revealed that an inverse relationship existed in all areas under investigation with the exception of flat grants. Flat grants were found to be positively correlated with the potential revenue of the districts.[3]

In 1978, Fraley assessed the school finance system in Oklahoma in a dissertation, The Impact of State Aid on the Funding of Public Education in Oklahoma: Incentive and Equalization. The purpose of the study was to determine whether or not the system of financial support for education encouraged local spending. Foundation Aid, Incentive Aid, and dedicated revenues were examined to determine which stimulated local

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[1]Ibid., pp. 65-69.

[2]Neil P. Williams, "An Analysis of Certain Aspects of the Financial Support of the School Districts of Oklahoma" (Ed.D. dissertation, Oklahoma State University, 1975), p. 4.

[3]Ibid., pp. 27-29.

educational funding and which substituted for local effort.[1] The findings of the study revealed that:

> ... State revenues stimulate local spending for education and help equalize expenditures per student. State dedicated revenues exacerbated the equalization objective and should be revised, unless this resource allocation would adversely affect resources allocation to education. Incentive aid had a substitution effect on local spending for education, thus it should be renamed or its formula rewritten.[2]

Selected Court Cases Related to School Finance

In 1971, the California Judiciary System was confronted with the Serrano v. Priest case. This was the beginning of a nationwide movement to challenge the constitutionality of the various school finance systems.

Since constitutional and statutory language vary from State to State, the decisions in State court cases have not been entirely consistent. Three specific approaches to litigation of school finance systems have been identified:

1. Standard fiscal neutrality.
2. Constitutional phrases such as "thorough and efficient," "general and uniform," or "equal education."
3. A push for a higher level of educational adequacy.[3]

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[1]Charles Ellsworth Fraley, "The Impact of State Aid on the Funding of Public Education in Oklahoma: Incentive and Equalization" (Ph.D. dissertation, University of Oklahoma, 1978), pp. 2-4.

[2]Ibid., pp. 85-86.

[3]Allan Odden, John Augenblick, and Phillip E. Vincent, School Finance Reform in the States: An Overview of Legislative Actions, Judicial Decisions, and Public Policy Research, p. 11.

The basis for court cases that applied the fiscal neutrality strategy was that disparities in per pupil expenditures were the result of heavy reliance on local school district property wealth and were in violation of State constitutional provisions of equal protection. Court cases that have addressed constitutional provisions, such as "thorough and efficient," included a fiscal neutrality component coupled with the results of the educational process fulfilling the constitutional provision. The final legal strategy that has been used in court cases challenged the delegation to local voters the State's constitutional obligation to provide educational programs.[1]

Court cases reviewed in this section were discussed according to the legal strategy applied and the basis for the decision of the court. The review of court cases included Serrano and cases subsequent to and including the Rodriquez Case of 1973.

The legal strategy of fiscal neutrality has been applied in the following cases: Serrano v. Priest,[2] California; San Antonio v. Rodiquez,[3] Texas; Thomas v. Stewart,[4] Georgia; and

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[1] Ibid.

[2] Serrano v. Priest, 5 Cal. 3d 584, 96 Cal. Rptr. 601, 487 P. 2d 1241 (1971). Subsequent opinion, 45 U.S.L.W. 2340 (Dec. 30, 1976).

[3] San Antonio Independent School District v. Rodriquez, 377 F. Supp. 280 (W.D. Tex. 1971), Rev'd 411 U.S. 1, 93 S. Ct. 1278, 36 L.Ed. 2d 16 (1973).

[4] Thomas v. Stewart, Docket No. 8275 (Polk County Superior Court, Georgia).

Levittown v. Nyquist,[1] New York. The cases of Serrano v. Priest and San Antonio v. Rodriquez have been used to illustrate the application of fiscal neutrality.

In 1971, a class action lawsuit was filed in Los Angeles County Superior Court, seeking declaratory and injunctive relief against certain state and county officials charged with administering the financing of the California Public School System. The plaintiffs alleged that the California Public School Finance System was unconstitutional under the Fourteenth Amendment's equal protection guarantee, as well as unconstitutional in various respects under the California State Constitution, because of its heavy reliance upon revenues derived from local property taxes.

The plaintiffs asserted that the California system of public school finance: (1) made the quality of education a function of the wealth of the children's parents as measured by the tax base of the district in which they reside; (2) made the quality of education a function of geographic accident; (3) failed to account for the variety of educational needs of several school districts; (4) provided educational benefits to some while denying the same to others, with material disadvantage to those deprived; (5) failed to provide children of substantially equal age, aptitude, motivation and ability with substantially equal educational resources; (6) perpetuated

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[1]Levittown v. Nyquist, Index No. 8208/74 (Nassau County Supreme Court).

marked differences in quality of educational services; and (7) was not reasonably related to the State purpose of providing equal educational opportunity.[1]

The defendants filed general demurrers to the plaintiffs' complaint, asserting that the plaintiffs' claims failed to state facts sufficient to contribute a cause of action. The trial court sustained the defendants' demurrers and granted the plaintiffs time to amend their complaint in such a manner that the court could grant relief. However, the plaintiffs elected to appeal the case to the State Supreme Court.

In a six-to-one majority opinion, the California Supreme Court concluded that the finance system was violative of the equal protection guarantee of the Federal Constitution, and in so holding, declared the system unconstitutional.[2]

With this conclusion the Supreme Court reversed the trial court and remanded the case back to the trial court to allow the plaintiffs an opportunity to prove, if they could, their factual allegations.

Based upon the Supreme Court's remand, trial before the County Court commenced on December 26, 1972. After more than sixty days of trial proceedings, the trial court rendered judgment for the plaintiffs on September 3, 1974. The trial court made extensive findings of fact and conclusions, there being 299 findings of fact and 128 conclusions of law. The

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[1]Serrano v. Priest, 45 U.S.L.W. 2340 (Dec. 30, 1976).

[2]Ibid.

State then made a motion for appeal to the California Supreme Court. The motion was granted and the appeal was referred to as Serrano II.

In a four-to-three majority decision, the California Supreme Court upheld the trial court's ruling, finding the State public school finance system unconstitutional under the State Constitution. The basis for this decision was that the reliance upon district wealth made the quality of a child's education dependent upon the level of the district expenditures.[1]

The San Antonio Independent School District v. Rodriquez case established the position of the Federal Judiciary with regard to education and the provisions of the Federal Constitution. This case was a class action suit originally filed in the United States District Court for the Western District of Texas. The thrust of the case was fiscal neutrality.

Action on the part of the plaintiffs sought to have the Texas Public School Finance System declared unconstitutional, in that it violated the equal protection guarantees of the Fourteenth Amendment of the Constitution because: (1) the system relied heavily upon local property taxation; (2) the system thus favored more affluent school districts; (3) such reliance and favoritism resulted in substantial inter-district disparities in per pupil expenditures; and (4) disparities of this nature, which violated in the equal protection guarantee, were primarily the results of differences in the values of assessable property among the districts.

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[1]Ibid.

The defendants generally maintained that the finance system was not constitutionally unsound and that the system did not present a "suspect" classification under the constitution. The defendants also contended that in a constitutional sense, education was not a fundamental right guaranteed by the Federal Constitution. Additionally they argued that there was a reasonable and rational basis for the system which made it constitutionally sound.

The court ruled for the plaintiffs, holding the Texas school finance system to be unconstitutional under the equal protection provision of the Fourteenth Amendment. The lower court found that the system did result in inherent disparities and inequities alleged by the plaintiffs.

The State appealed the federal court's ruling to the United States Supreme Court. The Supreme Court accepted jurisdiction and in a five-to-four majority opinion reversed the lower court's ruling.

The reversal of the lower court was based on two primary findings: (1) the constitutional strict judicial scrutiny test was not applicable to the equal protection claim raised against the school finance system; and (2) the Court determined that this was a reasonable and rational basis for the system in existence at that time.

Relative to the inapplicability of the strict judicial scrutiny test, the majority found that the finance system was not, in the constitutional sense, a system of suspect classification and, further, that education was not a fundamental right

under the United States Constitution. The strict constitutional test was not applicable in the absence of these two features. The Court indicated that its findings of reasonableness arose from the system's encouragement of educational control at the local level.

The next strategy employed in the litigation of school finance coupled fiscal neutrality with a concern for the output resulting from the schooling process. Such constitutional language as "equal education" has been challenged with regard to the ability of some states' finance systems attaining this goal. Cases have been filed in several states utilizing this approach: Robinson v. Cahill,[1] New Jersey; Oster v. Kneip,[2] South Dakota; Pauley v. Kelly,[3] West Virginia; Lujan V. Colorado State Board of Education,[4] Colorado; Thompson v. Engelking,[5] Idaho; Olsen v. State,[6] Oregon; and Northshore School District No. 417 v. Kinnear,[7] Washington. This approach to litigation was illustrated in the Robinson v. Cahill case in New Jersey.

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[1]Robinson v. Cahill, 62 N.J. 473, 303 A. 2d 272 (1973), Cert. Den, 414 U.S. 976, 94 S.Ct. 292, 38 L.Ed. 2d 219 (1973).

[2]Oster v. Kneip (Hughes County Circuit Court).

[3]Pauley v. Kelly, Docket No. 75-1268 (Superior Court, Kanawaha County).

[4]Lujan v. Colorado State Board of Education, District Court of Denver County, C.A. No. C-73688.

[5]Thompson v. Engelkin, 96 Idaho 793, 537 P. 2d 635 (1975).

[6]Olsen v. State, 276 Or 9, 554 P. 2d 139 (1976).

[7]Northshore School District v. Kinnear, 84 Wash. 2d 685, 530 P. 2d 178 (1974).

Action was instituted in the New Jersey Superior Court in 1972, challenging the constitutionality of the New Jersey Public School Finance System. Generally, the plaintiffs contended that the New Jersey Public School Finance System relied heavily on local property taxes as a source of revenue. The results were disparities in educational expenditures, which were in violation of the State and Federal equal protection guarantees. The State constitutional provision requiring a thorough and efficient education was afforded to some and denied to others under the existing system. Also argued was the concept of taxpayer equality, where tax rates for the same public purpose varied across the State.

The counsel for the defendants, the Attorney General, conceded that differences in expenditures did exist under the system and that resultant inadequacies could be found. However, the defendants maintained that the statutory system of school finance was constitutional; that the "State School Incentive Equalization Aid Law" (so-called Bateman Act of 1970) would increase State Aid and greatly reduce disparities caused by district wealth variations when funded by the Legislature. The defendants argued further that unequal expenditures did not necessarily prove unequal education, and that local control and responsibility to meet various interests justified the present school finance system of shared funding.

The Superior Court ruled in favor of the plaintiffs, finding the school finance system of New Jersey violative of

both State and Federal equal protection guarantees. Specifically, the court found that the system, heavily dependent upon local property taxes, denied plaintiffs their State and Federal equal protection guarantees by discriminating against pupils and districts with low real property wealth, and against taxpayers by imposing unequal burdens for a common State purpose. The Superior Court found education to constitute a fundamental interest in the constitutional sense, and that there was no compelling State interest to justify the existing finance system. A request was made and granted for an appeal to the State Supreme Court.

In a unanimous opinion the State Supreme Court modified and, as modified, affirmed the Superior Court. Basically, the Supreme Court rejected the Superior Court's reliance upon an equal protection as the basis for the conclusion of unconstitutionality, but concurred with the Superior Court in its conclusion that the existing school finance system was violative of the State constitutional mandate that imposed upon the State the obligation to furnish a thorough and efficient system of public schooling.

The State Supreme Court noted that education was a State obligation which could be met by the State directly or through proper delegation, and that the obligation, and mandate, was for the State to maintain and support a thorough and efficient system of free public schools. The Court stated that a system of instruction in any district which was not thorough and

efficient fell short of the constitutional command. The Supreme Court stated that the trial court found that this constitutional mandate had not been met and did so on the basis of discrepancies in dollar input per pupil. The Supreme Court agreed. The Court also noted that on its face, the statutory scheme had no apparent relation to the mandate for equal educational opportunity.

Another legal strategy related to systems in which local school districts must pass a special levy each year for any portion of the school district budget that exceeds the foundation level of expenditure guaranteed by the State aid program.

Two cases utilizing this strategy were Seattle School District No. 1 of King County, Washington v. State of Washington,[1] and Board of Education of the City School District of the City of Cincinnati v. Walter,[2] Ohio. The Seattle case illustrated the basic legal strategy.

Action was instituted on January 14, 1977, in Thurston County Superior Court challenging the constitutionality of the Washington School Finance System on the basis that it was in violation of the constitutional provision: "It is the paramount

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[1]Seattle School District No. 1 of King Co., Wash. v. State of Washington, 90 Wash. 2d 476, 585 P. 2d 71 (1978).

[2]Board of Education of the City School District of the City of Cincinnati v. Walter, No. A 7602725 (Hamilton Co. Ct. of Common Pleas.,1977).

duty of the state to make ample provision for the education of all children residing within its borders..."[1]

The plaintiffs in this class action against the State were seeking a declaratory judgment that the State's reliance on special excess levy funding to discharge the State's duty to provide for the education of resident children was unconstitutional. The Thurston County Superior Court sustained the plaintiffs' complaints and held that the foundation program was unconstitutional as it applied to Seattle.

The State appealed the case to the Washington State Supreme Court, and this court affirmed the trial court in part and modified the trial court ruling, in part. The basic findings of the Washington State Supreme Court were:

1. That the State Constitution which declared that it was the paramount duty of the State to make ample provision for the education of resident children was not a mere preamble but was mandatory and imposed a judicially enforceable, affirmative duty on the State.

2. That under the State Constitution, the legislature had the responsibility to implement the State's mandatory duty by defining and giving substantive content to basic education and a basic program of education.

3. That there could be compliance with the State's mandatory duty only if there are sufficient funds derived through a dependable and regular tax source to permit school districts to carry out a basic program of education.

4. That the statutory authorization of special excess levy elections did not satisfy the State's duty to provide for basic education.

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[1]Washington State, Constitution, Art. IX.

5. That the special excess levies could be utilized to fund enrichment programs that go beyond the constitutional mandate.[1]

Statutory Provisions for Financing the Schools of Oklahoma, 1977-78

This research project was concerned with two sources of revenues received by public schools of Oklahoma -- local sources and State appropriated sources. Each of these sources provided revenues pursuant to constitutional or statutory provisions. A review of the provisions relative to the sources may serve as an explanation of financing education in Oklahoma.

Local Sources

Ad valorem taxes were the bases for local support for public schools in Oklahoma, 1977-78. Article X, Section 9 of the Oklahoma Constitution provided for thirty-nine mills that could have been levied on ad valorem property for the support of schools.[2]

The county governmental entities were entitled to fifteen mills of ad valorem property taxes. However, at least five of these fifteen mills were dedicated to school district purposes. Another fifteen mills could have been levied by the local board of education upon certification of need to the county excise board. The County Four-Mill Levy was also

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[1]Seattle School District No. 1 of King Co., Wash v. State of Washington.

[2]Oklahoma, Constitution, Art. X, Sec. 9.

dedicated to schools.[1] While initially dedicated to schools for the blacks, the levy was retained for support of all schools in the county once desegregation was ordered by the courts.[2]

In addition to the aforementioned twenty-four mills provided for in the Oklahoma Constitution, local boards of education could obtain additional support locally from the ad valorem tax. These levies were referred to as the Local Support Levy (ten mills) and the Emergency Levy (five mills). A majority vote by the electors voting in an election was required for approval of these levies.[3]

As the above indicated, a maximum support level of thirty-nine mills could be levied on ad valorem property in each school district. They may be summarized as follows:

Local Support Levy	10 mills	Majority Vote
Emergency Levy	5 mills	Majority Vote
County 15-mill Levy	5 mills	Constitutional
County 4-mill Levy	4 mills	Constitutional
15-mill Levy	15 mills	Certification of Need

State Appropriated Sources

Article XIII, Section 1, of the Oklahoma Constitution provided, "The Legislature shall establish and maintain a system of free public schools wherein all children of the State

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[1]Ibid.

[2]Jack F. Parker and Gene Pingleton, Financing Education in Oklahoma, p. 7.

[3]Oklahoma, Constitution, Art. X, Sec. 9.

may be educated."[1] The constitution further stated in Article XIII, Section 1a:

> The Legislature shall, by appropriated legislation, raise and appropriate for the annual support of common schools of the state to the extent of forty-two ($42.00) dollars per capita based on total state-wide enrollment for the preceding school year. Such monies shall be allocated to the various school districts in the manner and a distributing agency to be designated by the Legislature; provided that nothing herein shall be construed as limiting any particular school district to the per capita amount specified herein, but the amount of state funds to which any school district may be entitled shall be determined by the distributing agency upon terms and conditions specified by the Legislature, and provided further that such funds shall be in addition to apportionments from the permanent school fund created by Article XI, Section 2, hereof.[2]

The aforementioned constitutional provisions charged the Oklahoma Legislature with the responsibility of establishing, maintaining, and appropriating funds for these purposes in the name of education. In other words, the constitution established that education was a State function.

In order to meet this responsibility, the Legislature has found it necessary to provide funding for education at the State level. This has been accomplished through an appropriation by the Legislature for public education.[3]

On June 21, 1977, House Bill 1001 was enacted by the Oklahoma Legislature in the First Extraordinary Session. This

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[1]Oklahoma, Constitution, Art. XIII, Sec. 1.

[2]Oklahoma, Constitution, Art. XIII, Sec. 1a.

[3]Oklahoma State Department of Education, Annual Report, 1977-78 (Oklahoma City: Southwestern Stationery and Bank Supply, 1979)

legislation provided an appropriation for the common schools of Oklahoma, 1977-78, in the amount of $321,951,961. Provisions for thirteen line-item appropriations were contained in this act. Of the thirteen line-item appropriations, seven were germane to this research study. They were:

1.	Financial Support of Schools	$175,732,515
2.	Minimum Revenue Guarantee	$ 4,210,000
3.	New Special Education and Gifted and Talented	$ 1,600,000
4.	Teacher and Support Personnel Salary Increases Prior to Fiscal Year 1978	$ 93,511,576
5.	Teacher Salary Increases, Fiscal Year 1978	$ 30,000,000
6.	Support Personnel Salary Increases, Fiscal Year 1978	$ 3,250,000
7.	Elementary Counseling	$ 1,600,000[1]

A formula for distribution of State funds was provided for in the following statute:

> Recognizing the state's responsibility to guarantee a realistic educational program for every school district in accordance with its relative ability to support such program, the amount of State Aid each district will receive shall be the sum of Foundation Aid and Incentive Aid.[2]

The Foundation Aid Formula consisted of two basic computations in 1977-78, minimum program aid and flat grant aid. The sum of these equated to the Foundation Aid Program. The Incentive Aid Program was referred to as an equalized percentage matching grant.[3]

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[1]Oklahoma, Session Laws, 1977, Thirty-Sixth Legislature, First Regular Session, First Extraordinary Session, Chapter 1, pp. 1017-1019.

[2]Oklahoma Statutes (1971), O.S. 70-18-109.

[3]Ibid.

The initial calculation of the minimum program aid was the determination of the minimum program requirements. This was accomplished by multiplying the preceding year's elementary and secondary average daily attendance by the base foundation support levels established by the Legislature. For the 1977-78 school year these were $300 for elementary and $360 for secondary. The sum of these products equalled the minimum program requirements.[1]

The second calculation for the Foundation Aid was the determination of foundation program income. The sum of the following revenue sources resulted in minimum program income:

2. Foundation Program Income

    a. The net assessed valuation of the school district during the next preceding year multiplied by fifteen (15) mills.

    b. Seventy-five per cent (75%) of the amount received by the school district from the proceeds of the county levy during the second preceding fiscal year, as levied under Section 9(b), Article X, Oklahoma Constitution.

    c. Auto License and Farm Truck Tax, actual collections during the second preceding year computed on a per capita average daily attendance basis.

    d. Gross Production Tax.

    e. State Apportionment.

    f. R.E.A. Tax.[2]

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[1] Ibid.

[2] Ibid.

Determination of minimum program aid was accomplished by subtracting the foundation program income from the minimum program requirements. The difference between these provided the minimum program aid. If the foundation program income exceeded the minimum program requirements, the result was no minimum program aid. The excess did not accrue to the State.[1]

The second computation for Foundation Aid included a flat grant section. Flat grants in the Foundation Aid Formula included three areas: transportation, special education, and vocational education.

The calculation of transportation aid was based on the determination of a density figure. Density figures were determined by dividing the average daily haul for the next preceding year by the area served for the same period. A density table was utilized to convert to per capita allowances for transportation (see Appendix A). The per capita allowance was multiplied by the average daily haul and then by 1.06 per cent to determine transportation aid.[2] This may be expressed by formula in the following manner:

1. A.D.H. - Area Served = Density Figures
2. (Convert density figure to per capita allowance using density table)

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[1]Ibid.

[2]Ibid.

3. Per Capita Allowance x A.D.H. = X
4. X x 1.06 = Transportation Aid[1]

The second element of the flat grant section to be considered was special education. For every program approved by the State Board of Education, $6,000 was allocated to the local school district.[2]

The final flat grant area considered vocational education programs. Two levels of funding were associated with vocational education, vocational agriculture and other vocational programs. Other vocational programs were funded at $2,500 per program approved by the State Board of Vocational-technical Education. Vocational agriculture was funded at $4,200 per approved program.[3]

The sum of the flat grants was considered as flat grant aid. Transportation was the only flat grant that varied from district to district on a program of per capita basis. The other two areas were consistent among districts on an amount-per-program basis.

In order to determine the total Foundation Aid, the minimum program aid was added to the flat grant aid. This

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[1]Oklahoma, State Department of Education, "The State Board of Education Regulations for Administration and Handbook on Budgeting and Business Management," Bulletin No. 145-S, (1977).

[2]Oklahoma Statutes (1971), O.S. 70-18-109.

[3]Ibid.

sum represented the amount of Foundation Aid for which a school district qualified.[1]

The second component of Financial Support of Schools was Incentive Aid. As stated previously, Incentive Aid was often referred to as an equalized percentage matching grant. Three factors were considered in determining the amount of Incentive Aid a school district received:

1. Tax Effort (mills levied above 15)
2. Average Daily Attendance
3. Fiscal Capacity (per capita valuation).

The Incentive Aid Formula was a percentage matching grant that was based on the premise that the level of participation for a school district should increase as the local district increased its tax effort. This formula compared the local fiscal capacity of the local school district (per capita valuation) to the average fiscal capacity of the State (State average valuation). This comparison yielded a district wealth ratio. The district wealth ratio subtracted from the unit of 100 per cent provided a State support ratio which could not fall below .4150 or exceed .8350. The State support level multiplied by the State support ratio provided the amount of support a school district would qualify for per mill levied above fifteen constitutional mills; this is the State support per mill. The State support per mill figure was multiplied by the number of mills levied above fifteen mills to determine

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[1] Ibid.

the matching grant. The average daily attendance multiplied by the matching grant equaled the level of participation.[1] The formula for Financial Support to Schools may be observed in Appendix B.

Section 12 of House Bill 1001 provided for the Minimum Revenue Guarantee. The purpose of this line-item appropriation was to guarantee every school district in the State at least an average daily attendance expenditure of $750. In order to qualify for participation in this program, the school district must have levied the thirty-five general fund mills and could not have had a general fund surplus in excess of ten per cent of receipts or expenditures.[2]

An appropriation for New Special Education and Gifted and Talented was provided for in Section 14 of this House Bill. The purpose of this appropriation was to provide incentive funding for the establishment of two-hundred and sixty-six new programs designed for the handicapped and exceptional children. Programs were approved by the State Board of Education and funded at a $6,000 per approved program level.[3]

Since 1973, the Oklahoma Legislature has mandated and appropriated funds for teacher and support personnel salary increases. In 1976, the Legislature enacted a formula for

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[1]Parker and Pingleton, Financing Education in Oklahoma, pp. 13-16.

[2]Oklahoma, Session Laws, 1977, Thirty-Sixth Legislature, First Regular Session, First Extraordinary Session, Chapter 1, Section 12, pp. 1019-1020.

[3]Ibid., p. 1019.

allocation of all previously mandated salary increase.[1] This formula based the allocation of funds on an average daily attendance basis, rather than a per teacher basis. Section 15 of House Bill 1001 provided the following formula for distribution of these funds:

> Step One. Divide the amount allocated to that district in fiscal year 1977 for all mandated salary increases by the average daily attendance (ADA) of the school district for the 1975-1976 school year.
>
> Step Two. Multiply the quotient of Step One by the 1976-1977 ADA for the school district to determine the amount to be allocated to the district for fiscal year 1978.[2]

For the 1978 fiscal year the Legislature mandated a salary increase for all State teachers. Teachers with less than one year of experience were to receive an increase of $300, while teachers with one or more years of experience were entitled to a $900 increase. Allocation of these funds was on an actual cost basis and included the district's contributions for social security.[3]

Support personnel salary increases were mandated in House Bill 1001, Section 18, in an amount of five per cent of the first $10,000. Allocation was on an actual cost basis and

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[1]Oklahoma, Session Laws, 1976, Thirty-Fifth Legislature, Second Regular Session, Chapter 273, Section 15, p. 273.

[2]Oklahoma, Session Laws, 1977, Thirty-Sixth Legislature, First Regular Session, First Extraordinary Session, Chapter 1, Section 15, p. 1021.

[3]Ibid., Sec. 16, p. 1021.

inclusive of the districts' social security requirements if applicable.[1]

The next line-item appropriation considered was Elementary Counseling. Incentive funding was provided in Section 19 of House Bill 1001 for the establishment of 320 elementary counseling programs. These programs were funded at a level of $5,000 for each program approved by the State Board of Education. The approval of programs in districts in which the per capita revenue exceeded $1,100 during 1974-75 was prohibited.[2]

State-appropriated revenues were a method by which the Legislature attempted to fulfill its obligation to establish and maintain public schools of Oklahoma. The preceding line-item appropriations represented $306,654,091 in legislative appropriations for public schools. Methods of allocation were different in many respects. The influence these methods of allocation had on equity will be addressed in a later chapter.

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[1]Ibid., Sec. 18, p. 1022.

[2]Ibid., Sec. 19, p. 1022.

CHAPTER III

METHODOLOGY

During the 1977-78 school year, there were 623 school districts in the State of Oklahoma. Each of these districts received financial support from the State for the purpose of maintaining and operating the school system. The primary intent of State support has been to provide as much equalization of funding as possible.

The methods and procedures used in this study were divided into three areas: pre-experimental procedures, data collection procedures, and data analysis procedures.

Pre-Experimental Procedures

The pre-experimental procedures included the following steps: Choice of populations, choice of statistical treatments, and obtaining approval and support for conducting the study.

Choice of Populations

The 623 Oklahoma school districts were classified in 1977-78 as Independent and Dependent. Independent school districts provided instruction in grades kindergarten through twelve, while Dependent districts offered grades kindergarten through eight. In 1977-78 there were 457 Independent and 166

Dependent school districts in the State of Oklahoma.[1] The two populations used for this study were the Independent and Dependent districts.

Choice of Statistical Treatment

The second step in the pre-experimental procedures was to select the appropriate analytical tools for making the desired statistical calculations.

As indicated in Chapter I, this study was concerned with three basic questions which may be translated into two statistical problems: (1) the degree of association between an independent variable and a number of dependent variables, and (2) the difference between these associations.

"According to the development owed to Galton and Pearson, the degree of association shared by two variables is indicated by the co-efficient of correlation."[2] On this basis, the analytical tool utilized to obtain the degree of association was product-moment correlation. The raw score formula may be expressed as

$$r_{xy} = \frac{n\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

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[1]Oklahoma, State Department of Education Annual Report, 1977-78, (1979).

[2]Edward W. Minimum, Statistical Reasoning in Psychology and Education (New York: John Wiley & Sons, Inc., 1970), p. 132.

Product-moment correlation possesses properties which allow for the determination of degrees of relationship between two variables. When no relationship exists, its value is zero. If a perfect relationship exists, the value is one. Correlation coefficients may be either positive or negative. Positive values of $\underline{r}$ indicate that when the value for one variable (x) is high, the value for the other (y) will be high. If the value for one variable (x) is high and the value of the other (y) is low, the coefficient will be negative.[1]

Fisher's Student's $\underline{t}$ was utilized to determine the level of significance for the obtained correlation coefficients. The formula is as follows:

$$P = \frac{r}{\sqrt{(1-r^2)/(n-2)}}$$

The second step in the analytical process was to test for significance of difference between the obtained correlation coefficients for the accepted hypotheses statements. This problem centers around the notion that the two distributions of $\underline{\rho}$, correspondingly $\underline{\rho_1}$ and $\underline{\rho_2}$, are unknown and probably skewed. In accomplishing this task, Fisher's $\underline{z}$ transformation was utilized. The $\underline{\rho}$ values were converted to $\underline{z}'$ values, and the following was hypothesized:

$$Ho : \rho_1 - \rho_2 = 0$$

$$Ha : \rho_1 - \rho_2 \neq 0$$

$$x = .05$$

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[1]Ibid., pp. 132-133.

The following formula was utilized to determine whether to accept or reject the hypothesis that $\rho_1 - \rho_2 = 0$:

$$z = \frac{(z'_1 - z'_2) - (Z'_1 - Z'_2)hyp}{\sigma_{z'_1 - z'_2}}$$

Acceptance or rejection of null hypotheses statements is dependent upon the level of significance set by the researcher. Level of significance allows the researcher to accept or reject null hypotheses on the basis of real difference, rather than chance of variation.

> In recent years, it has become common for research workers to evaluate the outcome of tests according to the 5% level: of significance, or alternatively, according to the 1% level. These values tend to give reasonable assurance that the null hypothesis will not be rejected unless it should be. At the same time, they are not so stringent as to raise unnecessarily the likelihood of accepting false hypothesis.[1]

Hypotheses statements tested with product-moment correlation were accepted if they were significant at the .05 level and provided negative correlation coefficients. If the correlation coefficient obtained was positive, the hypothesis was rejected. The .05 level was also utilized for rejection or acceptance of hypotheses statements for testing differences between obtained correlation coefficients.

Obtaining Approval/Support for Conducting the Study

The final step in the pre-experimental procedures was to obtain approval and support for conducting the study. After

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[1]Ibid., p. 259.

receiving approval and support from the State Superintendent of Public Instruction, data pertinent to the study were made available through the Data Center and Finance Division of the Oklahoma State Department of Education.

Data Collection Procedures

The second phase of the methodology was the data collection procedures. The procedures consisted of the compilation of actual per capita valuation and per capita State support from the various categories of appropriation for all school districts in Oklahoma during 1977-78.

The researcher submitted a request to the Data Center of the State Department of Education for a computer print-out and computer tape furnishing the following data for Independent and Dependent school districts for the 1977-78 school year:

1. Per capita valuation
2. Per capita foundation aid
3. Per capita incentive aid
4. Per capita flat grants
5. Per capita employee salary increase
6. Per capita teacher salary increase
7. Per capita support personnel salary increase
8. Per capita special education/gifted and talented
9. Per capita minimum revenue guarantee
10. Per capita elementary counseling
11. Per capita total State aid

Upon receipt of these data, each category of State support was compared manually to identical data maintained in the State Aid Section. Of the two populations, twenty-five per cent of the districts in each population were checked to validate data collected.

Data Analysis Procedures

The third phase of the methodology was the analysis of the data. This phase consisted of the statistical calculation processes which required two methods: automated and manual.

Determination of correlation coefficients was accomplished by utilizing an IBM 370-158 computer. The PROC REGR, Systems Analysis System (SAS), 1972, was selected to perform this analysis. This program utilizes Fisher's Student's *t* for determination of level of significance.[1]

Scatterplots of the pairs of variables for each hypothesis statement were also obtained from this system. The purpose of the scatterplots was to provide a visual analysis of the distributions. These analyses were used to evaluate the homoscedasticity, equal variability, of the distributions.[2] (See Appendix C.)

The second phase of the statistical calculations was performed manually. The formula utilized in this phase was described earlier in this chapter. The correlation coefficients for the accepted hypotheses were tested to determine which methods of allocation had greater tendencies to equalize school district revenues.

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[1]Anthony J. Barr, James H. Goodnight, John P. Sall and Jane T. Helwig, Statistical Analysis System, SAS (Raleigh: SAS Institute, Inc., 1972).

[2]Minimum, pp. 141, 158.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter of the research project contains an analysis and interpretation of the data as they relate to each of the hypotheses under investigation. The questions this research effort attempted to answer were:

1. What was the relationship between the fiscal ability of the school districts and the distribution of the various categories of State support in Oklahoma during the 1977-78 school year?

2. What effect did the sum of the methods of distribution have on equitably financing the public schools of Oklahoma during 1977-78?

3. Did some methods of allocation contribute more significantly to equalization than others? Which methods provided for the greatest and least degrees of equalization?

The statistical calculations necessary to answer these questions required two processes. This chapter was divided into two sections. The first was results of hypotheses testing, and the second was testing for differences in correlation coefficients.

For testing the hypotheses, the researcher accepted those which were supported at the .05 level of significance and resulted in negative correlation coefficients. Data summarized

in the tables constructed for the following section of this chapter reflect the results for both populations under study.

Results of Hypotheses Testing

Results of Testing Hypothesis$_1$

Ho_1: There is a significant negative relationship between per capita valuation and per capita foundation aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 1.

TABLE 1

SUMMARY OF DATA FOR HYPOTHESIS ONE

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	78.77	72.82	-.6709	.0001
Dependent Districts	166	116.02	94.08	-.6480	.0001

The calculated ρ values for Independent and Dependent school districts for this analysis were -.6709 and -.6480, respectively. These correlation coefficients were found to be significant at the .0001 level. Therefore, the hypothesis was accepted for both Independent and Dependent school districts.

Results of Testing Hypothesis$_2$

Ho_2: There is a significant negative relationship between per capita valuation and per capita incentive aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 2.

TABLE 2

SUMMARY OF DATA FOR HYPOTHESIS TWO

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	192.50	51.75	-.7181	.0001
Dependent Districts	166	183.65	56.68	-.5772	.0001

The calculated ρ value for Independent districts was -.7181, while it was -.5772 for Dependent districts for this analysis. It was determined that these ρ values were significant at the .0001 level. Therefore, in each instance the hypothesis was accepted.

Results of Testing Hypothesis$_3$

Ho_3: There is a significant negative relationship between per capita valuation and per capita transportation, special education, and vocational education aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 3.

TABLE 3

SUMMARY OF DATA FOR HYPOTHESIS THREE

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	85.22	32.64	+.4138	.0001
Dependent Districts	166	88.68	43.40	+.4118	.0001

The calculated ρ values for this analysis were +.4138 for Independent districts and +.4118 for Dependent districts. In each case the level of significance was .0001. However, it

was necessary to reject this hypothesis for both Independent and Dependent districts due to the positive $\underline{\rho}$ values.

Results of Testing Hypothesis$_4$

Ho_4: There is a significant negative relationship between per capita valuation and per capita employees' salary increase, 1977-78.

Data relevant to this hypothesis are summarized in Table 4.

TABLE 4

SUMMARY OF DATA FOR HYPOTHESIS FOUR

Type of School District	N	μ	σ	ρ	χ
Independent DistrictS	457	182.85	28.41	+.8159	.0001
Dependent Districts	166	196.31	48.62	+.7851	.0001

This analysis provided a calculated $\underline{\rho}$ value of +.8159 and +.7851 for Independent and Dependent school districts, respectively. Although these $\underline{\rho}$ values were significant at the .0001 level, the hypothesis was rejected because of the positive direction of the correlation coefficients.

Results of Testing Hypothesis$_5$

Ho_5: There is a significant negative relationship between per capita valuation and per capita teacher salary increase, 1977-78.

Data relevant to this hypothesis are summarized in Table 5.

TABLE 5

SUMMARY OF DATA FOR HYPOTHESIS FIVE

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	60.93	12.32	+.8141	.0001
Dependent Districts	166	66.36	22.82	+.7936	.0001

The calculated $\underline{\rho}$ value was +.8141 for Independent districts, which was determined to be significant at the .0001 level. For Dependent districts, the calculated $\underline{\rho}$ value was +.7936, significant at the .0001 level also. Due to the positive $\underline{\rho}$ value, it was necessary to reject the hypothesis for both classifications of school districts.

Results of Testing Hypothesis$_6$

Ho_6: There is a significant negative relationship between per capita valuation and per capita support personnel salary increase, 1977-78.

Data relevant to this hypothesis are summarized in Table 6.

TABLE 6

SUMMARY OF DATA FOR HYPOTHESIS SIX

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	4.47	1.82	+.5825	.0001
Dependent Districts	166	4.99	4.22	+.4276	.0001

The calculated $\underline{\rho}$ values for Independent and Dependent districts for this analysis were +.5825 and +.4276, respectively.

Each ρ value was determined significant at the .0001 level. Positive correlation coefficients, however, resulted in rejection of the hypothesis.

Results of Testing Hypothesis$_7$

Ho_7: There is a significant negative relationship between per capita valuation and per capita new special education and gifted and talented programs aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 7.

TABLE 7

SUMMARY OF DATA FOR HYPOTHESIS SEVEN

Type of School District	N	μ	σ	ρ	χ
Independent Districts	124	10.16	10.07	+.1336	.1349
Dependent Districts	15	69.71	79.79	+.0166	.9518

The calculated ρ value for Independent districts was +.1336, while it was +.0166 for Dependent districts. Neither correlation coefficient was found to be significant at the .05 level. Consequently, the hypothesis was rejected for both classifications of school districts.

Results of Testing Hypothesis$_8$

Ho_8: There is a significant negative relationship between per capita valuation and per capita minimum revenue guarantee aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 8.

TABLE 8

SUMMARY OF DATA FOR HYPOTHESIS EIGHT

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	4.36	15.36	-.1940	.0001
Dependent Districts	166	15.08	41.57	-.2063	.0076

The calculated $\underline{\rho}$ values were -.1940 for Independent districts and -.2063 for Dependent districts. These $\underline{\rho}$ values were significant at the .0001 and .0076 levels. Therefore, the hypothesis was accepted for Independent and Dependent districts.

Results of Testing Hypothesis$_9$

Ho_9: There is a significant negative relationship between per capita valuation and per capita elementary counseling aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 9.

TABLE 9

SUMMARY OF DATA FOR HYPOTHESIS NINE

Type of School District	N	μ	σ	ρ	χ
Independent Districts	145	6.27	4.01	+.1043	.2093
Dependent Districts	6	20.25	8.39	-.2606	.6206

For Independent school districts, the calculated $\underline{\rho}$ value for this analysis was +.1043 which was significant at the .2093 level. The calculated $\underline{\rho}$ value for Dependent districts

was -.2602 which was not significant at the .05 level. Therefore, the hypothesis was rejected for both Independent and Dependent school districts.

Results of Testing Hypothesis$_{10}$

Ho_{10}: There is a significant negative relationship between per capita valuation and per capita state aid, 1977-78.

Data relevant to this hypothesis are summarized in Table 10.

TABLE 10

SUMMARY OF DATA FOR HYPOTHESIS TEN

Type of School District	N	μ	σ	ρ	χ
Independent Districts	457	613.80	111.21	-.3803	.0001
Dependent Districts	166	678.12	143.74	-.2065	.0076

The calculated $\underline{\rho}$ values were -.3808 for Independent districts and -.2065 for Dependent districts for this analysis. These $\underline{\rho}$ values were significant at the .05 level. Therefore, the hypothesis was accepted for the Independent and Dependent school districts.

Testing for Differences in Correlation Coefficients

Fisher's $\underline{z}$ transformation was utilized in determining if there were significant differences among the correlation coefficients obtained for the accepted hypothesis statements. In order to test for differences, it was necessary to state the following hypotheses:

Ho_{11}: $\rho f - \rho i = 0$
Ho_{12}: $\rho f - \rho s = 0$
Ho_{13}: $\rho f - \rho mrg = 0$
Ho_{14}: $\rho i - \rho mrg = 0$ $\quad x = .05$
Ho_{15}: $\rho i - \rho s = 0$
Ho_{16}: $\rho s - \rho mrg = 0$

For purposes of these hypotheses:

ρ_f = Foundation Aid correlation coefficient
ρ_i = Incentive Aid correlation coefficient
ρ_{mrg} = Minimum Revenue Guarantee correlation coefficient
ρ_s = sum of State Aid correlation coefficient

The level of significance utilized for testing for difference in these hypotheses was .05. If the obtained $\underline{z}$ value met or exceeded the critical value of ± 1.96, the hypothesis was rejected. Otherwise, it was accepted. Data summarized in the tables constructed for this section reflect the results of the analyses as they applied to each of the populations under study.

Results of Testing $Hypothesis_{11}$

Ho_{11}: $\rho_f - \rho_i = 0$ $\quad x = .05$

Data relevant to this hypothesis are summarized in Table 11.

TABLE 11

SUMMARY OF DATA FOR HYPOTHESIS ELEVEN

Type of School District	N	ρ_f	ρ_i	z'_f	z'_i	$\sigma_{z'_f - z'_i}$	Z
Independent	457	-.6709	-.7181	-.813	-.904	.06	-1.379
Dependent	166	-.6480	-.5772	-.772	-.658	.11	-1.036

In this instance, since the obtained $\underline{z}$ values for Independent and Dependent school districts fell short of the critical value of $\underline{z}$ (± 1.96) required to declare significance at the .05 level, the hypothesis was accepted. In other words, there was no significant difference between the calculated correlation coefficients for Foundation and Incentive Aid for both populations.

Results of Testing Hypothesis_{12}

Ho_{12}: $\rho_f - \rho_s = 0$ $\quad x = .05$

Data relevant to this hypothesis are summarized in Table 12.

TABLE 12

SUMMARY OF DATA FOR HYPOTHESIS TWELVE

Type of School District	N	ρ_f	ρ_s	z'_f	z'_s	$\sigma_{z'_f - z'_g}$	Z
Independent	457	-.6709	-.3808	-.813	-.401	.066	-6.2424
Dependent	166	-.6480	-.2065	-.722	-.210	.11	-5.109

The obtained $\underline{z}$ values for Independent and Dependent school districts were -6.2424 and -5.109, respectively. Since

both obtained $\underline{z}$ values exceeded the critical $\underline{z}$ value of ±1.96, the hypothesis was rejected. There was a significant difference between the Foundation Aid and Minimum Revenue Guarantee correlation coefficients.

Results of Testing $Hypothesis_{13}$

$Ho_{13}: \rho_f - \rho_{mrg} = 0 \qquad x = .05$

Data relevant to this hypothesis are summarized in Table 13.

TABLE 13

SUMMARY OF DATA FOR HYPOTHESIS THIRTEEN

Type of School District	N	ρ_f	ρ_{mrg}	z'_f	z'_{mrg}	$\sigma_{z'f-z'mrg}$	Z
Independent	457	-.6709	-.1940	-.813	-.197	.066	-9.33
Dependent	166	-.6480	-.2063	-.772	-.210	.11	-5.109

The hypothesis that there was no significant difference between the correlation coefficients for Foundation Aid and the sum of State Aid was rejected. The basis for the rejection was that the obtained $\underline{z}$ values exceeded the critical value of $\underline{z}$ for Independent and Dependent school districts.

Results of Testing $Hypothesis_{14}$

$Ho_{14}: \rho_i - \rho_{mrg} = 0 \qquad x = .05$

Data relevant to this hypothesis are summarized in Table 14.

TABLE 14

SUMMARY OF DATA FOR HYPOTHESIS FOURTEEN

Type of School District	N	ρ_f	ρ_{mrg}	z'_i	z_{mrg}	$\sigma_{z'i-z'mrg}$	Z
Independent	457	-.7181	-.1940	-.904	-.197	.066	-10.712
Dependent	166	-.5772	-.2063	-.658	-.210	.11	- 4.073

The obtained $\underline{z}$ value for Independent districts was -10.712, while it was -4.073 for Dependent districts in this calculation. Since these obtained $\underline{z}$ values exceed the critical $\underline{z}$ value of ±1.96, the hypothesis was rejected for both classifications of school districts.

Results of Testing $Hypothesis_{15}$

Ho_{15}: $\rho_i - \rho_s = 0$ - x = .05

Data relevant to this hypothesis are summarized in Table 15.

TABLE 15

SUMMARY OF DATA FOR HYPOTHESIS FIFTEEN

Type of School District	N	ρ_i	ρ_s	z'_i	z'_s	$\sigma_{z'i-z's}$	Z
Independent	457	-.7181	-.3808	-.904	-.401	.066	-7.621
Dependent	166	-.5772	-.2065	-.658	-.210	.11	-4.073

The obtained $\underline{z}$ values of -7.621 and -4.073 for Independent and Dependent school districts, respectively, exceeded the critical value of $\underline{z}$. Therefore, the hypothesis of no difference

between the calculated correlation coefficients for Incentive Aid and Minimum Revenue Guarantee was rejected for each population.

Results of Testing Hypothesis$_{16}$

Ho_{16}: $\rho_s - \rho_{mrg} = 0$ $\quad x = .05$

Data relevant to this hypothesis are summarized in Table 16.

TABLE 16

SUMMARY OF DATA FOR HYPOTHESIS SIXTEEN

Type of School District	N	ρ_s	ρ_{mrg}	z'_s	z'_{mrg}	$\sigma_{z's-z'mrg}$	Z
Independent	457	-.3808	-.1940	-.401	-.197	.066	-3.091
Dependent	166	-.2063	-.2065	-.210	-.210	.11	-0-

The obtained $\underline{z}$ value for Independent school districts was -3.091, which exceeded the critical $\underline{z}$ value of $\pm$1.96. Thus, the hypothesis of no difference between the sum of State Aid and Minimum Revenue Guarantee correlation coefficients was rejected in the case of Independent districts. However, the obtained value of $\underline{z}$ in the case of Dependent districts was zero. Thus, there was no significant difference between these correlation coefficients for Dependent districts. The hypothesis was accepted.

Summary of Hypotheses Testing

Hypotheses 1 through 10 were tested by comparing the per capita valuations of the schools to the amount of revenue

received from the State via the various methods of allocation for State support. The determined relationship between these variables served as a unit of measure for equity of finance. Each hypothesis was accepted or rejected on the basis of the direction of the correlation coefficient and the level of significance. Hypotheses 1, 2, 8 and 10 were accepted because of observed negative correlation coefficients that were significant at the .05 level. Hypotheses 3, 4, 5, 6, 7 and 9 were rejected because of either positive correlation coefficients or negative correlation coefficients that were not significant at the .05 level.

Correlation coefficients for the accepted hypotheses were tested to determine if significant differences could be observed among them. Using Fisher's $\underline{z}$ transformation, no significant differences were observed in the cases of the sum of State Aid and Minimum Revenue Guarantee for Dependent districts, and Foundation Aid and Incentive Aid for both Independent and Dependent districts. This particular statistical calculation served as a basis for evaluating the potential possessed by methods of allocation for providing equity.

The final conclusions and recommendations drawn from the results presented in Tables 1 through 16 are presented in the final chapter of this study. The final chapter also contains a short summary of the entire study, findings, conclusions, implications, and recommendations.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

This study was designed to determine the effect legislative appropriation had on the equity of financing public schools of Oklahoma during the 1977-78 school year. More specifically, the purpose of the study was to determine the relationship between per capita valuation and the amount of State support received by local school districts in 1977-78. A secondary purpose of the study was to identify the methods of distribution of State support possessing the greatest potential to provide equity of finance in the Oklahoma public school system.

Two populations were considered and analyzed separately in the study. The 623 Oklahoma school districts were classified in 1977-78 as Independent and Dependent. These populations consisted of 457 Independent and 166 Dependent school districts. These classifications of school districts comprised the two populations under study.

Data collected were pertinent to the following aspects of the 1977-78 Oklahoma school finance system:

1. Per capita valuation
2. Per capita foundation aid

3. Per capita incentive aid
4. Per capita flat grant aid
5. Per capita employees' salary increase aid
6. Per capita teacher salary increase aid
7. Per capita support personnel salary increase aid
8. Per capita new special education and gifted and talented aid
9. Per capita minimum revenue guarantee aid
10. Per capita elementary counseling aid
11. Per capita sum of State aid.

Data relative to these aspects were obtained from the Data Center of the Oklahoma State Department of Education. Records in the Finance Division of the Oklahoma State Department of Education were also used to check the obtained data for accuracy.

Findings

Hypotheses 1 through 10 were double-negative, null hypotheses statements. Double-negative, null hypotheses statements were utilized for a specific purpose. Examination of the relationship between fiscal capacity and revenues received from the State must have resulted in an inverse relationship for equity to have existed. Consequently, only negative relationships between the independent and dependent variables reflected the potential to provide for equity of funding.

Product-moment correlation was utilized to test Hypotheses 1 through 10. Acceptance or rejection of these proposed hypotheses statements was based on the direction of the correlation coefficient and the .05 level of significance. The findings drawn in this section of the study were based on

the results observed when the data were analyzed, interpreted, and synthesized in Chapter IV.

Hypothesis 1 stated that there is a significant negative relationship between per capita valuation and per capita foundation aid, 1977-78. The hypothesis was accepted for each population.

Hypothesis 2 stated that there is a significant negative relationship between per capita valuation and per capita incentive aid, 1977-78. The hypothesis was accepted for both Independent and Dependent school districts.

Hypothesis 3 stated that there is a significant negative relationship between per capita valuation and per capita transportation, special education, and vocational education aid, 1977-78. The hypothesis was rejected for both populations.

Hypothesis 4 stated that there is a significant negative relationship between per capita valuation and per capita employees' salary increase aid, 1977-78. For Independent and Dependent districts, the hypothesis was rejected.

Hypothesis 5 stated that there is a significant negative relationship between per capita valuation and per capita teacher salary increase aid, 1977-78. The hypothesis was rejected for each population.

Hypothesis 6 stated that there is a significant negative relationship between per capita valuation and per capita support personnel salary increase aid, 1977-78. For each population, this hypothesis was rejected.

Hypothesis 7 stated that there is a significant negative relationship between per capita valuation and per capita new special education/gifted and talented aid, 1977-78. The hypothesis was rejected for Independent and Dependent school districts.

Hypothesis 8 stated that there is a significant negative relationship between per capita valuation and per capita minimum revenue guarantee aid, 1977-78. For Independent and Dependent school districts, this hypothesis was accepted.

Hypothesis 9 stated that there is a significant negative relationship between per capita valuation and per capita elementary counseling aid, 1977-78. The hypothesis was rejected for the two populations.

Hypothesis 10 stated that there is a significant negative relationship between per capita valuation and per capita State aid, 1977-78. The hypothesis was accepted for the two populations.

Hypotheses 11 through 16 related to the hypotheses which were accepted in the first phase of the analytics, Hypotheses 1, 2, 8 and 10. Fisher's $\underline{z}$ transformation was used to test for significant difference in the calculated correlation coefficients. The findings drawn in the following were based on the results observed in Chapter IV when the data were analyzed, interpreted, and synthesized.

Hypothesis 11 stated that there is no significant difference between the calculated correlation coefficients

for foundation aid and incentive aid. The hypothesis was accepted for both populations.

Hypothesis 12 stated that there is no significant difference between the calculated correlation coefficients for foundation aid and minimum revenue guarantee aid. The hypothesis was rejected for the two populations.

Hypothesis 13 stated that there is no significant difference between the calculated correlation coefficients for foundation aid and the sum of State aid. A significant difference was observed for each population. Therefore, the hypothesis was rejected.

Hypothesis 14 stated that there is no significant difference between the calculated correlation coefficients for incentive aid and the sum of State aid. The hypothesis was rejected for the two populations.

Hypothesis 15 stated that there is no significant difference between the calculated correlation coefficients for incentive aid and minimum revenue guarantee. For each population, the hypothesis was rejected.

Hypothesis 16 stated that there is no significant difference between the calculated correlation coefficients for the sum of State aid and minimum revenue guarantee. In the case of Independent districts the hypothesis was rejected. However, for Dependent districts it was accepted.

Summary Findings

This study proposed to answer three questions relative to Oklahoma School Finance, 1977-78. As stated in Chapter I, the questions under investigation were as follows:

1. What was the relationship between the fiscal ability of the school districts and the distribution of the various categories of State support in Oklahoma during the 1977-78 school year?

2. What effect did the sum of the methods of distribution have on equitably financing the public schools of Oklahoma during 1977-78?

3. Did some methods of allocation contribute more significantly to equalization than others? Which methods provided for the greatest and least degrees of equalization?

The basic findings of the study resulted in ancillary findings related to these proposed questions. They were as follows:

1. There was an inverse relationship between per capita valuation and Foundation Aid, Incentive Aid, and minimum revenue guarantee.

2. There was a positive relationship between per capita valuation and the various flat-grant methods of distribution.

3. When the sum of State aid was considered, the combination of flat-grants and wealth related methods of distribution, the potential for State revenues to provide for equity was reduced.

4. Flat-grant methods of distribution; transportation, special education, vocational education, employees' salary increase, teacher salary increase, support personnel salary increase, new special education and gifted and talented, and elementary counseling, were the least equalizing methods of distribution.

5. Foundation Aid and Incentive Aid had the greatest potential to provide equity.

Conclusions

The findings of this study resulted in the following conclusions:

1. The equalization typology developed by the National Educational Finance Project was supported. The N.E.F.P. typology provided an evaluation of methods of State distribution with regard to the potential to provide equity of funding. As in the findings of the N.E.F.P. study, this study determined that methods of distribution which considered the fiscal capacity of school districts possessed greater potential to achieve equalization than did flat-grants which ignored fiscal capacity.

2. The Oklahoma system of State support did not provide for as much equalization as was possible. The findings of this study demonstrated that greater levels of equalization were attained via wealth related methods of distribution than via flat-grants. Flat-grants were observed as disequalizing. The combined effect of both methods of distribution resulted in significantly less equalization with regard to the sum of State than in wealth related methods of distribution. Consequently, as much equalization as is possible was not attained. In order to achieve this goal, the State should begin distributing the majority, if not all, of State appropriated revenues through the wealth related methods of distribution.

3. The Oklahoma system of school finance did not facilitate full and equal educational opportunities for every child in Oklahoma. The legislative intent of the system of State

support was to provide full and equal educational opportunities for every child in the State. The legislature has stated that this could have been accomplished by a school finance system which provided for as much equalization as was possible. This study demonstrated that the Oklahoma school finance system did not fulfill this intent statement. Therefore, every child in Oklahoma is not receiving full and equal educational opportunities.

4. The State has not assumed fully its responsibility for eliminating the disparities in local fiscal disparity. Wealth related methods of distribution were found to be inversely related to the fiscal capacity of school districts. This resulted in elimination of disparities in school district funding. A positive relationship between fiscal capacity and flat-grants resulted in increased funding disparities. Therefore, the State did not assume its proper role in meeting equity standards.

Implications

This research project examined the 1977-78 system of Oklahoma school finance to determine if State revenues were distributed in an equitable manner. The findings and conclusions lead to some possible implications this system of school finance may have in the future on the Oklahoma public education system. The possible implications are concerned with the ability of the State to provide equal educational opportunities for every child in the State.

It was determined in this study that the system of school finance utilized in 1977-78 did not provide for as much equalization as was possible. The study also identified the elements of State support that could provide for equity of funding and those that could not provide for equity of funding. The Oklahoma Constitution charged the Legislature with the responsibility of establishing and maintaining a free public educational system. In order to accomplish this task, the Oklahoma legislature committed itself to providing full and equal educational opportunities through a system of finance that would provide for as much equalization as was possible. That being the case, three alternatives are available to the legislature which will influence the degree to which equal opportunities will exist.

The first alternative, which may be the most desirable if equitable funding is the primary concern, will require a philosophical change on the part of the Legislature. Foundation and Incentive Aid methods of distribution possess greater potential to achieve equity than do flat-grants. Rather than distribute State revenues on a program or teacher basis, the philosophy of the Legislature should give greater consideration to the ability of school districts to generate local revenues than to program costs. This may be accomplished by placing total distribution emphasis on the wealth related methods of distribution.

The second alternative at the Legislature's disposal involves no change in the distribution of State revenues.

The effect of this option would be status quo. State revenues would continue to have an equalizing effect; however, not as much equalization as is possible.

The final alternative would provide increased emphasis on flat-grant methods of distribution as opposed to wealth related methods of distribution. The outcome of this distribution would probably result in a perpetuation of the inequities observed in the 1977-78 school year.

Equal educational opportunities will be either enhanced or reduced depending upon the philosophy of the Legislature. Alternatives two and three seem to be the least desirable, due to inability of flat-grants to achieve equity in school funding. The first alternative would seem to be the most desirable, due to the potential to provide for equity through wealth related methods of distribution, such as foundation and incentive aid programs.

If the Legislature does not accurately assess the situation, litigation of the system may be inevitable. Litigation will not insure that the new system to follow will be more equitable than the 1977-78 system. Since certain aspects of the 1977-78 system did have the potential to facilitate full and equal educational opportunities, it would seem that appropriate changes and modifications necessary to enhance equity would be more effective and expedient than the creation of a totally new system.

Recommendations

Only fiscal capacity and State support were considered in this study as criteria for attainment of equity. The study suggests several recommendations for further research:

1. This study has shown that there was no significant difference between foundation aid and incentive aid with regard to potential to provide for equalization. Research should be conducted to determine why this occurred.

2. This study has shown that wealth-related methods of allocation possess greater potential to provide for equity than do flat-grant methods of allocation. Research should be pursued to determine the effect of distributing all State appropriated revenues through the wealth-related methods of allocation.

3. Equalization of assessments on ad valorem property was not investigated in this research endeavor. Investigation of this aspect of local fiscal capacity should be pursued to determine its effect on equity.

4. This study demonstrated that foundation aid and incentive aid had greater potential to provide equity than did flat-grants. Research should be conducted to determine what changes in foundation aid and incentive aid formulas would enhance their potential to provide for equity of funding.

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APPENDICES

APPENDIX A

DENSITY TABLE*

Density Figure	Per Capita Allowance	Density Figure	Per Capita Allowance
.3000-.3083	$167.00	.9334-. 9599	$99.00
.3084-.3249	165.00	.9600-. 9866	97.00
.3250-.3416	163.00	.9867-1.1071	95.00
.3417-.3583	161.00	1.1072-1.3214	92.00
.3584-.3749	158.00	1.3215-1.5357	90.00
.3750-.3916	156.00	1.5358-1.7499	88.00
.3917-.4083	154.00	1.7500-1.9642	86.00
.4084-.4249	152.00	1.9643-2.1785	84.00
.4250-.4416	150.00	2.1786-2.3928	81.00
.4417-.4583	147.00	2.3929-2.6249	79.00
.4584-.4749	145.00	2.6250-2.8749	77.00
.4750-.4916	143.00	2.8750-3.1249	75.00
.4917-.5083	141.00	3.1250-3.3749	73.00
.5084-.5249	139.00	3.3750-3.6666	70.00
.5250-.5416	136.00	3.6667-3.9999	68.00
.5417-.5583	134.00	4.0000-4.3333	66.00
.5584-.5749	132.00	4.3334-4.6666	64.00
.5750-.5916	130.00	4.6667-4.9999	62.00
.5917-.6133	128.00	5.0000-5.3333	59.00
.6134-.6399	125.00	5.3334-5.7499	57.00
.6400-.6666	123.00	5.7500-6.2499	55.00
.6667-.6933	121.00	6.2500-6.7499	53.00
.6934-.7199	119.00	6.7500-7.2499	51.00
.7200-.7466	117.00	7.2500-7.5357	48.00
.7467-.7733	114.00	7.5358-7.6071	46.00
.7734-.7999	112.00	7.6072-7.6785	44.00
.8000-.8266	110.00	7.6786-7.7499	42.00
.8267-.8533	108.00	7.7500-7.8214	40.00
.8534-.8799	106.00	7.8215-7.8928	37.00
.8800-.9066	103.00	7.8929-7.9642	35.00
.9067-.9333	101.00	7.9643-or more	33.00

*Source: Oklahoma State Department of Education, Bulletin No. 145-S, 1977-78.

APPENDIX B

FINANCIAL SUPPORT OF SCHOOLS
DISTRIBUTION FORMULA*

Foundation Aid Formula (1977-78)

1. Elem. A.D.A. _____ X $300 = $_____
2. Sec. A.D.A. _____ X $360 = $_____
3. Minimum Program Requirements $_____

Subtract Chargeable Income

4. 1976 Net Assessed Val. X 15 Mills
   _____ X .015 = $_____

1975-1976 Collections of:

5. 75% of County 4 Mill $_____
6. Auto License $_____
7. School Land $_____
8. Gross Production $_____
9. R.E.C. Tax $_____
10. Foundation Program Income $_____
11. Minimum Program Aid (Line 3 Total - Line 10 Total) = $_____
12. Transportation: (A.D.H. X Per Capita)
    _____ X _____ X 1.06 = $_____
13. Special Education:
    _____ X $6000 = $_____
14. Vocational Programs:
    _____ Vo.Ag. X $4200 = $_____
    _____ Other X $2500 = $_____
15. Flat Grant Aid $_____

Foundation Aid (Line 11 + Line 15) = $_____

- -

Incentive Aid

1. District Valuation divided by District A.D.A. = Dist. Val. Per A.D.A.
2. District Val. Per A.D.A. divided by 8990 = District Wealth Ration
3. District Wealth Ratio X .550 = Local Support Ratio
4. 1.0000 - Local Support Ration = State Support Ratio (Min. =.4150, Max.=.8350)
5. State Average Support Per Mill (8.990) divided by .550+ Support Level (16.35)

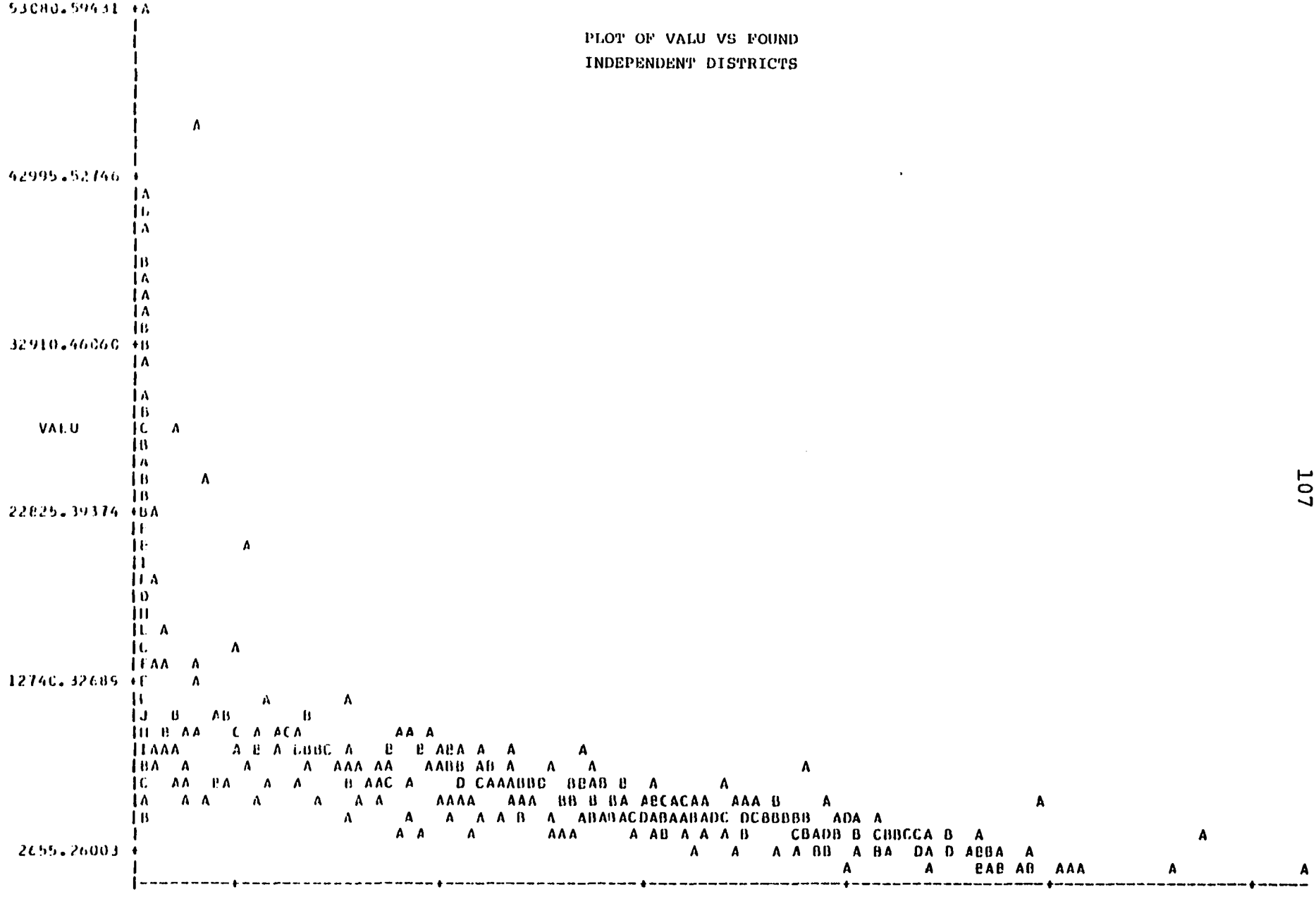
APPENDIX B--Continued

6. 16.35 X State Support Ratio = State Support Per Mill
7. State Support Per Mill X Mills Levied above 15 = Matching Grant
8. Matching Grant X Dist. A.D.A. = Incentive Aid $_____

Total State Aid $_____

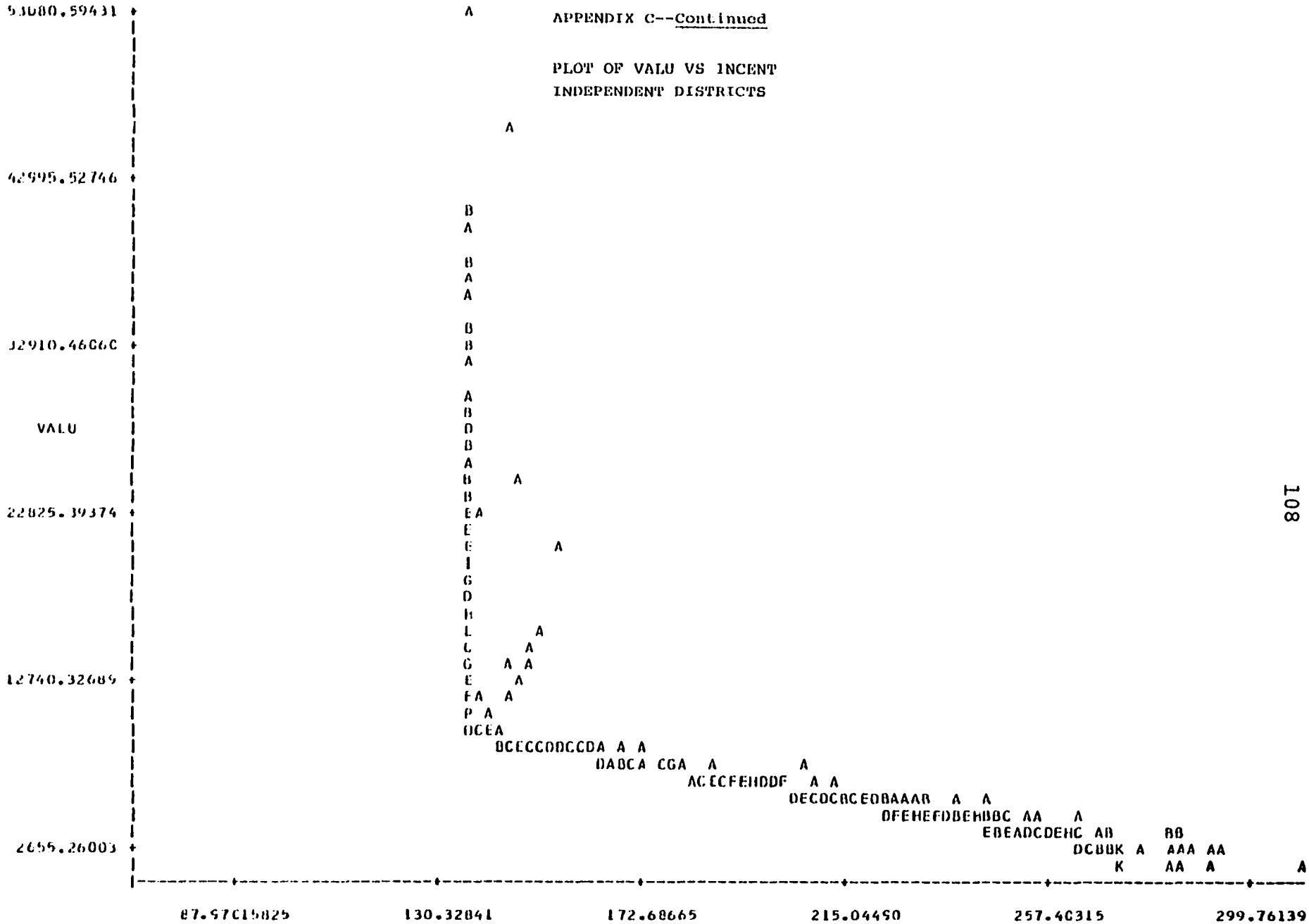
*Source: Oklahoma State Department of Education, Finance Division, State Aid Section

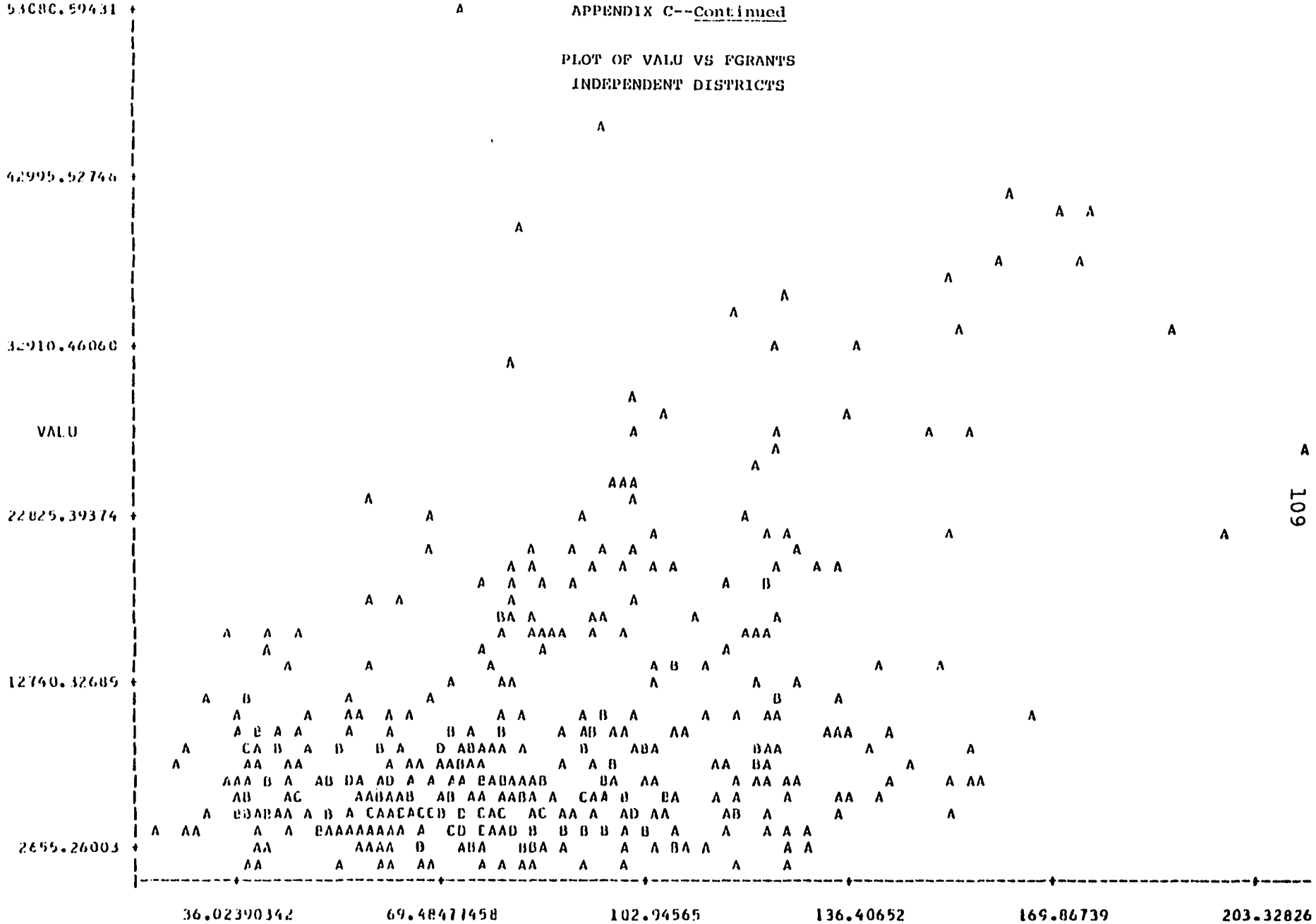
PLOT OF VALU VS FOUND
INDEPENDENT DISTRICTS



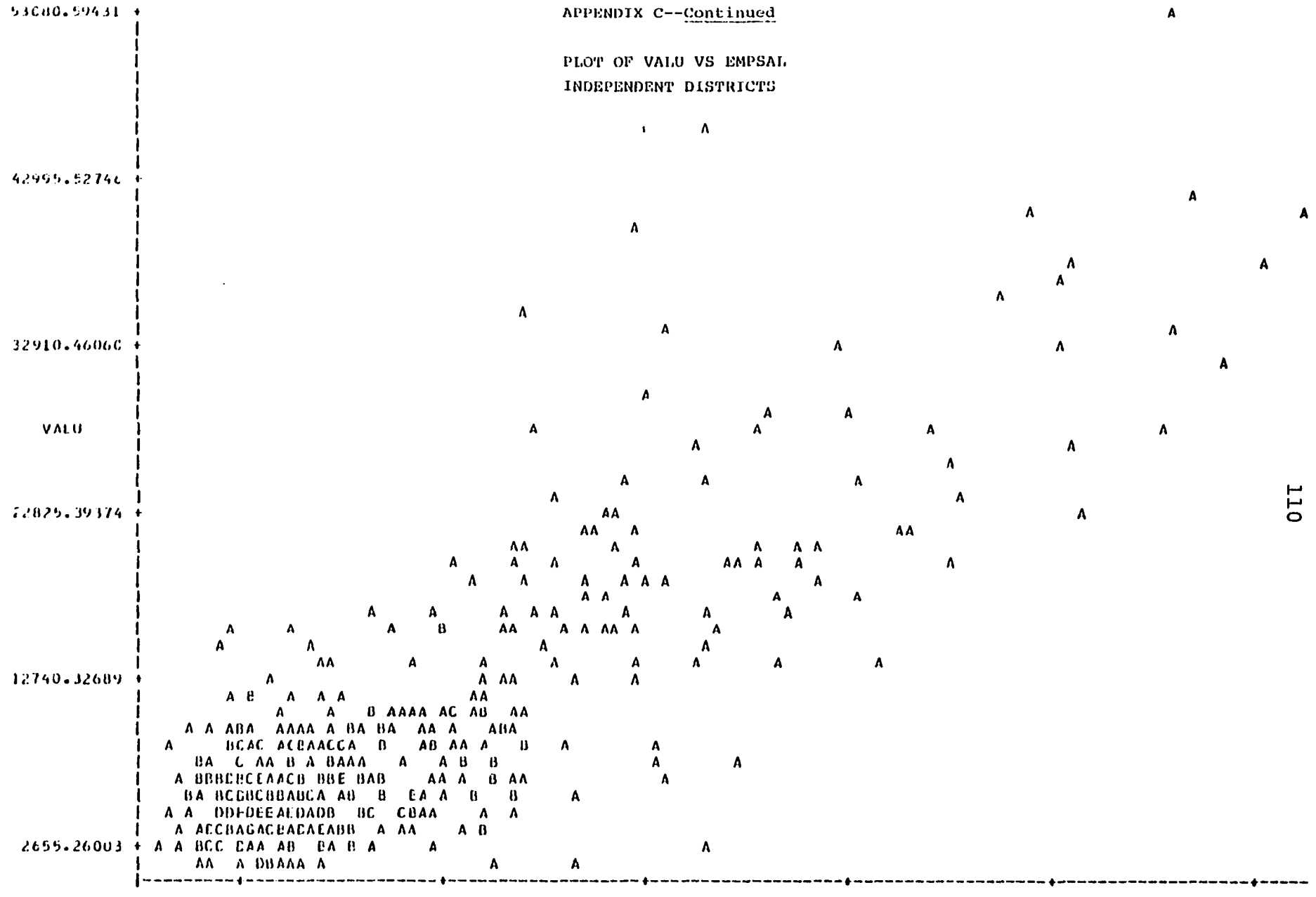
APPENDIX C--Continued

PLOT OF VALU VS INCENT
INDEPENDENT DISTRICTS

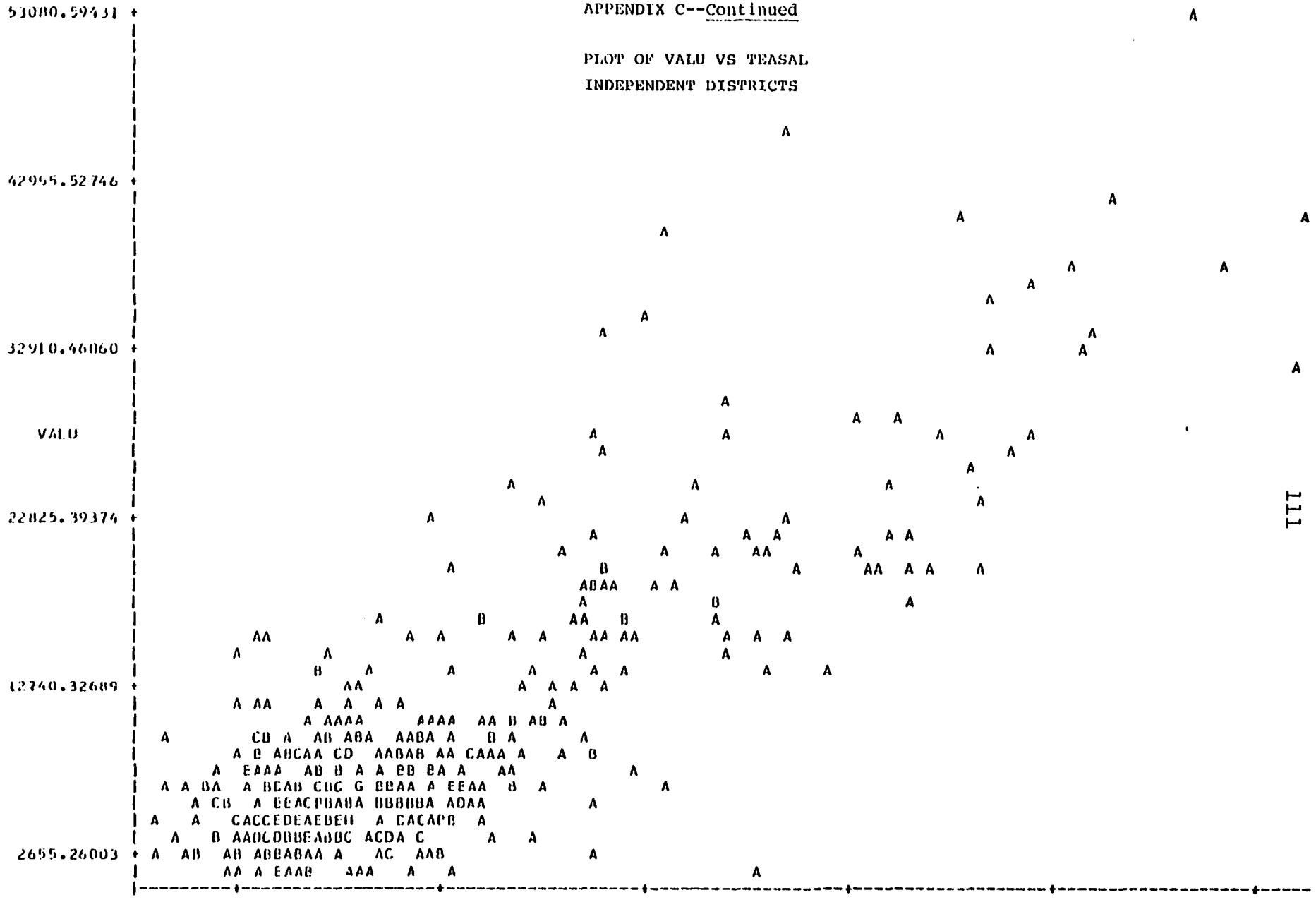



PLOT OF VALU VS FGRANTS
INDEPENDENT DISTRICTS
53080.59431
42995.52746
32910.46060
22825.39374
12740.32689
2655.26003
VALU
36.02390342
69.48477458
102.94565
136.40652
169.86739
203.32826
LEGEND: A = 1 OBS , B = 2 OBS , ETC.
FGRANTS

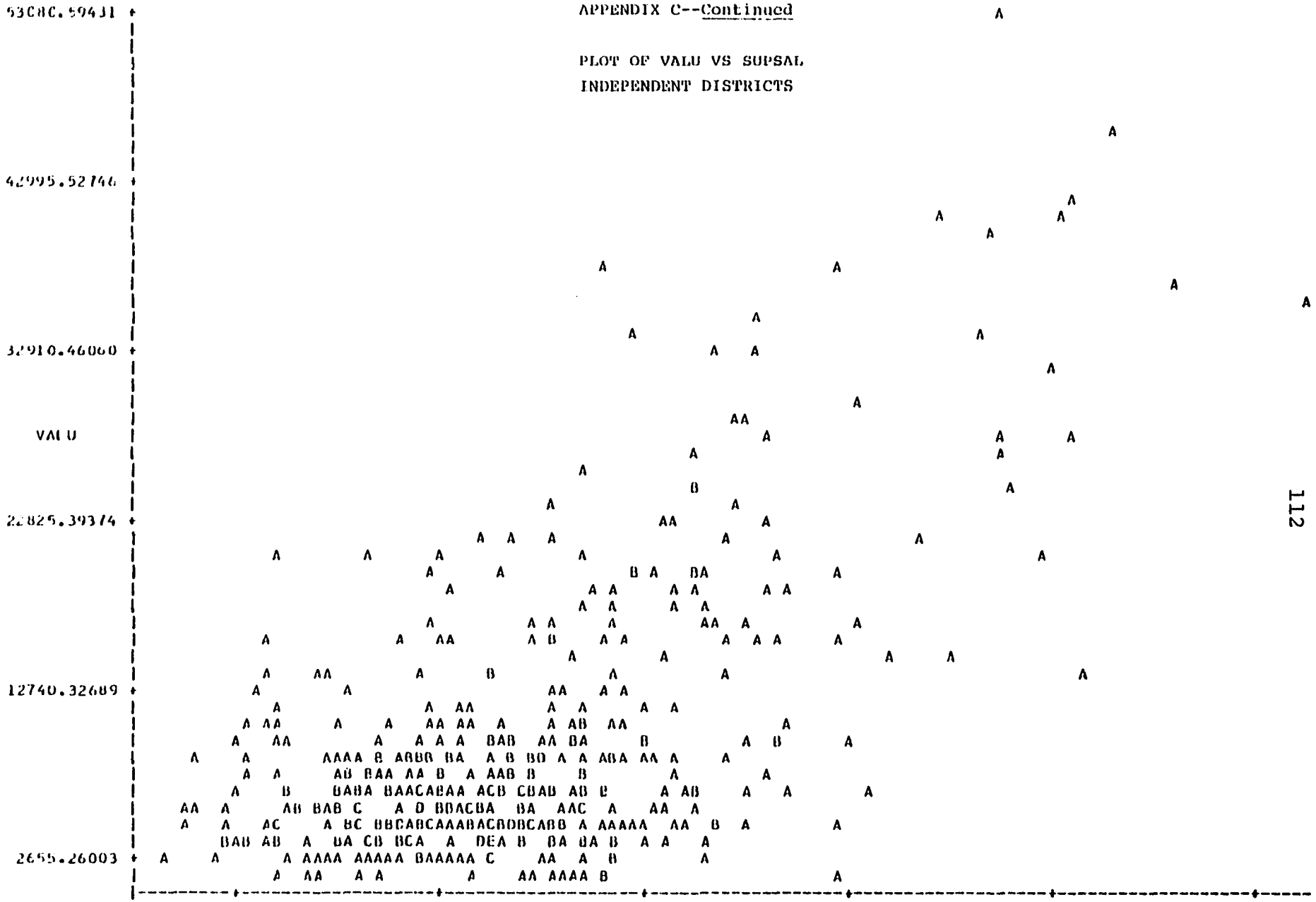
PLOT OF VALU VS EMPSAL
INDEPENDENT DISTRICTS



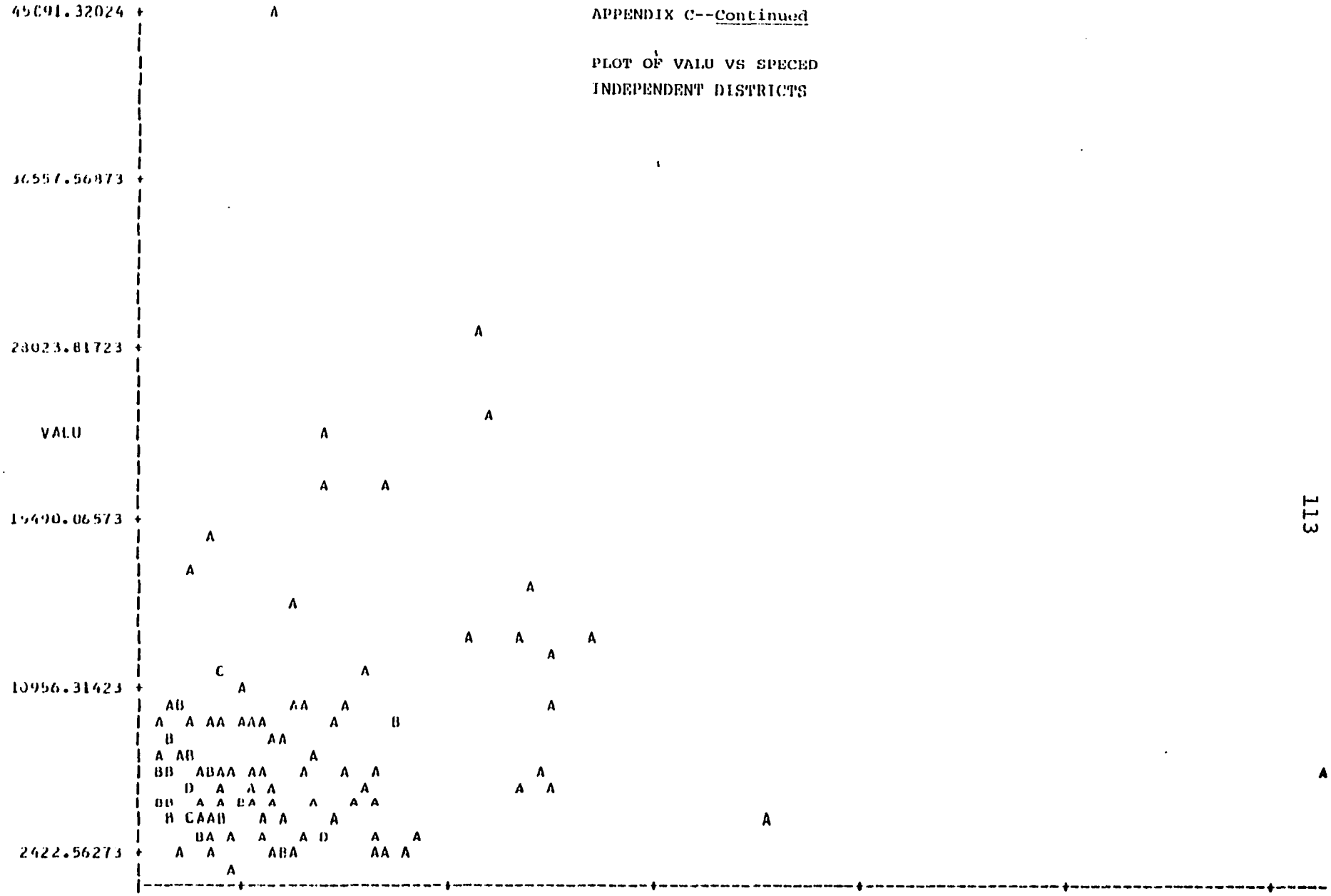
PLOT OF VALU VS TEASAL
INDEPENDENT DISTRICTS



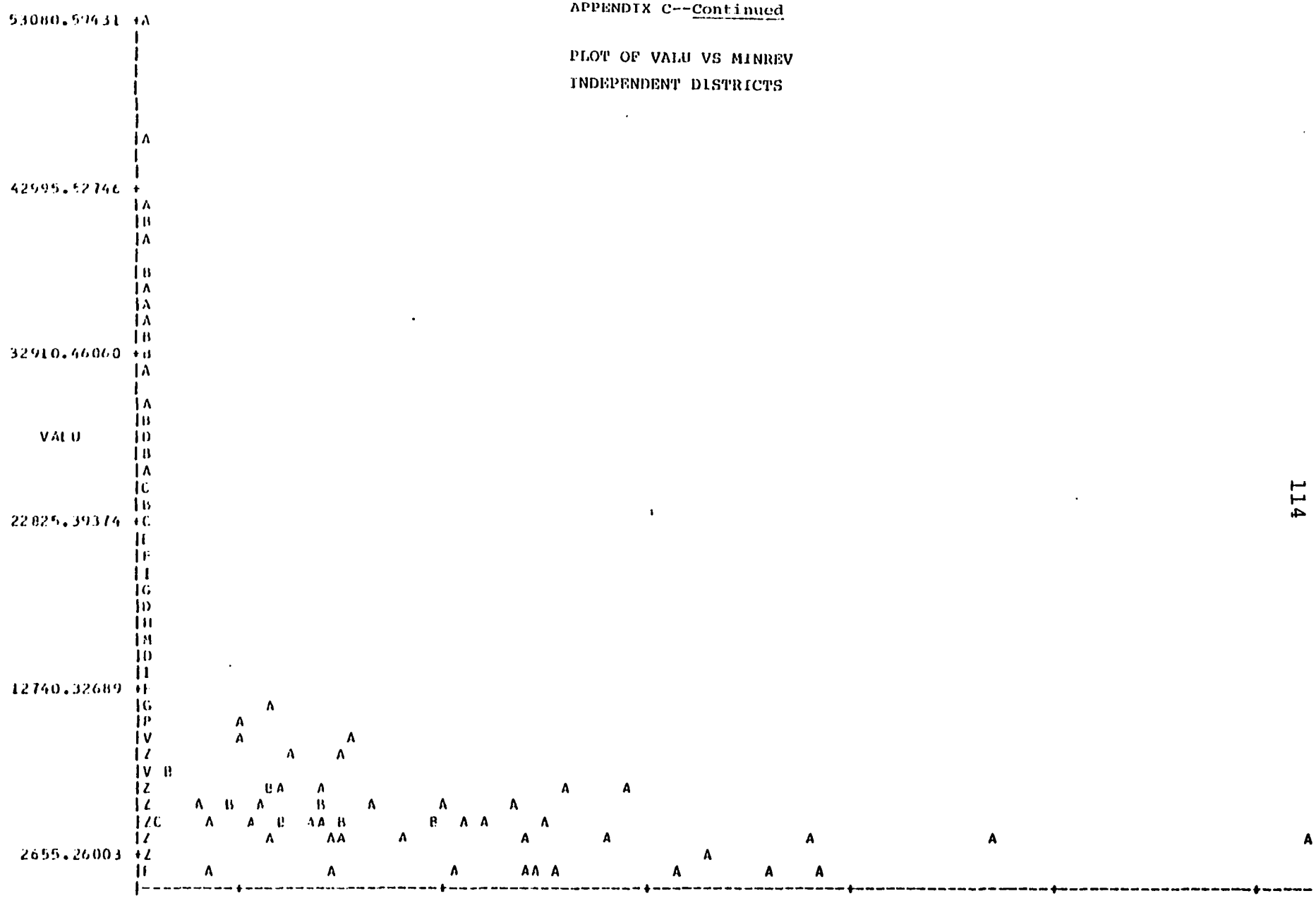
LEGEND: A = 1 OBS , B = 2 OBS , ETC.


PLOT OF VALU VS SUPSAL
INDEPENDENT DISTRICTS
53080.59431
42995.52746
32910.46060
22825.39374
12740.32689
2655.26003
VALU
1.63230426
3.67926068
5.72621709
7.77317351
9.82012992
11.86708634
SUPSAL
LEGEND: A = 1 OBS , B = 2 OBS , ETC.

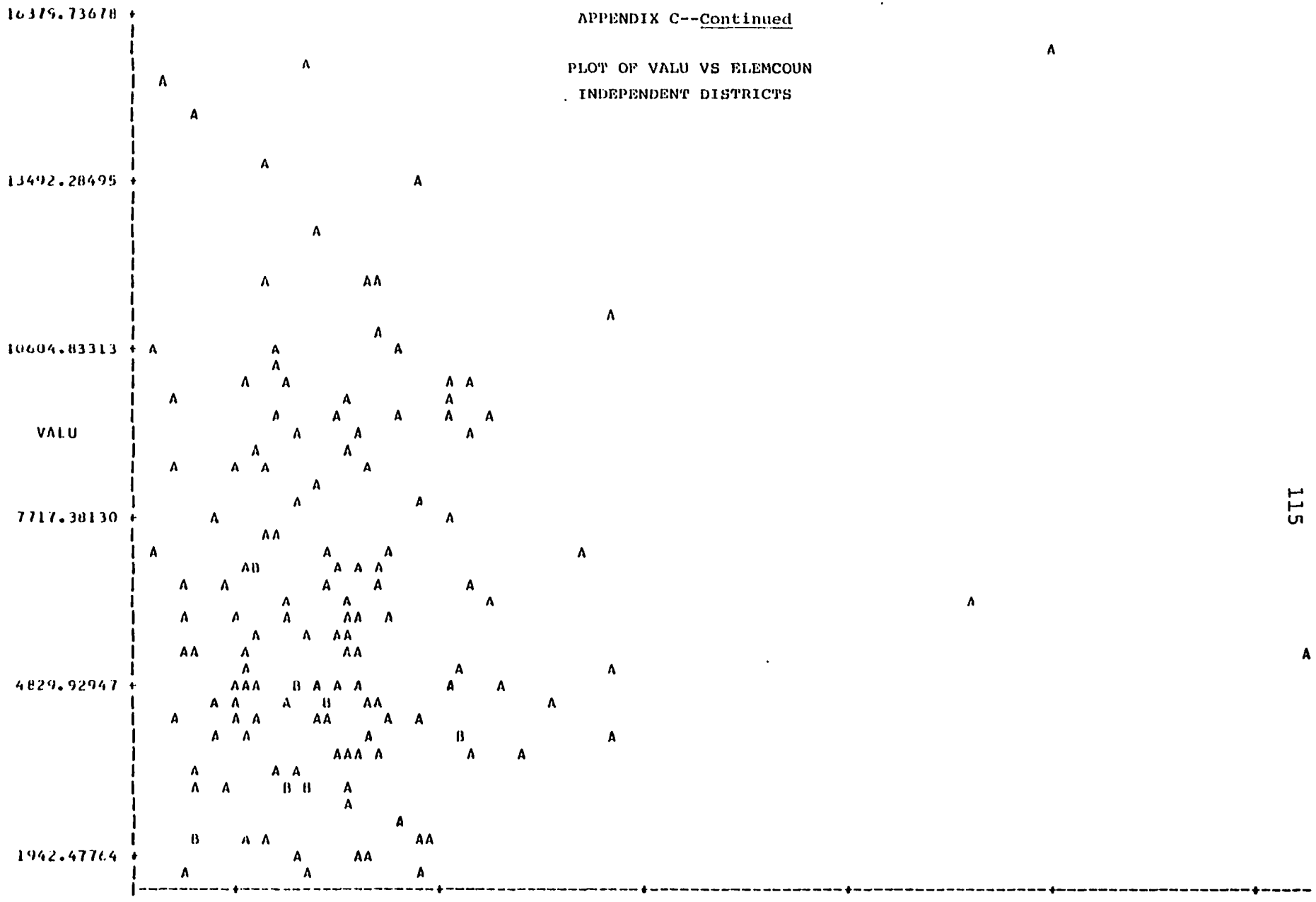
PLOT OF VALU VS SPECED
INDEPENDENT DISTRICTS



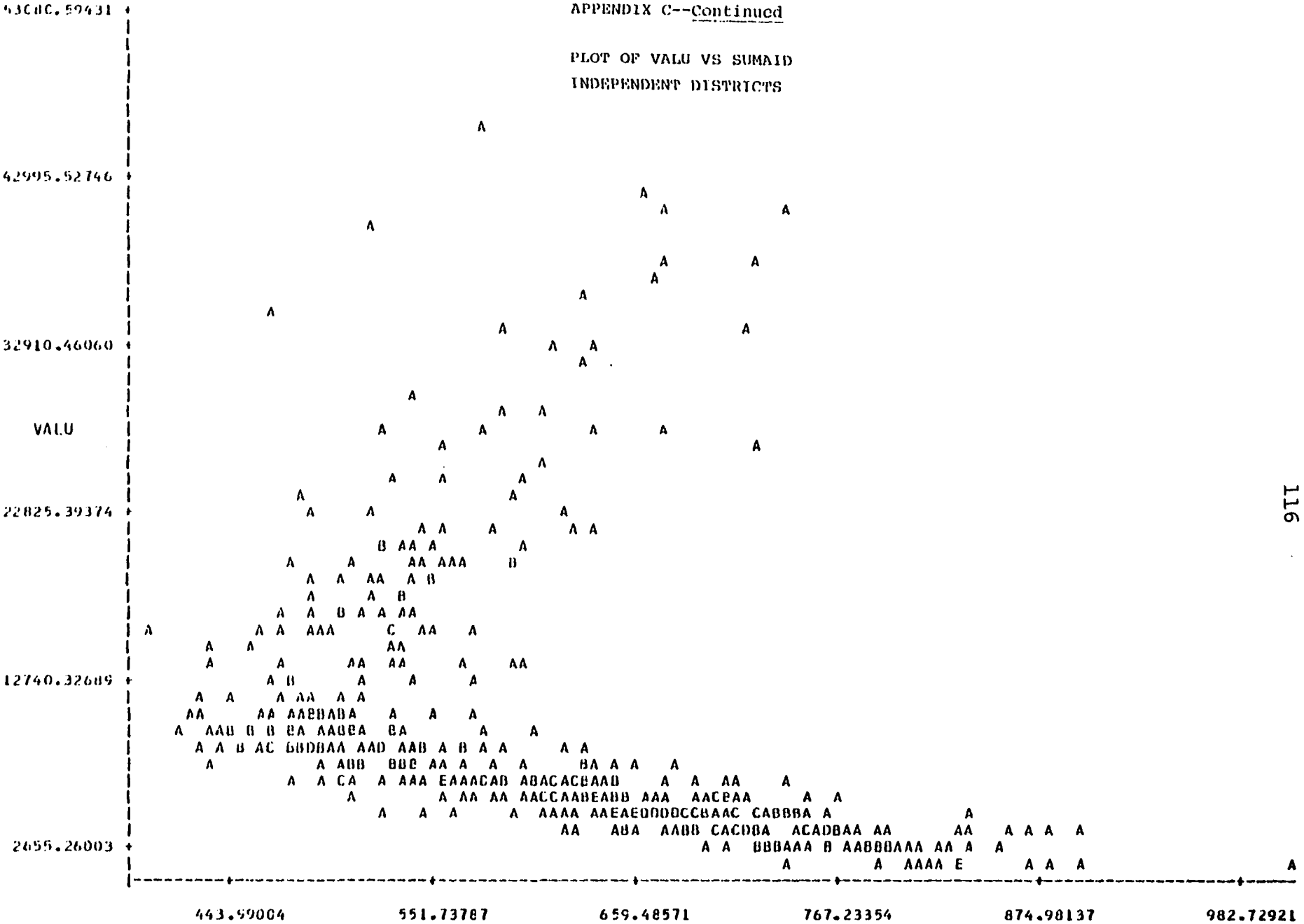
PLOT OF VALU VS MINREV
INDEPENDENT DISTRICTS



LEGEND: A = 1 OBS , B = 2 OBS , ETC.

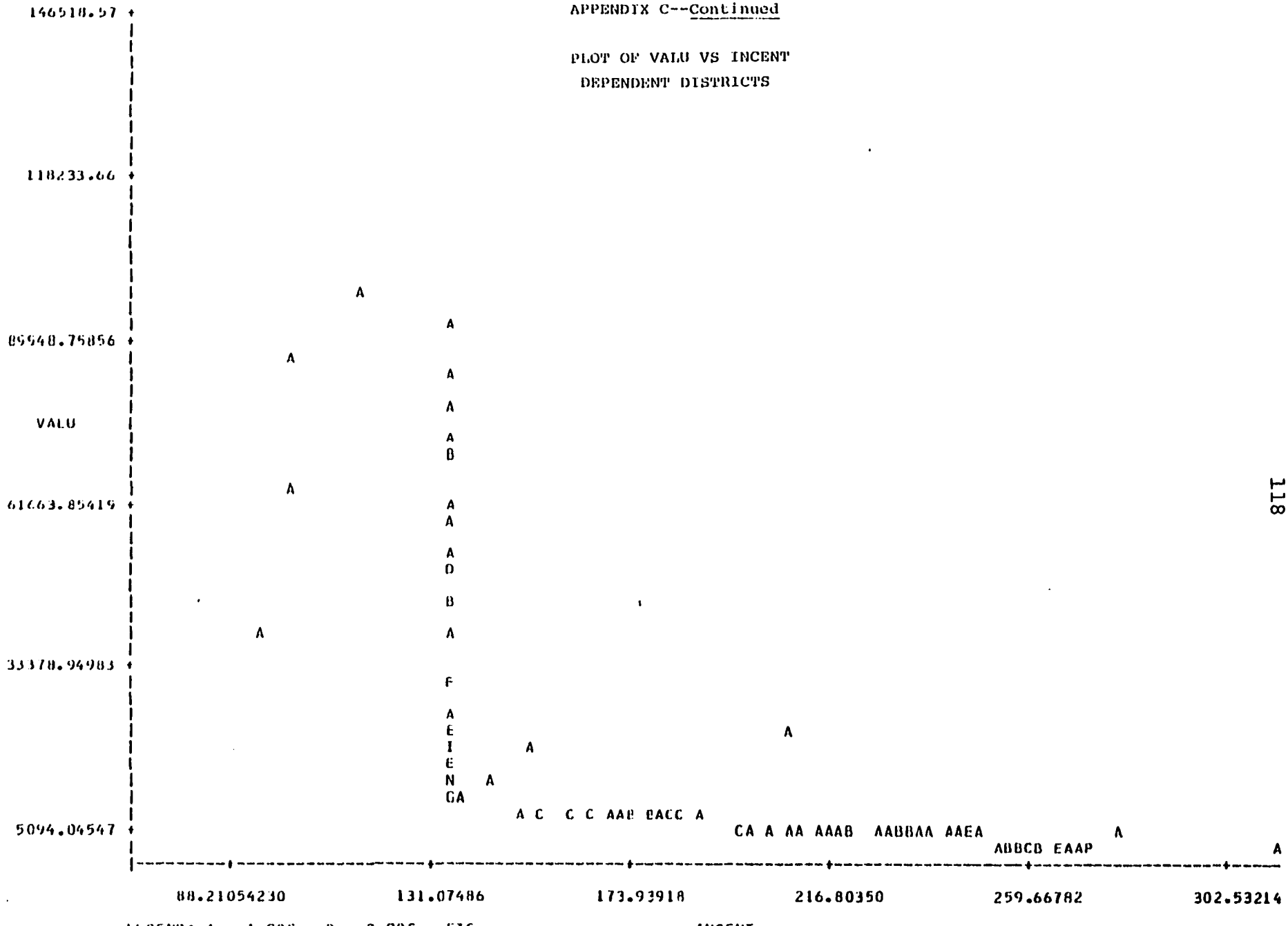

PLOT OF VALU VS ELEMCOUN
INDEPENDENT DISTRICTS
16379.73678
13492.28495
10604.83313
7717.38130
4829.92947
1942.47764
VALU
3.40169487
8.79473676
14.18777865
19.58082054
24.97386243
30.36690432
ELEMCOUN
LEGEND: A = 1 OBS , B = 2 OBS , ETC.

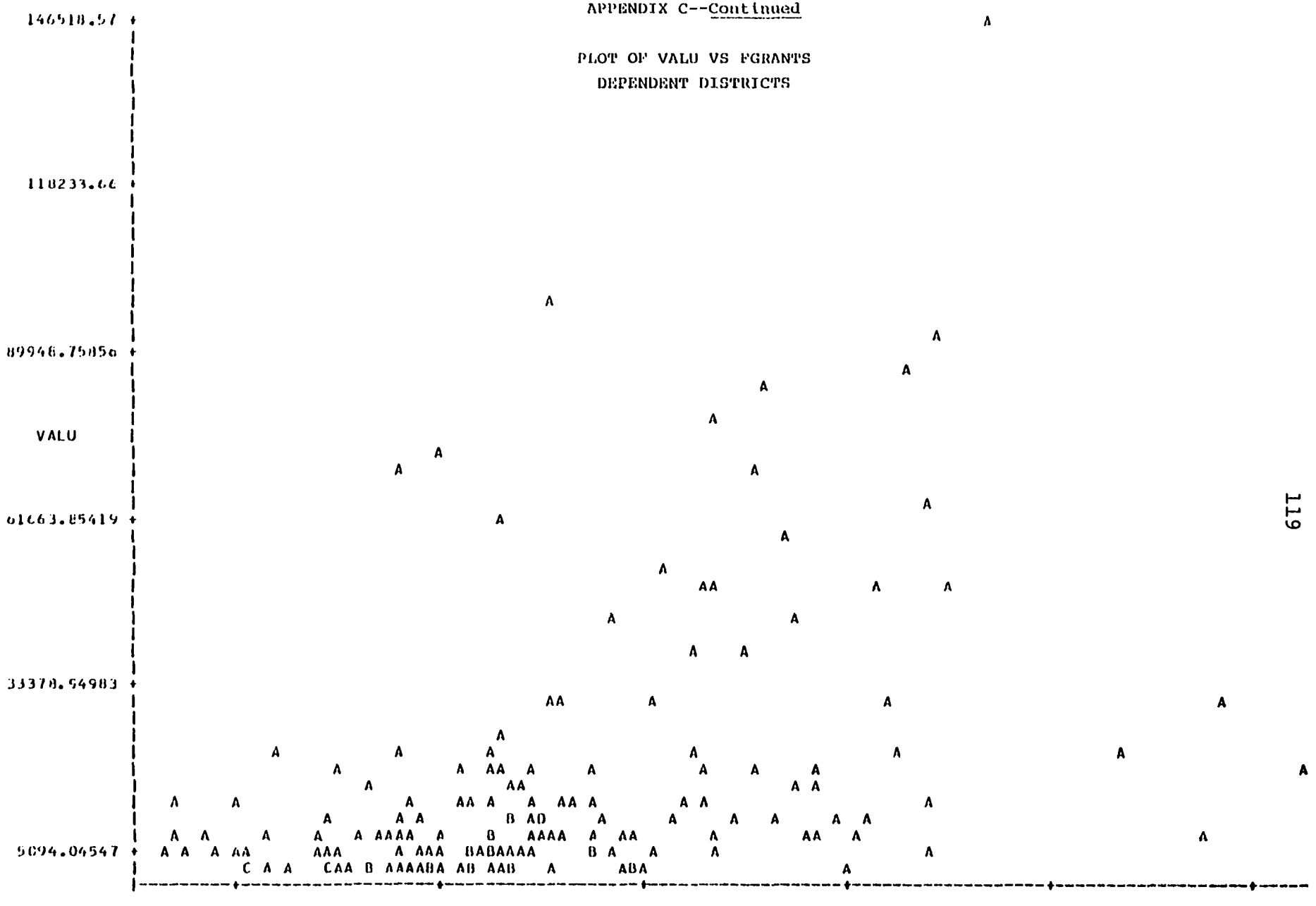
PLOT OF VALU VS SUMAID
INDEPENDENT DISTRICTS



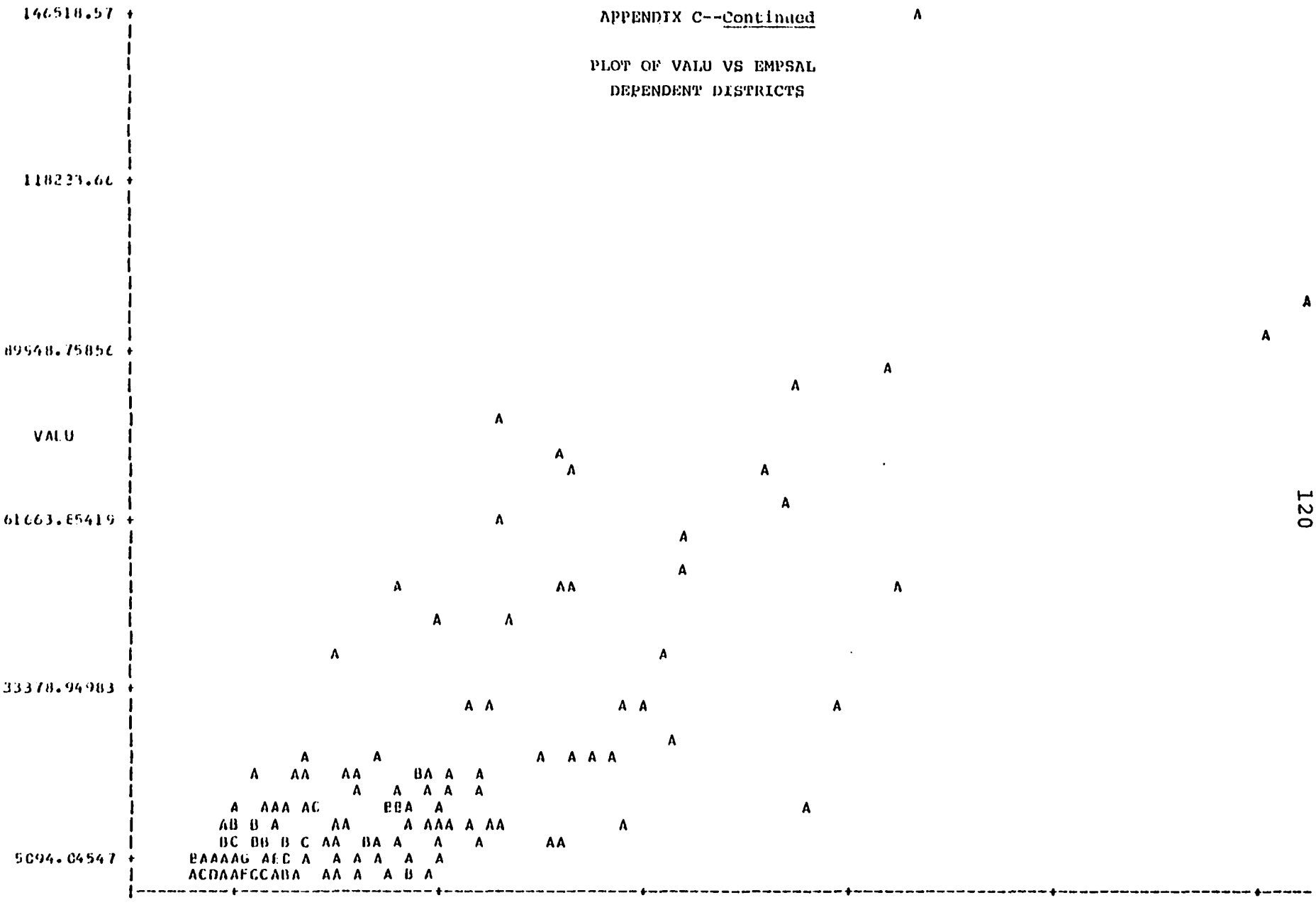
PLOT OF VALU VS FOUND
DEPENDENT DISTRICTS

APPENDIX C--Continued

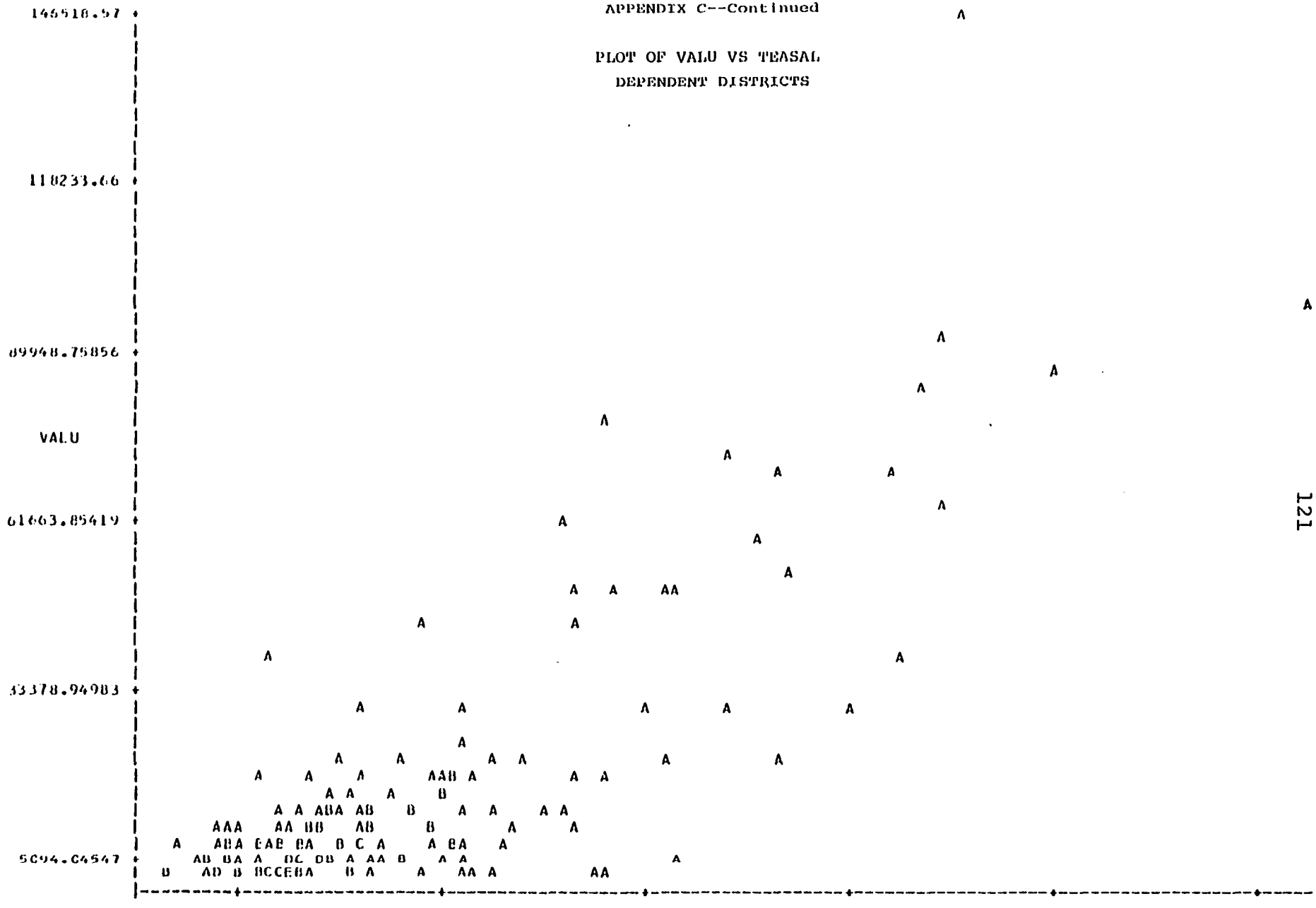



PLOT OF VALU VS FGRANTS
DEPENDENT DISTRICTS
146518.57
118233.66
89948.75056
61663.85419
33378.94983
5094.04547
VALU
32.15982468
70.60156165
109.04330
147.48504
185.92677
224.36851
FGRANTS
LEGEND: A = 1 OBS , B = 2 OBS , ETC.

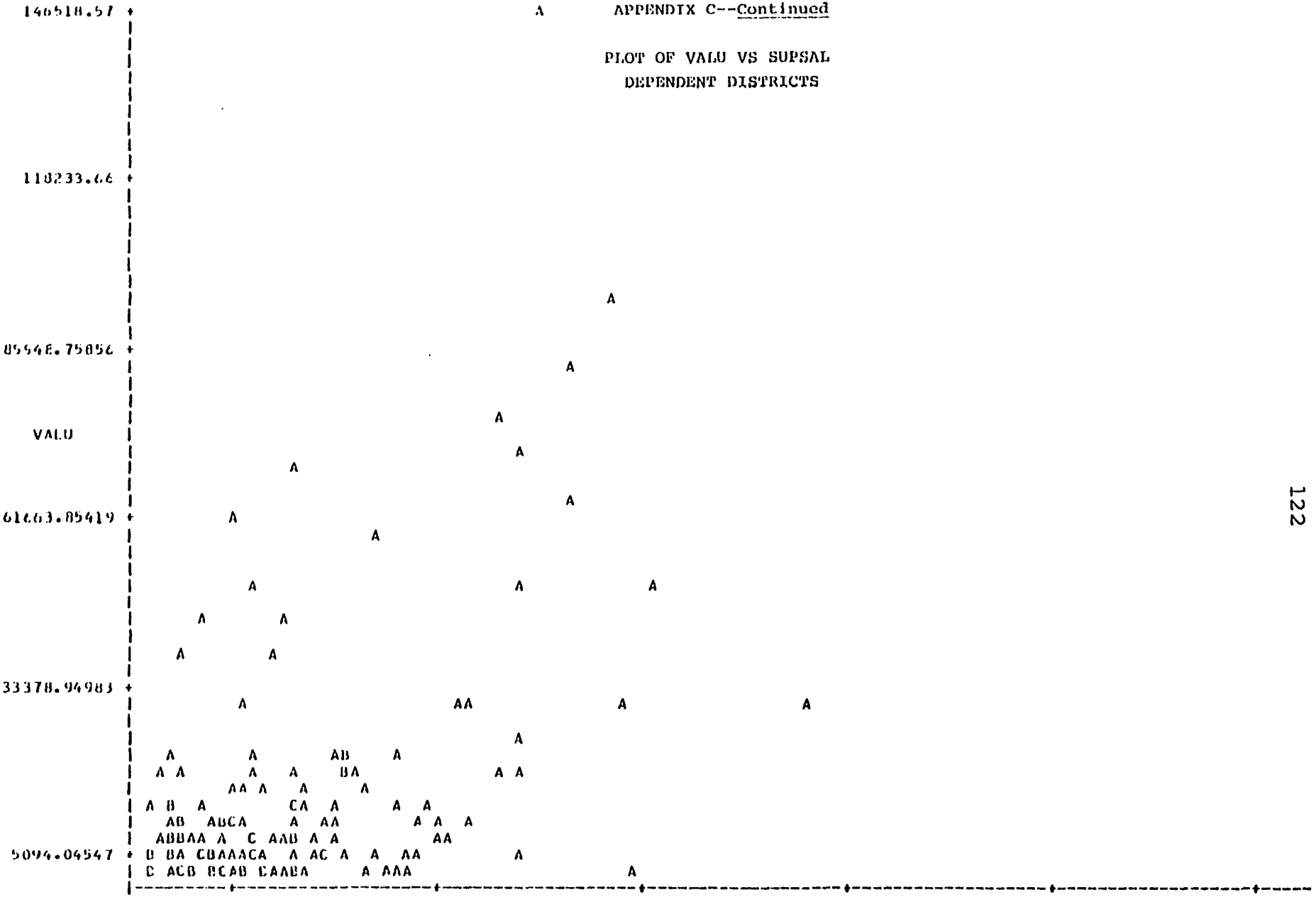
APPENDIX C--Continued



PLOT OF VALU VS TEASAL
DEPENDENT DISTRICTS

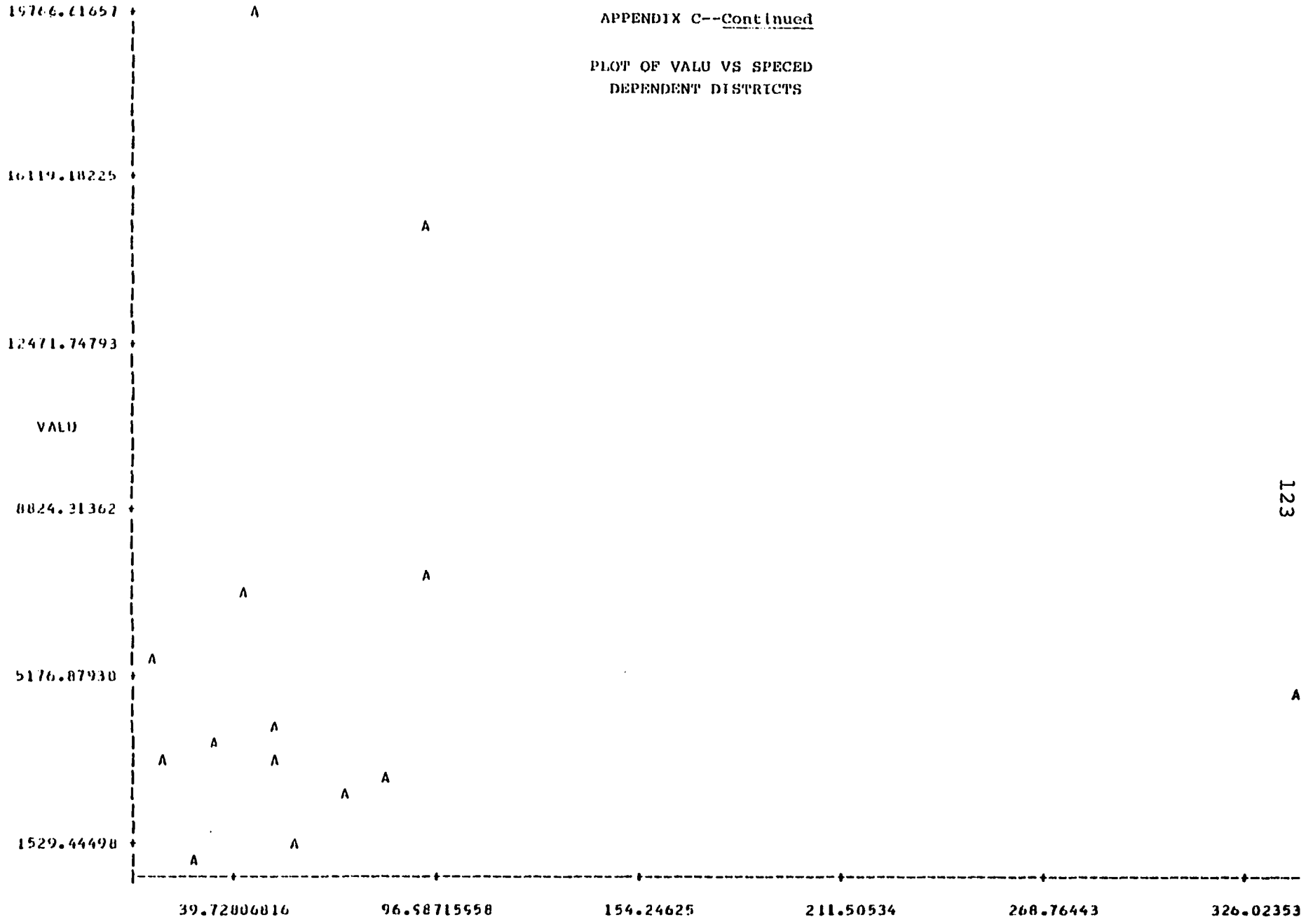


PLOT OF VALU VS SUPSAL
DEPENDENT DISTRICTS

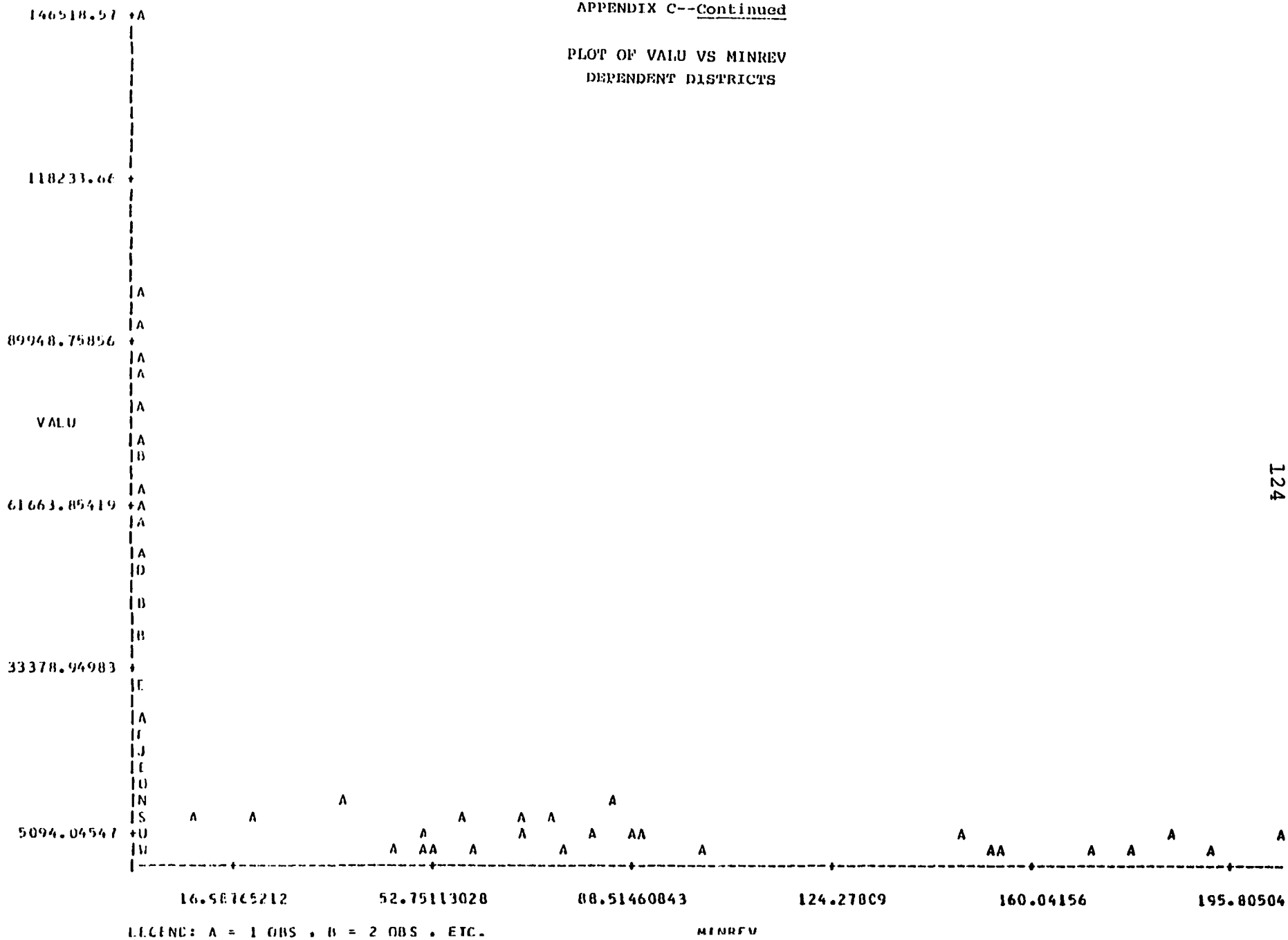


LEGEND: A = 1 OBS , B = 2 OBS , ETC.

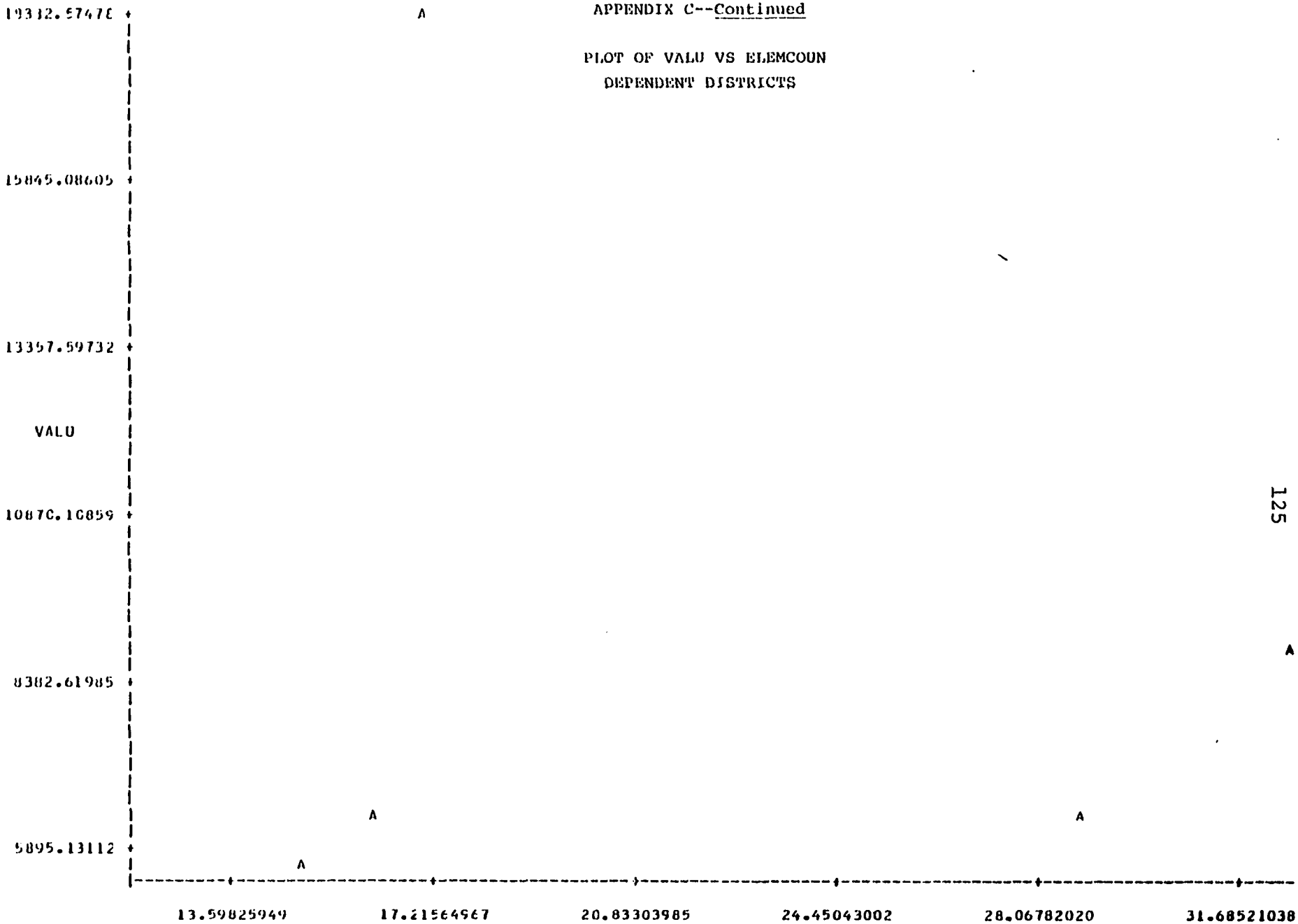
PLOT OF VALU VS SPECED
DEPENDENT DISTRICTS

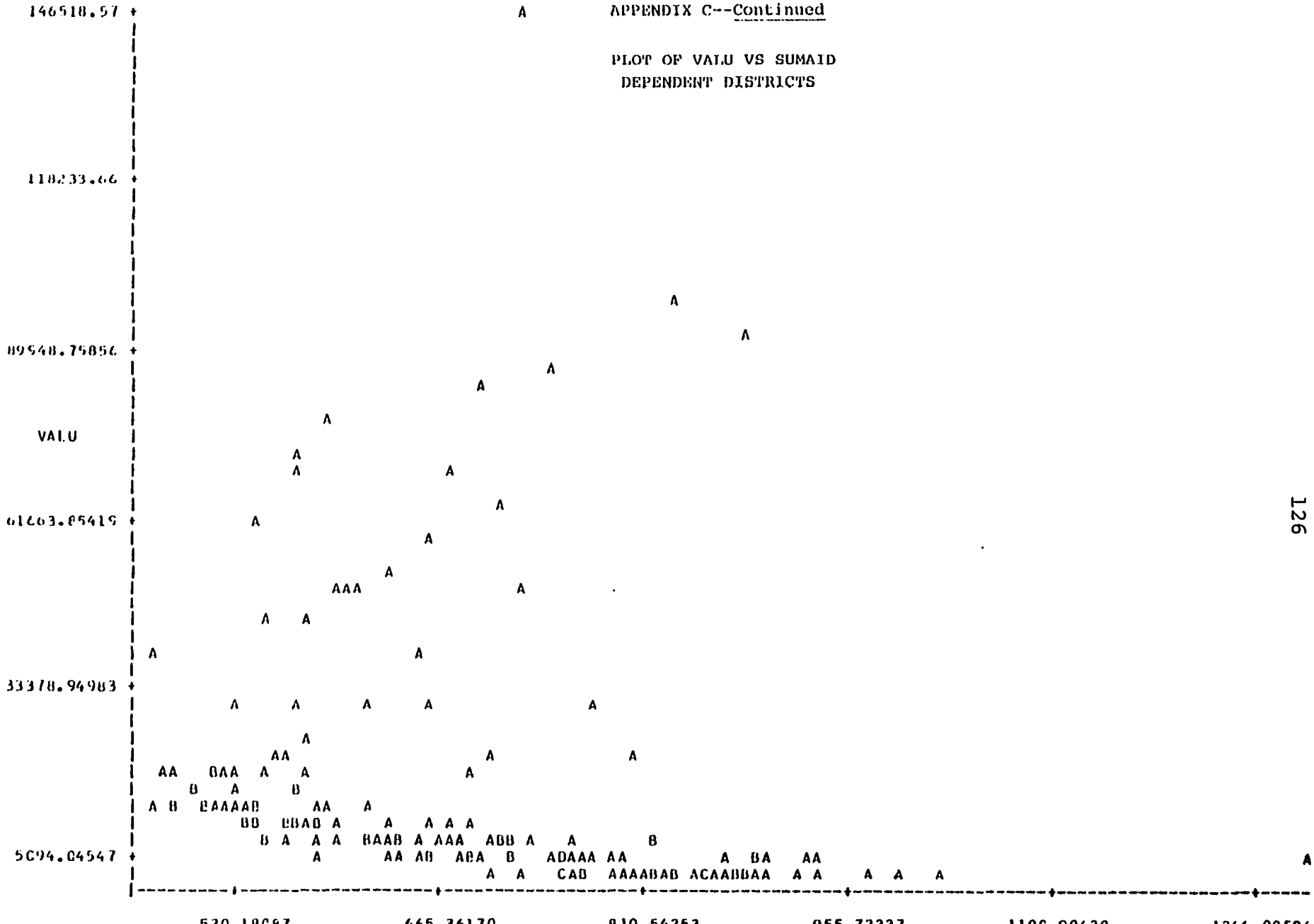


PLOT OF VALU VS MINREV
DEPENDENT DISTRICTS



LEGEND: A = 1 OBS , B = 2 OBS , ETC.


PLOT OF VALU VS ELEMCOUN
DEPENDENT DISTRICTS
19332.57478
15845.08605
13357.59732
VALU
10870.10859
8382.61985
5895.13112
A
A
A
A
13.59825949
17.21564967
20.83303985
24.45043002
28.06782020
31.68521038
LEGEND: A = 1 OBS , B = 2 OBS , ETC.
ELEMCOUN


PLOT OF VALU VS SUMAID
DEPENDENT DISTRICTS
146518.57
118233.66
89948.75856
61663.85419
33378.94983
5094.04547
VALU
520.18087
665.36170
810.54253
955.72337
1100.90420
1246.08504
SUMAID
LEGEND: A = 1 OBS , B = 2 OBS , ETC.