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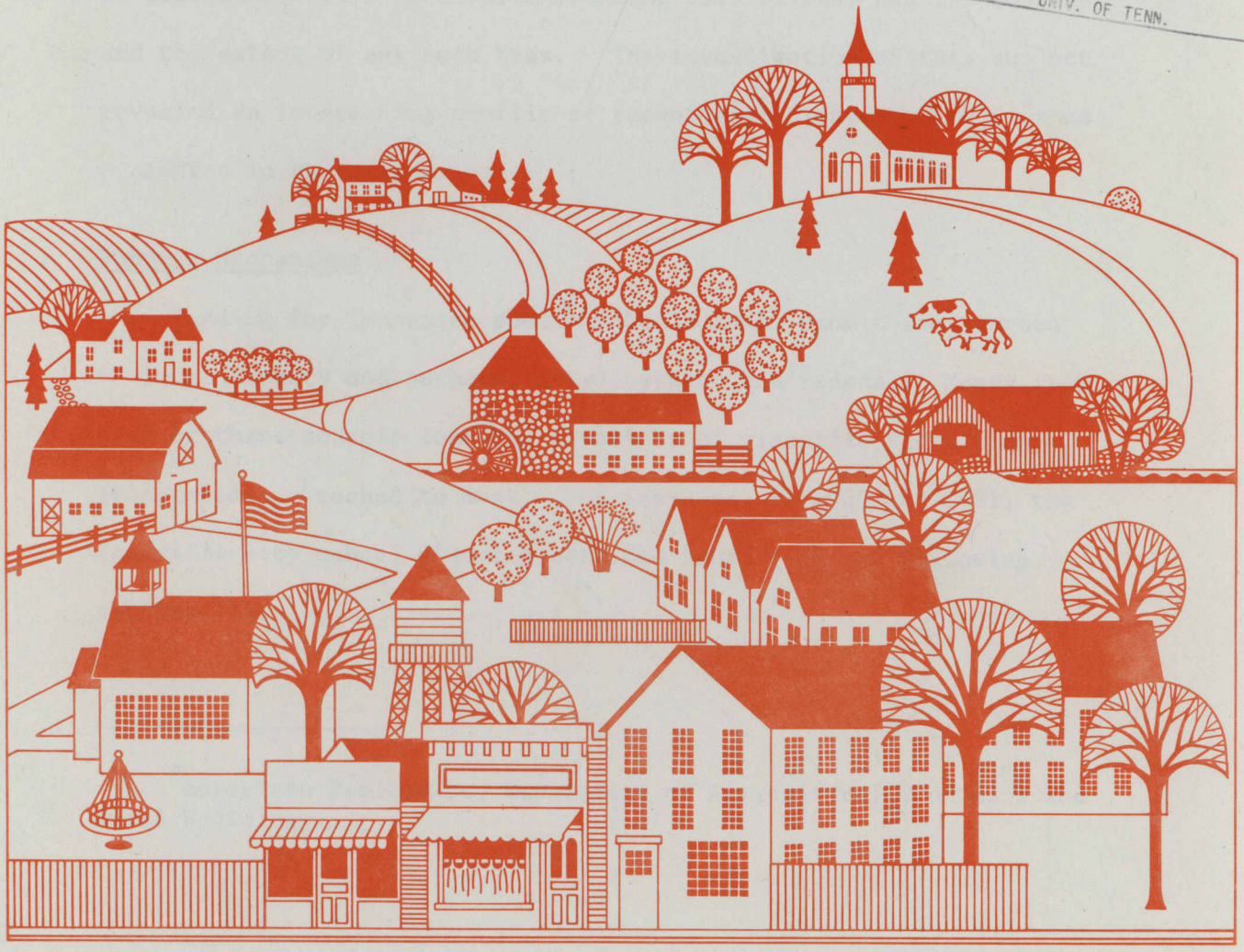

PUBLIC SCHOOL EXPENDITURES IN TENNESSEE -- A LOOK AT RURAL-URBAN DIFFERENCES

Neal Walker and Robert H. Orr*

The funding and process of educating the young have been under almost constant scrutiny in recent years with frequent calls/plans for "reform." A general lack of consensus on the functions, methods and desired results of education is a major cause of this near constant review. This study focuses on a small portion of the educational process; namely, the funding of the public school system in Tennessee. More specifically, the objectives of this paper are to determine: if a rural/urban funding bias exists; and the sources and the extent of any such bias. The investigation of this subject revealed an interesting profile of recent expenditures which is also presented in this paper.

Funding Mechanisms

Funding for Tennessee public schools comes from three sources -- local (county and perhaps, city), state, and federal. Money from each of these sources comes in a variety of classifications with restrictions attached to most. For instance, in 1980 and 1981, the Knoxville city school district obtained funds from the following sources [1]:

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City Sources

Mixed drink tax
Appropriation city general fund - taxes
Appropriation city general fund - revenue sharing
Tuition - regular day school
Tuition - summer school
Rent - use of school property
Reimbursement - jury duty
Adult education fees
Junk and miscellaneous sales
Instruction fees
Other miscellaneous revenue

County Revenue

County property taxes
Licenses, fines, fees
County-wide sales tax

State Revenue

Tennessee Foundation Program
School food services (state matching)
Textbook funds
Basic skills
Sick leave
Vocational basic grant (part B)
Vocational consumer and home making
Vocational work study
Vocational handicapped (sub part 2)
Vocational disadvantaged (sub part 2)
Other vocational funds
Other state revenue
Regular capital outlay

Federal Funds Through the State

Section 4 lunch
Section 11 lunch
Breakfast
Milk
USDA other
Adult Basic Education
Vocational disadvantaged (sub part 4)
Vocational basic grant (sub part 2)
Other vocational
Other federal funds through the state

Federal Revenue Received Directly

PL 874 Maintenance and operation
Other federal funds received directly

As is obvious from the above listing, many of the funding categories are intended for specific purposes and might entail a deliberate rural/urban bias (such as a city tax). Other special-purpose funding might result in a bias due to an uneven distribution of the recipient group. In general terms (across all Tennessee school districts) local funds account for approximately 40 percent of total funds, state funds account for approximately 45 percent, and federal funds make up the remaining 15 percent [2].

The major source of local funds is the local real estate tax. The second most important local source of revenue is the local-option sales tax. By 1979, ninety four of the State's ninety five counties and six cities levied local-option sales taxes. The most important state funding category is that of the Tennessee Foundation Program (TFP). Funds in this program constitute more than 90 percent of all state funds distributed to local school districts. The formula for allocation of TFP funds among local school districts is rather complex, but essentially it is intended to provide the core funding of teacher positions. Local school boards are required to provide a [minimal] supplement to this amount. In addition, extra money is allocated to districts that have particularly high numbers of handicapped or low socioeconomic status children. The aim of the Foundation Program is to provide a means of insuring a base level of support for each child in Tennessee. Equality of funding (per child) can be further skewed by the distribution of federal funds among districts and by local school districts which provide "above average" levels of funding from local sources.

Public school expenditures are broken down into many categories -- more than 160 for some school districts -- depending on the number of special programs and features offered. For purposes of this study, expenditures (as reported by the Annual Statistical Report of the Department of Education [3] are grouped into four categories: administrative expenditures, instruction expenditures, transportation expenditures and a total category. Administrative expenditures are not specifically examined in this study. However, they are retained as a portion of total expenditures. Revenue sources are grouped into federal, state, local (county, city and special school districts), other, and a total category.

Methodology

Perfectly equal distribution (among students) of educational expenditures would not be expected under any realistic situation. Thus bias, interpreted to mean inequality, almost certainly exists. However the extent of such bias is difficult to determine without ambiguity because of the lack of any single standardly accepted measure of "significant bias." In the absence of these commonly acknowledged techniques three possible measures of bias were employed in order to "triangulate" upon the research problem. To the degree that findings derived from the three different measures are consistent, added confidence is lent to their validity in measuring the presence and degree of bias. These measures -- the Gini coefficient (or ratio), the simple correlation coefficient and rankings -- are discussed below.

The Gini ratio is defined as the area between a Lorenz curve and a 45 degree line, divided by the area below the 45 degree line.

A Lorenz curve is defined as follows: "With percentages from 0 to 100 on each axis, the [Lorenz] curve shows the cumulative percentage relationships between two variables, one on each axis. The curve is used to measure the degree of departure from a uniform distribution in which 1% of one variable would be matched by 1% in the other variable. A completely uniform distribution would appear as a straight line of 45 degrees" [4].

The most obvious use of the Gini ratio in this study would be to consider the two variables total educational expenditures and student numbers. If expenditures were allocated equally among students, the Gini ratio would be zero. Gini ratios could also be computed for income and population (poor people would be expected to fund education at lower levels), and for Federal, State or local revenues versus student enrollment. However in considering the inequality in funding by source of revenue, the resulting Gini ratios would not be cumulative or directly comparable since inequality in the distribution of federal funds could be offset by inequality of distribution of state funds, etc.

The simple correlation coefficient measures the degree of association between two variables. For two variables X and Y, the correlation coefficient r is computed as follows:

$$r = \frac{(X-\bar{x})\ (Y-\bar{y})}{\sqrt{(X-\bar{x})^2(Y-\bar{y})^2}}$$

where X and Y are observations and x and y are sample means, respectively. The correlation coefficient is independent of units of measurement and thus can be compared between different samples. A priori a high correlation would be expected between per capita

income and local educational funding per student. Similarly, if the Tennessee Foundation Program effectively equalizes educational expenditures across school districts, then State funding per student should be negatively correlated with per capita income.

A third method of identifying bias in per capita educational expenditures involves ranking of expenditure and revenue statistics. If rural counties (for example) are consistently ranked at the bottom of the per capita expenditure scale, then ranking can also be used to identify the source of the bias as to funding source.

The time period for this study was defined as the 1969-70 through the 1980-81 school year. Educational statistics are normally reported on a school year basis; other data which are reported on a calendar year basis were matched with the school year beginning in the same calendar year, e.g., the 1969 population figures would correspond to the 1969-70 school year data.

Educational data utilized were on a school district basis. The number of school districts in Tennessee during the study period varied from 146 in 1973-74 and 1974-75 to 149 in 1969-70. Data on noneducational variables were reported on a county basis for the 95 Tennessee counties. If a particular county contained multiple school districts, the characteristics of the county were assigned to each school district equally -- population density and personal income data were not readily available for each school district separately. Unless otherwise noted, statistics relating to student numbers were calculated using the number of students in Average Daily Attendance (ADA).

All funding data (receipts and expenditures) utilized represent revenue funding only. Nonrevenue sources of funds were not considered.

Findings by School District

Gini ratios for the distribution of total educational expenditures amongst student numbers indicate an increasing degree of inequality during the early 1970's which leveled off in the mid 1970's at still rather low levels (Table 1). A primary cause of unequal expenditures might be an unequal distribution of income among the population in general. Gini ratios for income distribution among populations are also presented in Table 1 and indicate that income inequalities were about equal to educational expenditure inequalities during the latter part of the study period.

Gini ratios reflecting educational expenditure inequalities by source of funding are presented in Table 2. The inequality in distribution of both federal and local revenues was several times the magnitude of the inequality in state revenue distribution. Also the Gini ratios for both federal and local funding decreased during the study period while the Gini ratios for state revenues remained almost constant. This suggests that the capacity of State revenues to offset inequality in local revenue distribution is limited and would be effective only if state funds were tightly targeted to low expenditure districts. The fact that Gini ratios for federal and local revenues decreased over the study period but Gini ratios for total educational expenditures did not indicates that changes in the distributions of revenues from one source were partially offset by changes in the distribution of revenues from other sources.

Table 1. Gini Ratios*, 95 Tennessee Counties, by Year, 1969-1980

Year	Total Educational Expenditures .v. Student Numbers ADA	Population .v. Income
1969	0.087	0.121
1970	0.085	0.104
1971	0.098	0.102
1972	0.112	0.106
1973	0.122	0.104
1974	0.123	0.113
1975	0.126	0.105
1976	0.119	0.104
1977	0.115	0.111
1978	0.111	0.109
1979	0.111	0.111
1980	0.113	0.117

*The unit of analysis is the county with the counties of the state arrayed first in order of total educational expenditures and then in order of student numbers for a given year. The cumulative totals for each characteristic then yield a curve. It is the deviation of this curve from the diagonal that creates the space which is the basis for the Gini ratio. The values permit comparison of the equality of distributions but say little about the shape of those distributions.

Table 2. Gini Ratios, 146 School Districts*, Source of Funding .v. Student Numbers, 1969-1980

Year	Total Federal Revenue .v. Student Numbers ADA	Total State Revenue .v. Student Numbers ADA	Total Local Revenue .v. Student Numbers ADA
1969-1970	0.248	0.041	0.270
1970-1971	0.229	0.038	0.252
1971-1972	0.225	0.036	0.272
1972-1973	0.219	0.038	0.279
1973-1974	0.228	0.044	0.266
1974-1975	0.225	0.058	0.259
1975-1976	0.198	0.061	0.258
1976-1977	0.206	0.047	0.240
1977-1978	0.185	0.046	0.238
1978-1979	0.178	0.042	0.235
1979-1980	0.192	0.045	0.236
1980-1981	0.202	0.044	0.236

*Five school districts created after the 1969-1970 academic year were omitted from the analysis.

Gini ratios are useful in locating unequal distributions and in providing a measure of the degree of inequality in distribution, but they do not reveal sources of inequality and thus do little to provide hypotheses concerning causation. Correlation coefficients are useful in providing information about relationships. Correlation coefficients relating population density to educational funding categories are presented in Table 3. Total educational funding/ADA and population density were positively correlated throughout the study period, although there was some variation in the size of the coefficients. This indicates that densely populated areas are more likely to enjoy higher levels of funding for education than sparsely populated areas; i.e., there is a bias in favor of more heavily populated areas of the state.

The source(s) of the bias can be deduced from the correlation coefficients on local, state, and federal funding versus population density. In all years of the study, there was a positive relationship between population density and local funding and negative relationships between population density and state and federal funding. Furthermore, the relationship between population density and local funding was much stronger than the relationship between population density and state and federal funding in all years. Thus less heavily populated school districts receive smaller amounts of local funding per student than do the more heavily populated areas. These lower levels of funding are only partially offset by funding from state and federal sources leaving the rural areas generally underfunded compared to urban areas.

Table 3. Correlation Coefficients Relating Population Density to Local, State and Federal Educational Funding Per Student ADA, 95 Tennessee Counties, by School Year, 1969-1980*

Year	Population Density .v. Local Educational Funding Per Student ADA	Population Density .v. State Educational Funding Per Student ADA	Population Density .v. Federal Educational Funding Per Student ADA	Population Density .v. Total Educational Funding Per Student ADA
1969-1970	0.692	-0.231	-0.247	0.208
1970-1971	0.665	-0.175	-0.180	0.236
1971-1972	0.693	-0.136	-0.183	0.214
1972-1973	0.698	-0.101	-0.128	0.274
1973-1974	0.702	-0.069	-0.055	0.239
1974-1975	0.699	-0.060	-0.109	0.312
1975-1976	0.421	-0.067	-0.044	0.194
1976-1977	0.638	-0.074	-0.030	0.252
1977-1978	0.644	-0.095	-0.058	0.185
1978-1979	0.623	-0.090	-0.045	0.366
1979-1980	0.558	-0.081	-0.084	0.147
1980-1981	0.495	-0.082	-0.096	0.220

*Significance levels of coefficients are not reported because they comprise the population, not a sample, of the years included in the study.

The funding bias towards urban areas may be exacerbated by other factors on the spending side (Table 4). The consistent pattern of negative coefficients in the relationship of population density with transportation expenditures per student ADA suggest that rural school districts tend to spend more per student on transportation than do urban school districts, a relationship to be expected given the distances involved. This leaves even less money per student to be spent for instructional purposes. This is indicated by the positive coefficients in the second column, which suggest that urban school districts spend more than their rural counterparts in instruction per student ADA. Furthermore, the correlation coefficients for instructional expenses are higher than those for total educational expenditures (Table 3).

The reason for the lower local revenues per student in rural areas is also suggested from data in Table 4. The data show a relatively high positive correlation between per capita income and population density. People in urban areas can support education at higher levels than do rural people because they have higher incomes [and tax bases] than do rural people.

Table 4 also lists the correlation coefficients by year for population density versus percentage of student enrollment failed. At the beginning of the study period there was a slight negative correlation between those two variables suggesting that rural students were more likely to fail than their urban counterparts. However, this negative correlation decreased to near zero in 1978-79 and then turned slightly positive for the last two study years. It may be that lower per student educational expenditures have no

Table 4. Correlation Coefficients Relating Population Density to Per Capita Income and Educational Variables, Tennessee Counties, by Year, 1969-1980

Year	Population Density .v. Per Capita Income	Population Density .v. Expenditures on Instruction Per Student ADA	Population Density .v. Expenditures on Transportation Per Student ADA	Population Density .v. the Percentage of Enrollment Failed
1969-1970	0.575	0.466	-0.183	-0.116
1970-1971	0.566	0.469	-0.177	-0.160
1971-1972	0.573	0.462	-0.156	-0.118
1972-1973	0.595	0.481	-0.116	-0.112
1973-1974	0.612	0.527	-0.105	-0.094
1974-1975	0.654	0.489	-0.103	-0.52
1975-1976	0.630	0.487	-0.082	-0.077
1976-1977	0.599	0.492	-0.037	-0.042
1977-1978	0.596	0.495	-0.076	-0.144
1978-1979	0.573	0.386	-0.066	-0.001
1979-1980	0.586	0.359	-0.071	0.127
1980-1981	0.629	0.361	-0.061	0.007

effect on educational achievement. The percentage of students failing does not offer evidence of the contrary.

The third method utilized was that of ranking. Each school district (or county where appropriate) was ranked each year of the study by each criterion variable. The averages of the ranks (over the 12 year period) for each school district are presented in Appendix Tables 1 and 2. School districts which existed for fewer than 10 of the 12 years in the study period were not ranked.

For comparison purposes the average rankings for high population density counties and those of low density counties were calculated. The 20 counties with the highest average population densities over time were labeled arbitrarily as high density. The 20 counties with the lowest population densities were labeled low density. A summary of this comparison is presented in Table 5.

There was only one school district in each of the 20 low density counties. The 20 high density counties contained a total of 41 school districts within them. The average rank of low density counties in per capita income was 26 (of a total of 96) while the average rank of the high density counties was 74, near the top of the income scale.

The average rankings for revenue per student and local revenue as a percentage of total revenue are of a possible 146 (school districts). In general, low density counties were ranked low in terms of total revenue per student, local revenue per student and local revenue as a percent of total revenue, and were ranked high in terms of state and federal revenue per student and state and federal revenue as a percentage of total revenue. Rankings of high density counties tended to be the opposite of those of low density counties.

Table 5. Average Rankings of School Districts in 20 High- and 20 Low-Population Density Counties, 1969-1980

	Average Ranking of School Districts in	
	Counties with High-Population Density	Counties with Low-Population Density
Total educational expenditures per student ADA	101	84
County revenue for education as a percent of total revenue	93	68
Federal revenue for education as a percent of total revenue	48	92
State revenue for education as a percent of total revenue	49	93
Per capita income	74	26
Transport expenditures as a percent of total education expenditures	53	118
Percent of student enrollment failed	82	70

Summary

The major objective of this study was to investigate rural/urban differences in educational expenditures over a 12 year period 1969-1981. Using a triangulation approach of three different measures of bias, it was found that per capita income is positively related to population density. This might logically result in lower rural educational expenditures unless rural areas received subsidies from the state or federal governments. In fact counties of lower population density tended to have lower total funding per student ADA than counties of greater population density. An even greater discrepancy existed on the basis of local funding per student ADA. Therefore, some degree of urban-to-rural subsidy from state and federal sources was evident in the data, but there was not enough of a transfer to overcome income effects. Thus there remained a positive association between population density and educational expenditures per student. To the degree that the kind or quality of public educational program offered to the children of the State are influenced by the level of funding, rural students were at a disadvantage during the study period.

References

[1] Newman, James A. The Annual Report of the Superintendent and the Administrative Staff to the Board of Education, Knoxville Public School System, Knoxville (1981).

[2] Basic Facts of School Finance in Tennessee, 1981, Research Report 1981-R5 of the Research Division of the Tennessee Education Association, Nashville (1981).

[3] Annual Statistical Report of the Tennessee Department of Education, Nashville (1969-70 through 1980-81).

[4] Nemmers, Erwin Esser. Dictionary of Economics and Business, Littlefield, Adams & Co. (pub.), Totowa, New Jersey (1968) (pg. 252).

APPENDIX TABLE 1

Appendix Table 1. Average Ranks of County or School District for Income, Population Density and Educational Revenue Sources, 1969-70 Through 1980-81

County	School District	Per Capita Income (County) (Rank)	Population Density (County) (Rank)	Local Revenue as a Percent of Total Education Revenue (Rank)	State Revenue as a Percent of Total Education Revenue (Rank)	Federal Revenue as a Percent of Total Education Revenue (Rank)
Anderson Co.	Anderson Co.	92	88	91	41	126
	Clinton			122	73	64
	Oak Ridge			36	15	47
Bedford Co.	Bedford Co.	81	55	82	98	48
Benton Co.	Benton Co.	66	24	68	128	67
Bledsoe Co.	Bledsoe Co.	9	6	35	90	110
Blount Co.	Blount Co.	79	81	108	75	36
	Alcoa			24	8	12
	Maryville			58	39	27
Bradley Co.	Bradley Co.	75	87	107	64	46
	Cleveland			74	35	26
Campbell Co.	Campbell Co.	23	66	50	88	100
Cannon Co.	Cannon Co.	44	25	61	110	78
Carroll Co.	Carroll Co.	59	44	61	69	120
	Atwood			8	95	103
	H. Rock			17	78	64
	Huntingdon			17	76	93
	McKenzie			15	80	48
	South Carrol			22	100	97
	Trezevant			25	99	107
Carter Co.	Carter Co.	38	84	54	107	107
	Elizabethton			29	41	34
Cheatham Co.	Cheatham Co.	56	53	80	101	20
Chester Co.	Chester Co.	23	32	41	142	85
Claibourne Co.	Claibourne Co.	18	49	50	59	126
Clay Co.	Clay Co.	8	16	27	81	139
Cocke Co.	Cocke Co.	25	62	65	89	115
	Newport			42	59	49
Coffee Co.	Coffee Co.	80	72	70	82	79
	Manchester			54	53	83
	Tullahoma			8	46	88
Crockett Co.	Crockett Co.	50	54	25	126	101
	Alamo			30	124	102
	Bells			30	115	108
	Crockett Mills			46	131	98
	Friendship			40	124	74
	Gadsden			41	105	111
	Maury City			40	116	123
Cumberland Co.	Cumberland Co.	18	30	66	72	80
Davidson Co.	Davidson Co.	95	94	146	17	29
Decatur Co.	Decatur Co.	37	16	85	132	67
DeKalb Co.	DeKalb Co.	46	38	38	66	121

Appendix Table 1 (Continued)

County	School District	Per Capita Income (County) (Rank)	Population Density (County) (Rank)	Local Revenue as a Percent of Total Education Revenue (Rank)	State Revenue as a Percent of Total Education Revenue (Rank)	Federal Revenue as a Percent of Total Education Revenue (Rank)
Dickson Co.	Dickson Co.	64	54	103	87	32
Dyer Co.	Dyer Co.	75	61	85	53	114
	Dyersburg			63	72	47
Fayette Co.	Fayette Co.	8	26	23	65	135
Fentress Co.	Fentress Co.	3	12	38	96	131
Franklin Co.	Franklin Co.	42	54	65	111	86
Gibson Co.	Gibson Co.	68	71	82	75	105
	Humboldt			40	81	105
	Milan			53	104	85
	Trenton			*	*	*
	Bradford			*	*	*
Giles Co.	Giles Co.	75	33	122	82	62
Grainger Co.	Grainger Co.	15	55	39	128	109
Greene Co.	Greene Co.	52	73	93	74	71
	Greeneville			41	35	45
Grundy Co.	Grundy Co.	10	24	36	73	94
Hamblen Co.	Hamblen Co.	67	89	127	45	38
	Morristown			121	38	26
Hamilton Co.	Hamilton Co.	93	92	145	34	12
	Chattanooga			133	15	93
Hancock Co.	Hancock Co.	11	14	8	100	145
Hardeman Co.	Hardeman Co.	22	28	74	98	125
Hardin Co.	Hardin Co.	28	26	71	80	92
Hawkins Co.	Hawkins Co.	40	71	72	82	91
	Rogersville			86	52	72
Haywood Co.	Haywood Co.	25	33	55	67	134
	Brownsville			*	*	*
Henderson Co.	Henderson Co.	44	32	60	114	82
	Lexington			117	96	66
Henry Co.	Henry Co.	72	43	135	68	61
	Paris			122	25	38
Hickman Co.	Hickman Co.	39	8	113	91	54
Houston Co.	Houston Co.	41	18	54	135	96
Humphreys Co.	Humphreys Co.	64	13	121	94	45
Jackson Co.	Jackson Co.	8	9	50	83	129
Jefferson Co.	Jefferson Co.	50	77	94	82	68
Johnson Co.	Johnson Co.	25	37	85	65	123
Knox Co.	Knox Co.	88	93	143	25	30
	Knoxville			132	25	47
Lake Co.	Lake Co.	31	42	79	58	141
Lauderville Co.	Lauderville Co.	30	45	55	84	129
Lawrence Co.	Lawrence Co.	52	52	90	106	77
Lewis Co.	Lewis Co.	18	13	59	134	60

Appendix Table 1 (Continued)

County	School District	Per Capita Income (County) (Rank)	Population Density (County) (Rank)	Local Revenue as a Percent of Total Education Revenue (Rank)	State Revenue as a Percent of Total Education Revenue (Rank)	Federal Revenue as a Percent of Total Education Revenue (Rank)
Lincoln Co.	Lincoln Co.	52	41	74	95	70
	Fayetteville			76	60	92
Loudon Co.	Loudon Co.	68	78	119	59	60
	Lenoir City			81	51	57
McMinn Co.	McMinn Co.	61	75	112	60	32
	Athens			88	29	44
	Etowah			117	41	50
McNairy Co.	McNairy Co.	32	30	67	91	104
Macon Co.	Macon Co.	51	40	63	100	114
Madison Co.	Madison Co.	77	83	96	94	74
	Jackson			57	48	70
Marion Co.	Marion Co.	52	40	97	76	83
	Richard City			105	58	52
Marshall Co.	Marshall Co.	80	47	126	84	54
Maury Co.	Maury Co.	81	70	124	78	32
Meigs Co.	Meigs Co.	39	19	54	88	120
Monroe Co.	Monroe Co.	20	36	89	120	93
	Sweetwater			87	72	76
Montgomery Co.	Montgomery Co.	82	85	114	35	66
Moore Co.	Moore Co.	55	18	101	87	47
Morgan Co.	Morgan Co.	4	13	80	87	113
Obion Co.	Obion Co.	81	59	97	88	69
	Union City			55	30	19
Overton Co.	Overton Co.	12	30	57	69	109
Perry Co.	Perry Co.	26	1	82	101	84
Pickett Co.	Pickett Co.	7	7	43	118	116
Polk Co.	Polk Co.	54	15	128	27	19
Putnam Co.	Putnam Co.	47	77	87	59	66
Rhea Co.	Rhea Co.	66	62	71	54	88
	Dayton			100	61	61
Roane Co.	Roane Co.	52	82	88	80	108
	Hartiman			25	42	48
	Rockwood			*	*	*
Robertson Co.	Robertson Co.	73	67	104	77	53
Rutherford Co.	Rutherford Co.	78	80	124	78	30
	Murfreesboro			94	37	28
Scott Co.	Scott Co.	9	20	31	77	137
	Oneida			67	100	83
Sequatchie Co.	Sequatchie Co.	28	10	66	90	85
Sevier Co.	Sevier Co.	60	58	87	56	38
Shelby Co.	Shelby Co.	92	95	128	22	60
	Memphis			102	17	37
Smith Co.	Smith Co.	39	36	86	99	84

Appendix Table 1 (Continued)

County	School District	Per Capita Income (County) (Rank)	Population Density (County) (Rank)	Local Revenue as a Percent of Total Education Revenue (Rank)	State Revenue as a Percent of Total Education Revenue (Rank)	Federal Revenue as a Percent of Total Education Revenue (Rank)
Stewart Co.	Stewart Co.	39	4	57	73	117
Sullivan Co.	Sullivan Co.	92	91	132	39	17
	Bristol			114	18	23
	Kingsport			104	12	10
Sumner Co.	Sumner Co.	77	84	94	44	14
Tipton Co.	Tipton Co.	40	64	33	66	122
	Covington			19	28	118
Trousdale Co.	Trousdale Co.	74	44	88	103	92
Unicoi	Unicoi	56	71	62	101	96
Union Co.	Union Co.	10	47	67	101	98
Van Buren Co.	Van Buren Co.	2	2	32	132	74
Warren Co.	Warren Co.	68	65	110	94	46
Washington Co.	Washington Co.	79	89	92	60	37
	Johnson City			82	35	61
Wayne Co.	Wayne Co.	19	6	47	116	88
Weakley Co.	Weakley Co.	45	56	61	92	46
White Co.	White Co.	32	45	58	99	90
	Sparta			*	*	*
Williamson Co.	Williamson Co.	89	70	106	36	20
	Franklin			104	19	14
Wilson Co.	Wilson Co.	80	72	71	56	11
	Lebanon			81	40	49
	Watertown			129	100	4

APPENDIX TABLE 2

Appendix Table 2. Average Rankings of School Districts by Educational Revenues Per Student, 1969-70 Through 1980-81

County	School District	Local Revenue Per Student ADA (Rank)	State Revenue Per Student ADA (Rank)	Federal Revenue Per Student ADA (Rank)
Anderson Co.	Anderson Co.	124	124	137
	Clinton	98	24	46
	Oak Ridge	102	92	91
Bedford Co.	Bedford Co.	60	45	33
Benton Co.	Benton Co.	44	112	50
Bledsoe Co.	Bledsoe Co.	43	120	118
Blount Co.	Blount Co.	112	74	30
	Alcoa	107	90	54
	Maryville	66	48	26
Bradley Co.	Bradley Co.	111	53	55
	Cleveland	95	34	31
Campbell Co.	Campbell Co.	57	124	113
Cannon Co.	Cannon Co.	42	103	72
Carroll Co.	Carroll Co.	135	147	141
	Atwood	2	35	78
	H. Rock	8	28	51
	Huntingdon	9	32	87
	McKenzie	10	70	37
	South Carrol Co.	9	59	82
	Trezevant	12	73	89
Carter Co.	Carter Co.	44	97	99
	Elizabethton	46	104	54
Cheatham Co.	Cheatham Co.	54	44	56
Chester Co.	Chester Co.	18	92	52
Claibourne Co.	Claibourne Co.	69	120	133
Clay Co.	Clay Co.	57	140	144
Cocke Co.	Cocke Co.	46	45	108
	Newport	29	13	35
Coffee Co.	Coffee Co.	74	107	83
	Manchester	52	43	86
	Tullahoma	6	78	102
Crockett Co.	Crockett Co.	53	146	120
	Alamo	12	48	74
	Bells	12	39	81
	Crockett Mills	15	31	58
	Friendship	12	33	35
	Gadsden	29	61	90
	Maury City	15	40	100
Cumberland Co.	Cumberland Co.	69	64	88
Davidson Co.	Davidson Co.	147	60	69
Decatur Co.	Decatur Co.	66	121	51
DeKalb Co.	DeKalb Co.	35	95	122
Dickson Co.	Dickson Co.	94	64	19
Dyer Co.	Dyer Co.	84	38	115
	Dyersburg	51	52	36

Appendix Table 2 (Continued)

County	School District	Local Revenue Per Student ADA (Rank)	State Revenue Per Student ADA (Rank)	Federal Revenue Per Student ADA (Rank)
Fayetteville Co.	Fayetteville Co.	17	62	31
Fentress Co.	Fentress Co.	33	89	128
Franklin Co.	Franklin Co.	45	101	76
Gibson Co.	Gibson Co.	88	103	110
	Humboldt	29	69	102
	Milan	37	75	72
	Trenton	*	*	*
	Bradford	*	*	*
Giles Co.	Giles Co.	117	94	62
Grainger Co.	Grainger Co.	16	61	77
Greene Co.	Greene Co.	88	64	69
	Greeneville	88	122	81
Grundy Co.	Grundy Co.	45	107	112
Hamblen Co.	Hamblen Co.	129	10	30
	Morristown	127	57	28
Hamilton Co.	Hamilton Co.	143	36	11
	Chattanooga	142	74	133
Hancock Co.	Hancock Co.	4	129	143
Hardeman Co.	Hardeman Co.	60	92	115
Hardin Co.	Hardin Co.	70	89	97
Hawkins Co.	Hawkins Co.	68	80	88
	Rogersville	74	16	63
Haywood Co.	Haywood Co.	58	71	135
	Brownsville	*	*	*
Henderson Co.	Henderson Co.	53	118	76
	Lexington	76	9	32
Henry Co.	Henry	129	101	64
	Paris	131	18	49
Hickman Co.	Hickman Co.	112	112	56
Houston Co.	Houston Co.	42	129	86
Humphreys Co.	Humphreys Co.	115	100	36
Jackson Co.	Jackson Co.	49	117	129
Jefferson Co.	Jefferson Co.	85	65	67
Johnson Co.	Johnson Co.	91	108	126
Knox Co.	Knox Co.	143	42	37
	Knoxville	140	105	88
Lake Co.	Lake Co.	89	93	140
Lauderville Co.	Lauderville Co.	47	70	128
Lawrence Co.	Lawrence Co.	83	79	68
Lewis Co.	Lewis Co.	30	108	35
Lincoln Co.	Lincoln Co.	78	98	72
	Fayetteville	69	25	88
Loudon Co.	Loudon Co.	121	54	63
	Lenoir City	84	65	64

Appendix Table 2 (Continued)

County	School District	Local Revenue Per Student ADA (Rank)	State Revenue Per Student ADA (Rank)	Federal Revenue Per Student ADA (Rank)
McMinn Co.	McMinn Co.	116	79	36
	Athens	116	48	68
	Ethowah	115	11	44
McNairy Co.	McNairy Co.	55	86	101
Macon Co.	Macon Co.	47	89	103
Madison Co.	Madison Co.	78	66	61
	Jackson	70	50	86
Marion Co.	Marion Co.	96	69	85
	Richard City	89	11	42
Marshall Co.	Marshall Co.	118	77	44
Maury Co.	Maury Co.	120	61	18
Meigs Co.	Meigs Co.	56	107	118
Monroe C.	Monroe Co.	67	106	76
	Sweetwater	63	8	57
Montgomery Co.	Montgomery Co.	136	97	101
Moore Co.	Moore Co.	114	129	58
Morgan Co.	Morgan Co.	76	107	117
Obion Co.	Obion Co.	82	53	58
	Union City	81	32	23
Overton Co.	Overton Co.	59	103	118
Perry Co.	Perry Co.	99	136	97
Pickett Co.	Pickett Co.	57	142	127
Polk Co.	Polk Co.	143	112	41
Putnam Co.	Putnam Co.	103	87	74
Rhea Co.	Rhea Co.	90	92	105
	Dayton	82	8	44
Roane Co.	Roane Co.	82	84	106
	Hartiman	54	110	84
	Rockwood	*	*	*
Robertson Co.	Robertson Co.	107	75	51
Rutherford Co.	Rutherford Co.	122	81	23
	Murfreesboro	110	30	31
Scott Co.	Scott Co.	41	131	141
	Oneida	39	37	66
Sequatchie Co.	Sequatchie Co.	74	131	102
Sevier Co.	Sevier Co.	96	58	40
Shelby Co.	Shelby Co.	141	48	97
	Memphis	134	97	76
Smith Co.	Smith Co.	72	70	78
Stewart Co.	Stewart Co.	82	132	131
Sullivan Co.	Sullivan Co.	137	27	13
	Bristol	136	63	59
	Kingsport	136	84	37
Sumner Co.	Sumner Co.	106	53	9
Tipton Co.	Tipton Co.	27	44	126
	Covington	29	52	131

Appendix Table 2 (Continued)

County	School District	Local Revenue Per Student ADA (Rank)	State Revenue Per Student ADA (Rank)	Federal Revenue Per Student ADA (Rank)
Trousdale Co.	Trousdale Co.	79	101	88
Unicoi Co.	Unicoi Co.	46	84	89
Union Co.	Union Co.	49	66	87
Van Buren Co.	Van Buren Co.	23	135	70
Warren Co.	Warren Co.	97	67	30
Washington Co.	Washington Co.	105	54	35
	Johnson City	103	68	77
Wayne Co.	Wayne Co.	32	110	81
Weakley Co.	Weakley Co.	53	85	44
White Co.	White Co.	50	96	87
	Sparta	*	*	*
Williamson Co.	Williamson Co.	132	59	21
	Franklin	130	33	22
Wilson Co.	Wilson Co.	80	58	7
	Lebanon	81	8	48
	Watertown	75	2	1