August 1, 1933

To the Committee on Graduate Study:

I submit herewith a thesis by Mr. Maynard Murray Reed, "Farm Tax Incidence in Tennessee", and recommend that it be accepted for eighteen quarter hours credit in fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

C. E. Allred

Major Professor

At the request of the
Committee on Graduate Study,
I have read this thesis, and
recommend its acceptance.

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Accepted by the Committee

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Chairman

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Univ. of Tenn.

FARM TAX INCIDENCE

IN

TENNESSEE.

****

330.

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CHARLES E. ALLRED

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION:	
	Kind of Taxes Paid by Tennessee Farmers	2.
	Classified Receipts of Governmental Revenues	3.
	Estimated Amounts of the Specific Kinds of Taxes Paid by Farmers	3.
	Problem of Incidence	7.
	Problem of Shifting Taxes	9.
	Other Aspects of Farm Tax Incidence	10.
	Relation of This Report to Previous Reports	10.
II.	INCIDENCE OF THE GENERAL PROPERTY TAX:	
	Theory and History	12.
	The Incidence of the Tax on Farm Property	13.
	History of Division into Classes	14.
	Acreage Property: Decreasing Percentage as Compared with Total Amount of Property	15.
	Tax Burden: Proportion Borne by Each Class of Property in Tennessee	18.
	Fluctuations in Percentage in Some of the Years: Reasons for	19.
	Public Utilities Assessment Machinery Efficient	20.
	Tax Burden by Classes of Property: Overton County	21.
	Tax Burden by Classes of Property: Clay and Pickett Counties, Tennessee	23.
	Property Tax: Distribution by Classes of Property in Each Tennessee County, 1930	26.

Chapter Page.

II. (continued)

Acreage Tax: Percentage of Total Property Tax in Each Tennessee County ..... 26.

Lots: Percentage Taxes on Town Lots Is of Total County Tax ..... 29.

Public Utilities: Percentage Taxes on Public Utilities Is of Total Taxes ..... 32.

III. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF EQUALITY

Assessment Ratios: Relation to Owner's Value ..... 35.

Tennessee Counties ..... 36.

Relation of Assessed Value to Actual Sales Considerations ..... 38.

Overton, Clay and Pickett Counties, 1926 ..... 39.

Assessment Ratios in Relation to Owner's Value: Eleven Tennessee Counties, 1929 ..... 39.

Assessment Ratios: Urban and Rural Properties Compared ..... 40.

Number of Parcels Falling in Different Percentage Brackets ..... 41.

Assessed Value of Individual Parcels Tends to be Static ..... 42.

Dispersion of Assessment Ratios ..... 43.

Dispersion in Overton County: Ratios of 1920 Compared to Those of Later Years ..... 43.

Burden for the Two Periods Compared ..... 46.

Dispersion Pictured by Target Charts ..... 46.

Conclusion ..... 49.

Equality: Physical Extent of Properties ..... 49.

Deed Acreage: Comparison to Assessed Acreage .... 50.

Inequality: Value Classes of Property ..... 51.

Overton County, 1920 ..... 52.
Overton, Clay, and Pickett Counties, 1926 ..... 52.
Inequality in Value per Acre Classes ..... 53.
Inequality by Value Classes: 11 Counties, 1929 .. 54.
Inequality by Value Classes, Gibson County, 1929.. 54.
Results of Study ..... 55.

Chapter Page.

III. (continued)

Tax per $100 Owner's Valuation ..... 55.

Overton County, 1926 ..... 56.
Tennessee Counties, 1929 ..... 56.
States, 1929 ..... 58.
Geographic Divisions, 1929 ..... 62.

IV. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF ABILITY

Income ..... 64.

Gross Income ..... 64.

1. Overton County ..... 64.
2. Relation of Taxes to Gross Income in Tennessee by Counties ..... 66.

Net Income ..... 69.

1. Agricultural Industry Bears Heavy Tax Burden ..... 69.
2. Total Tax Burden on All Tennessee Corporations 69.
3. Dane County, Wisconsin ..... 71.
4. South Carolina ..... 74.
5. Individual Overton County Farms ..... 74.
6. Individual Van Buren County Farms ..... 77.
7. Tennessee Farms by Counties ..... 79.

Labor Income ..... 82.

1. Overton County, Tennessee ..... 82.
2. Knox County, Tennessee ..... 84.

Net Returns ..... 87.

1. Overton County, Tennessee:
   Absolute Relationship ..... 87.
   Relative or Percentage Relation ..... 89.
2. Knox County, Tennessee, 1916 ..... 91.
3. Van Buren County, 1929 ..... 93.
4. Tennessee ..... 95.

Net Rental Receipts ..... 97.

1. Overton County, Tennessee ..... 97.
   Relation of Size of Farm to Rent and Taxes 99.
2. Fourteen States of the United States ..... 100.
3. Farm and Urban Property ..... 103.

Chapter Page

IV. (continued)

Farm Prices ..... 106.

Amount of Tax per Acre ..... 112.

V. INCIDENCE OF THE GENERAL PROPERTY TAX IN RELATION TO BENEFITS RECEIVED:

Theory ..... 117.

Receipts from General Property Taxes ..... 119.

Purposes for Which General Property Tax Is Spent ..... 122.

Expenditures ..... 123.
Classified:
Total for All Counties ..... 123.
Overton County ..... 123.

Percentage of Total for Education and Highways ..... 126.

Expenditures for Education and Highways as Affecting Other Public Services in the Counties ..... 127.

State of Tennessee ..... 128.

Summary ..... 133.

APPENDIXA(See list of tables) ..... 134.

APPENDIX B - Conclusions of Dr. Seligman on General Property Tax ..... 136.

BIBLIOGRAPHY ..... 137.

TABLES IN TEXT

Chapter — Table No. — Page

I. INTRODUCTION:

1. A. Expenditures: National, State, and Local, 1890-1927 — 1.
B. Expenditures: Per Capita . . . . . 1.

2. A. Collections, Tax: State and Local in Tenn., 1902-30. — 2.
B. Collections, Tax: Per Capita . . . . . 2.

Estimated Amounts of Specific Kinds of Taxes Paid by Farmers:

3. Percentage Each Kind of Tax is of the Total Estimated Amount of Taxes Paid by Tenn. Farmers, 1929 . 6.

4. Taxes Paid by Farmers in the United States, 1927 . . . 7.

II. INCIDENCE OF THE GENERAL PROPERTY TAX:

Acreage Property: Decreasing Percentage as Compared with Total Amount of Property:

5. Property: Percentage Assessed Value of Each Class Is of the Total Assessed Value of All Property in Tennessee, 1868-1931 . . . . . 17.

Tax Burden by Classes of Property: Overton County:

6. Classes of Property: Per Cent Each Is of the Total Assessed Value of All Property in Overton County, 1901-1931 . . . . . 21.

Tax Burden by Classes of Property: Clay and Pickett Counties, Tennessee:

7. Classes of Property: Per Cent Each Is of the Total Assessed Value of All Property in Clay and Pickett Counties, 1916-1931 . . . . . 24.

Acreage Tax: Percentage of Total Property Tax in Each Tennessee County:

8. Acreage Tax: Tennessee Counties Ranked as to the Percentage Acreage Tax Is of Total, 1930 . . . . . 27.

Lots: Percentage Taxes on Town Lots Is of Total County Tax:

9. Lot Property: Tennessee Counties Ranked as to Percentage Lot Property Is of Total Property, 1930 . 30.

Public Utilities: Percentage Taxes on Public Utilities Is of Total Taxes:

10. Public Utilities: Rank of Tennessee Counties on the Basis of Public Utilities Taxes to the Total County Taxes, 1930 . . . . . 32.

Chapter	Table No.		Page
III.	INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF EQUALITY:		
	Assessment Ratios: Relation to Owner's Value:		
		11. Assessment Ratios: Approximate Ratio of the Assessment of Farm Real Estate in Tennessee to Owner's Estimate of the Value of Land and Buildings, 1929	36.
	Assessment Ratios in Relation to Owner's Value: Eleven Tennessee Counties, 1929:		
		12. Percentages of Assessed to Sales Value: All Classes of Realty, 1929 Assessment	40.
	Assessment Ratios: Urban and Rural Properties Compared:		
		13. Ratio of Assessed to Sales Value of Farm Real Estate, 1929	41.
		14. Percentage of Assessed to Sales Value of Farms as Based on 1929 Assessment	42.
	Dispersion of Assessment Ratios:		
		15. Range of Assessments in Relation to Sales Value, Overton County	45.
	Equality: Physical Extent of Properties:		
		16. Size and the Ratio of Assessment to Selling Price, 63 Overton County Parcels in 1920	50.
		17. Comparison of Deed to Assessed Acreage, 1920.	51.
	Inequality: Value Classes of Property:		
		18. Value Classification of Farms: 66 Overton County Farms, 1920	52.
		19. Ratio of Assessment to Selling Price of Real Estate by Value Classes, 1926.	53.
		20. Farms Classified According to Value, 11 Counties, 1929	54.
		21. Farms Classified According to Value, Gibson County, 1929	55.
	Tax per $100 Owner's Valuation:		
		22. Tax per $100 Owner's Valuation: Overton County Farms Paying Specified Amounts, 1926	56.
		23. Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, for Tennessee Counties, 1929	57.
		24. Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, for U. S. and Geologic Divisions, 1929	60.

Chapter Table No. Page

IV. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF ABILITY:

Income:

26. Total Farm Receipts and Taxes: 58 Overton County Farms, 1925 . . . . . 65.

26. Gross Receipts: Tennessee Counties Ranked as to the Percentage Taxes Were of Gross Farm Income, 1929 67.

27. Total Tax Burdens on Corporations, 1917-1928 . . . . . 70.

28. Net Income: Farms Ranked as to Percentage Taxes Were of Net Income, 54 Overton County Farms, 1925 . . . 75.

29. Taxes and Farm Income: 50 Individual Van Buren County Farms, 1929 . . . . . 77.

30. Per Cent Farm Taxes Were of Net Farm Income in Tennessee Counties, 1929 . . . . . 79.

31. Labor Income and Taxes, by 54 Individual Farms, Overton County, 1925 . . . . . 84.

32. Taxes and Labor Income, 67 Individual Farms, Knox County, Tennessee, 1916 . . . . . 86.

33. Net Returns and Taxes of 37 Farms in Overton County, 1925 . . . . . 89.

34. Taxes and Net Returns, 54 Individual Overton County Farms, 1925 . . . . . 91.

35. Taxes and Net Returns, 67 Individual Farms, Knox County, Tennessee, 1916 . . . . . 92A.

36. Taxes and Net Returns, 50 Individual Van Buren County Farms, 1929 . . . . . 93.

37. Taxes and Average Net Cash Farm Returns for Tennessee, 1922-1929 . . . . . 95.

38. Ratio of Taxes to Net Cash Returns . . . . . 96.

39. Taxes and Net Returns with Allowance Made for Family Living and Family Labor, 1922-1931 . . . . . 96.

40. Comparison of Taxes and Rental Receipts, 20 Overton County Farms, 1929 . . . . . 99.

Farm Prices:

41. Farm Prices and Taxes, 1914-1932 . . . . . 109.

42. Amount of Taxes Paid per Acre on Farms Operated by Full Owners Owning No Other Land, Tennessee Counties, 1929 . . . . . 112.

43. Amount of Taxes Paid per Acre on Farms Operated by Full Owners Owning No Other Land, by States, 1929 . . . . . 114.

44. Range of Taxes Paid per Acre in Tennessee Counties, 1929 . . . . . 116.

Chapter Table No. Page

V. INCIDENCE OF THE GENERAL PROPERTY TAX IN RELATION TO BENEFITS RECEIVED:

Receipts from General Property Taxes:

45. Per Cent That the Receipts from the General Property Tax Is of the Total Revenue Receipts of Tennessee Counties, 1929 .. . . . . 121.

Expenditures:

46. Percentage That Expenditure for Education and for Highways and Bridges Is of Total Operation of Tennessee Counties, 1929 . . . . . 130.

APPENDIX A:

1. Percentage Farm Taxes Were of Total Gross Receipts on Tennessee Farms by Counties, 1929 . . . . . 134.

2. Per Cent Farm Taxes Were of Net Farm Income in Tennessee Counties, 1929 . . . . . 135.

MAPS IN TEXT

Chapter — Map No. — Page

I. INTRODUCTION.

II. INCIDENCE OF THE GENERAL PROPERTY TAX:

Acreage Tax: Percentage of Total Property Tax in Each Tennessee County:

1. Per Cent That Taxes on Acreage Are of the Total State Taxes in Tennessee Counties, 1930 . . . . . 28.

Lots: Percentage Taxes on Town Lots Is of Total County Tax:

2. Per Cent That Taxes on Lots Are of the Total State Taxes in Tennessee Counties, 1930 . . . . . 31.

Public Utilities: Percentage Taxes on Public Utilities Is of Total Taxes:

3. Per Cent That Taxes on Public Utilities Are of the Total State Taxes in Tennessee Counties, 1930 33.

III. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF EQUALITY:

Assessment Ratios: Relation to Owner's Value:

4. Approximate Ratio of the Assessment of Farm Real Estate in Tennessee to Owner's Estimate of the Value of Land and Buildings, 1929 . . . . . 37.

Tax per $100 Owner's Valuation:

5. Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, for Tennessee Counties, 1929 . . . . . 59.

6. Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, U.S., 1929 . 61.

IV. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF ABILITY:

Income:

7. Percentage Taxes Were of the Gross Farm Income in Tennessee by Counties, 1929 . . . . . 68.

8. Per Cent Farm Taxes Were of Net Farm Income in Tennessee Counties, 1929 . . . . . 80.

Farm Prices:

9. Amount of Taxes Paid per Acre on Farms Operated by Full Owners, Owning No Other Land, on Tennessee Farms by Counties, 1929 . . . . . 113.

Chapter Map No. Page

Farm Prices (continued):

10. Amount of Taxes Paid per Acre on Farms Operated by Full Owners Owning No Other Land on Farms in United States, 1929. . . . . 115.

V. INCIDENCE OF THE GENERAL PROPERTY TAX IN RELATION TO BENEFITS RECEIVED:

Receipts from General Property Tax:

11. Per Cent the Receipts from the General Property Tax Is of the Total Revenue Receipts of Tennessee Counties, 1929 . . . . . 120.

CHARTS IN TEXT

Chapter — Chart No. — Page

I. INTRODUCTION:

Estimated Amounts of the Specific Kinds of Taxes Paid by Farmers:

1. Per Cent Each Classified Receipt Is of the Grand Total Receipts of All Tennessee Counties, 1929 . . . 4.

2. Per Cent Each Classified Receipt Is of the Total Receipts of Overton County, 1929 . . . . . 5.

3. Percentage Each Kind of Tax Is of the Total Estimated Amount of Taxes Paid by Tennessee Farmers in 1929 . . . . . 6.

II. INCIDENCE OF THE GENERAL PROPERTY TAX:

Acreage Property: Decreasing Percentage as Compared With Total Amount of Property:

4. Per Cent Each Class of Property Is of the Total Assessed Value of All Property in Tennessee, 1868 to 1931 . . . . . 16.

Tax Burden by Classes of Property: Overton County:

5. Per Cent Each Class of Property Is of the Total Assessed Value of All Property in Overton County, 1901-1931 . . . . . 22.

Tax Burden by Classes of Property: Clay and Pickett Counties, Tennessee:

6. Per Cent Each Class of Property Is of the Total Assessed Value of All Property in Clay County and in Pickett County, 1916-1931 . . . . . 25.

III. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF EQUALITY:

Dispersion of Assessment Ratios:

7. Ratio of Assessment to Sales Consideration of Parcels of Real Estate in Overton County, 1920 and 1926-28 . . . . . 44.

8-9. The Deviation from Uniformity of Assessment Ratios in 1920 and 1926-1928 . . . . . 47.

Chapter Chart No. Page

IV. INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF ABILITY:

Income:

10A. Average Taxes Paid, 1924, Dane County, Wisconsin . . 72.
10B. Average Net Incomes, 1924, Dane County, Wisconsin. . 72.
11. Percentage of Net Incomes in 1924 Absorbed by Taxes, Dane County, Wisconsin . . . . . 73.
12. Net Income: Percentage Taxes Were of the Net Income on 54 Overton County Farms, 1925 . . . . . 76.
13. Per Cent Taxes Were of Farm Income, 50 Individual Van Buren County Farms, 1929 . . . . . 78.
14. Percentage Taxes Were of the Labor Income, by 54 Individual Farms, Overton County 1925 . . . . . 83.
15. Per Cent Taxes Were of Labor Income of 67 Farms of Farragut Community, Knox County, Tenn., 1916 . 86.
16. Net Return and Taxes of 37 Farms in Overton County, 1925 . . . . . 88.
17. Per Cent Taxes Were of Net Returns, 54 Individual Overton County Farms, 1925 . . . . . 90.
18. Per Cent Taxes Are of the Net Return of 67 Farms of Farragut Community, Knox County, Tenn., 1916 . 92.
19. Per Cent Taxes Are of Net Return of 50 Farms in Van Buren County, 1929 . . . . . 94.
20. Taxes and Rental Receipts: Percentage Taxes Were of Rental Receipts on 20 Overton County Farms, 1929 . . . . . 98.
21. Per Cent Taxes Were of Net Rent: 14 States, Selected Years, 1921-1927: Tennessee, Overton County, 1929 . . . . . 101.
22. General Property Taxes and Net Rent on Farm and Urban Property in Nine States, Selected Years, 1922-1927 . . . . . 105.

Farm Prices:

23. Index Numbers of Farm Prices and Taxes, 1914-30 . . 108.

V. INCIDENCE OF THE GENERAL PROPERTY TAX IN RELATION TO BENEFITS RECEIVED:

Expenditures:

24. Expenditures Classified: Percentage Each Is of the Total Operation Expense for Tennessee Counties, 1929 . . . . . 124.
25. Expenditures Classified: Percentage Each Is of the Total Operation Expense for Overton County, 1929 . . . . . 125.

Chapter Chart No. Page

V. (continued)

Expenditures (cont.):

26A. Expenditures: State of Tennessee - Fiscal Year Ending June 30, 1930 . . . . . 129.

26B. Expenditures: State of Tennessee - Fiscal Year Ending June 30, 1932 . . . . . 129.

27. Expenditures in Tennessee Counties: Percentage Education, Highways and Bridges, and All Other Is of the Total Operating Expense, 1929 . . 131.

Chapter I.

INTRODUCTION

A form of taxation has been in vogue for as long a period as there is historical record. The first social orders had their methods of taxation or form of collecting revenue for a common cause. Society today has its methods of taxation. The methods of taxation of the present time are outgrowths of historical methods. Methods of taxation change with the alterations in social conditions. Also, both the forms of taxation and the actual basis of taxation change with the economic basis of society. Today we have a society with social and economical characteristics very much changed from what they were some years ago. Consequently the demand for public services has grown so great that it has become necessary for the revenue to the government to be increased considerably. The volume of governmental costs is recorded in the following tables:

Table 1.

Expenditures: National, State, and Local, 1890-1927*

A. (Expressed in millions)

	1890	1903	1913	1923	1927
Federal	$291	$475	$692	$3885	$4067
State	77	182	383	1242	1656
Local	487	913	1844	5136	6454
Total	$855	$1570	$2919	$10,263	$12,179

B. (Per capita)

Federal	$4.61	$5.87	$7.17	$34.78	$34.30
State	1.22	2.25	3.97	11.12	13.96
Local	7.73	11.27	19.10	45.98	54.41
Total	$13.56	$19.39	$30.24	$91.88	$102.67

*Derived from National Industrial Conference Board, "Costs of Government in the United States, 1928-1929".

Table 2.

Collections, Tax: State and Local in Tennessee, 1902 - 1930*

A. (Expressed in thousands)

	1902	1912	1922	1924	1925	1926	1927	1928	1929
State	$2,990	$5,680	$10,121	$10,648	$14,466	$17,381	$17,171	$17,956	$19,980
Local	7,150	13,388	33,637	35,168	36,676	39,530	41,504	43,787	45,000
Total	9,240	17,068	43,758	45,816	51,131	56,911	58,675	61,743	64,980

B. (Per capita)

	1902	1912	1922	1924	1926	1927	1928	1929	1930
State	$1.03	$1.64	$4.27	$4.42	$5.95	$7.04	$6.90	$7.13	$7.65
Local	3.53	5.98	13.14	13.59	14.98	16.12	16.70	17.41	17.28
Total	4.56	7.62	17.41	18.01	20.93	23.16	23.60	24.54	24.93

* Tennessee State Tax Committee: "Tennessee Taxation and Public Finance, 1930, pp. 41.

The relatively high cost of government has placed special tax burdens on the different types of industry. The problems common to one industry are not always common to another. Thus, in order to arrive at a solution of the tax problems of any one industry a definite study must be made. This particular study concerns farm taxation and deals specifically with farm tax incidence. The following paragraphs indicate the method of approach to the study and some of the problems dealt with.

Kind of Taxes Paid by Tennessee Farmers

The problem of incidence varies with the different kind of tax. Tennessee farmers are subject to a number of different tax levies and payments for governmental purposes. An outline of taxes paid by farmers follows:

A. Taxes paid by Tennessee farmers as required in the state and local tax system:
   1. General property tax.
   2. Gasoline tax.
   3. Tobacco tax.
   4. Inheritance tax.
   5. Registration of automobiles.
   6. Income tax on stocks and bonds.
   7. Malt tax.
   8. Poll tax.

B. Other taxes paid and expenditures made by farmers for state and local governmental purposes:
   1. Special assessments.
      a. Schools.
      b. Drainage districts.
      c. Levee districts.
   2. License taxes.
   3. License fees.
   4. Fees.

C. Taxes paid by Tennessee farmers to the Federal government:
   1. Income tax.
   2. Inheritance tax.
   3. Excise taxes.
      a. Tobacco.
      b. Gasoline.
      c. Playing cards.
      d. Automobiles and accessories.
      e. Checks written.
   4. Postal service.

Classified Receipts of Governmental Revenues

Chart 1 shows the percentage that each classified receipt is of the grand total receipts of all Tennessee counties in 1929. Note the importance of the general property tax.

Chart 2 shows the percentage each classified receipt was of the total receipts of Overton County in 1929. Again note the importance of the general property tax in producing revenue.(1)

Estimated Amounts of the Specific Kinds of Taxes Paid by Farmers

Table 3 and Chart 3 give the estimated amount of the different kinds of state and county taxes paid by Tennessee farmers. One readily sees the importance of the general property tax in the farm tax burden. General property

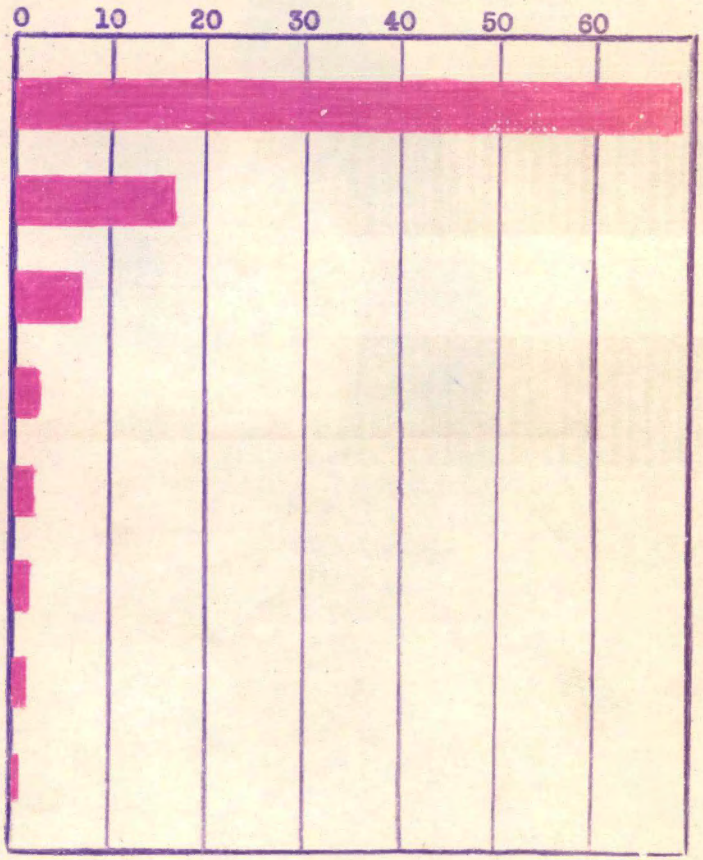
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(1) Overton County received more money in 1929 from grants than it did from any other source. But grants are not a burden on the local tax payers since they constitute aid from the state and federal governments. Thus general property tax constitutes the heaviest burden in Overton on tax payers.

Chart I.

CLASSIFIED REVENUE RECEIPTS OF TENNESSEE COUNTIES, 1929

Expenditure	Amount	% of total
General property	$23,025,411	68.8
Grants	5,531,165	16.5
All other revenue	2,324,232	6.9
Privilege	783,595	2.35
Merchant's Ad Valorem	651,630	1.95
Poll taxes	485,519	1.45
Excess fees	418,082	1.25
Fines and forfeitures	204,082	0.61
Total	$33,484,757	100.0

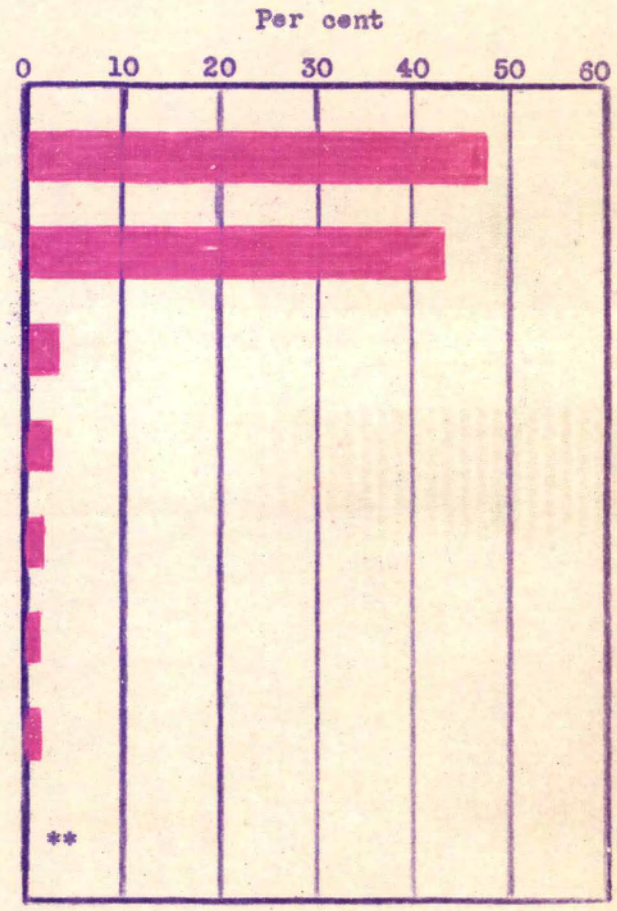


Source: State Tax Committee, 1930.

Chart 2.

CLASSIFIED REVENUE RECEIPTS OF OVERTON COUNTY, TENNESSEE, 1929

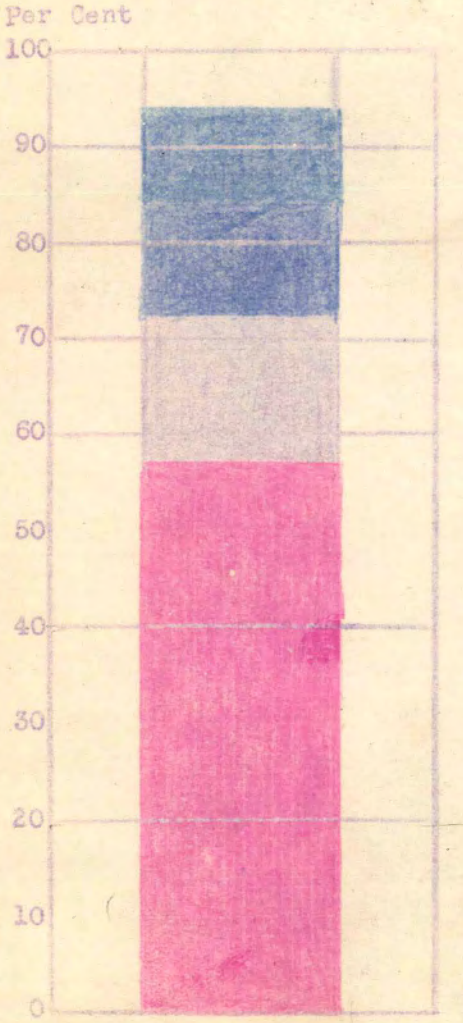
	Amount	% of total
Grants	$75,556	47.3
General property tax	68,888	43.1
All other revenue	4,937	3.1
Privilege	3,846	2.4
Poll taxes	2,520	1.6
Merchant's ad valorem	1,957	1.2
Fines and forfeitures	1,937	1.2
Excess fees	-	-
Total	$159,661	100.0



Source: State Tax Committee, 1930

Chart 3.

PERCENTAGE EACH KIND OF TAX IS OF THE TOTAL ESTIMATED AMOUNT OF TAXES PAID BY TENNESSEE FARMERS IN 1929.



Legend to Chart

- All other taxes
- Motor vehicle registration
- Gasoline tax
- Court clerk collections (a)
- General property tax

Table 3.

Kind of Tax	Percentage of Estimated Total Value Paid by Farmers
Gen. property tax	57.1%
Court clerk collections(a)	15.0%
Gasolina tax	12.0%
Motor vehicle registration	9.7%
Tobacco tax	2.5%
Poll taxes	1.9%
Dept. of Agriculture	1.0%
Inheritance tax	
Real estate transfers	
Mortgage tax	
Game and fish protection	0.8%
Bureau of Forestry	
Toll bridges	
Carbonic gas tax	
	100.0%

(a) Court clerk collections include fines, forfeitures, fees, etc. collected by county, circuit and criminal court clerks. Some property tax is collected through these sources in the form of delinquent taxes, etc., which will add to the burden on property.

Source: Expanded from unpublished estimates of farm contributions to state taxes, prepared by P. B. Boyer, Assistant Agricultural Economist, March, 1931. Basic data from Reports of the Department of Finance and Taxation; Report of Comptroller of Treasury; Report of the State Tax Committee, 1930; United States Census, 1930; University of Tennessee Record, Extension Series, No. 1, March 10, 1931.

tax constitutes 57.1% of the total farm tax burden. It is known that a certain amount of the collections through the different court clerk offices could be classified as property taxes for some delinquent tax collections are made through these offices. An estimate of the amount of property taxes included under these court clerk collections would be very indefinite, but it is thought that the amount would be large enough to substantially increase the percentage of property tax paid.

Table 4 gives an estimate of the taxes paid by farmers in the United States in 1927. The property tax, for the United States as a whole, constitutes by far a greater burden on farmers than it does in Tennessee. Property bears 83.8 of the total tax burden on U. S. farmers. From this it seems that the Tennessee estimate is surely not too high, and if anything, too low.

Table 4.

Taxes Paid by Farmers in the United States, 1927*

Kind of tax	Amount	Percentage
General property	$755,000,000	83.8
Gasoline	65,000,000	7.2
Automobile license	50,000,000	5.5
Income, federal and state	15,000,000	1.7
Inheritance, federal and state	10,000,000	1.1
Poll	6,000,000	0.7
Total	$901,000,000	100.0

Source: Whitney Coombs: "Taxation of Farm Property".

* Taxes paid by farmers on other than farm property are not included. Taxes on farm property paid by owners of farm property not themselves farmers are included. No attempt is made in this table to estimate the amount of taxes that are shifted to the farmers by other groups or the amount that the farmers are able to shift to others.

Problem of Incidence

By incidence of taxes is meant the resting place of or the person who pays or bears the burden of the tax. For example, the incidence of the gasoline tax is on the consumer of gasoline. In the study of incidence, as is

common to all phases of taxation, certain problems arise in dealing with each different kind of tax.

The important considerations to be given any kind of a tax are: who bears the burden and is the burden equitable and justifiable? The problem of incidence can well be presented by a discussion of the three following topics. First, the equality of incidence in relation to the tax base. That is, is the incidence equal in all cases where the same base is used? For instance, does the incidence of the general property tax conform to the principle of equality? In this connection the problem of assessment presents itself and has a great influence on the equity of incidence relative to a given base.

The second manner in which the problem presents itself is in the equality of incidence in relation to ability to pay. The theory is that each subject of the state should contribute to the costs of government in proportion to his means or ability to do so. The big problem in this connection is that of determining a fair measure of ability. There was a time when tangible property was a fair measure of ability, that is when it was the only criterion of wealth. Today economic opinion is that net income or returns is the best measure of tax paying ability. Some of the problems arising in the study of incidence in relation to ability to pay are: (1) the relationship of the farm tax burden to net income, and thus finding whether or not the farmer is able to pay the amount he does pay; (2) the relationship of the burden between individual farmers; (3) the relationship of incidence and ability to pay found in the different kinds of taxes.

The third topic under the problem of incidence is the equality of the tax burden in relation to benefits received. The theory is that each individual should be taxed in proportion to the benefits he derives from governmental

functions. It has two branches: (1) cost of service theory, and (2) the value of service theory. It is a difficult thing to actually measure benefits derived from a certain tax, especially in relation to each individual tax payer, because individual benefit is not the basic element in many of the present day governmental functions. There are certain instances when the benefit can be measured with some degree of accuracy as in the case of special assessments, fees and certain other definite taxes, as the gasoline tax. Generally speaking, the purpose for which the tax money is expended and the percentage of the total expenditures for each purpose is about the extent to which benefits can be determined under the present system.

Problem of Shifting Taxes

The possibility of shifting the tax burden is an important problem in the study of tax incidence. The possibility of shifting depends (1) on the nature of the tax, (2) on the economic circumstances under which it is levied, and (3) on the practices of the tax payers in taking advantage of the possibility of shifting where it exists. Two generalizations have been made between the nature of the tax and the possibility of shifting.[1] "First, a tax cannot be shifted when it is purely personal; that is, when it has no relation to any business dealings of the tax payers." In other words, taxes can be shifted only through business relations. "Second, the possibility of shifting a tax is reduced to the extent that it fails to be uniform and equal."[2]

Thus, in order to determine the real incidence of the tax on farmers, it is necessary to find the relationship of the taxes they pay to the possibilities of shifting.

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(1) Shultz, W. J., American Public Finance and Taxation, pp. 282.
(2) Ibid.

Other Aspects of Farm Tax Incidence

Some other important aspects of farm tax incidence which will not receive detailed attention may be mentioned, namely: (1) credit operations and the time element in evidence, and (2) problems in readjusting the tax burden.

The credit operations and bonded indebtedness of the state and local governments bring the time element into tax incidence. There is a definite tax burden arising out of these credit operations. The problem is concerned with the status of the state and county bonded indebtedness and credit expenditures and their relationship to the equality of incidence on the farming class relative to ability to pay and benefits received. Especially important, though, are the complications introduced in the repayment of borrowed money by fluctuations in the purchasing power of money.

The data presented in this report dealing with the problems mentioned in the above paragraphs poi t out that the present tax system is inadequate and unjust. In order to relieve the situation some readjustment of the farm tax burden must be made. Two means by which the situation may be helped are: (1) by a revision and adjustment of the present tax system, and (2) by finding other sources of revenue, or in other words, by expanding the tax base. Of course along with this, controlled, wise expenditures of governmental revenues must be made.

Relation of This Report to Previous Reports

This report is the fourth of a series dealing with taxation and county government in rural Tennessee with Overton, Clay and Pickett counties taken as a basis of the studies. The three previous reports were prepared by J. C. Powell, A. C. Seymour, and R. P. Matteson, respectively.

Incidence topics covered in the previous reports are: exemptions, assessment ratios and equality of incidence. An additional report on timber taxation as a special problem in tax incidence has been prepared by P. B. Boyer.

All material incorporated in this study is taken from either new unworked data or material from former reports reworked to bring out different points and relationships. There is an apparent duplication in the topic dealing with assessment ratios, but the assessment ratios in this study represent the incorporation of new material, different types of analysis, and the bringing up to date some previously used data to show present trends. Also under the topic of assessment ratios data for the period of 1926-28[1] is reused to make possible a comparison of the tax situation in 1920 with the later period, or in other words for a comparison of the situation immediately after a systematic reassessment, as in 1919, with the assessment situation six or eight years later.

Some data from reports and publications of other states and local units is incorporated in this report to supplement and make more significant the home evidence.

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(1) Assessment ratios for this period (1926-28) was incorporated in the report of A. C. Seymour and others, "Farm Taxation and County Government in Tennessee."

Chapter II.

INCIDENCE OF THE GENERAL PROPERTY TAX

Theory and History

"The theory underlying the general property tax, briefly stated, is that ownership of property indicates ability to pay, and that this ability varies directly with the value of the property. The further corollary embodied in the so-called uniform clause, is that property of equal value possesses equal ability regardless of the particular type it happens to be. This requires that farm land, jewels, city residences, mortgages, stocks and bonds, automobiles, merchants' stocks, machinery, etc., be assessed at market value and taxed at the same rate."(1)

There was a time when practically all property was in the form of land, at which time property value was an equitable measure by which to levy taxes. Today it is absurd to think of the value of property as such a measure, since there are so many classes of property, each yielding a different rate of return per unit of value. Much property has also been gradually changed into the intangible form.

As is evident, very little farm property is or can be of the intangible nature. The farmer's property is of such a form that it cannot be hidden and thus escape assessment. As a result, the farmer, as compared to the owner of intangibles, must bear a much heavier tax burden. Also intangible property probably yields a larger and higher rate of return than farm property, yet the owner pays no tax or very little at the most. The following quotation well expresses the incidence of taxes on intangibles. "In the words of the North Carolina Tax Commission of 1928, the

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(1) Dr. Charles P. White, "Finances of Tennessee", p. 44.

tax on intangibles falls only on 'the conscientious who do not try to escape, on estates which cannot escape, and on certain corporations." (1)

The Incidence of the Tax on Farm Property

The farmer could bear the burden of taxation more easily if he could readily shift a portion of the taxes onto the consumer of farm products. But in this respect the farmer is in unfortunate circumstances, for, unless economic conditions are just right he cannot add the amount of his tax onto the price of the product and make the consumer pay it. It is agreed by economists that a tax on farm property is one of the most difficult to shift. Shults(2) says, "Personal ownership of land or of a capital property does not involve any business relationship whereby the owner can shift the tax upon it to others. It must rest exclusively on the owner, reducing the periodic value of the services which the property yields by the amount of the tax." Whitney Coombs(3) also gives an economic aspect of the incidence of the property tax on farmers:

> Farm taxes may be passed on to the consumer only if they increase the price which the farmer receives for his products. Although taxes on farm products will influence the market demand for such products through their effects on prices, the immediate effects of taxes will come through increasing or restricting the supply of the products. When taxation causes land in general to be used more intensively, the result will be an increase in supply and so will tend to decrease price. Thus, it is impossible for farmers in general to add to the unit price of their product a sufficient amount to enable them to pass the tax on to the consumer."

Whether, under normal circumstances, it be possible to shift farm taxes or not, the present discussion is confined to the direct and immediate

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(1) Dr. Charles P. White, "Finance of Tennessee", p. 48.
(2) Shultz, W. J., American Public Finance and Taxation, p. 302.
(3) Coombs, Whitney, Taxation of Farm Property, pp. 81-85.

rather than the ultimate incidence. But since the nature of the property tax on farmers and the economic conditions under which it is levied are now contrary to all theories of shifting it can be truthfully said that the ultimate incidence of the property tax on farm property is on the owner of the property.

Property: History of Division Into Classes

The Constitution of the State of Tennessee requires that all property, personal or mixed, shall be taxes and that no one species of property shall be taxed higher than any other species of property of the same value.(1) Thus it is impossible to classify property in Tennessee for the purpose of levying different rates on the different classes of property. But for years the assessed value of Tennessee property has been reported in several classes.

At first property was considered as either real or personal. The real property was then divided into acreage and town lots. The first classification was (1) acreage, (2) town lots, (3) all other property.(2) The "all other property" included personalty and what is now termed public utilities. This classification existed until 1877(3) when the "all other property" class was divided into personalty and public utilities.(4) From 1877 until the present the four distinct types of property, (1) acreage, (2) lots, (3) personalty, and (4) public utilities, have stood.

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(1) Constitution of the State of Tennessee, 1870, Art. 11, Sec. 28.
(2) This classification is as given in the Report of Comptroller of Treasury, June 1930 to June 1932, pp. 58-9.
(3) The Railroad Commission was created in 1897, which assessed railroads and other public utilities. In the Report of the Railroad and Public Utilities Commission of Tennessee, 1921-22, pp. 58-9, a table is given having the assessment of railroad property for each biennial period from 1877 to and including 1893-94; the assessment of railroad, telephone and telegraph properties from 1895-6 to and including 1903-4; the assessment of railroad, telephone, telegraph, street railroad properties, hydro-electric, and water companies from 1905 to and including 1922.
(4) Railroads were the only property falling in the public utility class from 1877 to and including 1895.

Even though the State Constitution requires that each of the above types of property be taxed at the same rate per unit of value, the classification is necessary. Each type presents certain definite problems in evaluating and assessing which make the classification desirable. Also this classification enables one to find the relationship of the burden of taxation on each class to the total property tax burden of the state or county.

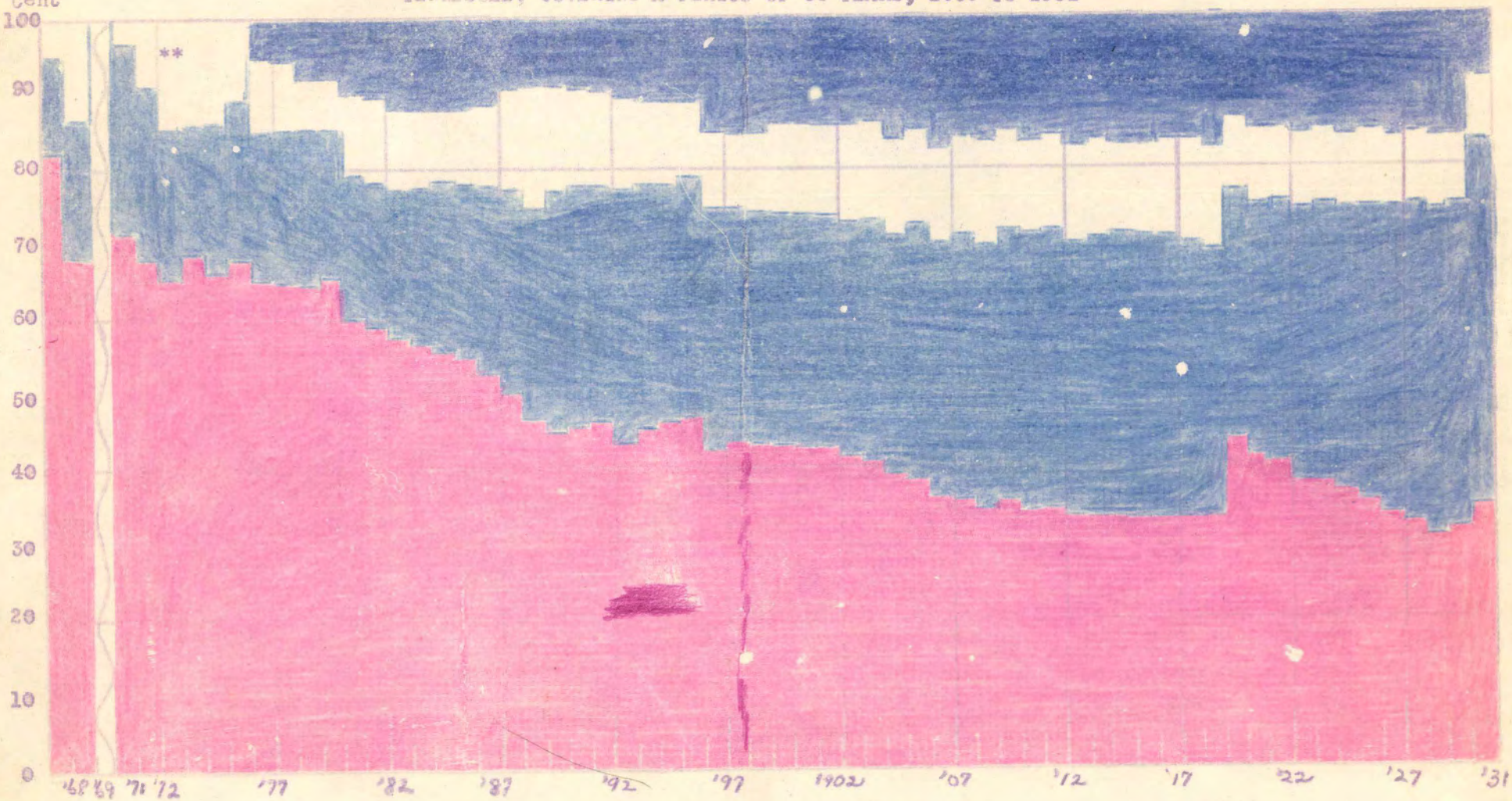
Acreage Property: Decreasing Percentage as Compared With Total Amount of Property.

The early history of taxation in Tennessee, as in practically all other new states, was a tax on acreage property. Other sources of property taxation followed as industrial development took place. Acreage property continued to be the greatest percentage of all property in Tennessee until the last quarter of the 19th Century, at which time industrial development became rapid. Towns were built and railroad and other public service corporations formed. With the coming of towns and public utilities came new sources of property taxation. This industrial development continued with great celerity until the crash of 1929. During this period acreage property also increased in value but with less speed by far, than did lots and public utilities. The valuation of urban and industrial properties increased so much more rapidly than did acreage, that the percentage the assessed value of acreage property represented in the total assessed value of all Tennessee property decreased by more than half from 1868 to 1931. See Chart 4 and Table 45.

Industrial development has not been uniform throughout the state, as is indicated by 79 per cent of the town lot property and 43.4 per cent of the public utilities property being located in four counties of the state, Shelby, Hamilton, Davidson, and Knox. Outside of these four counties acreage

Chart 4.

PER CENT EACH CLASS OF PROPERTY IS OF THE TOTAL ASSESSED VALUE OF ALL PROPERTY IN TENNESSEE, COVERING A PERIOD OF 64 YEARS, 1868 TO 1931



No data 1870

** From 1868 to 1877 Personalty and Public Utilities were not separated. Listed as all other property.

Source: Adapted from Reports of Comptroller of Treasury 1928-1932, The Report of Commissioner of Finance and Taxation 1933, and the Report of Tenn. R.R. and Public Utilities Commission, years 1901-1931.

Property of
Dept. of Ag. Econ.
Univ. of Tenn.

Table 5.

Property: Percentage Assessed Value of Each Class Is of the Total Assessed Value of All Property in Tennessee, Covering a Period of 64 Years, 1868 to 1931

Year	Acreage	Lots	Personalty	Pub. Ut.	Year	Acreage	Lots	Personalty	Pub. Ut.
1868	82.53	12.62	4.86		1905	39.34	31.65	12.87	16.14
1869	68.14	13.22	18.63		1906	38.51	34.04	12.29	15.15
1870	N.D.	N.D.	N.D.	(1)	1907	36.22	33.43	13.20	17.15
1871	71.34	25.19	3.47		1908	35.82	34.85	12.94	16.38
1872	67.92	22.53	9.55		1909	34.97	34.44	13.91	16.69
1873	65.31	19.89	14.81		1910	35.50	35.73	13.24	15.54
1874	68.78	17.13	14.09		1911	34.49	35.96	13.10	16.46
1875	65.93	20.71	13.38		1912	34.71	36.82	12.54	15.93
1876	67.98	21.34	10.68		1913	33.58	36.35	12.93	17.15
1877	65.14	19.67	9.70	5.49	1914	33.32	37.16	12.91	16.61
1878	64.86	20.54	8.81	5.81	1915	33.31	37.35	12.32	17.03
1879	64.72	20.77	7.39	7.14	1916	33.00	37.8	12.0	17.2
1880	65.31	20.44	7.07	7.18	1917	33.0	37.4	12.8	16.8
1881	60.24	19.02	10.02	10.71	1918	33.0	36.8	13.3	16.8
1882	58.91	19.57	10.66	10.85	1919	32.2	36.3	13.6	17.9
1883	57.49	19.53	10.58	12.41	1920	43.7	33.2	9.2	13.9
1884	56.45	21.03	10.31	12.21	1921	41.4	33.5	9.6	15.5
1885	55.44	22.42	9.93	12.22	1922	40.9	34.1	9.6	15.3
1886	54.98	23.06	9.67	12.30	1923	38.3	35.8	10.3	15.5
1887	52.79	24.93	10.41	11.88	1924	37.9	37.0	9.7	15.4
1888	50.22	26.91	13.07	9.80	1925	35.7	38.5	9.7	16.1
1889	46.51	28.00	15.83	9.67	1926	35.1	39.2	9.9	15.8
1890	45.08	31.53	14.29	9.10	1927	33.3	40.9	9.2	16.6
1891	45.87	31.41	13.10	9.61	1928	32.6	41.8	9.2	16.3
1892	46.56	30.82	12.82	9.80	1929	30.86	43.27	9.13	16.75
1893	43.75	33.03	12.23	10.73	1930	31.58	43.38	8.40	16.66
1894	45.76	32.05	10.91	11.29	1931	34.52	48.26	8.35	8.86
1895	46.53	31.39	10.74	11.34					
1896	46.86	32.07	9.66	11.42					
1897	44.28	30.37	9.98	15.37					
1898	45.96	30.61	9.84	15.59					
1899	43.36	30.84	10.32	15.48					
1900	43.22	30.32	12.22	14.28					
1901	42.31	31.37	11.99	14.34					
1902	42.64	30.71	12.29	14.36					
1903	41.96	30.82	12.53	14.70					
1904	40.95	32.02	12.91	14.12					

(1) 1868 to 1877 personalty and public utilities were reported as all other property.

Source: Adapted from Reports of Comptroller of Treasury, 1928 to 1932, Report of Commissioner of Finance and Taxation, 1933, and reports of Tenn. Railroad and Public Utilities Commissioners, years 1921-22 to 1927-28.

property still bears the brunt of property taxation. Thus Chart 4 is not a picture of the conditions in individual counties, but is merely a picture of the relative position of each type of property in the total assessed value of all property in the state as a whole.

Tax Burden: Proportion Borne by Each Class of Property in Tennessee

The history of the percentage that each class of property is of the total assessed value of all property in Tennessee for each year since 1868[1] is shown in Chart 4 and Table 5. Acreage and lots bear the greater portion of the property tax in Tennessee for the whole period, being over 80 per cent from 1868 through 1880 and again in 1931, and never lower than 68.5 per cent of the total assessed value of all property. At the first of the period the assessed value of acreage property was decidedly more than lots. After 1880 the acreage percentage[2] began to decrease rapidly and the lots percentage began to gradually increase. This continued until 1907, at which time the percentage that each of these classes of property is of the total assessed value was practically the same. From 1910 until 1920 town lots was a greater percentage of the total than acreage property. In 1920 acreage took the lead and held it until 1924, at which time the percentage that the assessed value of town lots is of the total assessed value again became the greatest and has continued so to date.

Public utilities were not classified as such until 1877, at which time the percentage was 5.49 per cent of the total assessed value of all property. After 1880 public utilities and personalty increased in percentage of the total until 1920 with the exception of years 1894-95-96. Since 1880 with the exception of six years, 188-1893, the assessed value of public utilities has been a greater percentage of the total assessed value of all property than personalty. During the whole period the percentage that personalty is of the total assessed value was fairly constant, ranging

(1) With exception of 1870, for which there is no data by classes.
(2) This does not mean that the assessed value of acreage property decreased, for in fact it increased continually. It simply means that the assessed value of lots and other property increased so much faster than acreage that acreage became a smaller per cent of the total.

most of the years from 10 to 13 per cent with extremes of 7.07 per cent in 1780 and 15.8 per cent in 1889. The percentage of the two classes combined never equaled that for either of the other classes in any one year. The total percentage that both personalty and public utilities is of the total was around 25 per cent for most of the years with extreme lows in 1880 and 1931 and extreme high in 1919.

Fluctuations in Percentages in Some of the Years:
Reasons For.

In 1920 a decisive shift was made in the position of each class of property on the chart, but only the assessment ratio of acreage property to the total assessed value was increased over the 1919 level (Table 5). The percentage in the case of acreage increased from 32.2 in 1919 to 43.7 in 1920. Lots decreased from 36.3 to 33.2 per cent, personalty decreased from 13.6 to 9.2 per cent and public utilities from 17.9 to 13.9 per cent. The fluctuation of these percentages was brought about by what is termed "Roberts'law of assessment", or the revision of the assessment procedure that took place under the administration of Governor Roberts. The assessed value of each class of property was increased but acreage was increased so much more in proportion than the other classes were that the percentage in each of the other cases was decreased.

In 1931 another marked shift in the percentage that each class of property is of the total assessed value of all property was experienced (Chart 4). Acreage increased from 31.58 per cent in 1930 to 34.52 per cent in 1931. Town lots increased from 43.36 to 48.26 in 1931. Personalty remained practically constant, being 8.40 per cent in 1930 and 8.35 per cent in 1931. Public utilities made a marked change, decreasing from 16.6 per cent in 1930 to 8.86 per cent in 1931. This was nearly a 50 per cent reduction. This does not mean that the value of acreage and lot property

was increased, for in fact the total assessed value in each case including personalty was decreased considerably, acreage being reduced from $561,714,598 to $532,003,022, lots from $771,232,849 to $743,827,298, and personalty from $149,329,321 to $128,725,313. Public utilities took the most remarkable decrease in assessed value, from $296,262,250 in 1930 to $136,799,850 in 1931. The fluctuations in percentages in 1931 simply means that the assessed value of public utilities was reduced by a much greater percentage than either acreage or lots.

Public Utilities Assessment Machinery Efficient. Incidentally, it may be pointed out here the extent to which the assessment machinery used in assessing public utilities is more efficient and works more readily than the machinery used in assessing other types of property. When the crash came in 1929, public utilities as well as the property of other businesses, failed to yield normal returns. The result of the failure to make normal returns was reflected in a decisive reduction of the assessed value of the property of public utilities the first year after the crash, while in the case of the other types of properties but slight change was made. This can be explained in part by the fact that a public utilities and railroad commission assessed all of the property of public service concerns. This commission studies and learns the conditions of the public service companies and then makes the assessment of their property in harmony with the returns made. Also the stock and bond value aids in evaluating the corporations' value. Acreage and lots are assessed by the generally incapable local or county assessor. These assessors tend to assess at the same value as assessed the previous year. It is very seldom that they make a marked increase or decrease in the assessed value of a parcel in any one given year. It is also difficult to determine the value of acreage and lot properties, since amount of returns is unknown and there is not a ready or listed market value as in the case of stocks and bonds

of public utilities.

Tax Burden by Classes of Property: Overton County

The history of the percentage that the assessed value of each class of property is of the total assessed value of all property in Overton County,

Table 6.

Classes of Property: Per Cent Each Is of the Total Assessed Value of All Property in Overton County, Covering a Period of 31 Years, 1901-31

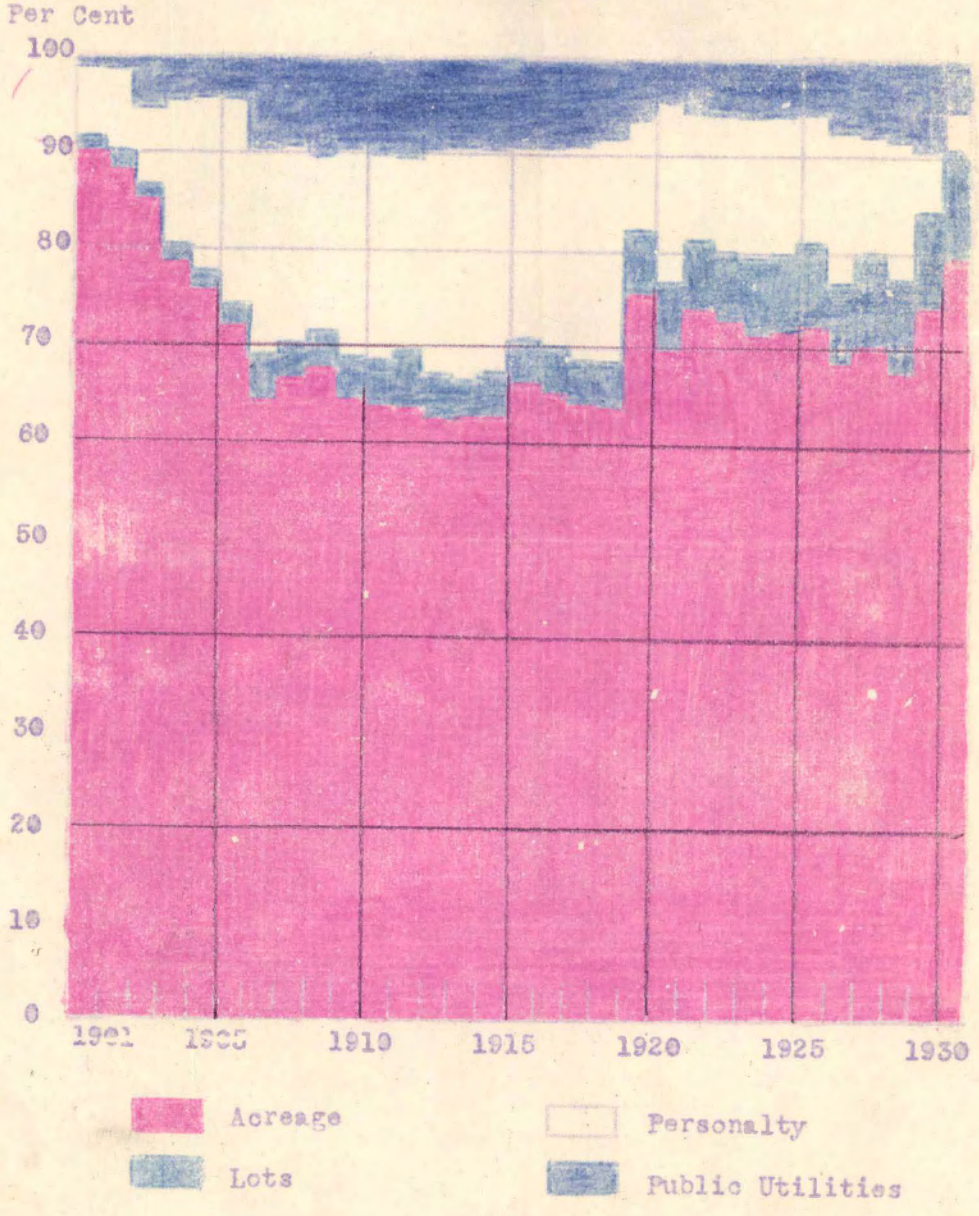
Year	Acreage	Lots	Personalty	Public Utilities
1901	89.71	1.86	6.84	1.59
1902	88.28	1.83	8.30	1.59
1903	85.05	1.89	8.13	5.17
1904	78.42	1.96	15.21	4.46
1905	75.72	2.08	17.71	4.48
1906	71.70	2.23	21.59	4.39
1907	64.15	2.54	23.63	9.65
1908	66.90	3.14	20.43	9.46
1909	67.85	3.39	18.43	10.34
1910	64.35	4.25	21.59	9.85
1911	63.90	4.64	21.42	10.07
1912	63.75	5.34	20.41	10.40
1913	62.10	4.92	23.24	9.74
1914	62.75	4.00	23.88	9.36
1915	82.63	4.67	23.08	9.62
1916	66.4	4.62	19.57	9.42
1917	65.3	4.78	20.33	9.51
1918	63.8	4.76	22.33	9.01
1919	63.6	4.69	22.71	8.94
1920	75.95	6.15	11.67	6.22
1921	69.38	7.29	18.49	4.86
1922	74.00	7.09	13.93	5.02
1923	72.35	7.59	14.71	5.46
1924	71.15	8.35	14.97	5.62
1925	71.29	8.63	15.00	5.11
1926	72.35	8.69	13.93	5.06
1927	68.59	9.06	15.00	7.33
1928	70.28	9.65	12.54	7.51
1929	67.38	9.66	14.04	8.35
1930	74.77	10.88	5.15	9.18
1931	79.16	11.95	4.19	4.96

Adapted from Overton County Tax Records and Report of Commissioner of Finance and Taxation, 1933

Tennessee, for the 31-year period, 1901-1931, is tabulated in Table 6 and pictured on Chart 5. The Overton County chart is directly comparable to

Chart 5.

PER CENT EACH CLASS OF PROPERTY IS OF THE TOTAL ASSESSED VALUE OF ALL PROPERTY IN OVERTON COUNTY, COVERING A PERIOD OF 31 YEARS, 1901-1931



the Tennessee chart, except in the number of years covered. Since the two are similar in nature a detailed explanation of Chart 5 is not necessary, but there are some facts to be pointed out.

The Overton County data as illustrated points out the fact that acreage and personalty are a greater percentage of the total than the two are of the total for the state as a whole. Town lots are not nearly as great a percentage of the total as the average for the state. Public utilities also bear a smaller percentage in Overton than in the state as a whole.

Chart 5 of Overton County shows that there were marked shifts in the percentages in 1920 and 1931, similar to the shifts on Chart 4, of the state. The shifts on Overton County chart are explained in same manner as the ones for the state chart (see topic, "Reasons for Marked Fluctuations in Percentages in Some of the Years", under discussion of Chart 4.).

Tax Burden by Classes of Property: Clay and Pickett Counties, Tennessee

The study of the history of the percentage the assessed value of each class of property is of the total assessed value of all property is continued in this study of Clay and Pickett counties for the 16-year period, 1916-31. The data for the two counties is tabulated in Tables 7A and 7B and is illustrated in Charts 6A and 6B respectively.

The significance of the study in each county is the large percentage that acreage property is of the total assessed value. In both Clay and Pickett counties the percentage is above 90 per cent, being 97.6 per cent and 97.8 per cent of the total in Clay County in 1930 and 1931 respectively. In Clay County there is, nor has been, no property in the form of lots, and as is noted by the green line at the top of Chart 6A, there is only a trace of public utilities property.

Pickett does have a small percentage of lot property, and a trace of

Table 7.

Classes of Property: Per Cent Each Is of the Total Assessed Value of All Property in Clay County and Pickett County, Covering a Period of 16 Years, 1916-31.

A.

Year	Acreage	Lots	Personalty	Public Utilities
		Clay County		
1916	90.6		9.3	0.05
1917	88.1		11.8	0.05
1918	87.8		12.1	0.04
1919	86.1		13.8	0.04
1920	90.5		9.4	0.03
1921	90.4		9.5	0.03
1922	91.9	No lots	8.1	0.03
1923	91.4		8.6	0.03
1924	89.9		10.0	0.04
1925	91.1		8.9	0.06
1926	90.5		9.4	0.07
1927	89.9		10.0	0.07
1928	91.8		8.1	0.07
1929	92.4		7.6	0.05
1930	97.6		2.3	0.05
1931	97.4		2.0	0.60

B.

		Pickett County		
1916	89.8	1.3	8.8	0.11
1917	90.0	1.3	8.5	0.11
1918	86.8	1.4	11.7	0.13
1919	88.3	1.4	10.17	0.09
1920	92.2	0.6	7.1	0.05
1921	91.8	1.1	6.9	0.06
1922	93.2	1.4	5.4	0.05
1923	93.7	0.9	5.4	0.05
1924	90.5	2.2	7.2	0.05
1925	93.0	2.2	4.6	0.08
1926	93.1	2.1	4.7	0.08
1927	92.8	2.7	4.4	0.13
1928	92.0	3.0	4.8	0.12
1929	91.5	3.2	5.2	0.12
1930	92.0	3.8	4.1	0.13
1931	91.1	3.9	4.4	0.60

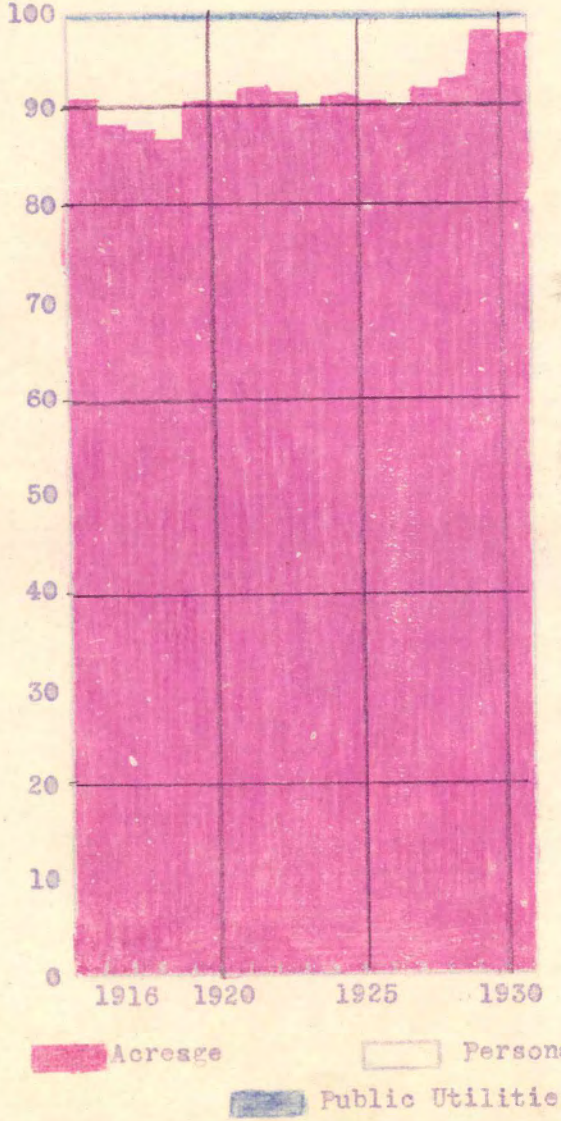
Adapted from Clay and Pickett County Tax Records and Reports of Commissioner of Finance and Taxation, 1931 and 1933.

public utilities as is noted by the blue line at the top of Chart 6B.

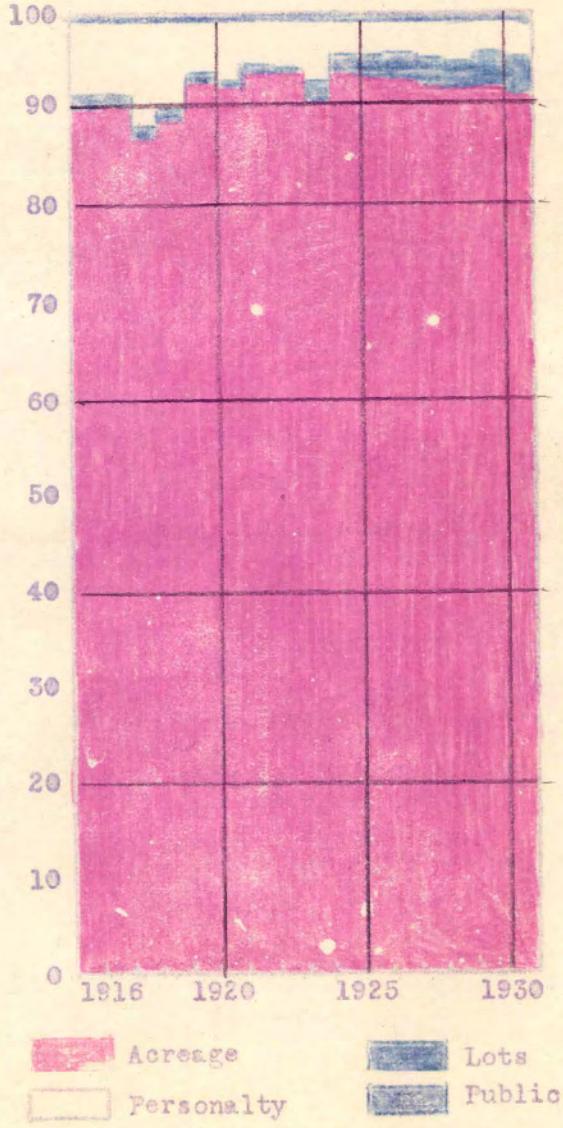
Chart 6.

PER CENT EACH CLASS OF PROPERTY IS OF THE TOTAL ASSESSED VALUE OF ALL PROPERTY IN CLAY COUNTY AND IN PICKETT COUNTY, COVERING A PERIOD OF 16 YEARS, 1916-1931

A.
Clay County



B.
Pickett County



Adapted from County Tax Records and Reports of Commissioner of Finance and Taxation, 1931 and 1933.

Property Tax: Distribution by Classes of Property in Each Tennessee County, 1930

As a supplement to the above data for Overton, Clay and Pickett Counties concerning the percentage that the assessed value of each class of property is of the total assessed value, a similar study is submitted for each Tennessee County for the year 1930. Each county is ranked from low to high as to the percentage the assessed value of each class of property is of the total assessment. Personalty is neither ranked nor mapped because it has a very minor effect on the farmer's tax burden. One half of the personalty is found in the four counties of the state with big cities, Davidson, Hamilton, Knox and Shelby, and the total value of all personalty in the state in 1931 was only 8.3 per cent of the total assessed value of all property.

Acreage Tax: Percentage of Total Property Tax in Each Tennessee County

Table 8 gives the rank of the counties according to the percentage that tax on acreage constitutes of the total county property taxes.(1) Map 1 pictures the manner in which the acreage tax is distributed over the state by counties. The percentage varies from 9.9 per cent in Hamilton County to 97.6 per cent in Clay County. As has previously been shown, acreage property represented 31.6 per cent of the total assessed value of general property throughout the state in 1930.(2) Thus Table 8 shows that in 86 counties acreage property bears a larger proportion of the total general property tax than the state average. In only 10 counties is acreage tax a

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(1) Heretofore the percentage has been given in percentage value of property. The percentage given in amount of taxes paid on each class of property is directly proportional to the percentage given in value, since all property bears the same rate of taxation.

(2) The average percentage 31.6 simply means that of all county property taxes paid in Tennessee in 1930, acreage property bore 31.6 per cent of the burden. In comparing each county to the state average we simply

(continued on next page)

Table 8.

Acreage Tax: Tennessee Counties Ranked As to the Percentage Acreage Tax Is of Total - 1930

Rank	County	Per Cent	Rank	County	Per Cent	Rank	County	Per Cent
1	Hamilton	9.9	32	Houston	51.7	64	Williamson	67.7
2	Shelby	10.3	33	Lauderdale	51.9	65	Greene	68.3
3	Davidson	12.0	34	Maury	53.2	66	Jefferson	68.6
4	Knox	15.9	35	Carroll	53.7	67	Hawkins	68.7
5	Unicoi	22.6	36	Tipton	54.2	68	Lake	68.8
6	Bradley	28.9	37	Dyer	54.8	69	Fayette	69.0
7	McMinn	30.1	38	Rutherford	55.8	70	Lincoln	69.2
8	Madison	30.2	39	Cocke	56.5	71	Cumberland	71.8
9	Campbell	30.9	40	Blount	56.5	72	Crockett	73.0
10	Sullivan	31.7	41	Coffee	58.1	73	Cannon	73.9
11	Roane	33.4	42	Lewis	58.5	74	Overton	74.8
12	Washington	33.6	43	Bedford	58.7	75	Trousdale	76.1
13	Anderson	36.3	44.	Putnam	58.7	76	Stewart	76.2
14	Warren	37.3	45	McNairy	58.8	77	Wayne	76.6
15	Hamblen	39.3	46	Benton	59.4	78	Hickman	76.7
16	Loudon	39.3	47	Gibson	59.5	79	Cheatham	77.5
17	Morgan	41.4	48	Humphreys	59.6	80	Smith	77.7
18	Hardeman	42.0	49	Robertson	59.6	81	DeKalb	80.0
19	Rhea	43.7	50	Marshall	60.7	82	Decatur	80.4
20	Carter	44.0	51	Weakley	60.8	83	Jackson	80.9
21	Polk	44.5	52	Sumner	61.4	84	Hardin	84.3
22	Marion	44.6	53	Van Buren	61.5	85	Moore	85.7
23	Montgomery	45.1	54	Giles	62.1	86	Sevier	86.6
24	Franklin	45.9	55	Lawrence	62.2	87	Perry	87.2
25	Henry	47.5	56	Haywood	62.8	88	Fentress	89.6
26	Dickson	47.8	57	Bledsoe	63.7	89	Grainger	90.2
27	Scott	48.2	58	Chester	64.3	90	Macon	91.3
28	Grundy	49.2	59	Henderson	66.7	91	Pickett	92.1
29	Monroe	49.2	60	Sequatchie	66.8	92	Union	93.6
30	Obion	50.5	61	Wilson	66.9	93	Meigs	96.4
31	White	51.3	62	Johnson	67.3	94	Hancock	97.0
			63	Claiborne	67.5	95	Clay	97.6
							State Av.	31.6

Source: Report of the Commissioner of Finance and Taxation, 1931

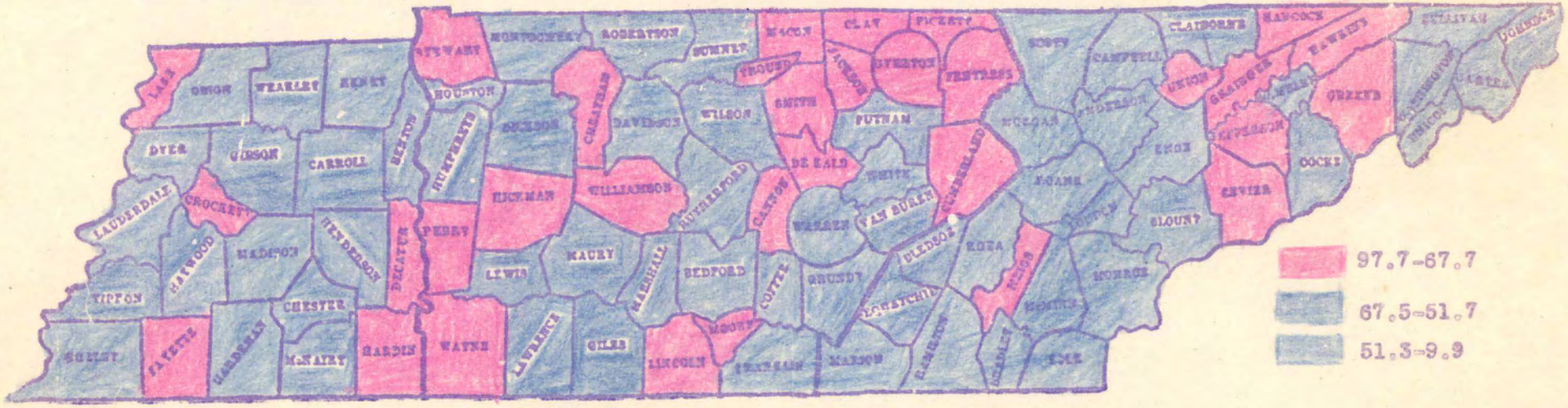
(continued from bottom p. 26)

compare the condition in each county to average condition in all counties collectively. Much weight cannot be placed on this average since industrial development is centralized in a few counties of the state. The value of acreage and lot property in Davidson, Hamilton, Knox and Shelby counties is so great that the average is either reduced or increased to such an extent that it is not at all representative of the remaining 91 counties. The best criterion of the burden in these cases is the number of counties above or below a certain percentage mark. The same principle applies in the study of public utilities, but there are not a definite small number of counties with public utility value so much greater than the rest that the average is varied so much from what is true in the remaining counties (see Table 10 in this volume).

Map 1.

PER CENT THAT TAXES ON ACREAGE ARE OF THE TOTAL STATE TAXES IN TENNESSEE

COUNTIES, 1930



Source: Report of Commissioner of Finance and Taxation, 1931

third or less of the total and in only 29 counties is it less than 50 per cent. The percentage that acreage tax is of the total is above 66.7 per cent in 37 counties and over 75.0 per cent in 21 counties. The state average is made so low by the high value of acreage in 9 or 10 counties with large cities and considerable industrial development. Also in these 9 or 10 counties, the first ones in Table 8, the value of property other than acreage is so much more in proportion that the percentage acreage is of the total is made low. 53.6 per cent of the total assessed value of all property in the state in 1930 is in the four counties, Davidson, Hamilton, Knox and Shelby, and only 19.8 per cent of the acreage property is found in the same counties. Therefore in the remaining 91 counties 80.2 per cent of 46.4 per cent of the total assessed value of all property is acreage property. Conclusion is that acreage property bears the brunt of taxation in 83 of the Tennessee counties, or all except the first ten in Table 8 and Morgan and Polk Counties.(1)

Lots: Percentage Taxes on Town Lots Is of Total County Tax

Table 9 gives the rank of Tennessee counties as to the percentage the tax on lots is of the total county taxes. The accompanying map, No. 2, pictures the distribution of the taxes on lots in the counties of the state. The percentage ranges from none in Clay, Fentress and Macon Counties(2) to 67.7 per cent in Shelby County. The average of the state as a whole is 43.4 per cent. There are four counties above the average

(1) In Morgan and Polk counties public utilities value exceeds acreage property value by a small percentage (see Table 10).

(2) Town lots in these counties are assessed as acreage. This permissive procedure may be and is applied to some contiguous city property holdings throughout the state. There is, nevertheless, every reason to believe that town lots are of but little importance in the four counties mentioned above.

Table 9.

Lot Property: Tennessee Counties Ranked as to Percentage Lot Property Is of Total Property - 1930

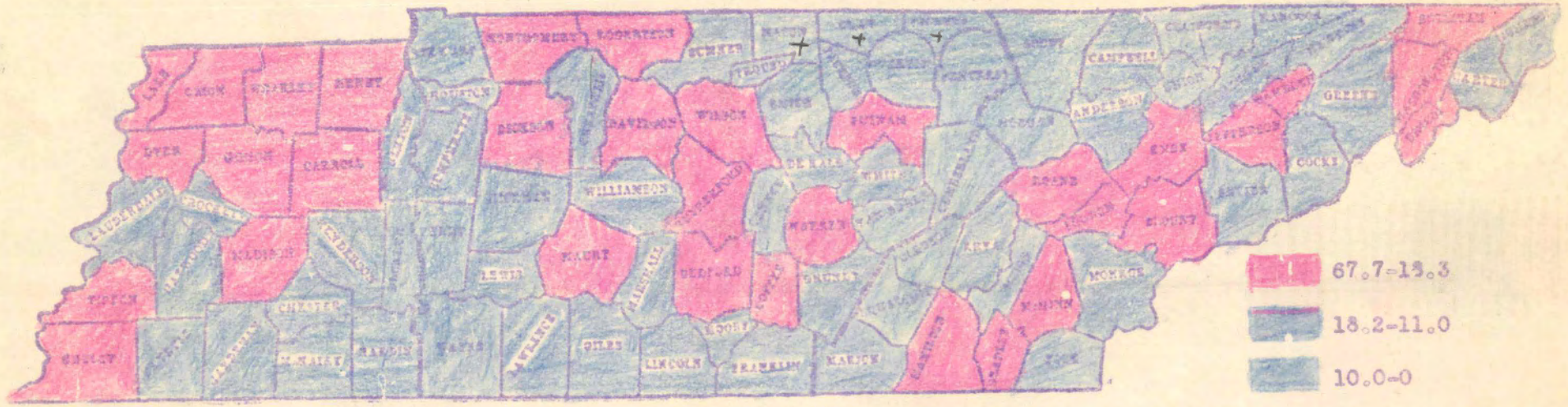
Rank	County	Per Cent	Rank	County	Per Cent	Rank	County	Per Cent
1	Clay	0.0	32	Jefferson	11.1	64	Blount	19.1
2	Fentress	0.0	33	Hardin	11.2	65	Tipton	19.2
3	Macon	0.0	34	Houston	11.3	66	Bedford	19.3
4	Hancock	1.2	35	Giles	11.4	67	Lake	19.3
5	Meigs	2.1	36	Sumner	11.5	68	Wilson	19.3
6	Union	2.2	37	Benton	11.6	69	Weakley	20.2
7	Van Buren	2.4	38	McNairy	11.6	70	Obion	20.5
8	Grainger	3.4	39	Anderson	11.8	71	Maury	20.9
9	Pickett	3.8	40	Lewis	11.8	72	Warren	21.3
10	Polk	4.3	41	Williamson	12.4	73	Robertson	21.5
11	Sequatchie	4.9	42	Crockett	12.7	74	Carroll	22.0
12	Jackson	5.1	43	Trousdale	12.7	75	Dickson	22.3
13	Perry	5.4	44	Humphreys	12.9	76	Gibson	22.4
14	Claiborne	6.0	45	Marion	13.2	77	Loudon	23.3
15	Morgan	6.2	46	Rhea	13.5	78	Coffee	23.8
16	Cannon	6.7	47	Greene	13.6	79	Dyer	24.2
17	Scott	6.8	48	Marshall	13.3	80	McMinn	25.4
18	Johnson	7.1	49	Henderson	13.7	81	Putnam	26.5
19	Moore	7.2	50	Hardeman	14.3	82	Ruther.	27.2
20	Cheatham	7.8	51	Grundy	14.4	83	Roane	29.3
21	Cumberland	8.2	52	DeKalb	14.4	84	Bradley	31.5
22	Fayette	8.3	53	Carter	14.9	85	Henry	31.5
23	Stewart	8.4	54	White	16.3	86	Hamblen	32.8
24	Hawkins	8.9	55	Chester	16.4	87	Montg.	33.9
25	Bledsoe	9.2	56	Lawrence	17.2	88	Unicoi	39.1
26	Decatur	9.2	57	Lincoln	17.4	89	Sullivan	39.5
27	Hickman	9.4	58	Lauderdale	17.5	90	Washington	41.9
28	Smith	9.4	59	Campbell	17.7	91	Madison	43.5
29	Wayne	10.0	60	Haywood	17.8	92	Davidson	61.0
30	Sevier	10.5	61	Cocke	18.1	93	Hamilton	62.3
31	Overton	10.9	62	Franklin	18.2	94	Knox	63.7
			63	Monroe	18.2	95	Shelby	67.7
							St. Ave.	43.4

Source: Report of Commissioner of Finance and Taxation, 1931

and Madison is practically on the average. The four counties above the average, Davidson, Hamilton, Knox, and Shelby, contain 79 per cent of the total lot (real estate) property of the state. By disregarding these four counties, lot property in the state is of little importance. In 79 of the counties (Table 9) less than 25 per cent of all property taxes paid is on lots. It is less than 15 per cent in 53 counties and 10 per cent or less in 29 counties.

Map 2.

PER CENT THAT TAXES ON LOTS ARE OF THE TOTAL STATE TAXES IN TENNESSEE COUNTIES, 1930.



Source: Report of Commissioner of Finance and Taxation, 1931

Public Utilities: Percentage Taxes on Public Utilities Is of Total Taxes

Table 10 gives Tennessee counties ranked from low to high as to the percentage the tax on public utilities is of the total county tax. Map 3

Table 10.

Public Utilities: Rank of Tennessee Counties on the Basis of Public Utilities Taxes to the Total County Taxes, 1930

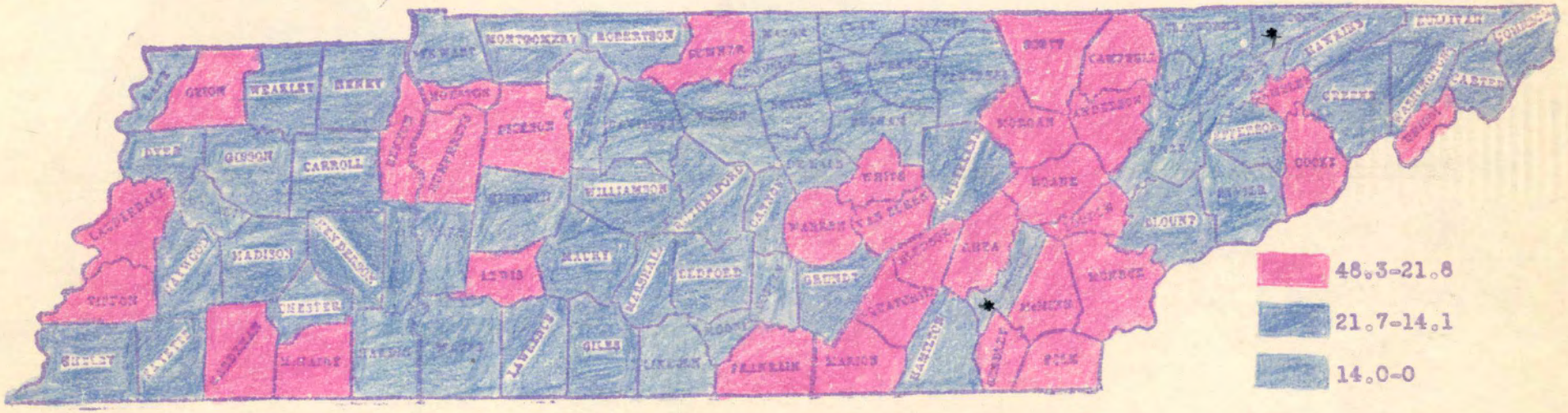
Rank	County	Per Cent	Rank	County	Per Cent	Rank	County	Per Cent
1	Hancock	0.0	32	Blount	14.1	64	Hamblen	21.8
2	Meigs	0.0	33	Gibson	14.1	65	Lewis	22.1
3	Pickett	0.01	34	Montgomery	14.1	66	Humphreys	22.5
4	Perry	0.03	35	Bedford	15.2	67	Cocke	22.8
5	Clay	0.05	36	Haywood	15.2	68	Obion	23.7
6	Hardin	1.8	37	Chester	15.4	69	Tipton	23.8
7	Sevier	2.3	38	Cumberland	15.4	70	Dickson	24.1
8	Moore	2.4	39	Shelby	15.6	71	Sumner	24.5
9	Union	3.1	40	Williamson	15.8	72	Bledsoe	24.7
10	Jackson	3.8	41	Robertson	15.9	73	Benton	24.9
11	Wayne	4.0	42	Henderson	16.0	74	Franklin	25.2
12	Macon	4.1	43	Rutherford	16.4	75	McNairy	26.1
13	Fentress	4.2	44	Greene	16.7	76	Sequatchie	26.2
14	DeKalb	4.7	45	Cannon	16.8	77	Lauderdale	26.7
15	Grainger	4.7	46	Weakley	17.0	78	Monroe	26.7
16	Decatur	5.1	47	Hamilton	17.0	79	White	26.7
17	Trousdale	5.8	48	Grundy	17.5	80	Bradley	29.5
18	Lake	6.7	49	Dyer	17.8	81	Loudon	29.8
19	Wilson	7.2	50	Jefferson	17.9	82	Roane	30.7
20	Stewart	8.1	51	Maury	18.1	83	Van Buren	34.9
21	Overton	9.2	52	Lawrence	18.2	84	Unicoi	35.0
22	Putnam	9.4	53	Henry	18.7	85	Warren	35.4
23	Lincoln	9.8	54	Sullivan	18.7	86	Houston	36.5
24	Davidson	10.1	55	Washington	19.0	87	Marion	36.7
25	Hickman	10.2	56	Hawkins	19.4	88	Scott	37.4
26	Smith	10.3	57	Carter	19.8	89	Rhea	37.7
27	Crockett	10.9	58	Madison	20.6	90	Anderson	40.4
28	Knox	11.3	59	Fayette	20.8	91	Hardeman	41.1
29	Cheatham	12.1	60	Marshall	21.0	92	McMinn	41.9
30	Claiborne	12.2	61	Johnson	21.2	93	Campbell	44.3
31	Coffee	12.3	62	Giles	21.4	94	Polk	46.9
			63	Carroll	21.5	95	Morgan	48.3
							St. Ave.	16.7

Source: Report of Commissioner of Finance and Taxation, 1931.

shows the distribution of the public utilities tax over the state. The percentage varies from none in Hancock and Meigs Counties to 48.3 in Morgan County. The average for the state is 16.7. In this case 44 counties are

Map 3.

PER CENT THAT TAXES ON PUBLIC UTILITIES ARE OF THE TOTAL STATE TAXES IN TENNESSEE COUNTIES, 1930



Source: Report of Commissioner of Finance and Taxation, 1931

* No public utility assessment.

below average and 51 above. As Map 3 shows, the Cumberland Mountains and part of the Smoky Mountains are the regions in which public utilities bulk most prominently as a source of general property taxes. None of the counties in which public utilities bear a large percentage of the tax, with the exception of Obion, Lauderdale, and Tipton, are especially productive farming areas.

Chapter III.

INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF EQUALITY

A study of assessment ratios and of taxes paid per $100 of owner's estimated value permits an analysis of the equality with which the incidence of the general property tax is distributed. By assessment ratio is meant the percentage that the assessment on a parcel of realty constitutes of its value. This value may be either the owner's estimate or an actual sales consideration. Properly analyzed these ratios indicate the degree of equality as between individual property owners, as between properties of different acreage, and as between properties of different total values. Equality of incidence, as presented by a study of taxes per $100 of owner's estimated value is little different from that presented in the study of assessment ratios, especially on individual parcels under the same tax rate. The study of taxes per $100 owner's value presents the problem in a monetary fashion while it is presented in percentages by the assessment ratios.

Assessment Ratios: Relation to Owner's Value

Assessment ratios based on the owner's value of farm real estate are presented both from the individual Overton County farm and the individual Tennessee county standpoint. The only data available by individual farms was that of 64 Overton County farms surveyed in 1926. From this study it was found that the ratio of assessed to owner's value ranged from 7.5 to 112 per cent.(1) The average percentage was 46.6. This study shows that

(1) Mr. A. C. Seymour and others. Farm Taxation and County Government in Tennessee, pp. 124b-126.

discrimination exists in the equality of assessment. Estimated ratios for the Tennessee counties in 1929, based on the 15th Census Report,(1) are tabulated in Table 11, and illustrated in Map 4.

Tennessee Counties: Table 11 gives the counties ranked from low to high as to the percentage assessed value was of the owner's value of farm

Table 11.

Assessment Ratios: Approximate Ratio of the Assessment of Farm Real Estate in Tennessee to Owner's Estimate of the Value of Land and Buildings, 1929

Rank	County	Ratio	Rank	County	Ratio	Rank	County	Ratio
1	Johnson	22.67	32	Anderson	51.06	64	Pickett	64.79
2	Carter	27.80	33	Grundy	51.80	65	Morgan	64.93
3	Unicoi	28.49	34	Loudon	52.50	66	Montgomery	65.36
4	Sullivan	32.07	35	Jefferson	52.54	67	Obion	65.50
5	McMinn	36.69	36	Marion	53.45	68	Hardeman	66.13
6	Sevier	36.78	37	Perry	54.49	69	Henderson	66.38
7	Moore	37.82	38	Lewis	54.60	70	McNairy	67.02
8	Meigs	38.33	39	Williamson	54.67	71	Robertson	67.39
9	Wayne	39.06	40	Dickson	55.10	72	Marshall	68.03
10	Cumberland	39.22	41	Scott	55.67	73	Decatur	68.69
11	Stewart	39.71	42	Bledsoe	55.90	74	Benton	69.02
12	Rhea	44.08	43	Putnam	56.95	75	Clay	69.34
13	Macon	44.89	44	Greene	65.28	76	Hickman	69.62
14	Claiborne	44.97	45	Haywood	57.10	77	Lake	69.80
15	Cocke	45.34	46	Lincoln	57.10	78	Blount	70.03
16	Sequatchie	45.73	47	Hancock	57.98	79	Shelby	71.01
17	Washington	45.73	48	White	58.11	80	Chester	71.02
18	Hamilton	45.82	49	Maury	58.22	81	Fayette	71.07
19	Tipton	45.92	50	Overton	58.34	82	Rutherford	72.14
20	Jackson	46.59	51	Franklin	58.59	83	Union	72.22
21	Bradley	47.93	52	Cannon	58.97	84	Henry	72.34
22	Knox	48.90	53	Roane	59.38	85	Hardin	73.97
23	Van Buren	49.03	54	Lauderdale	59.75	86	Grainger	74.40
24	Humphreys	49.08	55	Fentress	59.79	87	Hamblen	75.46
25	Warren	49.35	56	Monroe	59.86	88	Weakley	76.16
26	Sumner	49.58	57	Cheatham	60.50	89	Smith	76.53
27	Polk	49.66	58	Giles	62.23	90	Carroll	79.34
28	Bedford	49.82	59	Davidson	62.35	91	Gibson	79.39
29	Hawkins	49.89	60	Coffee	62.47	92	Trousdale	79.74
30	Campbell	49.95	61	Dyer	62.71	93	Houston	80.32
31	Madison	50.08	62	Lawrence	63.73	94	Wilson	90.04
			63	Crockett	64.61	95	DeKalb	91.11
							St. Ave.	54.35

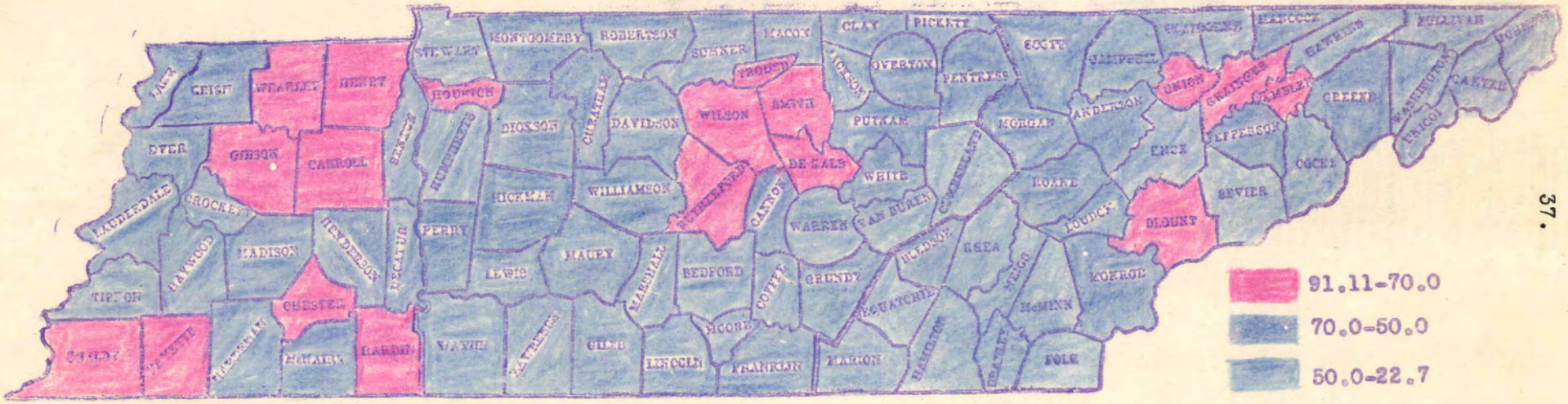
Compiled from 15th Census Report, U. S. Agriculture, Tennessee, Statistics by Counties, Series 2.

real estate. The lowest ratio, 22.67 per cent, was found in Johnson County and the highest one, 91.11 per cent, in DeKalb County. The average

(1) 15th Census of Agr., Tenn., Statistics by Counties, Second Series.

Map 4.

APPROXIMATE RATIO OF THE ASSESSMENT OF FARM REAL ESTATE IN TENNESSEE TO OWNER'S ESTIMATE OF THE VALUE OF LAND AND BUILDINGS, 1929



Source: 15th Census of the United States, 1930
Agriculture - Tennessee,
Statistics by Counties, Second Series.

for the state was 54.3 per cent. Thirty-six counties were below the average and 59 above. The assessment ratio of 48 or half of the counties fell between 50 and 70 per cent. Thus on the average the farm real estate in about half of the Tennessee counties was assessed at a just percentage of the owner's value,(1) while the other half was assessed either too high or too low.

The estimated ratios, as pictured on Map 4, show more West Tennessee counties to be assessed at a higher percentage of the owner's value than either Middle or East Tennessee counties.(2) As to the section of the state, West Tennessee ranks highest and East Tennessee lowest. The manner in which the colors are scattered over the map show at a glance the problem of equality in assessment. The problem is the adjustment of inequality.

Relation of Assessed Value to Actual Sales Considerations

The actual sales consideration of a parcel of real estate should be a reliable criterion by which to measure the value of properties. The ratio of assessed value to the sales price should present the assessment situation as it really is. The extent to which these ratios are uniform is the extent to which there is equality in assessment.

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(1) Generally speaking, assessors are supposed to assess at about 60 per cent of the actual valud of the property.

(2) The West Tennessee ratios are probably misleading. This section of the state has numerous drainage districts. No other section has extensive drainage of this kind. The ratio of assessed to owner's value was found by taking the value of all land and buildings in each county and multiplying it by the county plus the state rate. This gives the amount of taxes that would be paid if real estate were assessed at full value. Then by dividing the amount of taxes actually paid on farm real estate by the amount that would have been paid if assessed at full value, the ratio of assessed to full or owner's value was arrived at. Farmers in West Tennessee, in returning the amount of taxes paid, presumably include special taxes on drainage districts, etc. This increases the total amount of taxes actually paid on the assessed value of property at the prevailing rate. Thus the ratio is higher than would have been if special taxes had not been included.

Footnote 2 would seem to be in error; Very definite effort was made to exclude drainage district taxes from the 1930 returns. The following instruction note was printed immediately under question 33 on the schedule: "Include real estate taxes, personal property taxes on livestock and machinery, and special assessments, but omit taxes for irrigation or drainage districts." P.B.?

Overton, Clay and Pickett Counties, 1926. From study of 15 farms in Overton County, Mr. J. C. Powell found that the ratio of assessed to sales value varied from 13.33 per cent to 600 per cent.(1) The following lines from "Tennessee Taxation and Public Finance"(2) give a summary of the situation in Clay and Pickett Counties.

> The assessments in Clay County showed a variation from 25 to 266 per cent of the selling price. In Pickett County the variation was from 16.7 to 166.7 per cent. Enough has been pointed out to indicate that, even though it be found that farm lands are not bearing too great a share of the tax burden, there certainly exists much injustice due to inequalities in assessments between individual parcels of land.

Assessment Ratios in Relation to Owner's Value: Eleven Tennessee Counties, 1929

The assessment ratios given in the above discussion compare favorably to the ratios found in a recent study by Dr. Frank W. Prescott.(3) This study deals with 1929 realty transfers in 11 Tennessee counties. The average assessed value of all the parcels was 56.3 per cent of the total sales prices. The 56.3 per cent may be compared to the 60 per cent figure which the Census Bureau estimated was the ratio of assessed valuation to the "true value" of realty in 1929. "for 527 farms, the average was 54.1 per cent; for 1219 urban and village residences the average was 54.6 per cent; for the 182 commercial and industrial properties, the average was 57.4 per cent." This indicates that the averages, for each class of property, were but slightly different. Table 12 gives the range of the assessment ratios in each of the counties studied along with the number of properties and the average ratio in each county for all classes of property.

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(1) J. C. Powell and others, "Farm Taxation and County Government in Overton, Clay and Pickett Counties."
(2) Report of State Tax Committee, "Tennessee Taxation and Public Finance, 1930". (The portion quoted was based on Mr. Powell's report.)
(3) Frank W. Prescott, "Assessment and Equalization of Taxes in Tennessee."

Table 12.

Percentages of Assessed to Sales Value: All Classes of Realty, 1929 Assessment

County	Number of Properties	Percentage			
		High	Low	Median*	Average
Bradley	94	222.2	12.5	53.5	57.6
Coffee	42	125.0	15.0	66.6	51.4
Davidson	228	150.0	13.3	66.6	56.1
Franklin	41	190.4	37.0	68.5	72.4
Gibson	216	500.0	8.0	66.6	67.2
Hamilton	600	160.0	11.6	48.6	54.5
Knox	216	360.0	18.8	61.1	49.1
Lincoln	62	116.6	22.2	61.8	59.3
Madison	200	166.6	11.0	58.8	59.3
Marion	9	94.0	32.0	60.0	73.9
Shelby	221	141.6	10.5	65.1	58.9
Totals	1929				56.3

Source: Adapted from tables 1 and 2 in "Assessment and Equalization of Taxes in Tennessee", by F. W. Prescott.

* The "median" represents the middle property in each county, which means that there are just exactly as many cases assessed higher as there are cases assessed lower than the median.

The extremes as shown in all the counties except Marion compare to the extremes found in the studies in Overton, Clay and Pickett counties and thus must be somewhat indicative of the chaotic state of the assessment procedure in Tennessee. Mr. Prescott states that if there had been ten times as many parcels available in each county, the averages probably would have been more stable. On the other hand, the more parcels included the more cases of extreme inequalities there would have been in the individual instances. Yet it would be difficult to find more glaring discrepancies than those was in Gibson County, where the range was from 8 to 500 per cent of the value.

Assessment Ratios: Urban and Rural Properties Compared

As has been pointed out, there were but slight differences in the general average assessments as between rural and urban properties in all

the counties studied by Dr. Prescott. "In the case of small cities, the average was 1.1 per cent less, and in the large cities 2.8 per cent more than the farm properties studied. In several counties, however, the spread between urban and rural appraisal was much greater: in Bradley County in 1929, average farm assessments were 12 per cent higher than for city property; in Franklin 10 per cent; in Lincoln, 8.4 per cent; in Coffee, 6.7 per cent; and Shelby, 5.4 per cent. The other counties had farm property valued lower than city property."

Table 13 gives comparative data on farm assessment ratios as found in the 11 Tennessee counties studied by Mr. Prescott. Franklin and Gibson counties had the highest average assessment, of 75.1% and 66.4% respectively. Knox County was low with a percentage ratio of 39.1.

Table 13

Ratio of Assessed to Sales Value of Farm Real Estate, 1929

County	No. of Farms	No. of Acres	% Assessed to Sales Value
Bradley	57	5,626	64.5
Coffee	28	4,080	53.6
Davidson	31	3,677	50.0
Franklin	25	3,039	75.1
Gibson	140	7,485	66.4
Hamilton	25	2,947	53.0
Knox	62	3,865	39.1
Lincoln	42	3,790	62.1
Madison	53	5,080	53.2
Marion	6	1,129	52.2
Shelby	58	11,533	64.2
Totals	527	52,251	54.1

Source: Table 10, "Assessment and Equalization of Taxes in Tennessee", by F. W. Prescott.

Number of Parcels Falling in Different Percentage Brackets. Table 14 gives the percentage of the total number of farms falling within the different brackets of percentages that assessed value was of sales value. As is seen in Table 14, 44.4 per cent of the total number of farms were assessed between 41 per cent and 70 per cent. The largest per cent was found in the 41-50 per cent bracket. Two and one-tenth per cent were assessed between 11-20 per cent and 7 per cent were assessed over 100 per

cent of the sales value. This gives some idea of the wide range of assessment ratios on farm real estate and the discrimination which exists between individual farms.

Table 14.

Percentage of Assessed to Sales Value of Farms As Based on 1929 Assessment

Percentage of Sales Value	Number of Farms	Per Cent of Total Number	
0-10	0	0.0	
11-20	11	2.1	
21-30	27	5.1	
31-40	52	9.9	
41-50	83	15.7)	
51-60	74	14.1)	44.4
61-70	77	14.6)	
71-80	72	13.6	
81-90	41	7.8	
91-100	53	10.1	
101 and over	37	7.0	
Total	527	100.0	

Abridged from Table 11 of "Assessment and Equalization of Taxes in Tennessee" by F. W. Prescott.

Assessed Value of Individual Parcels Tends to Be Static: Dr. Prescott also found that when a farm in Tennessee is once listed on the tax books that the assessment then tends to become static, even though the local boards of equalization make "fitful and erratic reductions". He says, "The rural assessor merely copies forward figures of previous years. We have been that the results of the revaluation of 1920, as readjusted, did not tend toward erosion of property values in the aggregate. In periods of rising farm values, and of income, tax burdens do not seem heavy."(1)

(1) Several hundred properties were traced back through the tax books in a number of counties, to reveal what changes had been made by assessors and reasons therefor. Chapter 602, sec. 10, of the Act of 1907 says that it shall be unlawful for any assessor "------ to assess any property or polls solely by substitution of copy from former assessment."

Dispersion of Assessment Ratios

The revision of the tax assessment laws in 1919, generally referred to as "the Roberts' law of assessment", improved the equitability of the assessment in the state. But since 1920 there seems to be a tendency to drift from the state of uniformity that the 1919 laws provided.

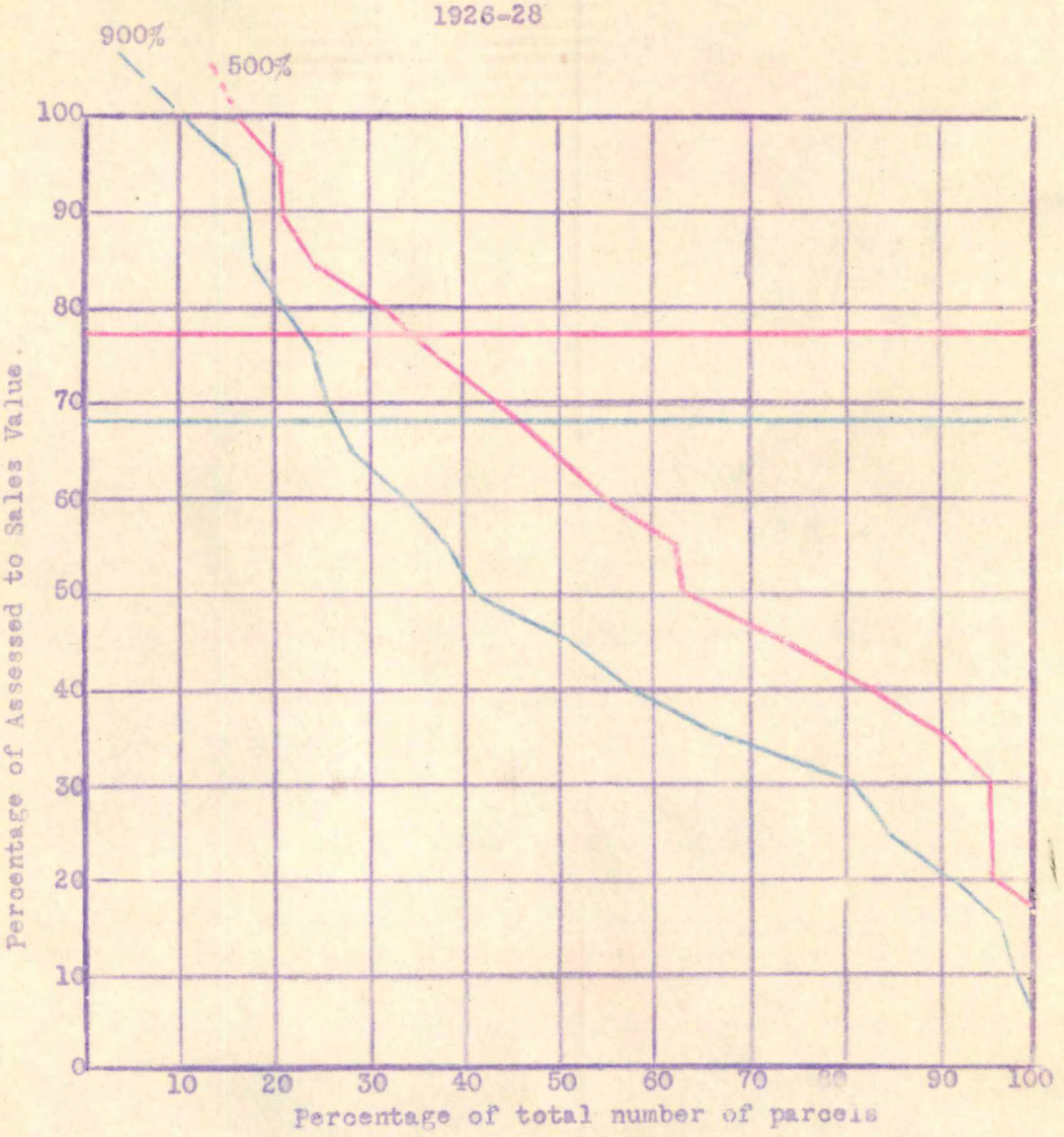
Dispersion in Overton County: Ratios of 1920 Compared to Those of Later Years: From assessment ratios on Overton County transfers for 1920 and 1926-28, it appears that the assessment in 1926-28 was less uniform than in 1920. Even though the 1920 ratios of assessment to sales value were far from uniform, they were considerably more uniform than the ratios for the later years.

The arithmetic mean of the ratios of assessment to the actual sales considerations on 65 parcels of Overton County real estate transferred in 1920 is 77.43 per cent and on 85 parcels in 1926-28 it is 68.26 per cent. The assessment ratios in 1920 ranged from 17.50 per cent to 500.00 per cent of the actual sales value. In 1926-28 the range was from 6.0 per cent to 900.0 per cent (See Table 15). In 1920, ten parcels, or 15.39 per cent of the total number, were assessed over a 100 per cent of the sales value. Ten and fifty-nine hundredths per cent of the parcels in 1926-28 period were assessed over 100 per cent. Four and sixty-two hundredths per cent and 17.82 per cent of the parcels were below 30 per cent of the sales value for the two periods respectively. The greatest concentration of ratios was between 36 and 50 per cent in 1920, with 27.69 per cent of the total properties falling in this range. In 1926-28, 29.42 per cent of the properties were assessed between 31 and 45 per cent, and 40.01 per cent of the properties fell in the 31-50 range.

Chart 7 is a graphic presentation of data found in Table 15. The red lines represent 1920 data and the green line the 1926-28 data. The graph

Chart 7.

RATIO OF ASSESSMENT TO SALES CONSIDERATION OF PARCELS OF REAL ESTATE IN OVERTON COUNTY, 1920 and 1926-28



Source: Overton County Records.

1920

1926-28

Red horizontal line is the arithmetic mean for 1920.

Green horizontal line is the arithmetic mean for 1926-28.

Table 15.

Range of Assessments in Relation to Sales Value - Overton County

Per Cent Range	Number Parcels	% of Total	Per Cent Range	Number Parcels	% of Total
1920			1926-28		
17.50-20	3	4.62	6-10	2	2.35
21-25	0	0.00	11-15	1	1.18
26-30	0	0.00	16-20	4	4.70
31-35	3	4.62	21-25	6	7.06
36-40	5	7.69	26-30	3	3.53
41-45	6	9.23	31-35	12	14.12
46-50	7	10.77	36-40	8	9.42
51-55	1	1.54	41-45	5	5.88
56-60	5	7.69	46-50	9	10.59
61-65	4	6.15	51-55	2	2.35
66-70	3	4.62	56-60	4	4.70
71-75	5	7.69	61-65	5	5.88
76-80	3	4.62	66-70	2	2.35
81-85	5	7.69	71-75	1	1.18
86-90	2	3.07	76-80	3	3.53
91-95	0	0.00	81-85	3	3.53
96-100	3	4.61	86-90	0	0.00
101-500	10	15.39	91-95	1	1.18
	65	100.00	96-100	5	5.88
			101-900	9	10.59
				85	100.00

Source: Overton County Records.

shows that the assessment ratios in 1920 did not vary between as great extremes as the ratios in later period. The average for 1920 is 9.17 per cent higher than for the later years. On first notice one may conclude that the assessment was more equitable and the tax burden lighter in the 1926-28 period. But this is not true. It is readily seen that the 1920 assessment is more nearly uniform since about 35 per cent of the parcels were above the average and 65 below, while in the later period about 27 per cent were above the average and 73 per cent below. Also the range of assessment ratios was from 17.5 per cent to 500 per cent in 1920 and from 6 per cent to 900 per cent in the later period. The standard deviation and the index of variability also prove the 1920 assessment more nearly uniform. The standard deviation was 63.56 per cent in 1920 and 99.25 per cent for the later years. The index of variability was 81.83 per cent in 1920 and 144.95 per cent in 1926-28.

Burden for the Two Periods Compared. For each percentage point deviation from the mean, the tax burden was lighter or the difference in the amount paid was less in 1920. For example, take a 10-point spread from the average for each of the two periods. Take a constant tax rate, say of $2.00 per hundred, and then find out the amount each individual would have to pay. The average in 1920 was 77.43 per cent. Compare the amount the man with the average assessment ratio paid to the one with an assessment ratio 10 points below the average or 67.43 per cent.

A.	.7743 x $2.00 =	$1.5486	Amount the average would pay per hundred
B.	.6743 x 2.00 =	1.3486	Amount man 10% below would pay
		$0.2000	Difference

The difference is $0.20, but A pays 12.91 per cent more than B.

For the 1926-28 period the average was 68.26 per cent. Compare the amount the man with the average assessment ratio paid to the man with an assessment ratio 10 points below the average, or 58.26 per cent.

A'.	68.26 x $2.00 =	$1.3652	Amount the average would pay per hundred
B'.	58.26 x 2.00 =	1.1652	Amount man 10% below average would pay
		$0.2000	Difference

The difference is $0.20 is this case also, but A' pays 14.65 per cent more than B'.

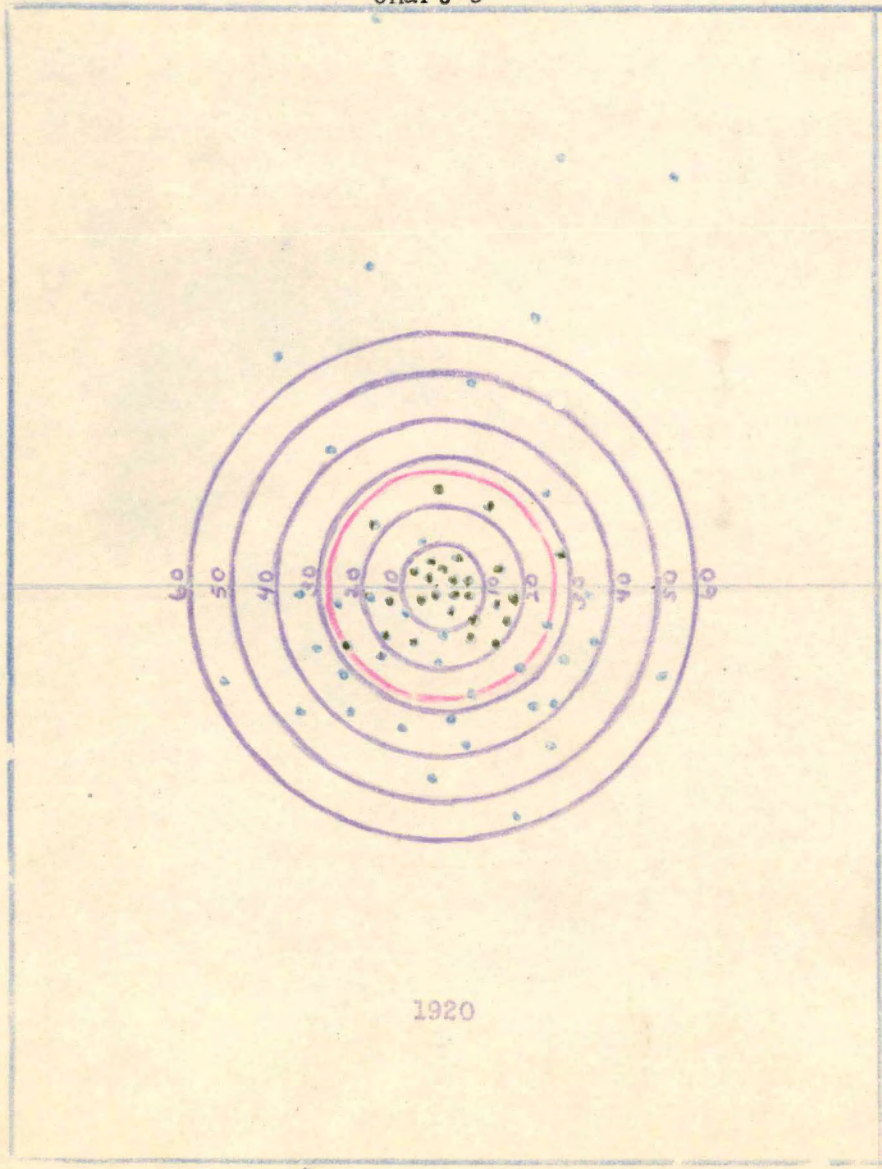
Thus it is seen that even though the rate is the same and the amount difference is the same for each assessment period, the percentage difference between the two men in 1926-28 is greater than for the 1920 period. This also points out that the 1920 assessments were more equitable than the ones for the later years.

Dispersion Pictured by Target Charts. Target Charts 8 and 9 present the same data as is found in Table 15 and Chart 7, but in a decidedly different manner. In this study the assessor is considered as a marksman at

Charts 8 and 9.

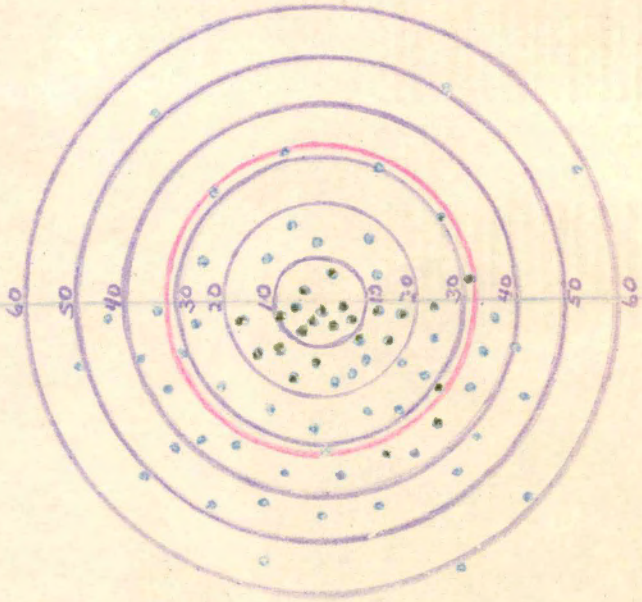
THE DEVIATION FROM UNIFORMITY OF ASSESSMENT RATIOS IN 1920 AND 1926-1928

Chart 8



1920

Chart 9



1926-1928

Source: Overton County Records.

Each dot equals one parcel of property.

target practice. The assessor's ability in assessing is pictured by the position of the dots or shots on the charts. The "bull's-eye" in each chart is the arithmetic mean for the period represented. The dots in each chart illustrate the deviation of each ratio from the mean. Each dot or shot represents one parcel of property.(1) The shots below the horizontal lines are the deviations below the mean and the ones above the deviations above the mean. Shots outside the outer-most circles are not placed according to scale, since some would not have hit the page.

Chart 9 is drawn on the 1920 basis and is thus directly comparable to Chart 8. A deviation of one percentage point(2) from the 1926-28 mean is represented by the same percentage chart distance as a one percentage point deviation from the 1920 mean. Since the means for the 1920 and the later period are .7743 and .6847 respectively, each scale unit on the 1920 chart covers .884 of the space covered by the 1926-28 scale unit, and thus each percentage point on the 1926-28 chart covers 1.13 more space than a one percentage point on the 1920 chart. In other words, taking 1920 as 100 per cent, the 1926-28 index is 113 per cent.(3)

Assessments in 1920 did not vary from uniformity so much as did the ones made in 1926-28. This is pointed out in the index of the mean assessment ratio for 1926-28 in terms of 1920. The index increased from 100 in 1920 to 113 in the later period. Since Chart 9 is drawn in terms of Chart 8, it would seem that a circle including 50 per cent of the parcels would fall the same number. of percentage points from the mean in each case. But this is

(1) The number of properties studied in each year being less than 100, it is not practical to let each dot represent 1 per cent of the properties.

(2) These charts are plotted according to the number of percentage points each parcel deviates from the mean and not according to the percentage deviation from the mean. The percentage deviation, which is found by subtracting the mean ratio from the ratio of assessment to sales value in each case and then dividing this remainder by the mean, is probably the best procedure to use.

(3) After having plotted and reproduced Charts 8 and 9, it was decided that it was unnecessary and very complicating to construct Chart 9 in terms

(continued on next page)

not true. In 1920 the assessor placed 50 per cent of his shots within a circle with a radius 27.5 percentage points from the mean and in 1926-28 50 per cent of the shots fell within a radius 32 percentage points of the "bull's-eye". The red circle on each chart encloses 50 per cent of the shots. The larger circle in 1926-28 denotes a greater deviation from uniformity. Also as is noted on Chart 7, the range is considerably wider in 1926-28 than in 1920.

Conclusion. The above discussion shows that either the 1920 assessor was a better marksman than were those of the later period or that he had a better rifle![1] Presumably the latter. It is evident that the machinery is becoming less efficient and that the ratios of assessment to selling value are deviating more and more from uniformity. The ratios have drifted from the state of uniformity brought about by the 1919 revision of the assessment machinery.

Equality: Physical Extent of Properties

There is inequality in the assessment of parcels of property in relation to their physical size. In the summary of a survey of 63 parcels in Overton County, 1920, as to the ratio of assessed to sales value it was found that there was discrimination between the different size brackets of properties (see Table 16).

(continued from bottom p. 48)

Chart 8, or to draw them to scale in terms of arithmetic means of the ratios for the two periods. It would have been better to have calculated the percentage deviation from the mean in each case for the two periods and then plotted the percentage deviations on scatter charts, both charts drawn to the same physical scale, enclosing 50 per cent of the dots or shots in a circle. By this method, as is shown in the method used, the circle enclosing 50 per cent of the parcels in 1926-28 would have been considerably larger than a similar circle for the 1920 period. The actual results would have been the same.

(1) Marksmen equal assessors, rifles equal assessment method or procedure and the two together equal assessment machinery.

Table 16.

Size and the Ratio of Assessment to Selling Price - 63 Overton County Parcels in 1920

Size	Number Parcels	Selling Price	Assessment	Per Cent Assessment Is of Selling Price
Less than 3 acres	19	$24,105.00	$16,620.00	68.95
3 to 44 acres	19	18,260.00	9,650.00	52.85
45 to 89 "	15	18,685.00	13,765.00	73.67
90 and Over	10	26,952.50	19,000.00	70.50
	63	$88,002.50	$59,035.00	67.07

The percentage that assessment was of sales price of 19 parcels in the less than 3 acre bracket(1) was 68.95 per cent; for 19 parcels in the 3 to 44 acre bracket, 52.85 per cent; for 15 parcels in the 45 to 89 acre bracket, 73.67 per cent; and for 10 parcels in the bracket over 90 acres, 70.50 per cent.

These data indicate that there is discrimination among different size farms in relation of assessed to sales price. The study also points to the fact that the very small farms and large farms are not assessed at as great a percentage of the sales value as are the medium size farms. In Tennessee, the average size farm ranges from 60 to 80 acres. Thus from Table 16 it is seen that the average size farm in Tennessee based on the Overton County data for 1920, was bearing a heavier tax burden than either the below or above average one.(2)

Deed Acreage: Comparison to Assessed Acreage. In the summarization of the above presented data, it was found that the assessed acreage was not in every case the same as the deed acreage. On 13 parcels the deed acreage was less than the assessed acreage. See Table 17. On 28 parcels the two were the same and on 4 parcels, assessed acreage was more than the deed acreage. Taking the 45 parcels for which data was available, deed acreage exceeded

(1) The majority of these parcels were town lots.
(2) Due to the small number of farms studied, a reliable generality cannot be made.

Table 17.

Comparison of Deed to Assessed Acreage, 1920

Relation of Deed to Assessed Acreage	Number Parcels	Deed Acreage	Assessed Acreage	Difference
Greater than	13	1167.50	1073.0	94.50
Same as	28	1737.00	1737.0	-
Less than	4	126.75	132.5	— 5.75
Total	45	3031.25	2942.5	88.75

assessed acreage by 88.75 acres. This indicates discrimination in assessments. The county was deprived of some revenue and some farmers were assessed either as having more or less acres than they did have.

Data for all Overton County farms in 1926[1] show that only 78 per cent of all the acres on the farms surveyed were listed. No taxes were paid on 22 per cent of the acres. Data from 64 Overton County farms in 1928 shows that only 95 per cent of the acres were assessed.[2]

Deeds read, that a parcel contains a certain number of acres, more or less. It seems to be a predominent custom for assessors to record the acreage on the "less" side.

Inequality: Value Classes of Property

Inequality in assessment between the different value classes of real estate has been found to exist in Tennessee. The transfers of real estate throughout the state in 1918 were carefully compared with the assessments on the same property and subdivided into four classifications. This tabulation showed that in every county in the state property valued at $2000 and less was assessed highest; property valued from $2000 to $10,000 was assessed lower than the first classification; property valued from $10,000 to $25,000 still lower; and property valued above $25,000 was assessed lowest

(1) J. C. Powell and others, "Farm Taxation and County Government in Overton, Clay, and Pickett Counties".
(2) A. C. Seymour and others, "Farm Taxation and County Government in Tennessee", pp. 124-126.

in relation to sales value.[1]

Overton County, 1920. In Overton County in 1920 from a study of 66 individual parcels of real estate it was found that 50 properties in the class of $2000 and less were assessed on an average of 68.1 per cent of the sales value, while the 16 parcels in the $2000 to $10,000 class were assessed an average of 65.5 per cent of the sales value. See Table 18. In the 1920 study made in Overton County no parcels with a sales consideration of over $10,000 were found.

Table 18.

Value Classification of Farms: 66 Overton County Farms, 1920

Value Class	Number Parcels	Selling Price	Assessed Value	Per Cent Assessment Is of Selling Price
Less than $2000	50	$35,693.50	$24,335.00	68.1
$2000 - $10,000	16	55,700.00	36,500.00	65.5
$10,00 and over	0	0	0	0

Overton, Clay, and Pickett Counties, 1926. A similar study has been made for Overton, Clay and Pickett Counties, based on 1926 data. The results found are similar to the results found from the earlier studies. Table 19[2] gives the results as found in each of the three counties and also the situation as found by considering the three counties in combination. A total of 202 farms were studied in the three counties. 177 of the farms fell in the value class of less than $2000, 24 in the $2000-$10,000 class and 1 sold for over $10,000. The average ratio of assessment to selling price in each of these three classes respectively was 62, 51.9, and 27.7

(1) First Biennial Report, Tennessee State Board of Equilization, 1919-20.

(2) This table is taken directly from the report of Mr. A. C. Seymour, "Farm Taxation and County Government", pp. 114, Table 30A. It is reproduced for convenience in comparing results for the two periods.

Table 19.

Ratio of Assessment to Selling Price of Real Estate by Value Classes* 1926

Value Classes	Number Parcels	Selling Price	Assessment	Per Cent Assessment Is of Selling Price
Overton County				
Under $2000	97	$66,875	$41,425	61.9
$2000-$10,000	13	34,060	17,400	51.1
Over $10,000	1	14,000	3,875	27.1
Total	111	$114,935	$62,700	54.6
Clay County				
Under $2000	32	$31,451	$20,090	63.9
$2000-$10,000	10	42,090	23,000	54.6
Total	42	$73,541	$43,090	58.6
Pickett County				
Under $2000	48	$29,079	$17,550	60.4
$2000-$10,000	1	2,400	400	16.7
Total	49	$31,479	$17,950	57.0
The Three Counties Combined				
Under $2000	177	$127,405	$79,065	62.0
$2000-$10,000	24	78,550	40,800	51.9
Over $10,000	1	14,000	3,875	27.7
Total	202	$219,955	$123,740	56.2

Source: A. C. Seymour and others. "Farm Taxation and County Government", p. 114, Table 30A.

Inequality in Value per Acre Classes. Comparing the value per acre and the amount of taxes paid per $100 owner's valuation on 70 Overton County farms in 1926,(1) it was found that the lower the value per acre the higher the rate per $100. On 35 farms ranging in value per acre from $8.33 to $31.25, with an average of $20.67 per acre, the mean average tax rate was $1.61 per $100. On the remaining 35 farms, ranging from $32 to $88 per acre, with an average of $44 per acre, the mean average tax rate was $1.20 per

(1) Overton County records, 1926.

$100. Thus assessments were so made that there was a $0.41 per $100 discrimination between the half of the farms with a low average value per acre and the half with higher average value per acre.

Inequality by Value Classes: 11 Counties, 1929. Dr. Frank W. Prescott,[1] from a study of 527 parcels of real estate in 11 Tennessee counties in 1929 also found that the properties of low value were assessed at a greater percentage of the selling price than the properties of high value. Table 20 shows the result of his work for the 11 counties combined.

Table 20.

Farms Classified According to Value - 11 Counties, 1929.

Value	Number Parcels	Sales Value	Assessed Value	Per Cent of Assessed to Sales Value
$0 - $2,500	235	$360,739	$208,185	57.7
$2,500-$5,000	137	503,734	367,212	72.9
$5,000-$10,000	93	639,594	412,750	64.5
$10,000 and over	62	2,199,769	1,014,205	46.1
Total	527	$3,703,836	$2,002,352	54.1

Source: Frank W. Prescott, "Assessment and Equilization of Taxes in Tennessee", Table 12, p. 22.

Inequality by Value Classes, Gibson County, 1929. The results obtained by Mr. Prescott in a similar comparison of assessments between the different value classes in Gibson County, an agricultural area, which contains some of the best farm land in the state, show a more marked discrimination against the small farms (Table 21). The farms priced below $2500 were assessed on an average of 76.8 per cent of the selling price and properties worth over $10,000 or more were assessed on an average of 56 per cent of the selling price. Mr. Prescott says, "When an owner of a $1,500 farm in this county discovers that he pays on an assessment,or 76 per cent, a large planter pays at the rate of 56 per cent, a villager is assessed at 68 per cent, he may

(1) Frank W. Prescott, "Assessment and Equilization of Taxes in Tennessee", p. 22, Table 12.

begin to realize that he is subjected to a rigid classification of his property, a tax graduated inversely with the value, and the enjoyment of some features of a single tax. Under such conditions any equity that obtains would seem to be accidental."

Table 21.

Farms Classified According to Value, Gibson County, 1929

Value	Number Parcels	Sales Value	Assessed Value	Per Cent of Assessed to Sales Value
$0-$2500	86	$131,490	$101,045	76.8
$2500-$5000	29	99,970	57,150	57.2
$5000-$10,000	22	136,481	91,350	66.9
$10,000 and over	4	49,086	27,500	56.0
Total	140	$417,027	$277,045	66.4

Source: Frank W. Prescott, op. cit., Table 13.

Results of Study. These studies all indicate that the general property tax as actually administered in Tennessee is regressive rather than equal. It is natural that some regression will enter into the assessments, since smaller properties tend to be more standardized, more marketable, and more easily appraised, as opposed to the properties of greater value. In Dr. Prescott's words, "Doubtless an appraisal can be more easily made of a 60 acre farm with buildings or a five-room cottage on a fifty foot lot, than a 10,000 acre plantation, or a million-dollar residence. But these familiar alternatives do not explain a range of 12 to 20 per cent between highest and lowest valued properties."

Tax per $100 Owner's Valuation

The problem of equality in the incidence of the general property tax on farmers is continued under the topic of the amount of tax paid per $100 of the owner's valuation. This topic bears a close resemblence to the one on assessment ratios. It is known that the wide range of assessment ratios

from county to county and parcel to parcel causes the rate per $100 of owner's value to vary also. In fact for the individual parcels in a given county the range of assessment ratio according to owner's value will vary identical with the range of the rate per $100 owner's valuation. Thus this study is in reality just another means of approach to the same conclusions, with the data given in dollars and cents rather than percentages.

Tax per $100 Owner's Valuation, Overton County, 1926. A survey of 70 individual farms in Overton County, Tennessee, reveals that the amount of taxes paid per $100 of the owner's valuation range from $0.44 to $3.44. Table 22 gives some idea of the range and the number of farms falling within the different rate brackets. Thirty-six of the farms fall in the range of rate between $0.44 to $1.20 with a mean average of $0.90. The remaining 36 farms fall in the range of rate between $1.21 and $3.44 with a mean average of $1.86 per $100 of owner's valuation. These data indicate the inequality of the tax burden on individual farms in Overton County.

Table 22.

Tax per $100 Owner's Valuation: Overton County Farms Paying Specified Amounts, 1926

Rate per $100 of Owner's Valuation	Number of Farms	Rate per $100 of Owner's Valuation	Number of Farms
0.41-0.60	1	1.81-2.00	5
0.61-0.80	9	2.01-2.20	4
0.81-1.00	16	2.21-2.40	0
1.01-1.20	10	2.41-2.60	1
1.21-1.40	9	2.61-2.80	1
1.41-1.60	5	2.81-3.00	3
1.61-1.80	5	3.44	1

Tax per $100 Owner's Value by Tennessee Counties, 1929. The extent to which the following data on the rate of tax per $100 owner's value presents the problem of equality in assessment is limited by the difference in tax rates from county to county. Both rates and assessment ratios may cause inequality in the rate per $100 owner's value. The following data is presented

Table 23.

Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, for Tennessee Counties, 1929

Rank	County	Full Owners Owning No Other Land	Rank	County	Full Owners Owning No Other Land	Rank	County	Full Owners Owning No Other Land
1	Sullivan	0.59	32	Cocke	1.07	64	Pickett	1.35
2	Knox	0.67	33	Cannon	1.07	65	Greene	1.35
3	Johnson	0.68	34	Franklin	1.08	66	Houston	1.36
4	Hamilton	0.70	35	Robertson	1.09	67	Marshall	1.39
5	Davidson	0.72	36	White	1.10	68	Blount	1.39
6	Stewart	0.77	37	Macon	1.10	69	Trousdale	1.40
7	Sumner	0.79	38	Hawkins	1.10	70	Fayette	1.42
8	Williamson	0.84	39	Hancock	1.10	71	Gibson	1.43
9	Polk	0.84	40	Giles	1.10	72	Perry	1.44
10	Shelby	0.84	41	Dickson	1.10	73	Grundy	1.45
11	Carter	0.86	42	Claiborne	1.12	74	Benton	1.45
12	Sequatchie	0.87	43	Bledsoe	1.12	75	Overton	1.46
13	McMinn	0.88	44	Crockett	1.13	76	Henry	1.48
14	Maury	0.90	45	Lincoln	1.14	77	Scott	1.50
15	Bedford	0.90	46	Meigs	1.15	78	Chester	1.50
16	Moore	0.91	47	Marion	1.15	79	Union	1.52
17	Washington	0.93	48	Jefferson	1.16	80	Smith	1.53
18	Madison	0.93	49	Jackson	1.16	81	Roane	1.54
19	Bradley	0.93	50	Tipton	1.17	82	Fentress	1.58
20	Cumberland	0.94	51	Wilson	1.22	83	Grainger	1.60
21	Hamblen	0.95	52	Putnam	1.22	84	Clay	1.63
22	Unicoi	0.97	53	Obion	1.22	85	Carroll	1.63
23	Van Buren	0.98	54	Lauderdale	1.22	86	Hardeman	1.65
24	Warren	0.99	55	DeKalb	1.23	87	Campbell	1.67
25	Sevier	1.01	56	Anderson	1.23	88	Decatur	1.68
26	Montgomery	1.01	57	Lake	1.24	89	Monroe	1.69
27	Wayne	1.02	58	Lewis	1.25	90	Dyer	1.72
28	Cheatham	1.03	59	Rutherford	1.26	91	Hickman	1.77
29	Loudon	1.05	60	Humphreys	1.30	92	McNairy	1.86
30	Rhea	1.06	61	Coffee	1.31	93	Henderson	1.99
31	Haywood	1.06	62	Weakley	1.32	94	Hardin	2.07
			63	Lawrence	1.34	95	Morgan	2.08
				St. Ave.	1.10		U.S. Ave.	1.26

Source: Fifteenth Census Report of U. S., Agriculture in Tennessee, Statistics by Counties, Series 2.

with an understanding that this limitation does exist. In periods of both depression and deflation the amount of tax per unit of capital has an important bearing on the owner's ability to preserve his holdings until their earning power is restored.

The percentage that taxes were of the owner's value of farm real estate for the different counties of Tennessee in 1929[1] ranged from 0.59 per cent[2] in Sullivan County to 2.08 per cent in Morgan (see Table 23). The weighted average for the state was 1.10 per cent. Forty-one of the counties were average or below, and 54 were above the average.

Map 5 illustrates the data given in Table 23. The counties in white are the ones with low taxes per $100 and the red ones have high taxes per $100 owner's evaluation. The difference in tax rates in the counties is one big factor in the high rates in certain counties. The other factor is the wide range of assessment ratios as to owner's value among the different counties. In the rich counties with high land and industrial evaluations, a sufficient amount of revenue is raised by low rates. While on the other hand, in the poor counties the reverse is true and thus a large rate per $100 owner's valuation is required.

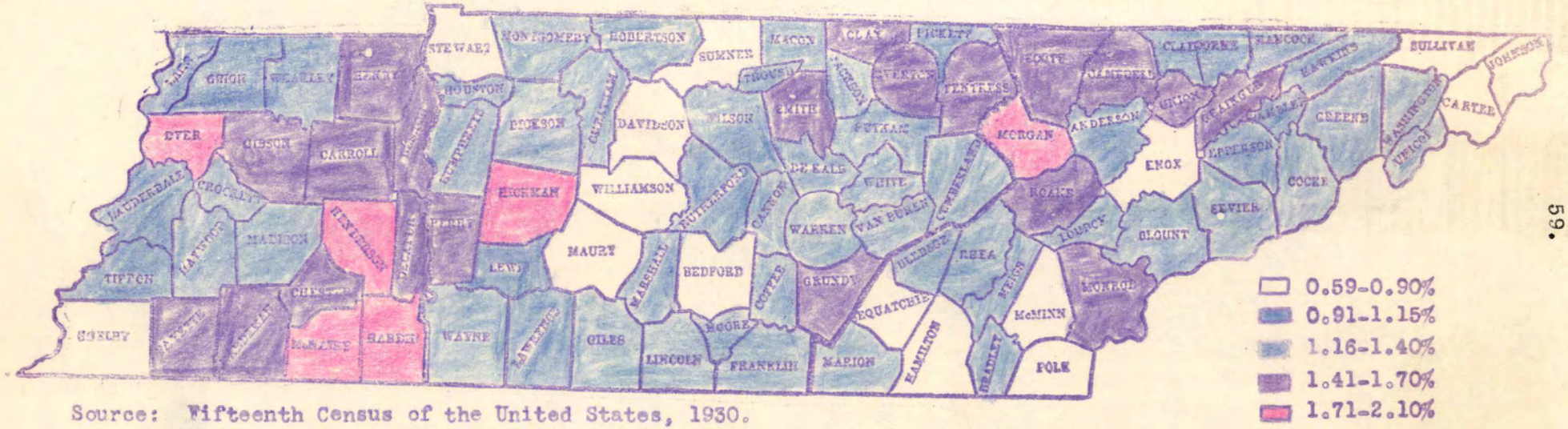
Tax per $100 of Owner's Valuation by States, 1929. For the states of the United States in 1929 the rate of tax per $100 of owner's valuation ranges from $0.65 in Virginia to $2.08 in Mississippi (Table 24 and Map 6). The weighted average was $1.26. Thirty states were average or below.[3] Tennessee ranked 19th, as the other states were ranked from low to high. Thus, so far as the average tax per $100 valuation is concerned, Tennessee is not so heavily burdened as 40 other states.

As was true in the Tennessee counties, the rates for the several states vary over a very wide range. This not only means that the rate is either excessively high or low in certain states, but also in the states with the

(1) United States Census Report, 1930. Agriculture in Tennessee. Statistics by Counties, Second Series.
(2) 0.59 per cent is the same as $0.59 per $100 owner's valuation.
(3) District of Columbia is ranked as a state, making the total 49. It functions as a state so far as taxation is concerned.

Map 5.

PER CENT TAXES ARE OF THE VALUE OF FARMS OPERATED BY FULL OWNERS OWNING NO OTHER LAND, FOR TENNESSEE COUNTIES, 1929.



Source: Fifteenth Census of the United States, 1930.
Agriculture, Tennessee. Statistics by Counties, Second Series.

Table 24.

Per Cent Taxes Are of the Value of Farms Operated by Full Owners Owning No Other Land, for U. S. and Geologic Divisions, 1929

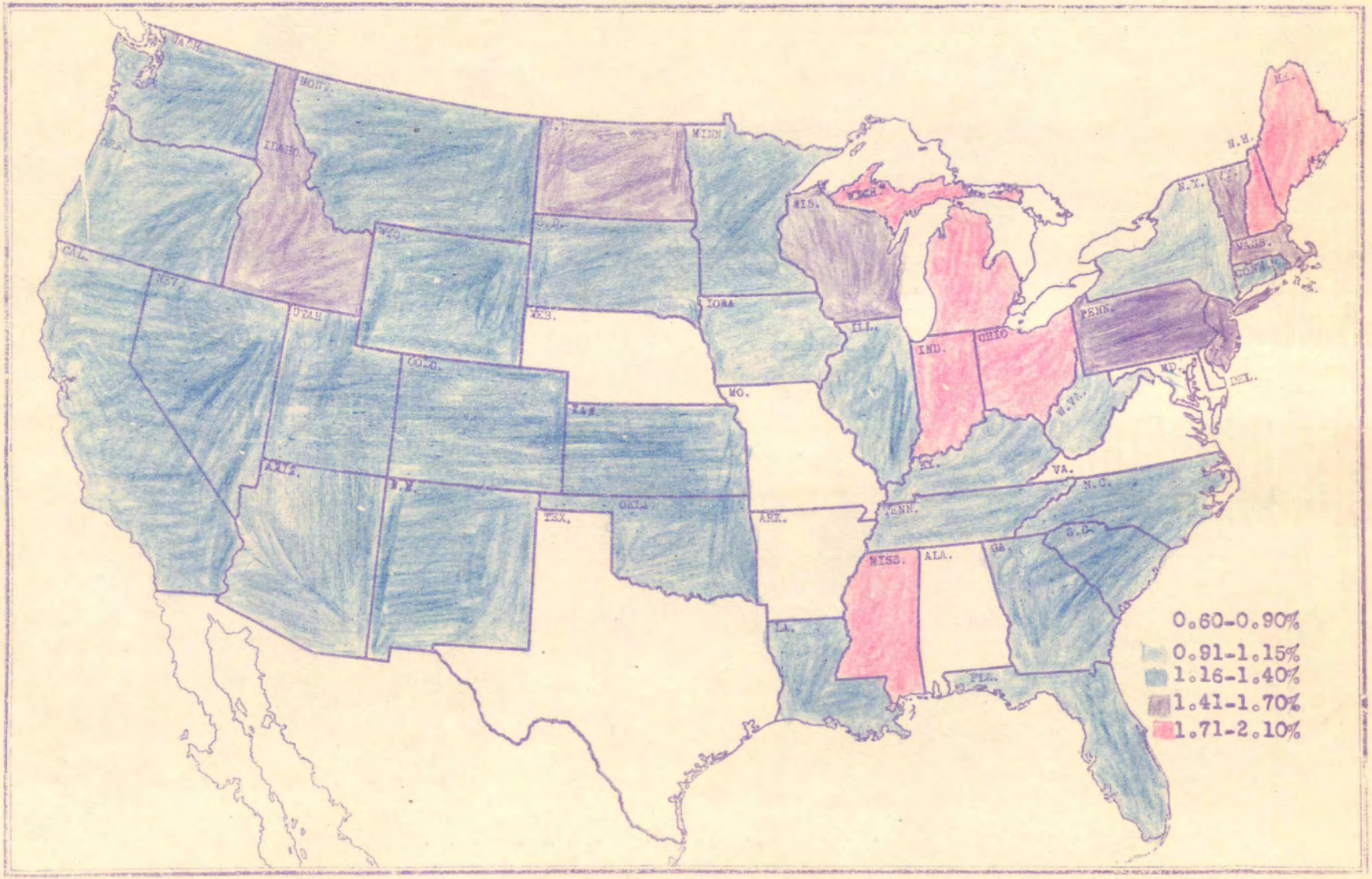
Rank	State	Full Owners Owning No Other Land	Rank	State	Full Owners Owning No Other Land
1	Virginia	0.65	25	Washington	1.18
2	Delaware	0.73	26	Oklahoma	1.22
3	Texas	0.76	27	North Carolina	1.23
4	Arkansas	0.81	28	Minnesota	1.25
5	Nebraska	0.81	29	Kansas	1.26
6	Missouri	0.85	30	South Dakota	1.26
7	Alabama	0.86	31	West Virginia	1.27
8	Dist. of Col.	0.88	32	Arizona	1.29
9	Kentucky	0.96	33	Louisiana	1.29
10	Iowa	0.99	34	Utah	1.32
11	California	1.00	35	Colorado	1.34
12	Wyoming	1.00	36	New York	1.40
13	New Mexico	1.04	37	Wisconsin	1.44
14	Florida	1.05	38	Idaho	1.46
15	Connecticut	1.07	39	Vermont	1.52
16.	Illinois	1.07	40	North Dakota	1.54
17	Rhode Island	1.07	41	New Jersey	1.59
18	Nevada	1.09	42	Massachusetts	1.65
19	Tennessee	1.10	43	Pennsylvania	1.67
20	Maryland	1.14	44	Ohio	1.78
21	Oregon	1.15	45	Maine	1.82
22	Georgia	1.16	46	Indiana	1.95
23	South Carolina	1.16	47	Michigan	2.06
24	Montana	1.17	48	New Hampshire	2.06
			49	Mississippi	2.08
1	U. S. C.	0.89	7	M. A.	1.53
2	S. A.	1.01	8	N. E.	1.57
3	Pacific	1.05	9	E. N. C.	1.61
4	W. N. C.	1.07			
5	E. S. C.	1.13		U. S. Average	1.26
6	Mountain	1.27			

Source: 15th Census of U. S., 1930. Agriculture in U. S. Statistics by States, Second Series.

the extreme low averages, a number of counties and individual farms must still pay a much lower rate in order to make the state average what it is, and in the states with the high average rates, a great number of farmers must bear a still much higher rate unless by happy chance an equal rate per $100 owner's valuation should exist.

Map 6.

PER CENT TAXES ARE OF THE VALUE OF FARMS OPERATED BY FULL OWNERS OWNING NO OTHER LAND, FOR UNITED STATES, 1929.



Source: Fifteenth Census of United States, 1930,
Agriculture, United States. Statistics by States.

Tax per $100 of Owner's Valuation by Geographic Divisions, 1929.

Table 24 also shows the range in rates in the different geographic divisions of the United States. The rate was lowest in the West South Central states and highest in the East North Central states. The rate was 0.89 and 1.81 per $100 owner's valuation in each division respectively.

Chapter IV.

INCIDENCE OF THE GENERAL PROPERTY TAX: PROBLEM OF ABILITY

The "ability" doctrine of taxation is based on the principle that the costs of government are incurred for general social purposes, and thus constiture an obligation of society as a unit and not of particular individuals. The individuals who compose the social unit must each bear the burden of these costs in such a manner as to impose the least hardship. The least hardship results when each subject contributes pro rata to his "ability" to do so.(1) Adam Smith made the ability doctrine the first of his four cannons of taxation:

I. "The subjects of every state ought to contribute toward the support of the government, as nearly as possible in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state".(2) Today the ability doctrine is generally accepted as a proper standard of tax distribution.

"Ability" is a vague term and has been given many interpretations. In early American history, the individual was held to be the norm of ability and thus a poll tax levied, which was considered essentially equitable by this standard. Jean Bodin and numerous later writers held property to be the best measure of ability to pay. Property yields, individual expenditures, individual incomes, and savings have all been held to be the ideal criteria of "ability". At present popular opinion accepts income as the standard of ability.(3) (4)

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(1) Shultz, W. J.: American Public Finance and Taxation, p. 331.
(2) Adam Smith: The Wealth of the Nations; Book V, Ch. 2.
(3) Shultz, W. J.: op. cit.
(4) In the words of Shultz, "American Public Finance and Taxation", pp. 331-2, "The difficulty with each of the proposed objective measures of "ability", including the now popular measure, or income, is that they fail actually to measure "ability". If one individual has twice as much property, or spends twice as much, or receives twice as much income, or saves twice as much in the course of a year, as a second individual, does the first individual have exactly twice as much "ability" as the second individual, or

(continued on next page)

This study deals with the problem of ability from the viewpoints of income and price and tax indexes. Income in relation to ability to pay taxes is studied under five heads, namely: gross income, net income, labor income, net returns, and rental receipts. The price and tax indexes together with the amount of tax through periods of inflation and deflation are analyzed with reference to problems of retaining ownership and or land utilization.

Income

Gross Income. A study of taxes in relation to gross farm income gives a general idea of inequality of the tax burden on farmers.(1) The term total or gross farm receipts or income as used in this study means the total value of all crops, plus the value added by animals plus the value of animals slaughtered.

1. Overton County. A survey of 58 farms in Overton County in 1925 show that the gross receipts ranged from $32 on one farm to $4,208 on another. The percentage that taxes were of the gross receipts ranged from 1.8 to 56.2 per cent (see Table 25). The farm with total receipts of $32 paid $18 taxes or 56.2 per cent of the total receipts. This farm ranked first in the percentage taxes were of gross receipts. The farm with gross receipts of $4,208 ranked thirty-eighth, paying $286 taxes, which is 6.8 per cent of the $4,208. The farm which ranked last or lowest had a gross income of $789, $14 or 1.8 per cent of which was taken for taxes. Farm ranked as twenty-fourth also paid $14 taxes, but had a total income of only $156, indicating payment of 9

(continued from bottom page 63)

is the proportion somewhat more than double, or somewhat less than double? None of the objective "ability" doctrines can answer the questions. They cannot determine the very important question whether the tax burden should be proportional, regressive, or progressive in relation to property, expenditure, savings, or income."

(1) All the indquality cannot be attributed to the administration of the tax system since inefficient farm management and bad crop years along with insects and diseases may cause the ratio of taxes to gross receipts to vary.

per cent of the gross income for taxes. Farm ranked as rifth, with a total income of $805, paid $200 taxes,while on the other hand farm ranked last or 58th, with a total income of $789, or just a few dollars less than the rifth farm, paid only $14 taxes. The percentage that taxes constituted of the gross receipts was 24.8 and 1.8 respectively. The average percentage that taxes were of the total receipts on the 58 farms is 9.7. Thirty-six farms were above average and 22 below. The ratio of taxes to gross receipts on 32 farms or 55.1 per cent of the total number fell between 5 and 15 per cent. Thus there was some concentration of ratios around the average, yet the extremes are too wide.

Table 25.

Total Farm Receipts and Taxes: 58 Overton County Farms, 1925

Rank	Farm receipts	Farm taxes	% taxes are of farm receipts	Rank	Farm receipts	Farm taxes	% taxes are of farm receipts
1	$ 32	$18	56.2	30	$275	$22	8.0
2	120	36	30.0	31	379	30	7.9
3	439	126	28.7	32	154	12	7.8
4	92	25	27.2	33	271	20	7.4
5	805	200	24.8	34	206	15	7.3
6	216	48	22.2	35	871	61	7.0
7	347	72	20.7	36	216	15	6.9
8	332	65	19.6	37	1418	97	6.8
9	764	150	19.6	38	4208	286	6.8
10	806	150	18.6	39	222	15	6.8
11	569	105	18.4	40	223	15	6.7
12	249	45	18.1	41	346	23	6.6
13	505	90	17.8	42	346	23	6.6
14	599	105	17.5	43	269	17	6.3
15	319	54	16.9	44	847	52	6.1
16	339	50	14.7	45	201	12	6.0
17	252	33	13.1	46	386	22	5.7
18	176	23	13.1	47	618	32	5.2
19	239	30	12.6	48	284	14	4.9
20	645	75	11.6	49	688	33	4.8
21	332	36	10.8	50	287	13	4.5
22	370	35	9.4	51	402	18	4.5
23	363	33	9.1	52	371	16	4.3
24	156	14	9.0	53	661	27	4.1
25	290	26	9.0	54	1192	48	4.0
26	156	14	9.0	55	517	20	3.9
27	1704	150	8.8	56	321	10	3.1
28	333	29	8.7	57	638	20	3.1
29	756	65	8.6	58	789	14	1.8
				Total	29,910	2904	-
				Ave.			9.7

Source: Overton County Farm Management Survey, 1925.

It may be said, and no doubt is true in many cases, that the farmers, whose farms are ranked among the first fifteen or twenty in Table 25 are inefficient in their methods and that they should make larger incomes. Also many of them may be on naturally unproductive land which will not produce more. If the farmer is not farming according to the best methods, it will be difficult to make improvements when he is paying from 25 to 50 per cent of his total income for taxes. It may also be said that the farmer should borrow to have a desirable amount of working capital. One will find it is difficult for the average small farmer to borrow when he has only an anticipated income for security.

Again it may be that the farms ranked among the last 15 to 20 are efficiently managed and thus make a fair income per unit of investment and labor. It probably is that the farmers paying only 1.8 to 5 per cent of their total receipts for taxes are assessed too little in relation to actual value. But also it must be remembered that the farmers paying a very small percentage of their total receipts for taxes have more funds left to spend for better methods of farming.

2. Relation of Taxes to Gross Income in Tennessee by Counties. A comparison of the estimated total farm taxes with the estimated total or gross farm income in Tennessee by counties in 1929, shows that the taxes ranged from 7.45 per cent of gross income in Blount County to 1.81 per cent in Houston County (see Table 26). The weighted average for the state was 3.90 per cent. Fifty-five counties were above and 40 below the average. Map 7 shows the geographic distribution of the tax burden in relation to gross income through the state. It is readily seen that West Tennessee counties rank lower than the counties in the other grand divisions. This means that the West Tennessee farmers made more income per unit of assessed value than the farmers of other

sections. As has been stated above, this may be due to either more efficient[1] farming in this section, to low assessment ratios, or to both.

Regardless of the cause of the wide range of the ratios between taxes and gross income among the several counties of Tennessee, discrimination is thereby indicated between individual farmers in a given county and between the farmers in the different counties.

Table 26.

Gross Receipts: Tennessee Counties Ranked as to the Percentage Taxes Were of Gross Farm Income, 1929.

Rank	County	Per Cent	Rank	County	Per Cent	Rank	County	Per Cent
1	Blount	7.45	32	Humph.	4.70	64	Henry	3.47
2	Carter	6.50	33	Meigs	4.67	65	Fentress	3.41
3	Monroe	6.34	34	Wilson	4.67	66	Hender.	3.39
4	Marshall	6.33	35	Hamblen	4.58	67	Warren	3.39
5	Graing.	6.19	36	Moore	4.49	68	Carroll	3.37
6	Roane	6.03	37	Hancock	4.46	69	Decatur	3.30
7	Union	5.99	38	DeKalb	4.44	70	V. Buren	3.26
8	Unicoi	5.96	39	Hawkins	4.42	71	Sequatchie	3.24
9	Perry	5.84	40	Grundy	4.41	72	Weakley.	3.20
10	Morgan	5.72	41	Johnson	4.29	73	Gibson	3.18
11	Knox	5.63	42	Jackson	4.27	74	Cheatham	3.05
12	Maury	5.60	43	Dyer	4.26	75	Macon	3.00
13	Marion	5.56	44	Franklin	4.25	76	Lawrence	3.00
14	Davidson	5.55	45	Hardin	4.23	77	McNairy	3.00
15	Greene	5.54	46	Bedford	4.17	78	Lauderdale	2.97
16	Hickman	5.54	47	White	4.15	79	Sumner	2.97
17	Jefferson	5.38	48	Overton	4.12	80	Polk	2.96
18	Smith	5.25	49	Lincoln	4.11	81	Hardeman	2.89
19	Clay	5.23	50	Obion	4.11	82	Robertson	2.86
20	Loudon	5.19	51	Williamson	4.04	83	Wayne	2.80
21	Sevier	5.16	52	Bradley	4.04	84	Montgomery	2.79
22	Trousdale	5.12	53	Lewis	4.03	85	Chester	2.72
23	Rutherford	5.07	54	Bledsoe	3.97	86	Cumberland	2.70
24	Anderson	5.04	55	Benton	3.91	87	Dickson	2.64
25	Claiborne	5.01	56	Pickett	3.81	88	Fayette	2.49
26	Hamilton	5.01	57	McMinn	3.78	89	Crockett	2.45
27	Putnam	5.00	58	Rhea	3.74	90	Lake	2.37
28	Washington	4.95	59	Scott	3.68	91	Madison	2.33
29	Campbell	4.92	60	Sullivan	3.68	92	Haywood	2.15
30	Cocke	4.87	61	Giles	3.66	93	Tipton	2.15
31	Coffee	4.83	62	Cannon	3.59	94	Stewart	1.87
			63	Shelby	3.49	95	Houston	1.81
							St. Ave.	3.90

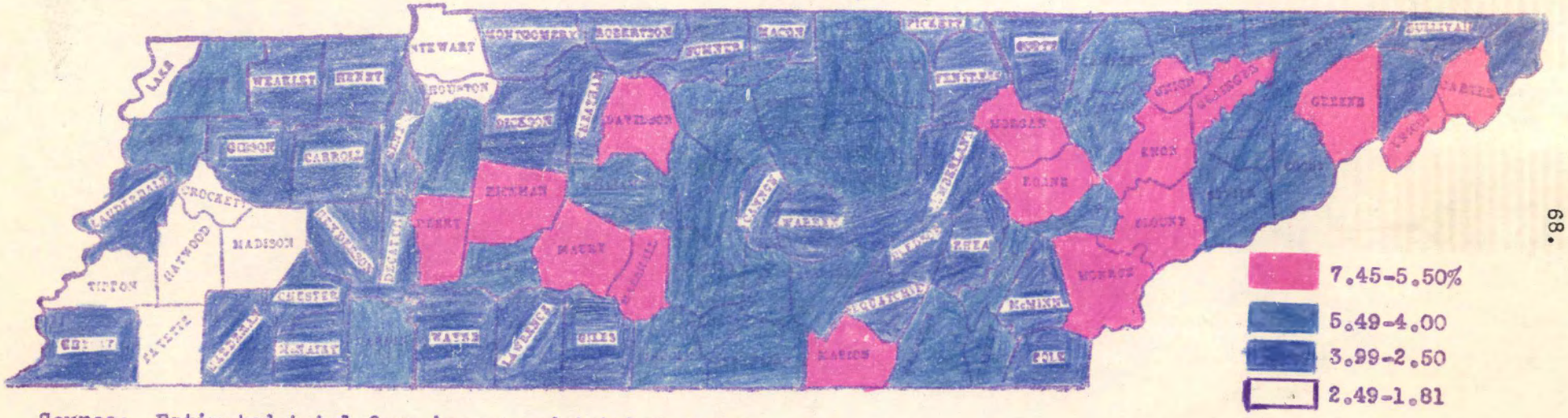
Source: Estimated total farm income and total farm taxes as compiled from the 15th Census Report of U. S. Agriculture, Tennessee, 1st, 2nd, and 3rd series by counties. *See Appendix Table 1

(1) Strictly speaking a large gross income is not a measure of efficiency in farming. Neither is a large gross income per unit of value, such as these

(continued on next page)

Map 7.

PERCENTAGE TAXES WERE OF THE GROSS FARM INCOME IN TENNESSEE BY COUNTIES, 1929



Source: Estimated total farm income and total farm taxes as compiled from 15th Census Report of U.S., Agriculture, Tennessee - 1st, 2nd and 3rd series by counties.

Net Income. Net income is the present popular accepted measure of "ability" to pay taxes. The term net income as used in this study means the amount of gross income left after all business and operating expenses have been deducted, unless otherwise stated. Taxes are generally counted as a business expense but in this study they are not counted as production cost and hence must be paid out of the net income as given herein. On the farm net income is generally spoken of as "farm income". The two terms are used in the following discussion synonymously.

1. Agricultural Industry Bears Heavy Tax Burden. In relation to net income farmers and laborers in the related agricultural industries have borne a heavier tax burden than laborers in other industries. This is shown by a study of the total tax burden on all corporations in Tennessee and supported by the findings of a study of taxes and net income among farmers, city dwellers, and villagers in Dane County, Wisconsin. Also there is discrimination between individuals of the farming class, in individual counties, from county to county, and from one section of the state to another. This is evidenced by a study of the relation of taxes to net income on a number of Overton County farms and on Tennessee farms by counties.

2. Total Tax Burden on All Tennessee Corporations. The tax burden on all corporations in Tennessee from 1917 through 1928, measured by the per cent taxes were of the net income(1) before the payment of taxes, had been extremely

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(continued from bottom page 87)

data indicate in West Tennessee, a definite measure of efficiency in farming, since in some types of farming the farm business expense is more than in other types. But it is true that there must be a large gross income before the net farm income can be very large. Gross income, in the several counties, does bear a fairly parallel relation to net income, especially so by sections of the state. (See Map 8, p. 80 of this chapter.) It is noticed that the ratio of taxes to both gross and net income is less in West Tennessee than in the other divisions. Thus by counties and certainly by sections of the state, gross income is a measure of ability to pay taxes.

(1) Net income as used in this instance equals "net profits" minus interest on tax exempt securities and dividends and on shares of other corporations.

Table 27.

Total Tax Burdens on Corporations, 1917-1928

	Per Cent That Taxes Were of Net Income* Before Payment of Taxes											
	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Agriculture and related industries	37.43	58.03	44.15	**	**	99.33	85.74	44.20	**	70.11	67.90	50.22
Mining and quarrying	28.43	44.24	44.97	42.67	**	**	62.32	93.25	**	34.58	68.57	42.71
Manufacturing	28.18	50.02	33.62	37.19	**	27.63	25.37	22.39	39.51	23.83	25.87	22.13
Construction	34.48	62.57	50.36	46.23	92.94	40.48	35.32	25.24	31.70	23.68	21.57	24.18
Transportation and other public service corporations	26.24	***	***	***	56.88	45.86	37.31	32.98	55.64	29.55	32.15	30.24
Trade	29.65	43.44	39.09	44.81	**	29.61	28.24	24.73	43.36	29.43	31.44	26.50
Service, amusements, hotels, etc.	52.26	51.72	38.80	41.46	57.60	42.94	39.89	35.22	56.59	37.07	43.14	40.66
Finance	28.90	46.16	36.65	39.94	55.27	50.71	31.82	32.20	61.02	27.69	27.07	25.79
Combinations	) **	46.12	62.97	58.75	**	43.79	30.98	27.36	66.57	) **	**	69.96
Inactive concerns	)	**	**	**	**	**	**	**	**	)		
All corporations	28.57	***	***	***	***	36.60	30.75	27.75	48.95	27.29	29.44	26.18

*"Net income" equals "net profits" minus interest on tax-exempt securities and dividends on shares of other corporations.

** Taxes in excess of net income or net profits.

*** Figure for total state and local tax payments not available.

Derived from United States Bureau of Internal Revenue, "Statistics of Income" series.

heavy. It absorbed more than 25 per cent of the net income each year. The highest per cent that taxes consumed of net income from all corporations during this period was 48.95, in 1925. The lowest per cent of the period, 26.18 per cent, was taken in 1928. In each of these years the percentage that taxes were of agricultural income is far greater than the average for all corporations.(3)

Table 27 gives the percentage of the net income by each class of corporation which was taken for taxes. Of the several corporations it is seen that agriculture and related industries bore the heaviest burden, taxes being in excess of net income in 1920, 1921, and 1925.

3. Dane County, Wisconsin. In Dane County, Wisconsin,(1) in 1924, from a survey of 4214 farmers, 13,000 city people, and 1854 village people who were making incomes, it was found that the farmers were receiving an average net income(2) of $937, while city men and villagers were receiving $2,102 and $1,466 respectively (see Chart 10B). The taxes paid by the farmers averaged $220, while the amount of taxes for the city men and villages was $146 and $92 respectively (see Chart 10A).

In comparing the amount of taxes to the net income for each of the three classes, it was found that the farmers paid 19 per cent of their net income for taxes, while the city men and villagers paid 6.5 and 5.9 per cent of their net income for taxes, respectively (see Chart 11). These data point out the fact that the tax burden was heavier on the farmers than on either the city or village man. It also points out that the percentage of the net income paid for taxes was extremely high, 19 per cent.

The Dane County survey is representative of the three classes of individuals. the total number of reports was about two-thirds of the total number of incose

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(1) B. H. Hibbard and B. W. Ollin: Tax Burdens Compared, Wisconsin Agricultural Experiment Station Bulletin 393, Madison, Wisconsin.

(2) Net income as used in this case refers to net income before taxes are paid.

(3) This does not show a direct tax burden on farmers. However the heavy tax on the agricultural corporations may force them to pay the farmers less for their raw materials. The data also points out that the agricultural corporations as well as the farmers are taxed higher than other industries.

Chart 10A.

AVERAGE TAXES PAID, 1924, DANE COUNTY, WISCONSIN (1)

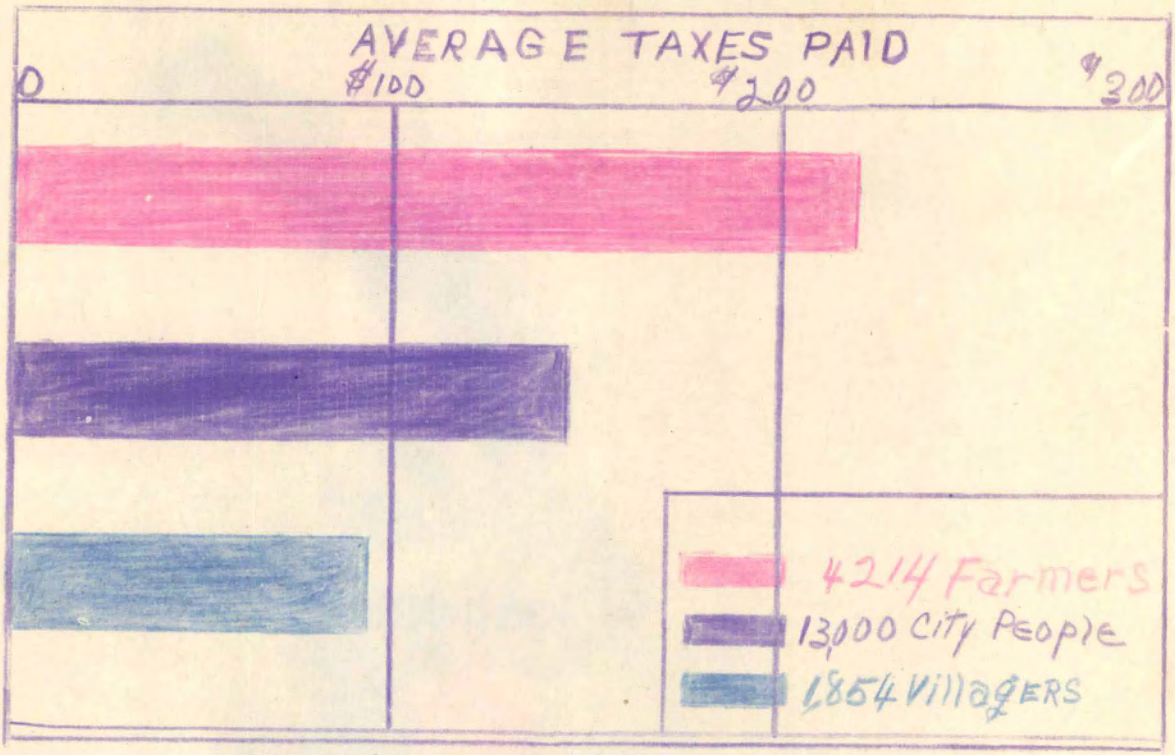
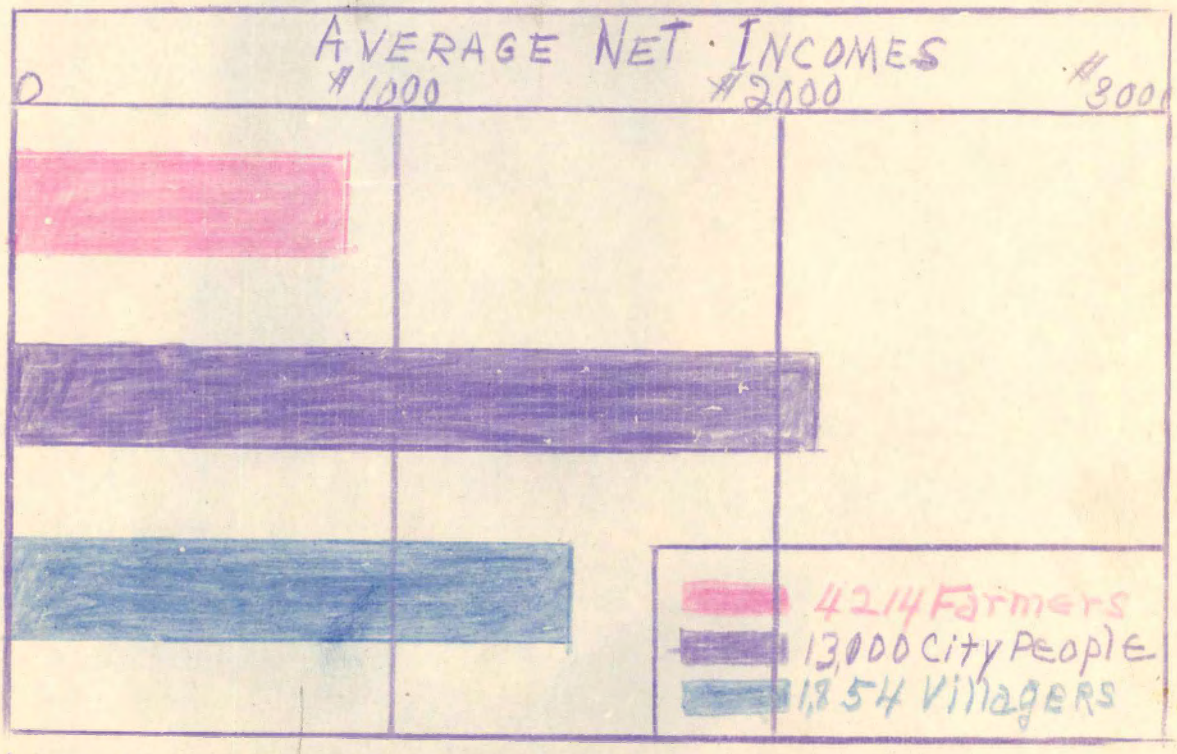


Chart 10B.

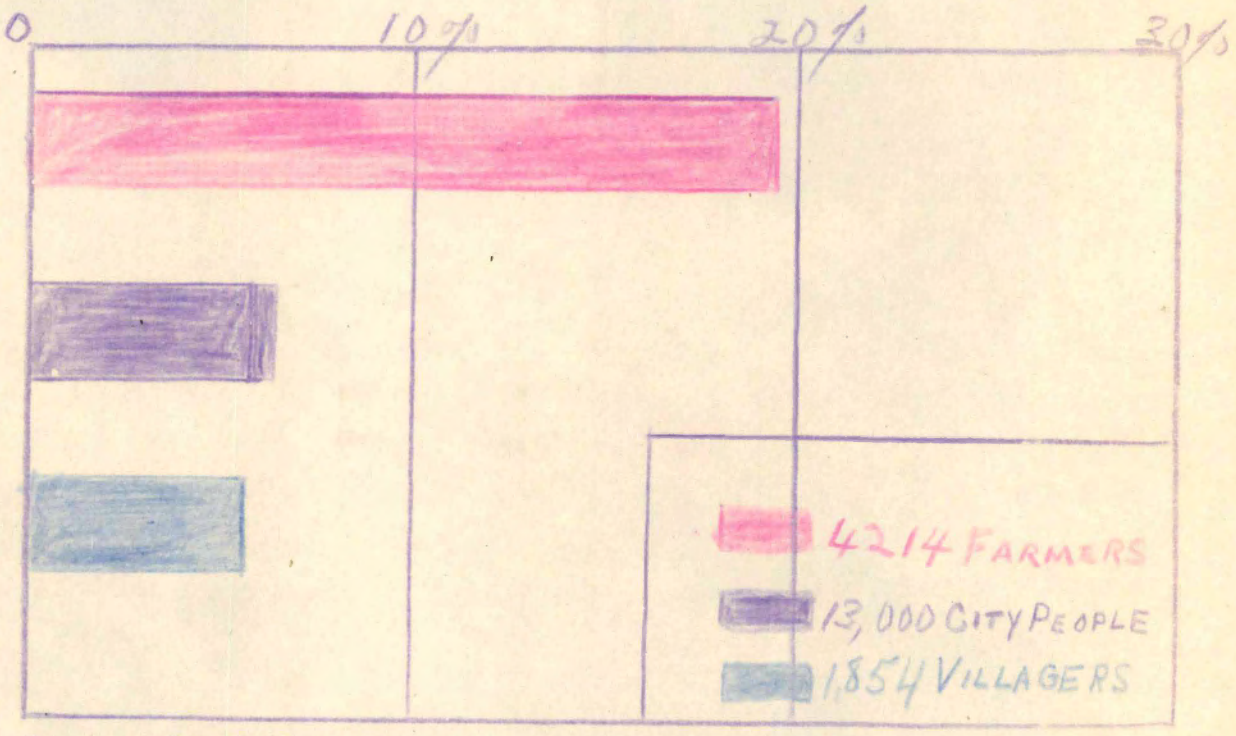
AVERAGE NET INCOMES, 1924, DANE COUNTY, WISCONSIN (1)



(1) Tax Burdens Compared; Wisconsin Agricultural Experiment Station, Bulletin 393.

Chart 11.

PERCENTAGE OF NET INCOMES IN 1924 ABSORBED BY TAXES, DANE COUNTY, WISCONSIN
(Paid by farm, city and village people of Dane County, Wisconsin)



Source: Tax Burdens Compared; Wisconsin Agricultural Experiment Station, Bulletin 393.

receivers of each class. Of course conditions in Dane County may not be comparable to Tennessee conditions, but the results as to the farmer bearing the heavier burden supplements the Tennessee data and shows that farmers in states other than Tennessee bear a heavier burden of taxation than other classes of laborers.

4. South Carolina. In South Carolina in 1951[1] property assessed at $4000 paid $200 taxes. An income of approximately $12,000 (at the present rate) also yields about $200 in revenue. The person with the $12,000 income may not own any property and thus would pay only income tax. The poor man with $4000 assessed property pays as much tax as the person with $12,000 income. He would have to make 300% on his investment to make $12,000 income. Then when he makes $12,000 income he will have to pay $200 in the form of income tax. Thus it appears to be an economic disadvantage to be an owner of property. The above data points out that the owners of property are discriminated against and if such continues to happen, property, in the form of real estate will be turned over to the state or will revert to the public domain.

5. Individual Overton County Farms. Data tabulated from a farm management survey for 54 Overton County farms show that 12 farms did not make a net income even before taxes[2] were paid. Of the farmers who did make an income, 4 did not make enough to pay their taxes, 1 made the amount of his taxes, and 37 farmers paid taxes ranging from 80 to 2.2 per cent of their net income. Taxes averaged 25.5 per cent of the net income on the 54 farms combined (see Table 28 and Chart 12).

---

(1) G. H. Aull, Taxation and Ability to Pay in South Carolina, Agricultural Experiment Station of Clemson Agr. College, Bulletin 286, p. 18.

(2) Farm income equals gross income less total business expenses. Taxes are considered a business expense, but since in this study taxes were not counted as a business expense and thus will have to be paid out of the farm income as given in the tables of this study.

Table 28.

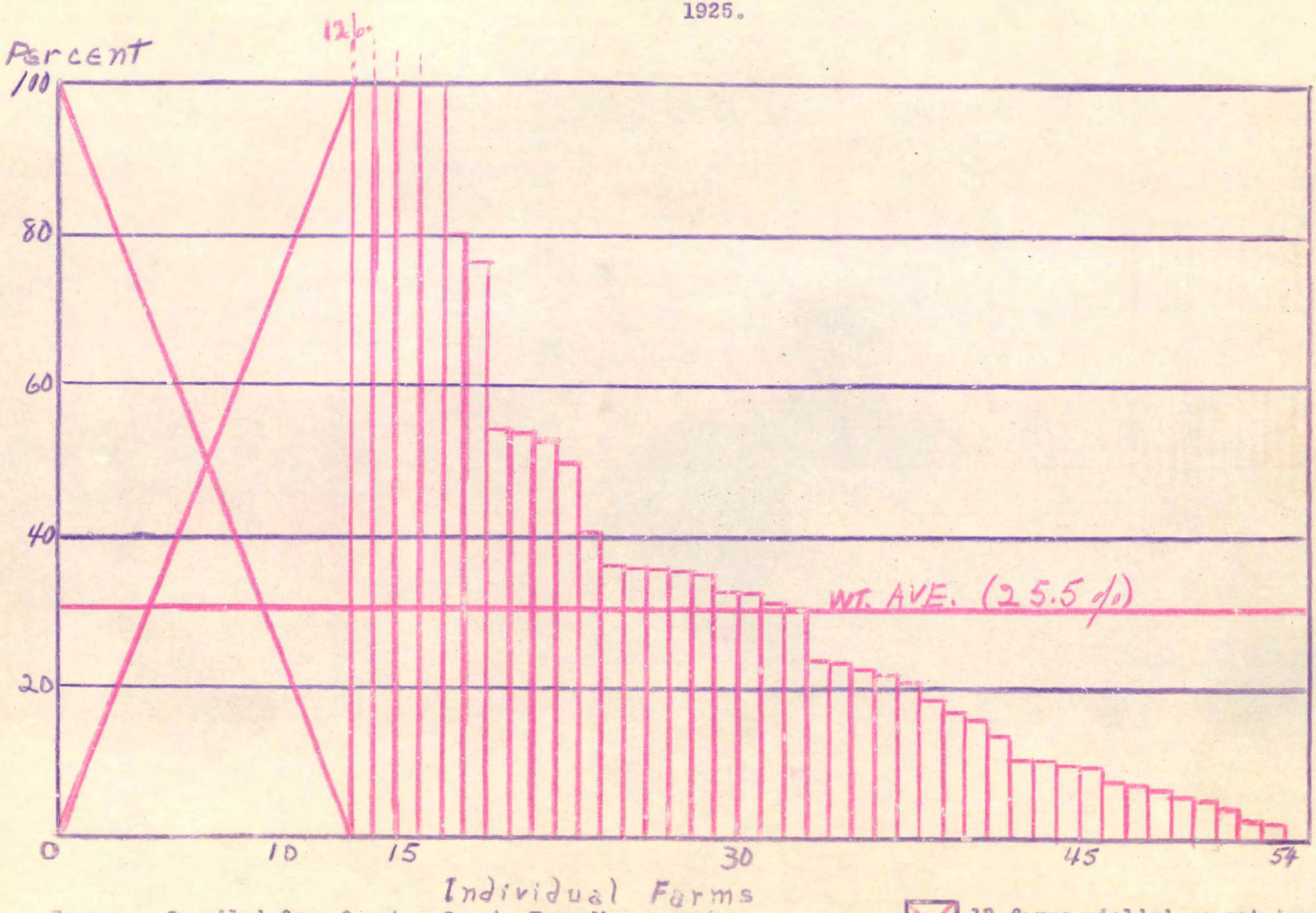
Net Income: Farms Ranked As to Percentage Taxes Were of Net Income, 54 Overton County Farms, 1925

Rank	Taxes	Farm income	% taxes were of farm income	Rank	Taxes	Farm income	% taxes were of farm income
1	$22	$-22		29	$20	$57	35.0
	23	-369		30	65	199	32.6
	30	- 77		31	54	166	32.5
	65	- 20	No	32	15	48	31.2
	48	-183	farm	33	152	500	30.4
	17	- 15	in-	34	12	51	23.5
	72	-163	come	35	15	64	23.4
	25	-157		36	61	273	22.3
	32	-139		37	33	153	21.5
	14	-231		38	75	357	21.0
	43	-105		39	26	141	18.4
	14	- 5		40	12	73	16.4
13	29	23	126.0	41	35	224	15.6
14	27	23	117.3	42	150	1085	13.8
15	50	47	106.3	43	33	315	10.4
16	105	103	101.9	44	286	2770	10.3
17	20	20	100.0	45	13	134	9.7
18	20	25	80.0	46	18	193	9.3
19	126	165	76.3	47	52	677	7.6
20	90	166	54.2	48	22	290	7.5
21	150	373	53.9	49	16	264	6.0
22	97	183	53.0	50	18	319	5.6
23	200	400	50.0	51	48	883	5.4
24	45	110	40.9	52	14	320	4.3
25	36	99	36.3	53	45	1628	2.7
26	250	69	36.2	54	100	444	2.2
27	10	28	35.7				
28	15	42	35.7	Total	3064	12,023	25.5

This average of 25.5 per cent on the Overton County farms may be contrasted with the 19 per cent average that taxes were of the net income on Dane County, Wisconsin, farms. It is bound to be difficult for farmers to maintain efficient methods when they are taxed from one-fifth to one-fourth of their net income. Also, as the Overton County data shows, the "ability" to pay principle seems to have been generally ignored in making the assessments on the individual farms for 12 farms made no income and the remaining 42 farms paid taxes ranging from 126 to 2.2 per cent of their net income.

Chart 12.

NET INCOME: PERCENTAGE TAXES WERE OF THE NET INCOME ON 54 OVERTON COUNTY FARMS, 1925.



Source: Compiled from Overton County Farm Management Survey of 1926. Survey by local department.

12 farms yielded no net income

6. Individual Van Buren County Farms. A tabulation for 50 Van Buren County farms in 1929[1] shows that the ratio of taxes to farm income ranged from 100% to 1.92%. Taxes averaged 7.7 per cent of farm income (see Table 29 and Chart 13). On six farms the taxes were equal to the farm income. Sixteen

Table 29.

Taxes and Farm Income: 50 Individual Van Buren County Farms, 1929

Rank	Taxes	Farm income	Ratio of 2 to 3	Rank	Taxes	Farm income	Ratio of 2 to 3
1	$4.00	$4.00	100.0	26	$11.00	$95.00	11.58
2	7.00	7.00	100.0	27	13.50	1213.50	11.12
3	11.00	11.00	100.0	28	8.00	78.00	10.27
4	30.00	30.00	100.0	29	24.00	239.00	10.00
5	24.00	24.00	100.0	30	7.00	72.00	9.72
6	65.00	65.00	100.0	31	110.00	1170.00	9.40
7	17.00	27.00	62.96	32	40.00	515.00	7.77
8	24.00	49.00	49.0	33	40.00	540.00	7.41
9	14.00	29.00	48.28	34	10.50	160.50	6.54
10	106.00	406.00	26.10	35	40.00	650.00	6.15
11	24.50	999.50	24.51	36	7.00	122.00	5.74
12	22.00	97.00	22.68	37	60.50	1060.50	5.70
13	46.00	185.00	21.62	38	28.00	528.00	5.30
14	150.00	750.00	20.00	39	20.00	420.00	4.76
15	10.00	50.00	20.00	40	19.00	419.00	4.53
16	8.00	40.00	20.00	41	10.00	240.00	4.17
17	57.00	307.00	18.57	42	6.00	146.00	4.11
18	40.50	240.50	16.84	43	20.00	505.00	3.96
19	20.00	120.00	16.67	44	42.00	1092.00	3.85
20	41.00	265.60	15.47	45	11.00	341.00	3.23
21	38.00	248.00	15.32	46	15.00	490.00	3.06
22	9.00	59.00	15.25	47	11.00	526.00	2.09
23	16.50	116.50	14.16	48	63.00	3063.00	2.09
24	24.00	100.00	13.33	49	2.50	122.50	2.04
25	13.50	113.50	11.89	50	11.00	573.00	1.92
				Total	1146.00	18804.00	7.7

Source: A tabulation by S. M. McKissick.

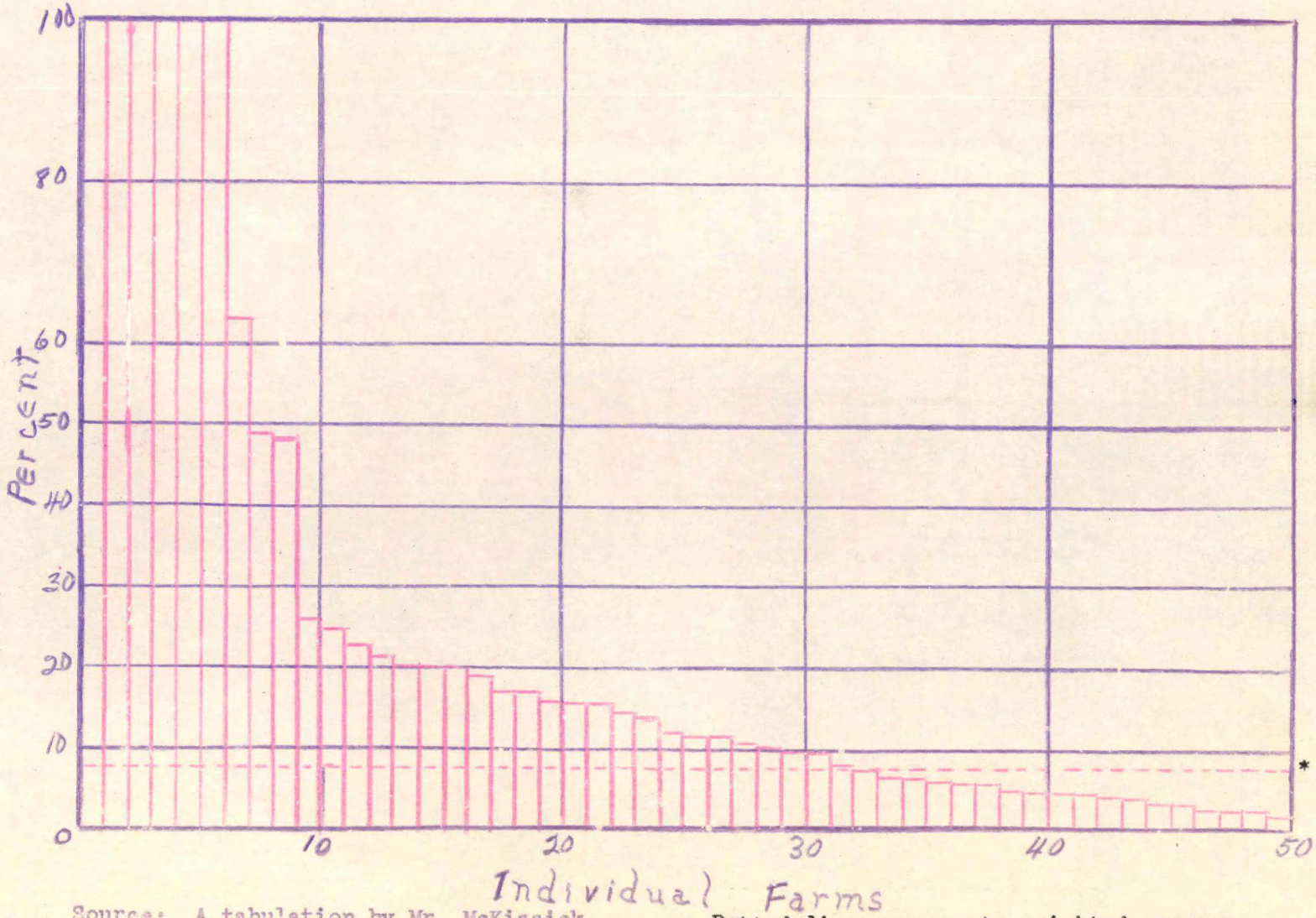
farmers paid 20 per cent or more of their farm income for taxes, while 12 farmers paid less than 5 per cent.

These data, as well as the above on Overton County, point to the fact that there was discrimination between individual farmers as to the tax burden. On an average the 50 Van Buren County farmers were not laboring under as heavy a tax burden in relation to farm income as the Overton County farmers.

(1) Tabulation by Mr. S. M. McKissick.

Chart 13.

PER CENT TAXES WERE OF FARM INCOME - 50 INDIVIDUAL VAN BUREN COUNTY FARMS - 1929



Source: A tabulation by Mr. McKissick.

* Dotted line represents weighted average

But the range in ratios of the two sets of data point in the same direction, namely to an unjust burden in relation to ability to pay.

7. Tennessee Farms by Counties. The 1929 ratio of taxes to the net farm income in Tennessee counties[1] ranged from 13.22 per cent in Maury County to 2.50 per cent in Stewart. The weighted average for all 95 counties

Table 30.

Per Cent Farm Taxes Were of Net Farm Income in Tennessee Counties, 1929

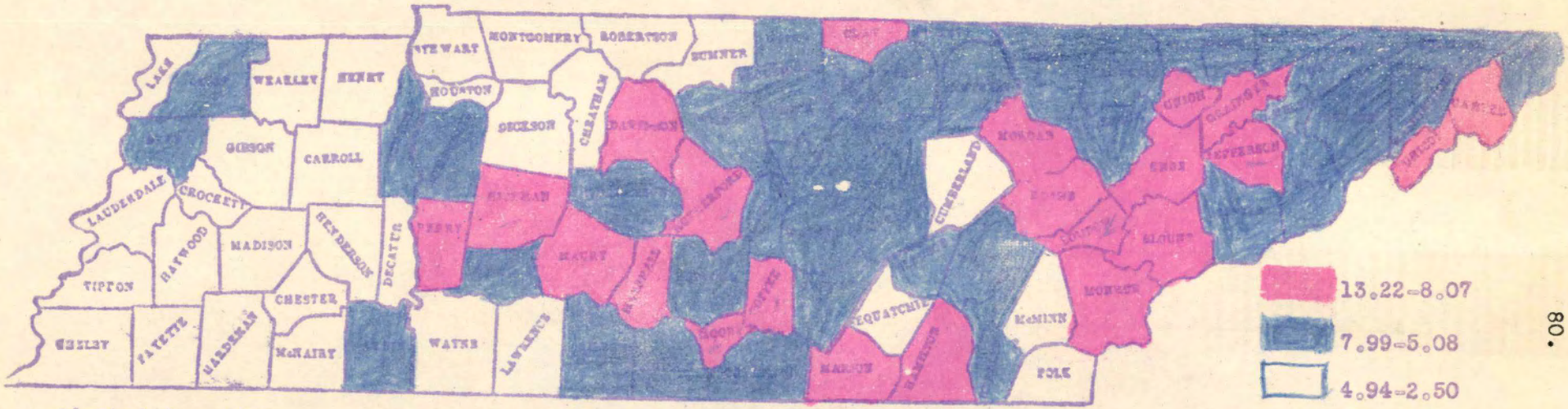
Rank	County	Per Cent	Rank	County	Per Cent	Rank	County	Per Cent
1	Maury	13.22	32	Franklin	7.47	64	V.Buren	5.23
2	Knox	12.93	33	Wilson	7.33	65	Fentr.	5.08
3	Davidson	12.64	34	Hamblen	7.33	66	Sequat.	4.94
4	Blount	12.44	35	Grundy	7.32	67	Shelby	4.92
5	Carter	12.43	36	Cocke	7.31	68	Henry	4.75
6	Unicoi	10.94	37	Campbell	7.26	69	Hender.	4.64
7	Marshall	10.83	38	Johnson	7.19	70	Carroll	4.63
8	Monroe	9.71	39	Bradley	6.93	71	Decatur	4.62
9	Roane	9.70	40	Humph.	6.87	72	Houston	4.54
10	Hamilton	9.37	41	Meigs	6.71	73	Polk	4.39
11	Marion	9.37	42	White	6.65	74	Cheatham	4.38
12	Grainger	9.27	43	DeKalb	6.61	75	Sumner	4.38
13	Union	9.08	44	Williams.	6.60	76	Weakley	4.38
14	Morgan	9.07	45	Lincoln	6.59	77	McNairy	4.29
15	Loudon	8.77	46	Macon	6.37	78	Cumber.	4.26
16	Perry	8.70	47	Hancock	6.30	79	Gibson	4.21
17	Moore	8.62	48	Hawkins	6.29	80	Lawrence	4.17
18	Coffee	8.33	49	Lewis	6.19	81	Montg.	4.16
19	Jefferson	8.18	50	Jackson	6.19	82	McMinn	4.13
20	Hickman	8.17	51	Sullivan	6.14	83	Wayne	4.05
21	Rutherford	8.16	52	Benton	6.11	84	Robert.	4.00
22	Clay	8.07	53	Obion	5.95	85	Harde.	3.87
23	Anderson	7.99	54	Overton	5.93	86	Lauder.	3.86
24	Greene	7.99	55	Hardin	5.89	87	Chester	3.76
25	Washington	7.90	56	Pickett	5.84	88	Dickson	3.66
26	Putnam	7.82	57	Warren	5.76	89	Crockett	3.20
27	Sevier	7.78	58	Cannon	5.57	90	Fayette	3.18
28	Claiborne	7.68	59	Gibson	5.55	91	Lake	3.18
29	Trousdale	7.60	60	Scott	5.52	92	Madison	3.16
30	Smith	7.55	61	Bledsoe	5.49	93	Haywood	2.82
31	Bedford	7.49	62	Rhea	5.48	94	Tipton	2.69
			63	Dyer	5.45	95	Stewart	2.50
						St. Ave.		5.75

was 5.75 per cent. (See Table 29.) Fifty-seven counties were above the average and 38 below. There was no marked concentration of percentages

(1) Taxes and net farm income are estimated from the 15th Report of the Census of the U. S., Agriculture in Tennessee, Statistics by Counties.

Map 8.

PER CENT FARM TAXES WERE OF NET FARM INCOME IN TENNESSEE COUNTIES, 1929



Adapted from 15th Census Report of U.S., Agriculture, Tennessee Series 2 and 3.

around the average. As is noticed in the table, the percentages declined from 13.22 to 2.50 in a rather straight line manner. These data point out the fact that the tax burden on the farmers of the several counties is not uniform in relation to their "ability" to pay as measured by net income.

Map 8 pictures the burden of taxes in relation to net income, in the several Tennessee counties. At a glance it is noticed that Middle and East Tennessee are burdened more heavily than West Tennessee counties. In the above study of the relation of taxes to gross income, pictured on Map 7, it was also found that West Tennessee counties were less heavily burdened than either of the other divisions of the state. Comparing Maps 7 and 8 and Tables 28 and 30 it is seen that, generally speaking, the average gross income is directly related to net income.

The above data conclusively point out that the tendency in Tennessee is for the individual farmers in a given county and the farmers among the different counties to bear a tax burden disproportionate to their ability to pay as measured by net income. The three major reasons that the ratio of taxes to net income varies so much from farm to farm and from county to county are: (1) difference in the efficiency of farmers, (2) farms not valued according to the amount of income they yield, and (3) the wide range in assessment ratios. No one of the three reasons can be said to be more the cause of the wide range in ratio of taxes to net income than the others. They are all very closely connected and each contributes to the existing condition. Difference in efficiency among farmers causes a difference in the amount of net income per unit of capital. To a certain extent some farmers use net income as a basis of determining the value of their farm, but the majority of farmers pay no attention to net income and base their values on the income or returns made during some previous good crop year or on what

he, his father, or some other person paid for the farm, or on what he was offered for the farm during boom times, thus not taking into consideration the general rise or fall of value levels or the amount of income made. This inconsistent method of assessing farm property in relation to the owner's value[1], does, necessarily, increase the extent to which taxes tend to bear an irregular relation to net income between individual farms and counties.

Labor Income. Insofar as the farmer with a large labor income[2] is possibly able to pay more taxes than he does pay and the farmer with very little or no labor income would possibly make one if his taxes were not so high, labor income is a measure of "ability" to pay. On the other hand, strictly speaking, it is not a measure of "ability", since taxes are paid before labor income is determined. But yet the relation of taxes to the amount a person receives for his labor must indicate "ability" and the range of these ratios on a number of individual Tennessee farms points out considerable discrimination between the farmers. A tax system is undoubtedly unjust when one person pays only 3 or 4 per cent of what he receives for his labor for taxes and his neighbor pays taxes and receives no labor income. This is the case among Tennessee farmers.

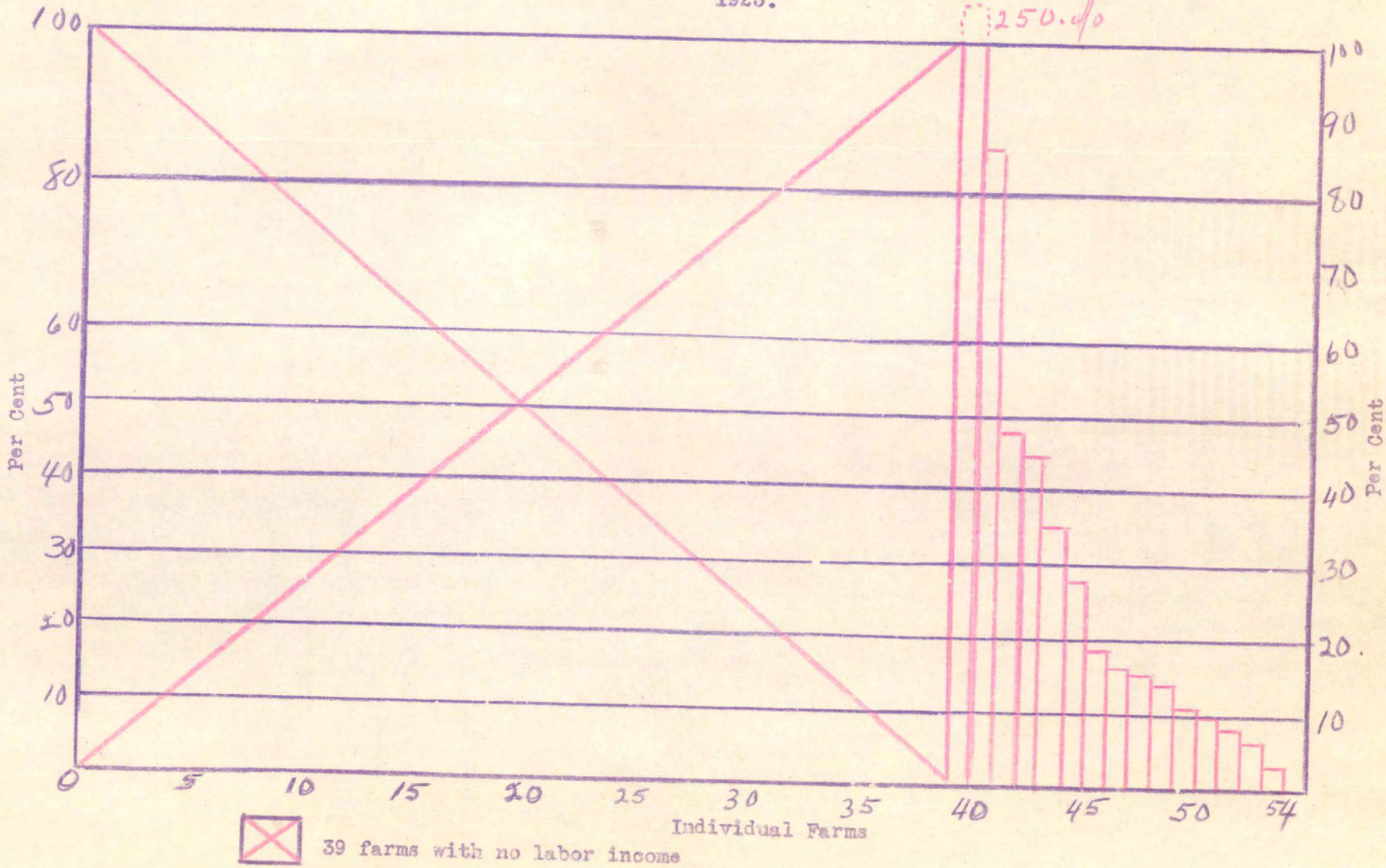
1. Overton County, Tennessee. Of 54 individual farms surveyed in Overton County in 1925-26, 39 yielded no labor income. That is, after taxes, depreciation, other business expenses and a moderate rate of interest on the farm investment were figured out, 39 of the 54 farmers had no return left for their labor.(see Table 31 and Chart 14). Of the 15 farmers receiving a labor income, the percentage that their taxes were of the returns of their own labor ranged from 3.5 to 250 per cent.

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(1) See Chapter 3 of this volume.
(2) Labor income equals farm or net income minus interest on the total farm investment.

Chart 14.

PERCENTAGE TAXES WERE OF THE LABOR INCOME - BY 54 INDIVIDUAL FARMS - OVERTON COUNTY 1925.



Source: Farm Management Survey, 1925-26.

Table 31.

Labor Income and Taxes, by 54 Individual Farms, Overton County, 1925

Rank	Labor income	Taxes	Per cent taxes were of labor income
Not ranked due to negative labor income	-175	27	Percentage not figured on account of negative labor income
	-248	50	
	-356	90	
	- 30	36	
	-223	22	
	-584	23	
	-222	30	
	- 92	61	
	-157	65	
	- 61	10	
	-370	65	
	-670	200	
	- 57	54	
	-106	45	
	-487	48	
	- 50	75	
	-118	17	
	-178	100	
	-283	20	
	-212	150	
	-683	72	
	- 92	15	
	-191	29	
	- 42	26	
	-337	25	
	-237	105	
	- 93	152	
	-120	15	
	-198	200	
	-115	33	
	-278	32	
	-335	14	
	-368	97	
	- 91	20	
	- 50	12	
	-145	14	
	- 12	35	
	-143	20	
	-436	126	
40	6	15	250.0
41	21	18	85.7
42	25	12	48.0
43	334	150	44.9
44	37	13	35.1
45	119	33	27.7
46	1535	286	18.6
47	134	22	16.4
48	336	52	15.5
49	290	42	14.5
50	144	16	11.1
51	177	18	10.2
52	574	48	8.4
53	203	14	6.9
54	1227	45	3.7

Source: Farm Management Survey, 1925-1926

2. Knox County, Tennessee. A survey of 67 farms in the Farragut community of Knox County in 1916 showed that 36 of the farms yielded no labor income. On the remaining 31 farms, those returning a labor income, the taxes ranged from 2 to 669.2 per cent of the labor income. See Table 32 and Chart 15. The principle of ability is largely disregarded when out of 67 farmers, 36 paid taxes although they received no return for labor; when one of the 31 who did receive a labor income paid in taxes the equivalent of 669.2 per cent thereof; and when 16 farmers paid less than 10 per cent of their own labor income for taxes, with 12 of these 16 paying less than 5 per cent.

Table 32.

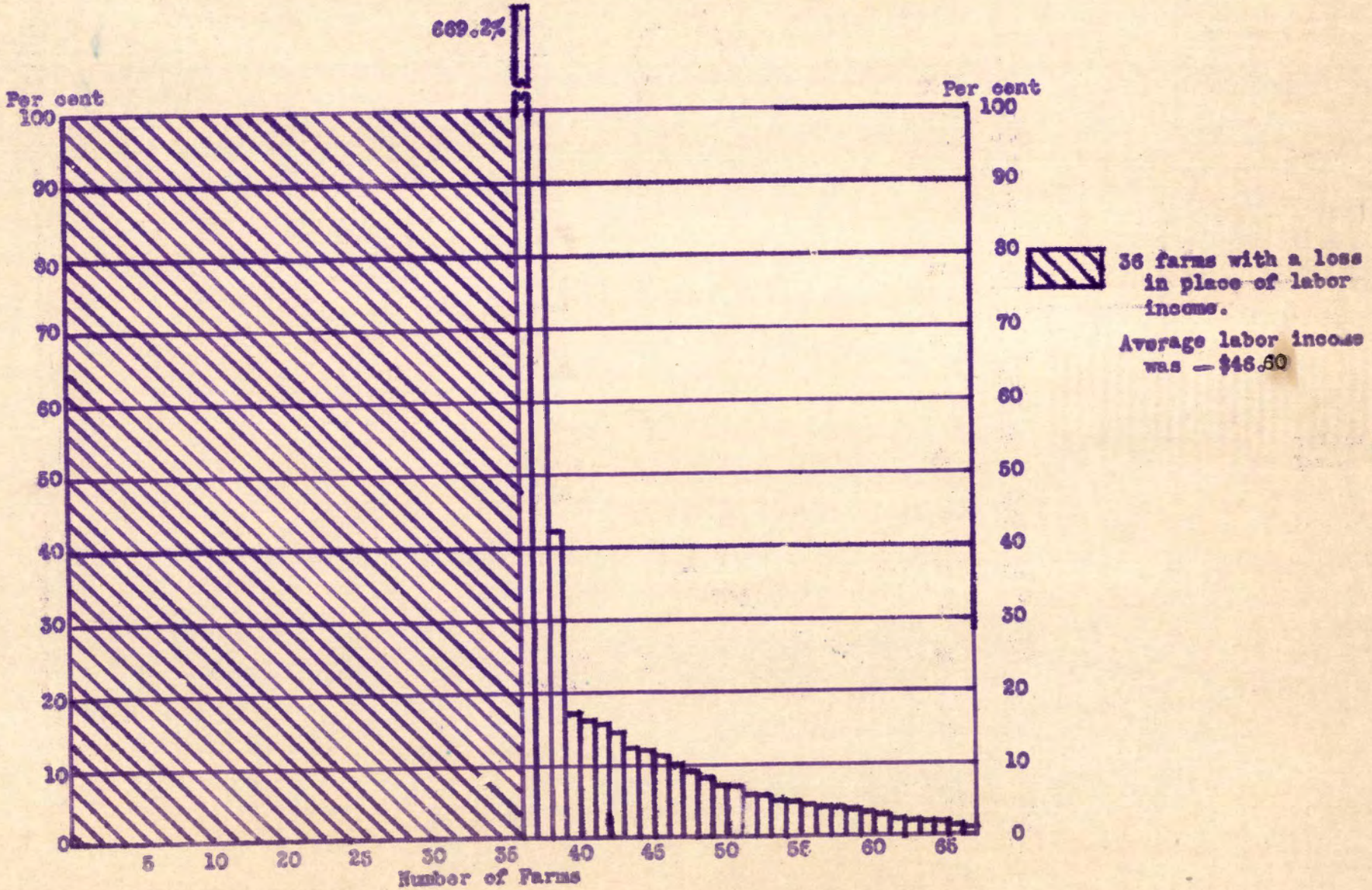
Taxes and Labor Income, 67 Individual Farms, Knox County, Tennessee, 1916

Rank	Taxes	Labor Income	Per cent taxes is of labor income	Rank	Taxes	Labor Income	Per cent taxes is of labor income
	$104	$-1523			$12	$-263	
	88	- 116			28	-134	
	52	- 356		37	87	13	669.2
	44	- 571		38	72	72	100.0
Not	14	- 204	No	39	100	237	42.2
	30	- 361	percentage	40	8	46	17.4
ranked -	35	- 493		41	10	60	16.7
	19	- 110	calculated	42	18	113	15.9
negative	12	- 163		43	50	334	15.0
	20	- 170	since labor	44	19	148	13.8
labor	30	- 312		45	65	530	12.3
	14	- 28	income is	46	60	515	11.7
income	400	-3874		47	65	636	10.2
	15	- 89	negative	48	65	685	9.5
	8	- 91		49	40	487	8.2
	26	- 159		50	30	396	7.6
	12	- 114		51	10	138	7.3
	56	- 676		52	26	385	6.8
	10	- 116		53	21	345	6.1
	9	- 60		54	91	1508	6.0
	18	- 318		55	16	298	5.4
	10	- 186		56	93	1817	5.1
	20	- 238		57	47	956	4.9
	28	- 62		58	35	768	4.7
	16	- 689		59	50	1154	4.3
	50	- 760		60	22	548	4.0
	9	- 178		61	52	1338	3.9
	3	- 195		62	13	481	2.7
	33	- 24		63	8	320	2.5
	26	- 145		64	8	355	2.3
	93	- 505		65	10	446	2.2
	20	- 55		66	35	1810	1.9
	8	- 152		67	7	459	1.5
	70	- 825		Total	2665	3122	-
				Ave.		46.60	85.4

It cannot be truthfully said that the heavy burden of the general property tax is the cause of some farmers receiving no labor income and the cause of other farmers paying a large percentage of their labor income for governmental purposes. But it can be truthfully said that if the tax burden were more equitable some farmers would receive a larger labor income than they do receive. The norm of efficiency among farmers is probably the

Chart 15.

Per Cent Taxes Were of Labor Income of 67 Farms of Farragut Community, Knox County, Tennessee, 1916.



most important factor in determining labor income, with taxes playing a less important part. Thus with the efficient and inefficient farmer taxed with no consideration being taken of this factor, as the cases in the above surveys show, the tax burden is extremely regressive.

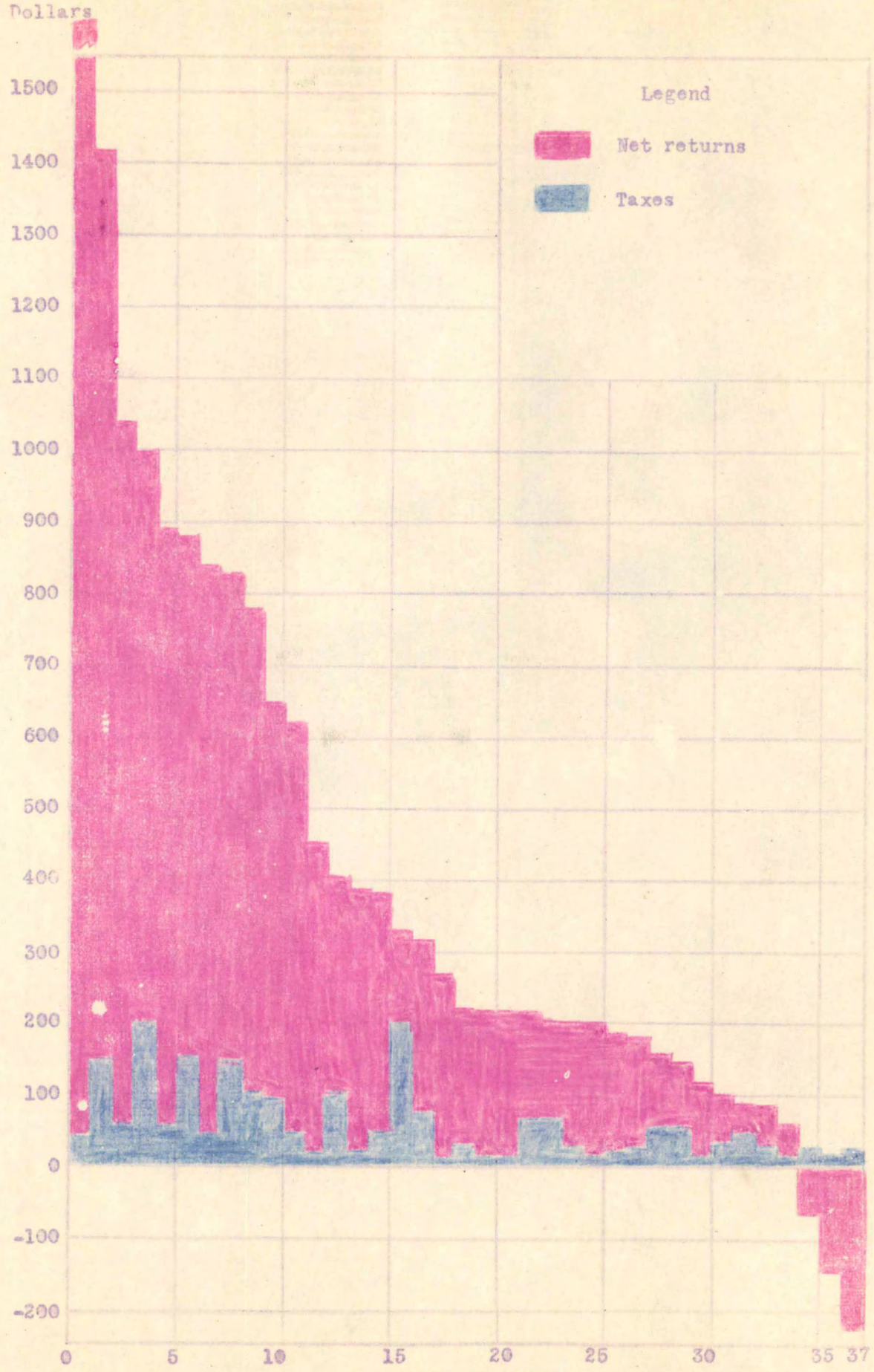
Regardless of the reasons for the general property tax operating as it does, it is a known fact that property yielding an income is taxed at the same rate as the unproductive property. As shown in the above studies, the inefficient farmer pays a tax which parallels the amount of tax paid by the efficient one. It is entirely possible that the amount of money paid for taxes by the inefficient farmer used to finance the next year's crop would in many cases mean the difference between success and failure. Thus taxes may cause the weak, with possibilities of gaining strength, to remain disabled.

Net Returns. Net returns of farmers do indicate ability to pay taxes. The term net returns as used here means the farm income plus family living from the farm plus taxes (taxes were counted as business expense in figuring farm income) minus farm labor. It is from the net returns that the farmer receives funds for personal expenditures, cash family living expenditures, capital for improvement and taxes. The relation of taxes to net returns has been studied on a number of individual farms in Overton, Knox and Van Buren counties. The range of the percentage ratios of taxes to net returns in these studies indicates the extent to which the tax burden is equitable between individual farmers in relation to ability.

1. Overton County, Tennessee. Absolute Relationship. The amount of the net returns taken for the payment of taxes on 37 Overton County farms in 1925 varied from $45 on the farm with the highest net return, or $1949, to $23 on the farm which lacked $224 of yielding a net return (see Table 33 and Chart 16). As compared to the farmer paying $45 taxes with a net return of $1949 another farmer paid $200 taxes with a net return

Chart 16.

NET RETURN AND TAXES OF 37 FARMS IN OVERTON COUNTY, 1925



Source: Overton County Survey, 1925.

See Table 33.

Table 33.

Net Returns and Taxes of 37 Farms in Overton County, 1925

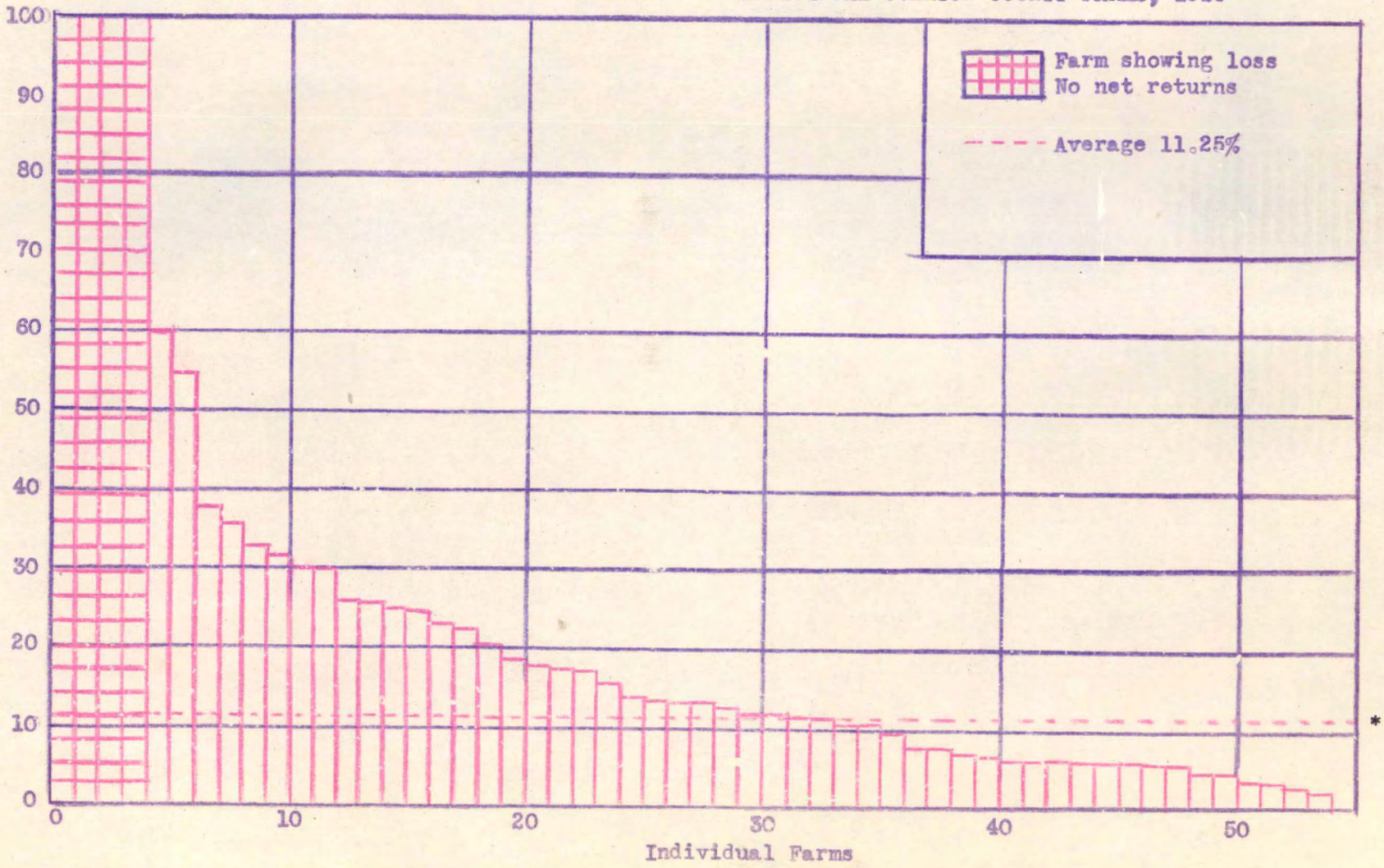
Rank	Net Returns	Taxes	Rank	Net Returns	Taxes
1	$1949	$45	21	$219	$14
2	1422	150	22	217	65
3	1039	61	23	208	65
4	988	200	24	203	27
5	889	52	25	202	15
6	880	152	26	189	22
7	838	48	27	184	29
8	830	150	28	156	50
9	775	100	29	144	54
10	647	90	30	113	15
11	623	75	31	101	36
12	454	18	32	88	48
13	408	105	33	86	25
14	388	20	34	59	15
15	381	45	35	- 63	30
16	331	200	36	-146	17
17	320	72	37	-224	23
18	269	10			
19	223	26			
20	220	13			

of $331. Chart 16 illustrates the relation of taxes to net returns in dollars.

Relative or Percentage Relation. In this same study of taxes and net returns in Overton County, the percentage ratio of taxes to net returns was calculated for 54 farms. The tabulation shows that 4 farms yielded no net returns, or in other words operated at a loss. On the 50 farms receiving a net return the ratio ranged from 2.31 to 60.42 per cent (see Table 34 and Chart 17). The average for the 54 farms was 11.25 per cent. Nineteen farmers paid more than 20 per cent of the net returns for taxes and 19 farmers paid less than 10 per cent.

Chart 17.

PER CENT TAXES WERE OF NET RETURNS - 54 INDIVIDUAL OVERTON COUNTY FARMS, 1925



Source: Farm Management Survey, 1925-26.

* Dotted line represents weighted average

See Table 34, p. 91.

Table 34.

Taxes and Net Returns, 54 Individual Overton County Farms, 1925

Rank	Taxes	Net Returns	Ratio of taxes to net returns	Rank	Taxes	Net Returns	Ratio of taxes to net returns
1	$23	$-224	-	28	$15	$113	13.27
2	17	-146	-	29	100	775	12.90
3	30	- 63	-	30	75	623	12.04
4	50	- 98	-	31	45	381	11.81
5	200	331	60.42	32	26	223	11.66
6	48	88	54.55	33	22	189	11.64
7	54	144	37.50	34	150	1422	10.55
8	36	101	35.64	35	33	314	10.51
9	50	156	32.05	36	28	2955	9.68
10	65	208	31.25	37	15	202	7.43
11	65	217	29.95	38	35	473	7.40
12	25	86	29.07	39	14	219	6.39
13	105	408	25.74	40	16	258	6.20
14	15	59	25.42	41	13	220	5.91
15	12	48	25.00	42	61	1039	5.87
16	97	391	24.81	43	52	889	5.85
17	126	547	23.05	44	20	347	5.76
18	72	320	22.50	45	48	838	5.73
19	200	988	20.24	46	14	249	5.62
20	150	839	18.07	47	33	629	5.25
21	18	101	17.82	48	20	388	5.15
22	152	886	17.27	49	22	478	4.60
23	32	187	17.11	50	12	276	4.35
24	29	184	15.76	51	18	454	3.96
25	90	647	13.91	52	10	269	3.72
26	14	102	13.73	53	20	799	2.50
27	27	23	13.30	54	45	1949	2.31
				Total	2764	23672	11.25

Source: Survey by Dept. of Agr. Ec., Univ. of Tennessee.

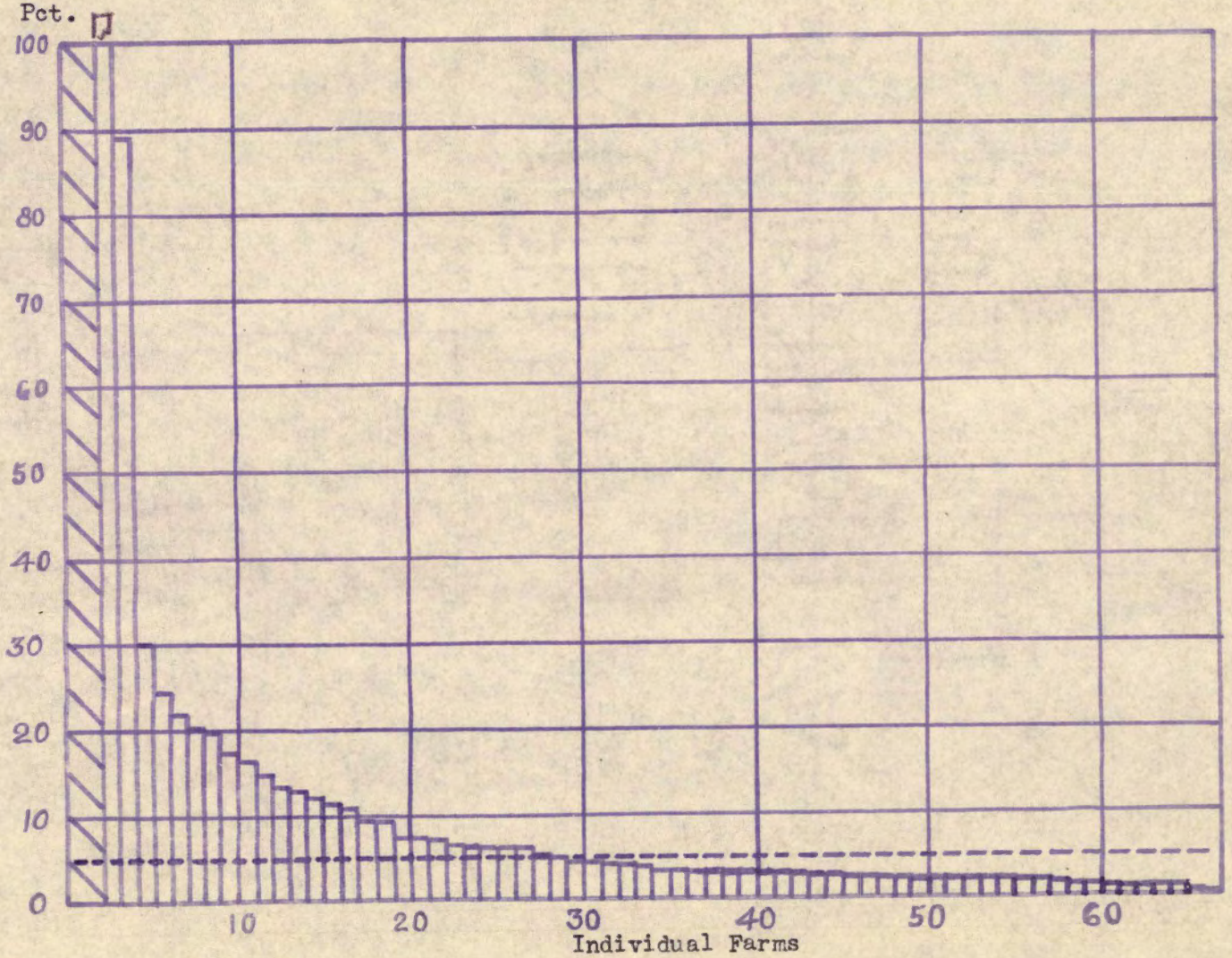
2. Knox County, Tennessee, 1916. Two of the 67 farms studied in the Farragut community of Knox County in 1916, operated at a net loss. One farmer paid 5 times his net returns for taxes and another one paid 89 per cent (see Chart 18 and Table 35). Nineteen farmers paid over 10 per cent of their net returns for taxes while 48 farmers paid less than 5 per cent. The average ratio of taxes to net returns for the 67 farms was 4.97 or 5 per cent.

Chart 18.

PER CENT TAXES ARE OF THE NET RETURN OF 67 FARMS OF FARRAGUT COMMUNITY, KNOX COUNTY, TENNESSEE, 1916



2 FARMS SHOWING A NET LOSS



See Table 35

Table 35.

Taxes and Net Returns, 67 Individual Farms, Knox County, Tennessee, 1916

Rank	Taxes	Net returns	Ratio of taxes to net returns	Rank	Taxes	Net returns	Ratio of taxes to net returns
	$14	$-47		35	$60	$1632	3.68
	35	-96		36	65	1778	3.66
3	10	2	500.00	37	33	902	3.66
4	8	9	88.89	38	65	1799	3.61
5	30	100	30.00	39	50	1429	3.50
6	400	1657	24.14	40	14	414	3.38
7	19	85	22.35	41	28	848	3.30
8	8	37	21.62	42	26	803	3.24
9	104	515	20.19	43	10	319	3.13
10	52	266	19.55	44	21	684	3.07
11	56	323	17.33	45	9	297	3.03
12	52	307	16.29	46	40	1351	2.96
13	12	81	14.81	47	93	3147	2.96
14	16	118	13.56	48	30	1028	2.92
15	28	212	13.20	49	12	432	2.78
16	35	146	13.01	50	91	3335	2.73
17	70	579	12.08	51	52	1997	2.60
18	18	54	11.69	52	47	1837	2.56
19	44	400	11.00	53	35	1406	2.49
20	20	207	9.66	54	16	660	2.42
21	10	108	9.26	55	50	2107	2.37
22	100	1342	7.45	56	9	393	2.29
23	87	1175	7.40	57	20	798	2.04
24	88	1196	7.36	58	8	399	2.00
25	43	645	6.67	59	10	528	1.89
26	72	1120	6.43	60	22	1196	1.84
27	30	468	6.41	61	13	860	1.51
28	20	316	6.33	62	35	2547	1.37
29	26	513	5.07	63	8	603	1.33
30	26	556	4.85	64	8	626	1.28
31	15	316	4.75	65	10	796	1.26
32	12	256	4.69	66	3	343	0.87
33	65	1527	4.28	67	7	930	0.75
34	18	445	4.04				
				Total	2643	53,142	4.97

Source: Survey by Dept. of Agr. Economics, Univ. of Tennessee.

This study does not show as great an average tax burden as does the Overton County study, the average for the two studies being 4.97 and 11.25 per cent respectively. But it does show, as well as does the Overton County study, that ratios for the individual farms fall over an extremely wide range.

3. Van Buren County, 1929. A tabulation of taxes and net returns for 50 individual Van Buren County[1] farms in 1929 shows that two farmers operated at a loss. The ratio of taxes to net returns on the remaining 48 farms ranged from 0.89 to 72.22 per cent. The average for the 50 farms was 6.24 per cent (see Table 38 and Chart 19). Seventeen farmers paid 10 per cent or more of their net returns for tax while 21 paid less than 5 per cent.

Table 36.

Taxes and Net Returns, 50 Individual Van Buren County Farms, 1929

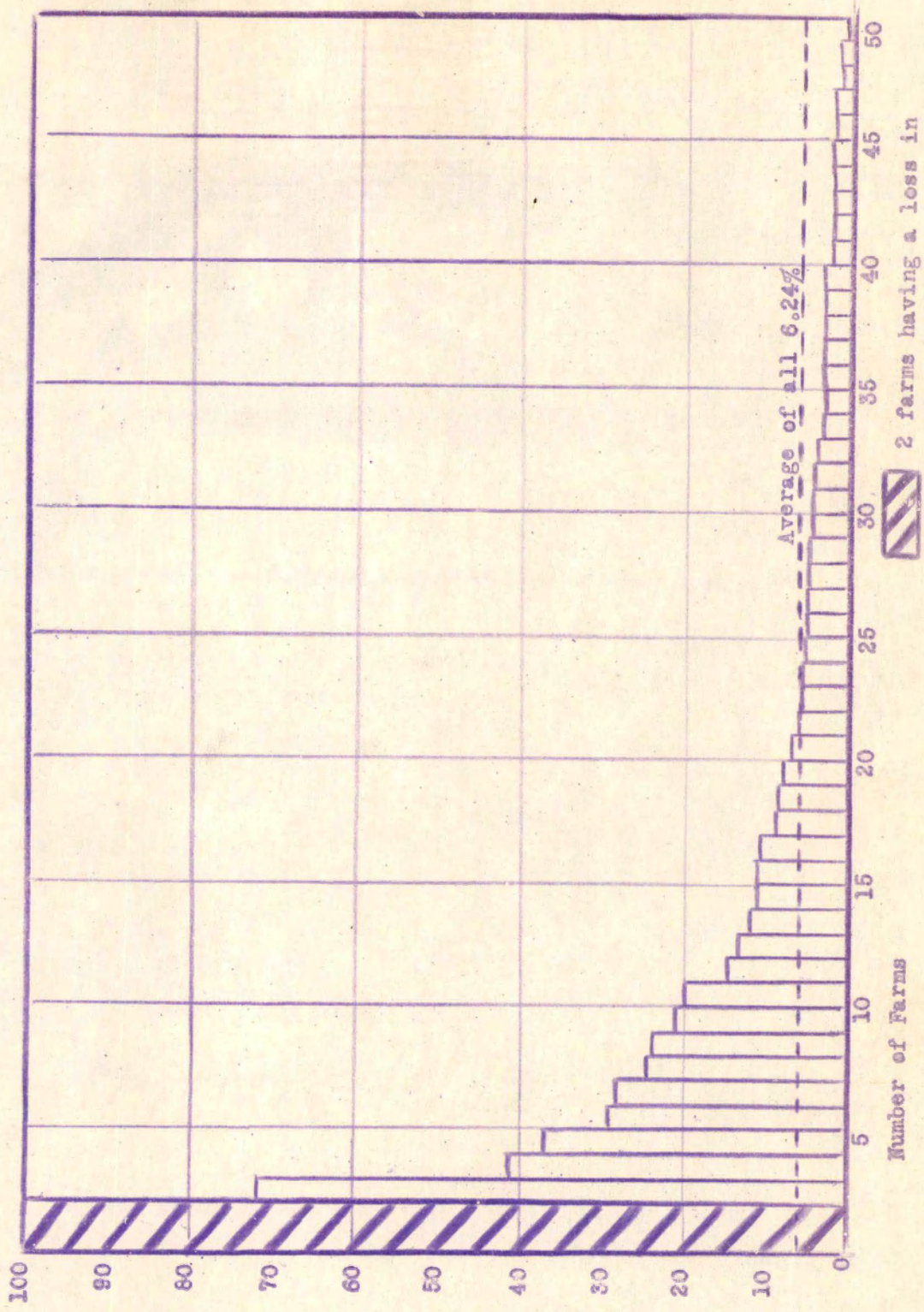
Rank	Taxes	Net returns	Ratio of taxes to net returns	Rank	Taxes	Net returns	Ratio of taxes to net returns
1	$11.00	-$105.00		25	$24.00	$414.00	5.80
2	11.00	- 89.00		26	7.00	122.00	5.74
3	65.00	90.00	72.22	27	14.00	700.00	5.71
4	106.00	256.00	41.41	28	41.00	765.00	5.36
5	30.00	80.00	37.50	29	13.50	263.50	5.12
6	40.00	135.00	29.63	30	9.00	184.00	4.89
7	40.50	140.50	28.83	31	28.00	578.00	4.84
8	16.50	66.50	24.81	32	60.50	260.50	4.80
9	24.00	99.00	24.24	33	6.00	146.00	4.11
10	150.00	700.00	21.43	34	19.00	509.00	3.73
11	8.00	40.00	20.00	35	10.00	275.00	3.64
12	7.00	47.00	14.89	36	7.00	197.00	3.55
13	4.00	29.00	13.79	37	20.00	580.00	3.45
14	40.00	315.00	12.70	38	10.50	310.50	3.38
15	20.00	170.00	11.76	39	20.00	620.00	3.23
16	57.00	507.00	11.24	40	42.00	1342.00	3.13
17	38.00	348.00	10.92	41	8.00	303.00	2.64
18	40.00	44.00	9.09	42	10.00	415.00	2.41
19	110.00	1220.00	9.02	43	24.50	1049.50	2.33
20	22.00	272.00	8.09	44	11.00	476.00	2.31
21	24.00	324.00	7.41	45	63.00	2963.00	2.13
22	24.00	380.00	6.32	46	250.00	122.50	2.04
23	17.00	277.00	6.14	47	15.00	740.00	2.03
24	14.00	229.00	6.11	48	11.00	591.00	1.86
25	24.00	414.00	5.80	49	11.00	775.00	1.42
				50	13.50	1513.50	.89
				Total	1446.00	23184.00	6.24

Source: Survey by Dept. of Agr. Economics, Univ. of Tennessee

(1) Tabulation by Mr. S. M. McKissick.

Chart 19.

PER CENT TAXES ARE OF NET RETURN OF 50 FARMS IN VAN BUREN COUNTY, 1929



The average for this study, as well as for the Farragut Community, Knox County study, is low.[1] But the range of the ratios for this study as was the case in the other studies shows considerable discrimination between individual farmers in the relation of taxes to ability.

4. Tennessee. Table 37 gives the relation of taxes to net cash returns for the average Tennessee farm during the period 1922-1929 inclusive. Taxes were the highest percentage of net cash returns in 1923 and lowest in 1929, 14.1 and 10.2 respectively.

Table 37.

Taxes and Average Net Cash Farm Returns for Tennessee, 1922-1929

Year	Number of reports	Net cash returns	Average amount of taxes	Ratio of taxes to net returns
1922	203	$706	$92	13.03
1923	464	790	120	14.10
1924	597	829	104	12.55
1925	539	741	95	12.82
1926	596	866	104	12.02
1927	451	859	105	12.22
1928	440	783	93	11.88
1929	370	868	89	10.25

Source: Adapted from a special tabulation by S. W. Mendum of the U. S. Department of Agricultural Economics. The number of parcels studies are by far too few to make these data reliable, thus it is not for publication. The study does show a trend and does not show great fluctuation from year to year.

Table 38 gives a comparison of the ratio of taxes to net cash returns between Tennessee, the South Atlantic and South Central States and the United States for the years 1922 to 1929 inclusively. The ratios for Tennessee and the South Central states are somewhat lower than the ones for the South Atlantic and the United States.

(1) In a later study for Tennessee as a whole and some other sections of the U. S. it is found that the ratio of taxes to net returns seldom falls under 10 per cent. These studies show there are localized sections where the percentage is considerable less than 10.

Table 38.

Ratio of Taxes to Net Cash Returns*, 1922-1931

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
South Atlantic	12.7	12.9	15.7	16.2	17.7	11.9	15.1	13.1	55.3	30.9
Tennessee**	13.0	14.1	12.5	12.8	12.0	12.2	11.9	10.2		
South Central	13.1	13.6	11.5	12.9	11.1	10.8	9.3	10.7	35.8	33.9
United States	16.7	15.7	13.7	12.8	13.9	12.2	12.1	12.6	26.7	54.3

Adapted from U. S. D. A. Yearbook, 1932, pp. 894-5.
Tennessee data from a special tabulation by S. W. Mendum.

* Taxes were not counted as an expense. Thus as calculated from the U.S.D.A. Yearbook, taxes were added to the net cash returns before the percentages were calculated.

** Tennessee data are not for publication.

Table 39 gives a comparison of the ratio of taxes to the net cash returns with allowance made for family living and family labor.(1) The percentages in this table are comparable to the one for the individual farms in the three counties studied above, since family living and family labor were considered there. As is noted in Table 39, Tennessee has the lowest percentages, with the South Central states second and the United States highest. For the U. S. as a whole and especially for the last few years beginning with 1930, taxes have absorbed an extremely large portion of the net returns. In 1930, for the U. S., taxes were 75.4 per cent of the net returns and in 1931 there were, on the average, no net returns for the U. S., the net returns being negative by $71. Of course the major cause of this is the general agricultural depression while taxes have had a tendency to remain stable.

Table 39.

Taxes and Net Returns with Allowance Made for Family Living and Family Labor, 1922-1931.

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
South Atlantic	15.9	22.4	21.0	22.0	24.2	14.9	19.4	17.1	93.6	54.9
Tennessee*	14.9	17.8	14.0	14.8	13.4	13.3	13.6	11.9		
South Central	16.6	23.0	14.6	18.3	14.5	14.0	11.9	14.0	29.7	86.0
United States	26.0	31.4	22.0	19.7	22.3	18.5	18.1	19.2	75.4	**

Source: Adapted from U.S.D.A. Yearbook, 1932, pp. 894-5.
Tenn. data from special tabulation by S. W. Mendum, U.S.D.A.

*Tennessee data not for publication ** Ave. net return was negative by $71.

(1) Found by adding net returns (including taxes) to value of food produced and used on farm by family, then subtracting the value of family labor. Divide the resulting amount into the amount of taxes paid.

Net Rental Receipts. "There is no satisfactory basis for dividing a farmer's annual profits definitely into return for managing ability, income from his labor, and earnings on investment in livestock, machinery and land. Since the general property tax is levied on the property rather than on the man, it is necessary to find a method of comparing the tax on a particular kind of property with the return which that property yields. Probably the easiest method of throwing light on this problem is to determine the general relation between taxes and rents for properties which are actually rented."(1)

Briefly and with some oversimplification, all useful real estate has a rental value which varies according to usefulness. This value is present whether the property is actually rented or not. The person who uses his own real estate naturally does not receive a rental return separate from his other income, but a part of his farm income can properly be considered as rent, since he would have had to pay a rent if he had not owned the land. Therefore taxes have the same effect on the rental value of real estate in the hands of the owner as if it were actually rented.

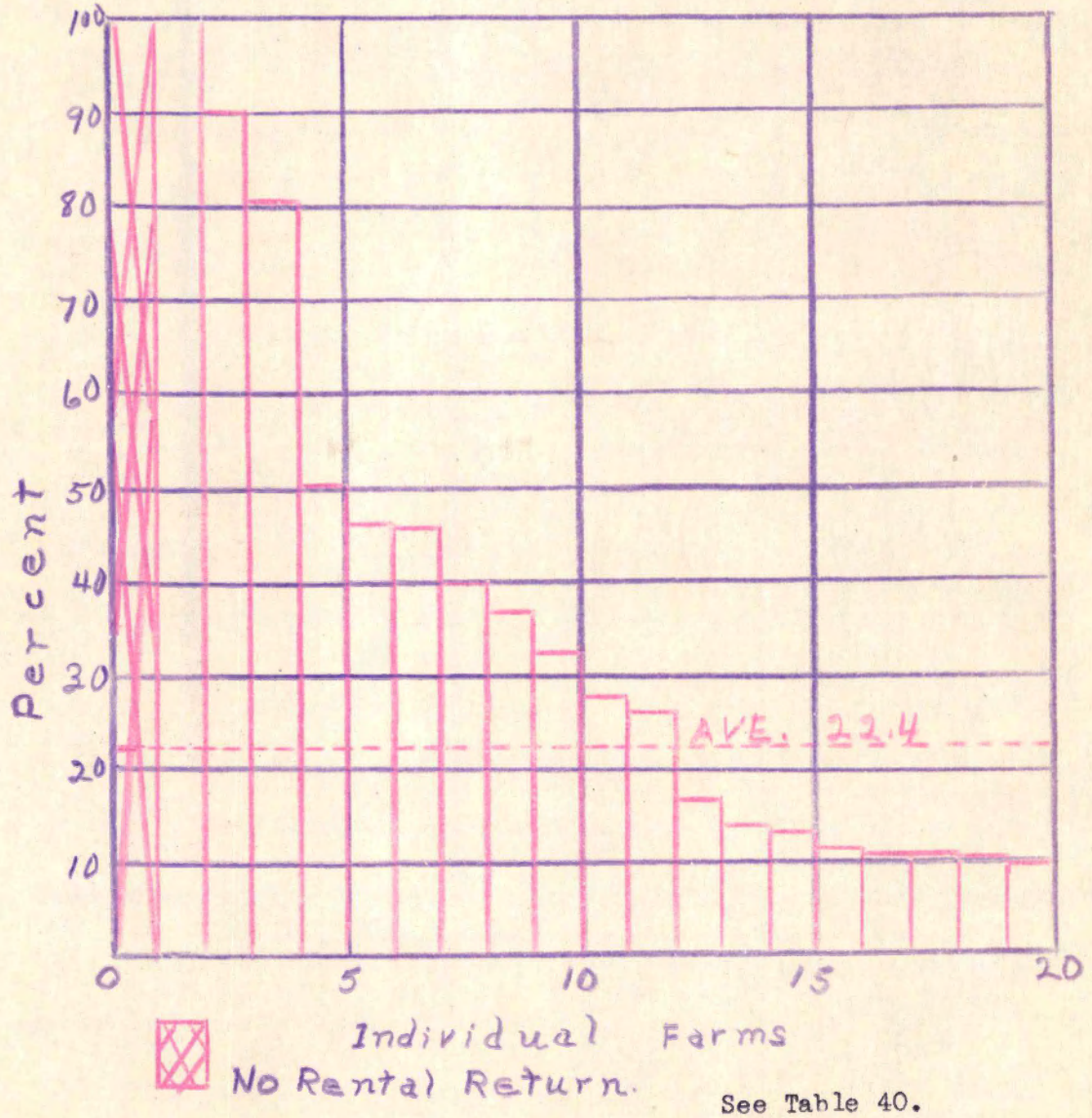
The general property tax being a tax on property and rent being the returns from property, the ratio of taxes to rent receipts will measure the tax burden, both as to equity and heaviness, in relation to ability to pay. This study of taxes and net rental receipts covers conditions found on individual Overton County, Tennessee, farms in 1929, and conditions as found in other states and the United States.

1. Overton County, Tennessee. The per cent that taxes were of the net rents on 20 individual farms in Overton County for the year 1929 ranged from 9.2 to 100.0 with one owner paying taxes in excess of rent returns. See Table 40 and Chart 20. For the 20 farms as a group, taxes absorbed 22.4

(1) R. Wayne Newton: Taxes on Michigan's Rented Farms, 1919-1925; Michigan Agricultural Experiment Station, Technical Bulletin No. 91, p. 4.

Chart 20.

TAXES AND RENTAL RECEIPTS: PERCENTAGE TAXES WERE OF RENTAL RECEIPTS ON 20 OVERTON COUNTY FARMS - 1929



See Table 40.

per cent of the rent. The ratio of taxes to net rent was 50 per cent or more on 5 farms; more than 30 per cent on 10 farms; and less than 20 per cent on 8 farms. Thus in Overton County taxation fails to conform to the cannon of ability to pay.

Table 40.

Comparison of Taxes and Rental Receipts, 20 Overton County Farms, 1929.

Rank	Net rental	Taxes	Ratio of taxes to rental	Acreage	Taxes per acre, in cents
1	$ -	$59.00	-	150	39
2	6.90	6.90	100.00	40	17.2
3	20.00	16.10	80.5	100	16.1
4	50.00	25.30	50.6	200	13.0
5	50.00	6.90	13.8	35	19.7
6	60.00	27.60	46.0	50	55.2
7	75.00	27.60	36.8	75	36.8
8	85.00	27.60	32.5	60	46.0
9	100.00	40.00	40.0	160	25.0
10	100.00	26.00	26.0	200	13.0
11	150.00	69.00	46.0	143	48.2
12	150.00	41.40	27.6	100	41.4
13	150.00	15.00	10.0	276	20.1
14	250.00	23.00	9.2	63	36.5
15	300.00	270.00	90.0	1000	27.0
16	300.00	29.90	10.0	150	19.9
17	470.00	46.00	9.8	90	51.1
18	700.00	115.00	16.4	645	17.8
19	750.00	82.80	11.0	160	51.8
20	1200.00	158.70	13.2	290	20.1
Total	4966.90	1114.60	-	4487	-
Ave.			22.4		24.8

Source: Survey by Dept. of Agricultural Economics, Univ. of Tennessee.

Relation of Size of Farm to Rent and Taxes. A further analysis of the data in Table 40 shows that the farmers receiving the least amount of rent paid a greater portion of it for taxes than did the farmers receiving the larger amounts of rent. Disregarding the first farm in the table, the next nine farmers, receiving a rent ranging from $6.90 to $100 per farm, paid on the average 37.3 per cent of their rent for taxes. The ten remaining farmers, receiving a rent ranging from $150 to $1200, paid on the average 19.25 per cent for taxes.

The relation of the size of the farm to the per cent of rent paid for taxes, indicates that a greater percentage of the receipts of small farms is paid for taxes than of the large farms. Disregarding farm number one in Table 40, and dividing the remaining 19 farms into two groups, it was found that the average acreage of the first nine farms, on which 37.3 per cent of the rental receipts were required for tax, was 102.2 acres, while on the 10 remaining farms, on which 19.25 per cent of the rental receipts were required to pay taxes, the average acreage was 291.7 acres.

These data point out that there is a tendency for the tax burden, both in relation to amount of receipts and size of farms, to be regressive.(1) Also that the burden does not fall according to equity on the individual tax payers.

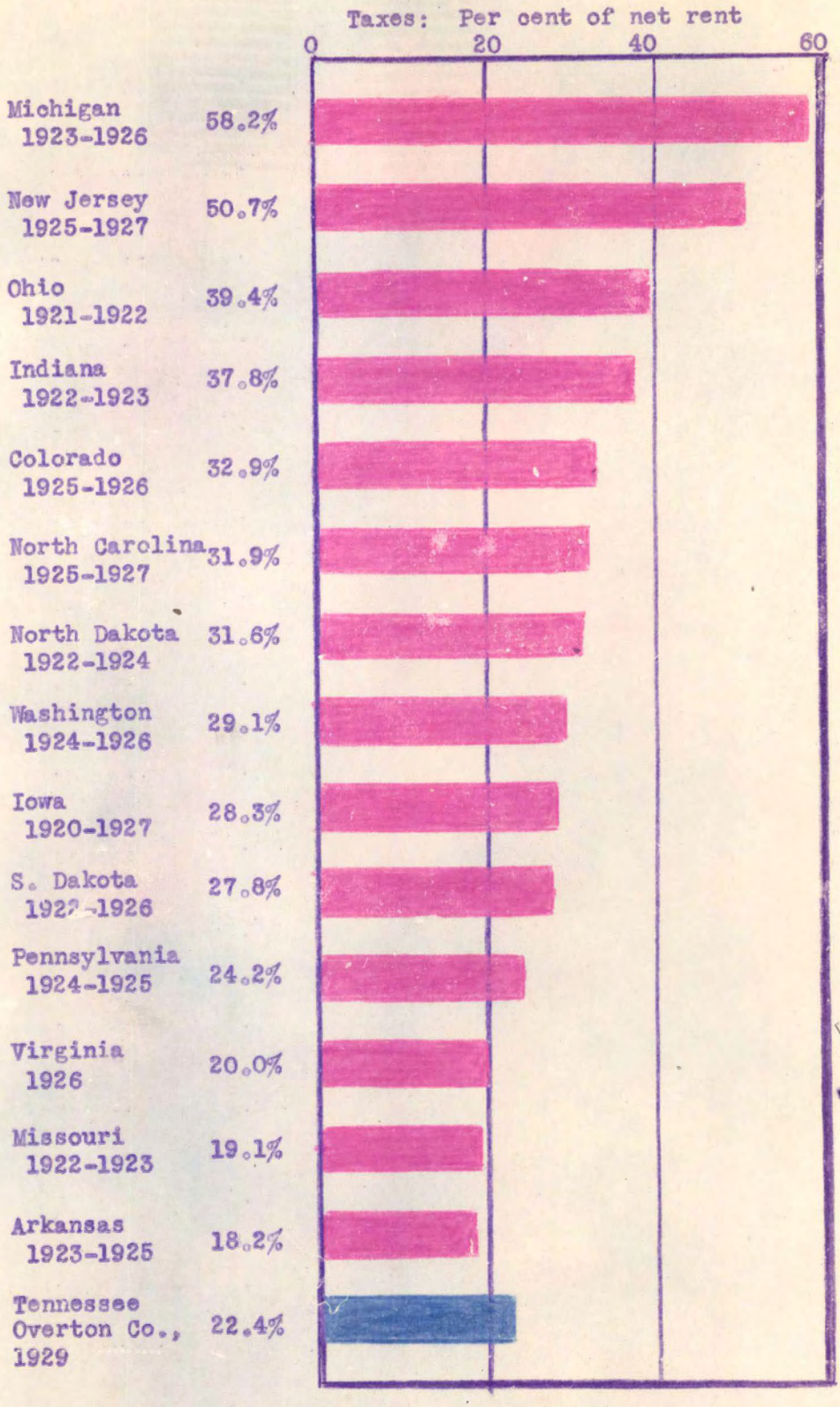
2. Fourteen States of the United States. A tabulation of the ratio of taxes to net rental receipts of farms in 14 states in different sections of the United States, between 1921 and 1927, shows that the North Central section of the U. S. bears a heavier tax burden in relation to net rent than the Southern section. A diagrammatic summary of the study is presented on Chart 21. The percentage that taxes were of the net rent before taxes were deducted ranged from 58 per cent in Michigan and 51 per cent in New Jersey to 19 and 18 per cent in Missouri and Arkansas respectively. The states studied are ranked in order of these percentages on Chart 21.

No simple average of the data presented on Chart 21 is in any sense significant. But is can be said that in these states on the average taxes took from 25 to 35 per cent of the net rent. In the cases of three states the percentage was lower, and in four others, higher. By taking the states

(1) Chapter 3, page 49, of this volume gives a discussion of the tax burden in relation to size or physical extent of properties.

Chart 21

PER CENT TAXES WERE OF NET RENT: 14 STATES, SELECTED YEARS, 1921-1927: TENNESSEE, OVERTON COUNTY, 1929



Source: Whitney Coombe: "Taxation of Farm Property", U. S. D. A. Technical Bulletin 172, p. 30. And Overton County Records, 1929.

studied as typical of general conditions, which assumption seems to be justified, it may be estimated that during the period 1922 to 1927 taxes took about 30 per cent of the net income from rented farms.(1)

The green bar at the bottom of Chart 21 gives a summary of all the data available for Tennessee. On 20 farms in Overton County in 1929 taxes took on an average of 22.4 per cent of the net rent. This percentage is hardly as low as that of either Virginia, Missouri, or Arkansas. But on the other hand, the few farms studied in Overton County could hardly be representative of the whole state. The data does show that for this particular county, which is representative of a number of Tennessee counties, the tendency was for taxes to take a percentage of the net rent which is comparable to the other Southern states studied.

As is pictured on Chart 21, the North Central section of the United States bore a heavier farm tax burden in relation to net rental than did the other sections. The data on which this study is based do not supply conclusive evidence sufficient to trace the reason for the burden being heavier in this section to the cause of either high taxation or of low rental returns. In each of the states mentioned in the North Central section, except North Dakota, taxes figures on the per acre basis are high. It is also a well-known fact that in this section the services that the local governmental units are called upon to supply are greater than in any other sections. In Colorado and North Carolina the percentage of net rent taken by taxes is as high as in some of the North Central states. In Colorado the standard of public services has been kept at a high level for many years, and North Carolina has made heavy expenditures in the last few years to improve its governmental services.

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(1) The data for the study in the 14 states was compiled by Whitney Coombs, and presented in "Taxation of Farm Property", U. S. D. A. Technical Bulletin 172, pp. 12-31.

> It is unquestionably true that net income from land has been low generally throughout the North Central States for the last eight years. The same statement could apply to agricultural income for the country as a whole, but this region has probably been as unfortunate in this respect as any other. Thus it seems a logical conclusion that both high taxes and low agricultural income have been factors in making the percentage of income taken by taxes high.(1)

Whether either high taxes, or low agricultural income or both have been the major factor in causing the heavy tax burden in the North Central States, the ability to pay principle is little considered, when the ratio of taxes to property returns ranged from 18 to 58 per cent in different states. If the people in the North Central Section of the U. S. are called on to support more local services, these services and functions should reflect in an increased income, thus tending to hold the ratio of taxes to rental income down. Or maybe the heavy tax burden in this section has justified itself in an increase in living standards. But it is hardly to be presumed that the standard of living in one section of the United States is enough above that of other sections to cause a spread of 40 percentage points in the tax burden between the two sections. The major portion of the cause is undoubtedly the inadequacy of the general property tax system as a means of obtaining governmental revenue.

3. Farm and Urban Property. The relation between the tax burden on farm and urban property is a topic of general discussion. The data available permits no conclusive answer, but studies of the subject were made in nine states of the United States for the period 1922 to 1927. A summary of the study is given on Chart 22.

The chart shows a tendency for the farm property to bear a heavier tax burden relative to net rent than urban property. The percentages for farm

(1) Whitney Coombs, Taxation of Farm Property, U. S. D. A. Technical Bul. 172, p. 31.

property ranges from 77.1 to 37.8 and for the urban property from 16.0 to 31.7. In five of the states it took a greater percentage of net rent to pay taxes on farm than on urban property, while in the other four states the taxes on urban property took the greater percentage.

These data cannot be used as a conclusive answer to the question of whether the urban or farm taxes take a greater proportion of the net rental returns, but it does denote that the burden is high throughout the country for both types of property.

It seems to be unquestioned that during the years immediately following the post-war deflation farm real estate contributed a greater percentage of its net rental returns than did urban real estate to governmental functions.(1)

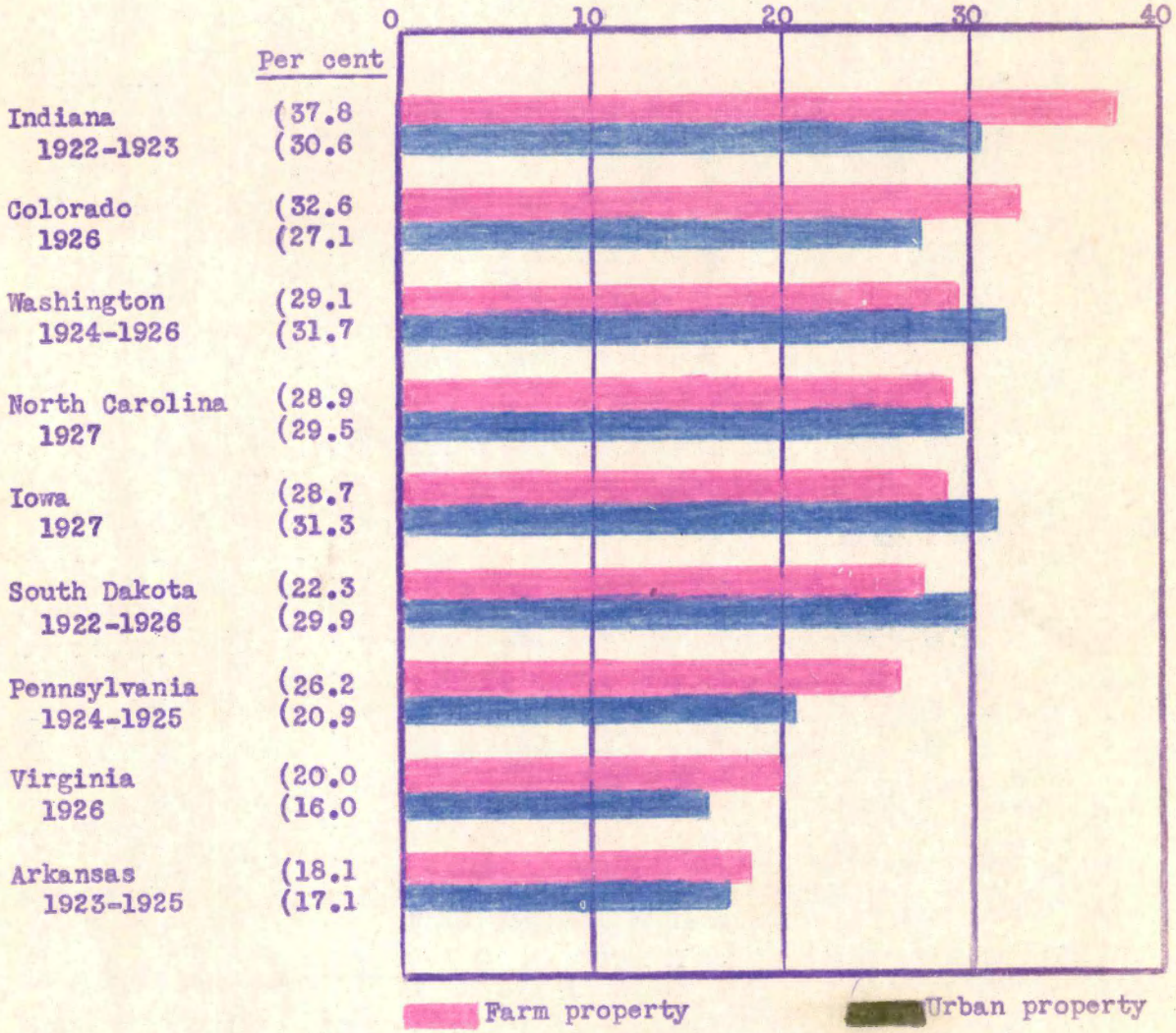
> Two circumstances tend to explain this situation. Net income on farm property was low, and often non-existent. Assessed valuations of farm property, on the other hand, were at their peak. The fall in market values of farm land was not reflected in a decline in its assessed valuation for several years. The fact that there is in all cases a period of about a year between assessment and payment of taxes makes a lag of one year inevitable. Besides, only half of the states assess farm property every year and in many of these states the assessment is a formal requirement which results in copying the figures from previous year's rolls. As a result in many cases farm properties were assessed for many years at a proportion of their actual value materially higher than normal. The effect of this was a high tax contribution at a time when income was exceedingly low.
>
> Too much emphasis should not be placed upon the influence of high farm assessments in causing farms to be taxed at a high proportion of their net yield. Farm taxation is largely local taxation. So far as this local taxation is concerned, it makes no difference whether the average relationship between assessed valuation and true value is high or low. If it is high, the tax rate may be low. If, on the other hand, the relation is kept low, the tax rate must be high. Low assessment ratios have usually been accompanied by the maximum inequalities of assessment. In other words, it is considered much easier to assess uniformly at a high ratio than at a low rate.
>
> Outside of a local jurisdiction, a difference in the ratio of assessed to true value will tend to transfer part of the taxes from the low-assessed group to the higher assessed groups. But these taxes in most sections of the country are relatively small in amount and could not account for a

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(1) Whitney Coombs, Taxation of Farm Property.

Chart 22.

GENERAL PROPERTY TAXES AND NET RENT ON FARM AND URBAN PROPERTY IN NINE STATES, SELECTED YEARS, 1922-1927



Source: Whitney Coombs: "Taxation of Farm Property", U. S. D. A. Technical Bulletin 172, page 32.

large inequality between urban and rural properties.

The comparison which has been made of the taxes and yields of urban and rural properties does not give a satisfactory indication of the relative burdens of taxation on these types of property. From the point of view of current income to the owner of rented land, the comparison is exceedingly important. Examination indicates that both types of property pay high proportions of their net yields in taxes and that on the basis of the few states for which figures are available, farm property seems to pay a slightly greater proportion.

Too much importance should not be attached to the meager conclusions that may be drawn from the comparative data that have been presented. Urban and rural taxes are, in part, different things. That is, the taxpayer in the city is purchasing, through his payments, types of services that are different from those paid for in rural tax payments. The city government provides fire and police protection. It maintains a school system which may be no better in its individual units than are the rural schools, but which enables pupils to carry their education further and provides a greater variety of training and more elaborate equipment. The streets maintained by city taxes are of a higher grade and are usually kept in better condition than are roads in rural sections. Street cleaning and lighting are city functions which rarely have rural counterparts. Thus it is apparent that the things for which city taxes are paid are much more extensive than the things for which the rural property owner purchases through his payments.

In further qualifying the conclusions which might be drawn from a hasty consideration of the data from city and country, it should be recalled that although the services may be provided at a greater unit cost to the tax payers. No detailed consideration of this is possible at present. It is mentioned merely to suggest another direction in which it is necessary to look before finding the data that are essential to a complete consideration of the subject.(1)

Farm Prices.

Farm prices determine to a major extent the ability of the farmer to pay taxes, taking income as a measure of ability. Prices plus natural conditions and efficiency in farming determine the farmer's income or returns. Perchance taxes in relation to prices should have been studied before the foregoing discussion on taxes and incomes, since prices are a factor in determining incomes. But the relation of taxes to income is the important

(1) Whitney Coombs, Taxation of Farm Property, U. S. D. A. Technical Bulletin 172, pp. 32-3.

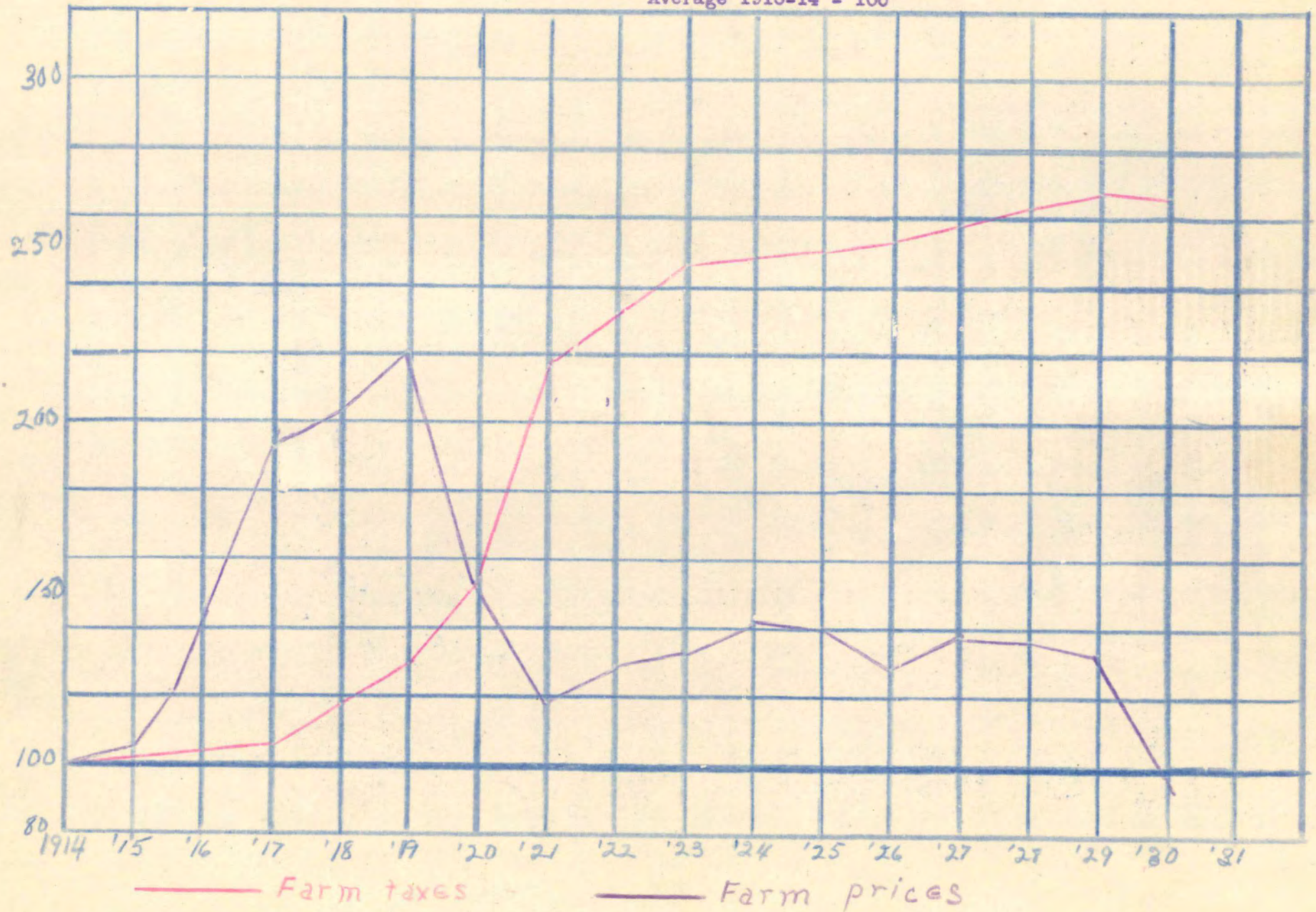
factor of direct concern to the farmers. The relation of farm prices and taxes appear as a problem in respect to ability only after second thought, but it is a very important one as to the tax burden in times of inflation and deflation as to the problems of retaining ownership and of land utilization.

An increase in taxation is not so burdensome, if it is accompanied by a like increase in farm income and indirectly farm prices. But when taxes increase while income decreases, as has been the case for the last few years, the result is disastrous. An examination of the records of or the indexes of farm prices and farm taxes (Chart 23) one finds that the two do not fluctuate together. The index of taxes may be fairly constant, while prices are rising rapidly. Or on the other hand taxes may be increasing while prices are falling rapidly. This lack of coordination of taxes and prices has an unfortunate effect on agriculture, for in the period of low taxes and high prices the farmer becomes very hopeful of the future or at least expects no rapid disappearance of prosperity. This expectation of continued and even greater prosperity is capitalized into high land values. The inflated land values are in turn taken by the government as a basis of increased assessment for taxation. Then by the time taxes are paid, as they are paid a year after assessment, farm prices may have collapsed, farm income become negligible, and farmers by the millions find themselves unable to pay. Such has been the case in the United States since 1930.

From Chart 23 and Table 41 it is seen that there is very little coordination between the indexes of farm prices and taxes as to each rising and falling together. Only from 1917-18 and 1918-19 did prices and taxes increase with any great degree of equality. Judging from the curves in Chart 23, the farmers were able to pay taxes without undue burden until

Chart 23.

INDEX NUMBERS OF FARM PRICES AND TAXES, 1914-30
Average 1910-14 = 100



Source: U. S. D. A. Yearbook, 1931.

1919, for from 1914 to 1919 the price index increased from 101 to 220 while the index of taxes increased from 100 to 130. In 1920 the crash came in farm prices, the index falling from 220 in 1919 to 152 in 1920. During the same time the index of taxes increased from 130 to 155. In 1921 the price index dropped to 119 while taxes continued to rise, reaching an index of 217. During the years from 1921 to 1929, farm prices remained more or less constant, the index ranging from 129 to 143. During the same

Table 41.

Farm Prices and Taxes, 1914 - 1932(1)

(Ave. 1910-1914 = 100)

Year	Index number of farm prices	Index numbers of taxes
1914	101	100
1915	104	102
1916	146	104
1917	192	106
1918	203	118
1919	220	130
1920	152	155
1921	119	217
1922	130	232
1923	132	246
1924	142	249
1925	143	250
1926	129	253
1927	138	258
1928	137	263
1929	133	267
1930	97	266
1931	80	
1932	57	

(1) U. S. D. A. Yearbook 1932, pp. 900 and 902.

period taxes continued to gradually increase, rising from 232 to 267.

Even though the spread between the two indexes was over 100(1) points each year from 1921 to 1929, the farm tax burden was relatively light, considering the problem from all angles. With an increase in farm educational

(1) Each index was equal in 1914.

facilities and in highway, along with Federal and State, aid in agriculture, the farmers were receiving justifiable returns on their tax money. Also the situation was not as bad as the relation between the price and tax indexes show it to be. Even though prices did decrease by a large percentage, the farmer's income did not necessarily decrease in proportion, since by modern and more efficient methods he was able to produce more per unit of cost to sell at the lower price, thus tending to hold his income at a relatively high level.

It was in 1930 that the farm tax burden became acute. From 1929 to 1930 the price index fell from 133 to 97, while the tax index fell only one point, from 267 to 266. Preliminary reports show that the farm price index reached 80 in 1931 and 57 in 1932, while the tax index[1] decreased only a few points.

These data point out that the present farm tax burden is of recent development. The heavy tax burden on farms had its beginning in 1920 and has been becoming more serious since that date. During the present depression, or since 1929, the situation has become critical.

In periods of deflation, as has been since 1929, it is very difficult for farmers to retain ownership of their homes, especially so if they do not have them paid for. Farm taxes make it all the more difficult to retain ownership, and especially so since 1929, with the tax burden remaining practically constant and prices falling 40 points below the 1910-14 level.

Taxation works a definitely greater hardship on the land or property owners than on the salaried or professional men with large incomes. Under the property tax system, the tax is a lien on the property. Thus if the

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(1) No index available for 1931 and 1932, but it is estimated that the farm tax index decreased a few points during these years.

owner is unable to pay his taxes his property is sold for the same. While on the other hand there is no tax on income until it reaches a relatively large size. Carrying the comparison further, if the professional or salaried man does not own his home, of course a deflation will make it more difficult to pay his rent, but if he cannot pay his rent, he has nothing to lose except a place to live. While on the other hand the farmer loses both his farm or business and a place to live if he cannot pay his taxes.

A high tax on farm property, and especially in times of deflation, increases the amount of marginal and submarginal land. It causes the abandoning of some submarginal lands, which is undoubtedly desirable since there is enough more productive land to produce sufficient quantities to feed and clothe the nation. It is desirable that the land be abandoned in the sense that it is not used for immediate crop production. It should be put in some productive use, as reforestation.

After the high tax has come into effect and raised the level of marginal lands, the marginal and above-marginal farmers have a tendency to increase production especially in the field of cash crops, in order to have cash for taxes and living purposes. This increase on the part of each individual farmer may in the long run cause overproduction of the particular commodity. Also this tendency to produce cash crops causes the type of farming to be unbalanced and the land not used in accordance with a well rounded program of land utilization. The objectives of such a program, with particular reference to agricultural land, are: "(1) to put land to uses that will promote the economic welfare of the present rural population, with due regard to the interest of the general public, and (2) to conserve the soil and other land resources, thus safeguarding the national interest and well-being of

future generations of farmers."(1)

Amount of Tax per Acre. Whether or not the amount of tax per acre has any valuable direct relationship to the problems of retention and land utilization, it does show the amount of cash per acre the farmer must have available before he can retain ownership and utilize his land ethically.

Table 42.

Amount of Taxes Paid per Acre on Farms Operated by Full Owners Owning No Other Land, Tennessee Counties, 1929

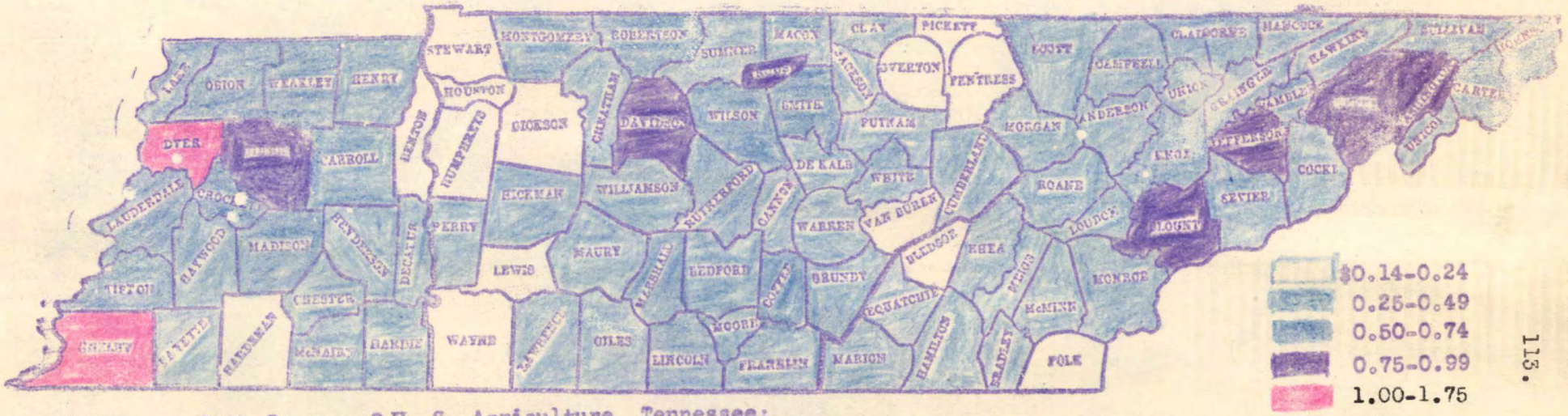
Rank	County	Amount paid per acre	Rank	County	Amount paid per acre	Rank	County	Amount paid per acre
1	Wayne	$0.14	32	White	$0.34	64	Grainger	$0.49
2	V. Buren	0.17	33	Hender.	0.34	65	Coffee	0.49
3	Stewart	0.17	34	Hancock	0.34	66	Wilson	0.50
4	Polk	0.17	35	Carroll	0.35	67	Union	0.50
5	Humphries	0.21	36	Hickman	0.36	68	Sulliv.	0.50
6	Dickson	0.21	37	Chester	0.36	69	Lincoln	0.51
7	Houston	0.22	38	Fayette	0.37	70	Madison	0.52
8	Hardeman	0.22	39	Bradley	0.37	71	Claiborne	0.52
9	Fentress	0.22	40	Montgomery	0.38	72	Weakley	0.54
10	Bledsoe	0.22	41	Sevier	0.39	73	Campb.	0.55
11	Benton	0.22	42	Rhea	0.39	74	Ruther.	0.56
12	Pickett	0.23	43	Morgan	0.39	75	Robert.	0.56
13	Lewis	0.23	44	Lawrence	0.39	76	Monroe	0.57
14	Overton	0.24	45	Johnson	0.39	77	Marshall	0.59
15	Perry	0.25	46	Frank.	0.39	78	Carter	0.60
16	Cumber.	0.25	47	DeKalb	0.39	79	Smith	0.62
17	Decatur	0.26	48	Roane	0.40	80	Knox	0.63
18	Cheatham	0.26	49	Henry	0.40	81	Tipton	0.65
19	Warren	0.27	50	Gibson	0.40	82	Hamblen	0.67
20	Scott	0.27	51	Bedford	0.40	83	Obion	0.69
21	Moore	0.28	52	Williams.	0.41	84	Lake	0.71
22	McNairy	0.28	53	Putnam	0.41	85	Lauder.	0.72
23	McMinn	0.28	54	Ander.	0.41	86	Crock.	0.73
24	Sequat.	0.29	55	Marion	0.42	87	Jeffer.	0.75
25	Meigs	0.29	56	Cocke	0.43	88	Blount	0.79
26	Macon	0130	57	Haywood	0.44	89	Trousd.	0.85
27	Hardin	0.30	58	Loudon	0.44	90	Wash.	0.86
28	Cannon	0.30	59	Hamilt.	0.44	91	Greene	0.86
29	Clay	0.32	60	Unicoi	0.46	92	Gibson	0.91
30	Jackson	0.33	61	Maury	0.48	93	David.	0.99
31	Grundy	0.33	62	Sumner	0.49	94	Dyer	1.17
			63	Hawkins	0.49	95	Shelby	1.68
				St. Ave.	0.45		U.S. Ave.	0.74

Source: 15th Census of U. S. Agriculture, Tennessee, Statistics by Counties, Second Series.

(1) Proceedings of National Conference on Land Utilization, 1931, p. 132.

Map 9.

AMOUNT OF TAXES PAID PER ACRE ON FARMS OPERATED BY FULL OWNERS, OWNING NO OTHER LAND, ON TENNESSEE FARMS BY COUNTIES, 1929.



Source: 15th Census of U. S. Agriculture, Tennessee; Statistics by Counties, Second Series.

The incidence of the tax on farm land and buildings, on farms operated by full owners owning no other land in 1929, ranged from $0.14 in Wayne County to $1.68 per acre in Shelby County. The average for the state was $0.45 (see Table 42 and Map 9). The tax per acre for the United States ranged from $0.14 in Wyoming to $2.77 in New Jersey and $18.70 in the District of Columbia. The average for the United States was $0.74 per acre (see Table

Table 43.

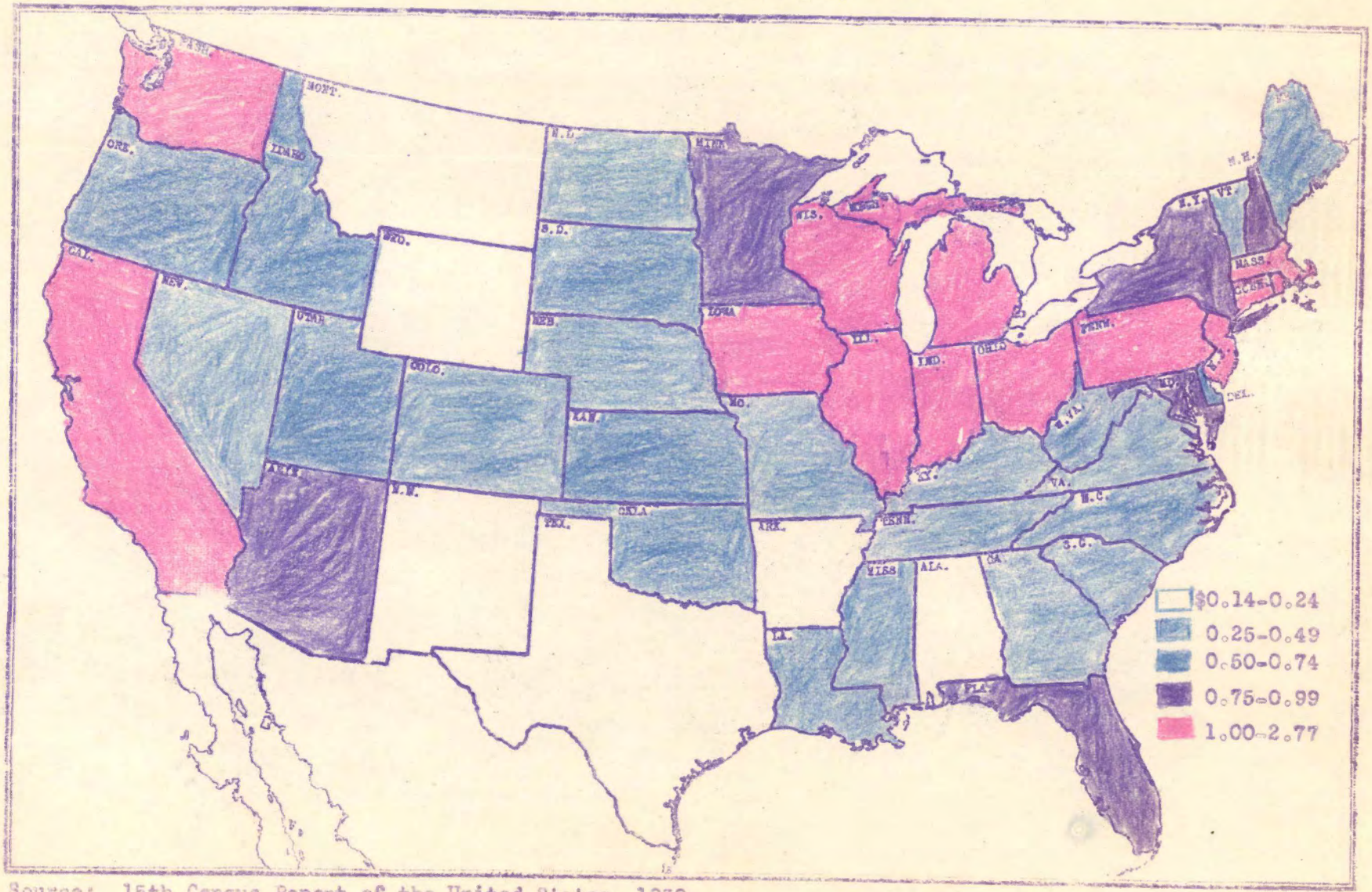
Amount of Taxes Paid per Acre on Farms Operated by Full Owners Owning No Other Land, by States, 1929

Rank	State	Amount paid per acre	Rank	State	Amount paid per acre
1	Wyoming	$0.14	25	Delaware	$0.60
2	New Mexico	0.14	26	Utah	0.64
3	Montana	0.20	27	Kansas	0.70
4	Arkansas	0.21	28	Maine	0.72
5	Alabama	0.22	29	Idaho	0.73
6	Texas	0.23	30	Arizona	0.76
7	Nevada	0.32	31	New Hampshire	0.77
8	Virginia	0.34	32	Minnesota	0.92
9	Kentucky	0.37	33	Florida	0.94
10	South Carolina	0.38	34	New York	0.95
11	Colorado	0.39	35	Maryland	0.96
12	Missouri	0.43	36	Illinois	1.07
13	Tennessee	0.43	37	Rhode Island	1.09
14	North Dakota	0.45	38	Wisconsin	1.15
15	Georgia	0.46	39	Washington	1.15
16	Mississippi	0.46	40	Pennsylvania	1.21
17	West Va.	0.48	41	Iowa	1.30
18	Nebraska	0.49	42	Indiana	1.32
19	North Carolina	0.52	43	Connecticut	1.33
20	Louisiana	0.52	44	Ohio	1.38
21	Oklahoma	0.52	45	Michigan	1.39
22	Vermont	0.55	46	California	1.88
23	South Dakota	0.56	47	Massachusetts	2.00
24	Oregon	0.60	48	New Jersey	2.77
			49	D. of C.	18.70
1	W.S.C.	0.28	7	M.A.	1.14
2	Mtn.	0.34	8	E.N.C.	1.26
3	E.S.C.	0.37	9	Pacific	1.28
4	S.A.	0.47	U.S. Average		0.74
5	W.N.C.	0.70			
6	N.E.	0.92			

Source: 15th Census Report of the United States, 1930, Agriculture.

Map 10.

AMOUNT OF TAXES PAID PER ACRE ON FARMS OPERATED BY FULL OWNERS OWNING NO OTHER LAND ON FARMS IN UNITED STATES, 1929.



Source: 15th Census Report of the United States, 1930, Agriculture, United States.

43 and Map 10). In Tennessee the tax paid per acre was below the average in 59 counties and above in 36. The following table (Number 44) gives the number of counties falling within the different ranges of amount of taxes paid per acre on farms operated by full owners owning no other land.

Table 44.

Range of Taxes Paid per Acre in Tennessee Counties, 1929

Range-tax per acre	No. counties in range	Per cent of total	Range-tax per acre	No. counties in range	Per cent of total
Below 0.16)	1)	16.8	0.56-0.65	8)	14.7
0.16-0.25)	15)		0.66-0.75	6)	
0.26-0.35)	19)	60.0	0.76-0.85	2)	8.5
0.36-0.45)	24)		0.86-0.95	3)	
0.46-0.55)	14)		0.96 and above	3)	
			Total	95	

Source: 15th Census of U. S. Agriculture, Tennessee, Statistics by Counties, Second Series.

Map 9 shows the tax incidence per acre in the various counties and sections of Tennessee. Map 10 presents the tax incidence per acre in the various states and sections of the United States.

The two Maps 9 and 10 show that the tendency is for the tax per acre to be highest in the rich agricultural and the industrial sections of the state and nation.

Chapter V.

INCIDENCE OF THE GENERAL PROPERTY TAX IN RELATION TO BENEFITS RECEIVED

This chapter concludes the present discussion of the incidence of the general property tax.

It should be recognized that taxes in general are levied because the people demand of their government numerous services and improvements which cannot be had free of charge, but which must be bought by the public or people in a cooperative manner. In this sense the government acts as a unit of cooperative buying. It is more difficult to measure the resulting benefits to the people of this spending of public money than it is to measure in quantitative terms the levies that are necessary to meet these demands for public expenditures. There is a tendency for people to get the burden of taxation so close to their eyes that they lose sight of the benefits which they receive from it.

Theory

The principle of the benefit doctrine of tax distribution is that each individual should be taxed in proportion to the benefits he derives from governmental functions. The doctrine has two branches: (1) the cost of service theory, and (2) the value of service theory.

By the cost of service theory is meant that each individual be compelled through taxation to pay to the government the cost of the services the government performs for him. Under this theory all governmental functions would have to be conducted on a government enterprise basis. The taxes paid would be equal to the cost of the services to the individual.

The United States postal service corresponds more or less to this theory. In collecting for the cost of all governmental functions, no one has as yet suggested a basis for apportioning governmental costs among the individuals benefited. This theory thus has no working application.

By the value of the service theory is meant that "the individual should share in the total costs of government in proportion to the value of the benefits derived from the activities of his government".(1) Here again difficulty arises in measuring the extent to which each individual benefits from the services of the government. An early conception was that the major function of a government is protection, and that individuals benefit from this protection in proportion to the property owned and safeguarded. For such thinkers a single general property tax seemed the best means of making an equitable distribution of the tax burden.(2)

So long as the principal function of government was domestic and national protection there was some fairness in a tax of this character because the protection afforded bore a real relation to property. But under present conditions governmental functions are more or less of a social welfare nature, with direct individual benefits being received from the general property taxes hard to measure.(3) It is society as a whole, or the general populace, that benefits from the present governmental activities. "The benefit doctrines of tax distribution cannot find general application today, because individual benefit is lacking as a basic element in many of the governmental functions of the present."(4)

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(1) W. J. Shultz, op. cit., pp. 326.
(2) J. H. G. Van Justi, "Staatswirthschaft" (second edition, 1758), Part II, sec. 228, p. 312. (Page 327, W. J. Shultz, op. cit.)
(3) Individual and sometimes more or less measurable benefits are received from special property taxes. The benefit principle also finds application in fees, license fees, special assessments and certain commodity taxes.
(4) W. J. Shultz, op. cit., p. 327.

In speaking of the benefit principle of taxation, Lionel D. Edie says, "No special benefit is given in exchange for the tax. If an individual buys an article of food or clothing, he can see it, measure it, handle it. But when he pays a tax to the government, he has no particular article in hand, no tangible and labelled service or commodity which he is paying for. The benefits are general and need not be in proportion to the tax."(1)

Thus we see that the benefits derived from the general property tax cannot be measured in terms of services received by individuals, but through the promotion of the welfare of the social order. In this sense then, the extent of the study of the incidence of the general property tax is naturally limited to: (1) a study of the relation of the receipts from the general property tax to the total receipts of the Tennessee counties, which gives some idea as to the burden of the property tax in the different counties; (2) the purposes for which the property tax is expended; and (3) the proportion of the expenditure going for the different functions, with particular reference to the major ones as influencing the extent of public services in the several counties. The quantity and the quality of the governmental services supported by a tax determine to a high degree the benefits derived from the tax.

The outcome of a study of the general property tax may be the realization that the term "benefit" is very vague in meaning, and that benefits are difficult to measure. Nevertheless the study of "benefits" is of use as a guide in attempting to judge the equitableness of the general property tax.

Receipts from General Property Taxes

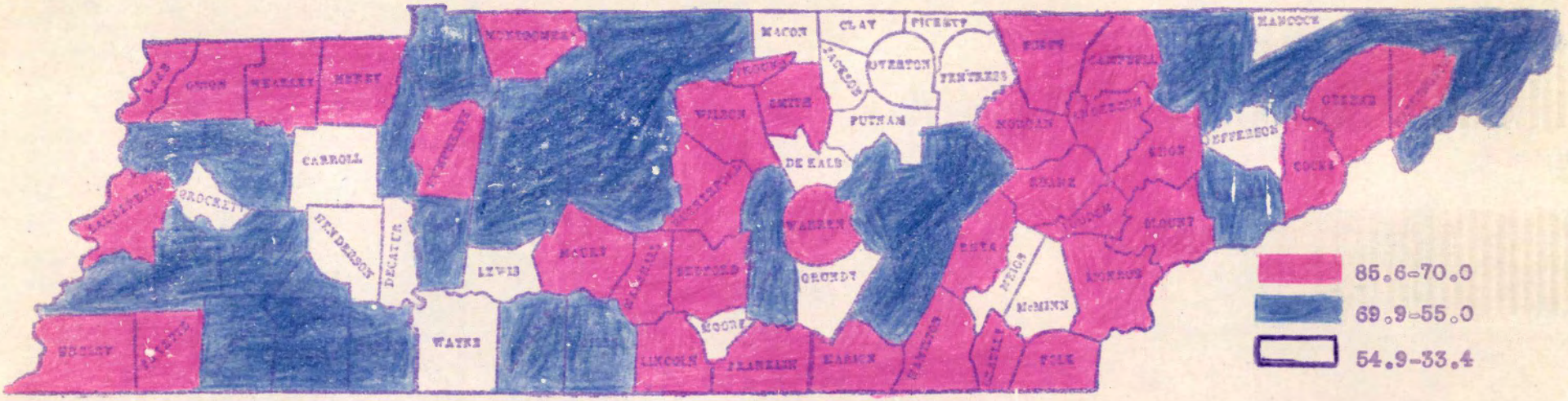
Knowledge of the relation of the receipts from the general property tax to the total revenue receipts in the several Tennessee counties is necessary,

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(1) Lionel D. Edie, "Economic Principles and Problems", p. 719.

Map 11.

PER CENT THE RECEIPTS FROM THE GENERAL PROPERTY TAX IS OF THE TOTAL REVENUE RECEIPTS OF TENNESSEE COUNTIES, 1929



Source: Table 45.

before one can even estimate the benefits received from general property taxes. It is logical that in counties in which more than half the total revenue receipts are from the general property tax that more than half the benefits received from all taxation are the result of this tax.(1)

In 84 Tennessee counties in 1929, fifty per cent or more of the total

Table 45.

Per Cent That the Receipts from the General Property Tax Is of the Total Revenue Receipts of Tennessee Counties, 1929

Rank	County	%	Rank	County	%	Rank	County	%
1	Marion	85.6	32	Humphreys	71.2	64	Dickson	57.5
2	Monroe	84.7	33	Washington	71.0	65	Cheatham	57.4
3	Morgan	83.2	34	Warren	70.6	66	Coffee	57.2
4	Fayette	83.0	35	Cocke	70.3	67	Hardin	56.9
5	Blount	81.6	36	Lake	70.1	68	White	56.7
6	Greene	79.7	37	Madison	69.6	69	Sevier	56.1
7	Marshall	79.6	38	Unicoi	69.4	70	Chester	56.0
8	Smith	79.5	39	Dyer	69.0	71	Johnson	55.6
9	Anderson	78.8	40	Gibson	68.7	72	Stewart	55.5
10	Franklin	78.5	41	Hickman	68.1	73	Benton	55.5
11	Shelby	77.0	42	Grainger	68.0	74	Van Buren	55.0
12	Rhea	76.4	43	Davidson	66.6	75	Meigs	54.9
13	Hamilton	76.1	44	Houston	65.6	76	McMinn	54.5
14	Knox	75.9	45	Haywood	64.6	77	Henderson	54.2
15	Obion	75.4	46	Bledsoe	64.6	78	Pentress	53.6
16	Bradley	74.7	47	Cannon	64.4	79	Jefferson	53.6
17	Roane	74.7	48	Carter	63.9	80	Putnam	53.5
18	Henry	74.5	49	Sequatchie	63.6	81	Crockett	52.4
19	Polk	74.5	50	Perry	63.1	82	DeKalb	52.2
20	Rutherford	74.4	51	Tipton	62.5	83	Wayne	51.9
21	Campbell	74.3	52	Hamblen	62.5	84	Jackson	50.0
22	Loudon	74.0	53	Hardeman	62.2	85	Carroll	48.5
23	Scott	73.2	54	Cumberland	61.9	86	Decatur	48.5
24	Trousdale	73.2	55	Union	61.5	87	Morgan	47.3
25	Wilson	72.8	56	Williamson	61.3	88	Clay	47.1
26	Bedford	72.4	57	Hawkins	61.2	89	Lewis	45.4
27	Lincoln	72.3	58	Giles	60.9	90	McNairy	44.2
28	Weakley	71.9	59	Sullivan	60.8	91	Overton	43.1
29	Lauderdale	71.8	60	Claiborne	60.1	92	Moore	41.9
30	Maury	71.6	61	Sumner	59.7	93	Hancock	41.0
31	Montgomery	71.4	62	Robertson	59.7	94	Pickett	37.6
			63	Lawrence	58.5	95	Grundy	33.4
							St. Av.	68.8

Source: Report of State Tax Committee, 1930.

(1) It is impossible to measure benefits in dollars and cents; we can only say that, relatively speaking, one county receives more benefits from a certain tax than others.

revenue receipts were from the general property tax (see Table 45). The percentage ran as high as 85.6 in Marion County. In only 11 counties was the receipts from this tax less than 50 per cent of the total. Grundy County is low with 33.4 per cent. The weighted average for all counties is 68.8 per cent.

Map 11 presents the geographic distribution of the data in Table 45. Judging from the position of the lowest counties, it appears that the tendency is for the property tax to be lowest, in relation to total revenue receipts, in the poorer agricultural counties. The highest counties lie in the rich agricultural and highly industrialized sections. It is apparent too that the tendency is for the medium counties to fall in either the better agricultural or industrial sections.

One is safe in generalizing and saying that the general property tax is the principal source of revenue in the better agricultural sections of the state and that the farmers are bearing the brunt of this tax. As has been previously pointed out[1] "acreage" property bore an average of 80.2 per cent of the general property tax in 91 of the Tennessee counties in 1930. (The other four counties were the ones with large cities, Davidson, Hamilton, Knox, and Shelby.) And it is known that a major portion of the farmers' property is classified as acreage. Thus we can make a further generalization and say that in the majority of Tennessee counties the benefits derived from the general property tax are as a result of the taxes paid by farmers. Also, of the estimated amount of all taxes paid by Tennessee farmers in 1929, 57.1 per cent was a general property tax."[2]

Purposes for Which General Property Tax Is Spent

In the typical Tennessee county the general property tax is expended for: general county purposes, special county purposes, high schools, ele-

(1) See page 29 of this report.
(2) See page 6 of this report.

mentary schools, highways and roads, bridges, interest on bonds and other indebtedness, sinking funds, and building funds. The general county and special county funds are used for the same purpose, the special county tax being levied merely to supplement the general county fund, since the general county fund was not large enough to take care of the general county expenditures such as general repairs, office supplies, fuel, salaries, administration of justice, jail expense and law enforcement, health and sanitation, charitable institutions and other general welfare work.

Expenditures

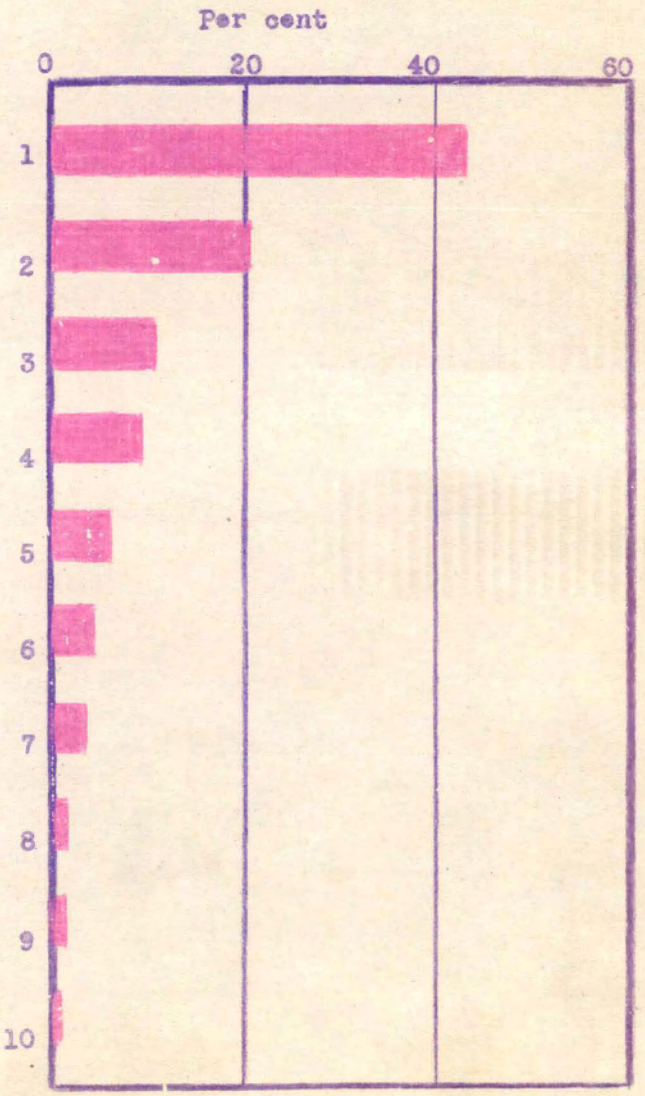
Classified: (1) Total For All Counties. Chart 24 gives the classified expenditures and the percentage each is of the total operation expense for Tennessee counties in 1929. It is readily seen that education and road building occasion the major portion of the total operating expenditures, the percentages being 42.8 and 20.5 respectively. Interest and debt redemption take about 20 per cent of the total expenditures. Thus with about 83.00 per cent of the total expenditures going for these four purposes, the tax payer must look for and expect the major portion of his benefits from the education of his children, the use of the highways, and the payment of interest on and the retirement of bonds, which were floated in most instances in order to raise capital for the building of roads, schools, and other public buildings.

(2) Overton County Chart 25 gives the classified expenditures, and the percentage each is of the total operation expense, for Overton County in 1929. Here education is 49.8% of the total as compared to 42.8%, the average for all counties. Interest is second highest, being 24.2% of the total. The expenditures for highways and bridges are only 11.8% as compared to the state average of 20.5%.

Chart 24.

EXPENDITURES CLASSIFIED: PERCENTAGE EACH IS OF THE TOTAL OPERATION EXPENSE FOR TENNESSEE COUNTIES, 1929

Expenditure	Amount	Per cent
Education	$16,658,441	42.8
Highways and roads	7,992,748	20.5
Interest	4,080,296	10.5
Debt redemption	3,608,452	9.3
General operation	2,324,675	6.0
Charities and hospitals	1,788,658	4.6
Law enforcement	1,195,616	3.1
Miscellaneous	599,892	1.5
Health & sanitation	531,548	1.4
Elections	121,323	0.3
	$38,901,659	100.0

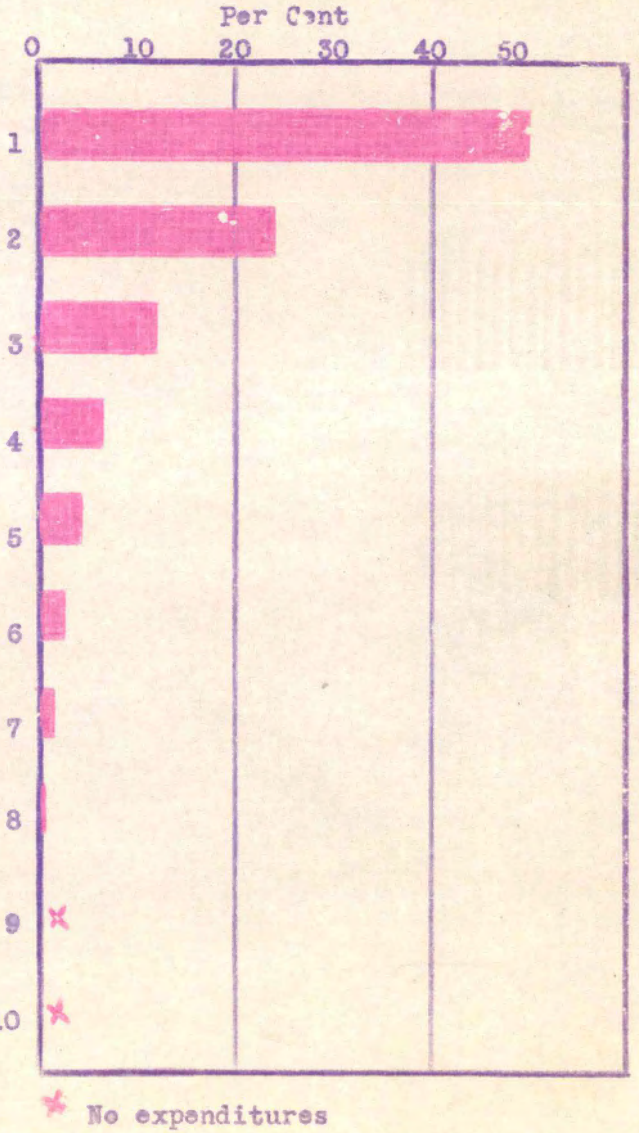


Source: Report of State Tax Committee, 1930, pp. 118-19

Chart 25.

EXPENDITURES CLASSIFIED: PERCENTAGE EACH IS OF THE TOTAL OPERATION EXPENSE FOR OVERTON COUNTY, 1929

Expenditure	Amount	Per cent
Education	$77,279	49.6
Interest	37,500	24.2
Highways	18,275	11.8
Charities and hospitals	9,897	6.4
Law enforcement	6,120	3.9
General operation	3,675	2.4
Health & sanitation	2,000	1.2
Elections	420	.3
Debt redemption	-	-
Miscellaneous	-	-
	$155,766	100.0



Source: Report of State Tax Committee, 1930, pp. 118-19

This study indicates that in each of the several Tennessee counties the taxpayer cannot expect the same percentage benefit from each of the respective functions. In Overton County the taxpayers must look for their greatest benefit, as measured by percentage of total expenditure, in the form of education and in the payment of interest; while in a county with expenditures comparable with the average of all the Tennessee counties, a larger share of the benefits would be expected from the use of highways.

Percentage of Total for Education and Highways. Table 46 shows at a glance that expenditures for education and highways in practically all Tennessee counties make up the greater percentage of the total. Expenditures for education were the greatest percentage of the total in Stewart County, being 80.6 per cent, and Washington County had the least with only 16.5 per cent. The weighted average expenditure for education by Tennessee counties was 42.8 per cent. Sixty-eight of the counties were average or above.

The expenditures for highways and bridges was 20.5 per cent of the weighted total expenditures of all counties. In individual counties the percentage ranged from zero in Johnson County to 71.8 per cent in Fayette County. Inspection of Table 46 and Chart 27 indicates that as the percentage expenditure for education decreases the tendency is for the proportion for highways to increase.

Chart 27 consists of 95, 100 per cent bars, each bar representing a Tennessee county. The red portion of each bar represents expenditure for education, the green portion, highways and bridges, and the blank portion, all other county operating expenditures. The counties are ranked on the chart by the percentage expenditure for education, from high to low.

Chart 27 shows that the larger portion of a majority of the bars are colored red and green. In 19 counties the total expenditures for education and highways is 80 per cent or more, and in 74 counties the percentage is 60 per cent or more.

Expenditures for Education and Highways As Affecting Other Public Services in the Counties. The percentage of the total operating expenditures in the individual counties is more or less in inverse proportion to the volume of other public services rendered by the county governments. As the percentage expenditure for these two major functions increase the volume of other public services tend to decrease, and vice versa. In the counties with 80 per cent or more of the total operating expenditures for education and highways, very little money is left for such important functions as sanitation and health work, county and home demonstration agents, and county institutions such as jail, poorhouse, and hospital. In 19 counties in 1929, 20 per cent or less of the total expenditures were for services other than education and highways. Counties in this group may be either poor or relatively rich, but they are predominately poor. The poor counties must spend a large portion of their available funds for these two purposes, and especially for education, in order to maintain schools on a par with the richer counties. The relatively more wealthy counties in this group, Wilson and Williamson, are there largely because of unusually high expenditures for roads during that year.

In the counties with a relatively low percentage of the total expenditures for education and highways, either of two conditions are present: (1) The county may be a wealthy one in which case a comparatively small percentage of the total funds available spent for the two major functions may be enough to maintain high standards of education and good roads, thus leaving large funds available for other public services. Such is the case in Shelby, Davidson, and Hamilton Counties. (2) The county may be either rich or relatively poor and still be failing to maintain the state average in standards of education and highway systems. Thus other public services receive a greater proportion of the total expenditures. Expenditures for education and highways were less than 60 per cent of the total in 20 counties.

State of Tennessee. Charts 26A and 26B give the percentage that each classified expenditure is of the total expenditures[1] of the State Government of Tennessee during the years ending June 30, 1930 and June 30, 1932. The contrast between the expenditures for the major functions for the two years is very pronounced. During the fiscal year ending June 30, 1930 (Chart 26A) the expenditure for highways was 56.57 per cent of total. In addition to this 11.18 per cent was spent for highway bridges, making a total of 67.75 per cent for roads. During this fiscal year the proportion going to education was only 12.22 per cent of the total.

During the fiscal year ending June 30, 1932 (Chart 26B) the expenditure for highways and bridges was only 24.7 per cent of the total, as compared with 67.75% in 1930. The proportional expenditure for education increased from 11.18 per cent of the total in 1930 to 23.3 per cent in 1932. During 1932 the amount spent for interest, bond retirement and sinking funds was 19.3 per cent of the total expenditures as compared with 6.24 per cent in 1930.

The fiscal year 1932 is probably more representative of normal expenditures than 1930, since unusually large expenditures were made in 1929-30 for highways. The greater part of this highway construction was financed with borrowed capital, which was reflected in the increased interest and sinking fund payments of 1931-32 over 1929-30. Nevertheless, from the study of the expenditures made during the fiscal years 1930 and 1932, it is seen that, as was found true for the counties, the major portion of the expenditures by the state government were for education, highways, and interest and debt payments.

(1) Total expenditures include operating expenditures plus the capital expenditures. Capital expenditures in the form of highways and highway bridges were very great during 1928-29-30. This makes the per cent of funds spent for highways and bridges, a major portion of which was borrowed, high in relation to expenditures for other purposes. The fact that expenditures for other purposes were increasing in amount should not be overlooked.

Chart 26A.

EXPENDITURES: STATE OF TENNESSEE - FISCAL YEAR ENDING JUNE 30, 1930

Per cent	Distribution
56.57	Highways
12.22	Education
11.18	Highway bridges
5.65	Penal & charitable inst.
2.54	County highway bonds & int
1.78	Administrative
1.70	Confederate pensions
1.38	Judiciary
1.37	State debt & interest
1.33	Sinking fund bond & int.
1.22	Lands-S. Nat'l Pk. & Reelfoot
.91	Public health
.64	Agriculture
.51	Sundry accounts (state aid, etc.)
100.00	

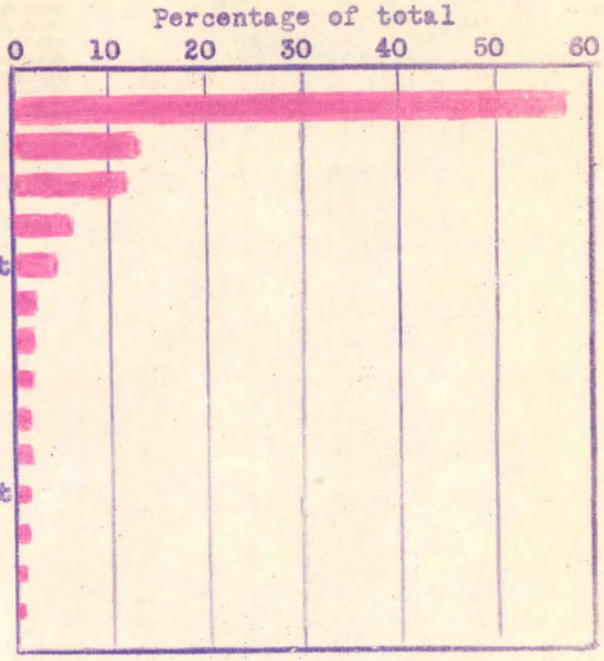
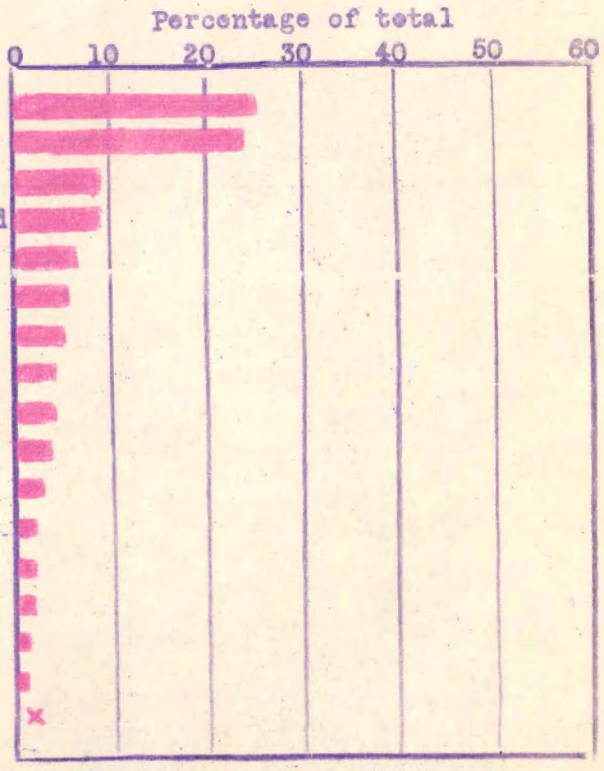


Chart 26B.

EXPENDITURES: STATE OF TENNESSEE - FISCAL YEAR ENDING JUNE 30, 1932

Per cent	Distribution
24.7	Highways
23.3	Education, inc. U. T.
8.5	Penal & charitable inst.
8.3	2-cent gas tax- county aid
5.9	Int. & short-term highway notes
5.0	Highway bonds and int.
4.5	State debt and int.
3.9	Sinking fund bond & int.
3.7	Confederate pensions
3.6	Administrative
2.4	Judiciary
1.8	Expense, legis. - misc.
1.6	Health
1.3	Sundry accounts
1.0	Agriculture
0.5 (0.43	Lands, S.Mtn.Pk. & Armory
(0.038	Highway bridges
100.0	



Report of the Commissioner of Finance and Taxation, 1933

Table 46.

Percentage That Expenditure for Education and for Highways and Bridges Is of Total Operation Expense of Tennessee Counties, 1929

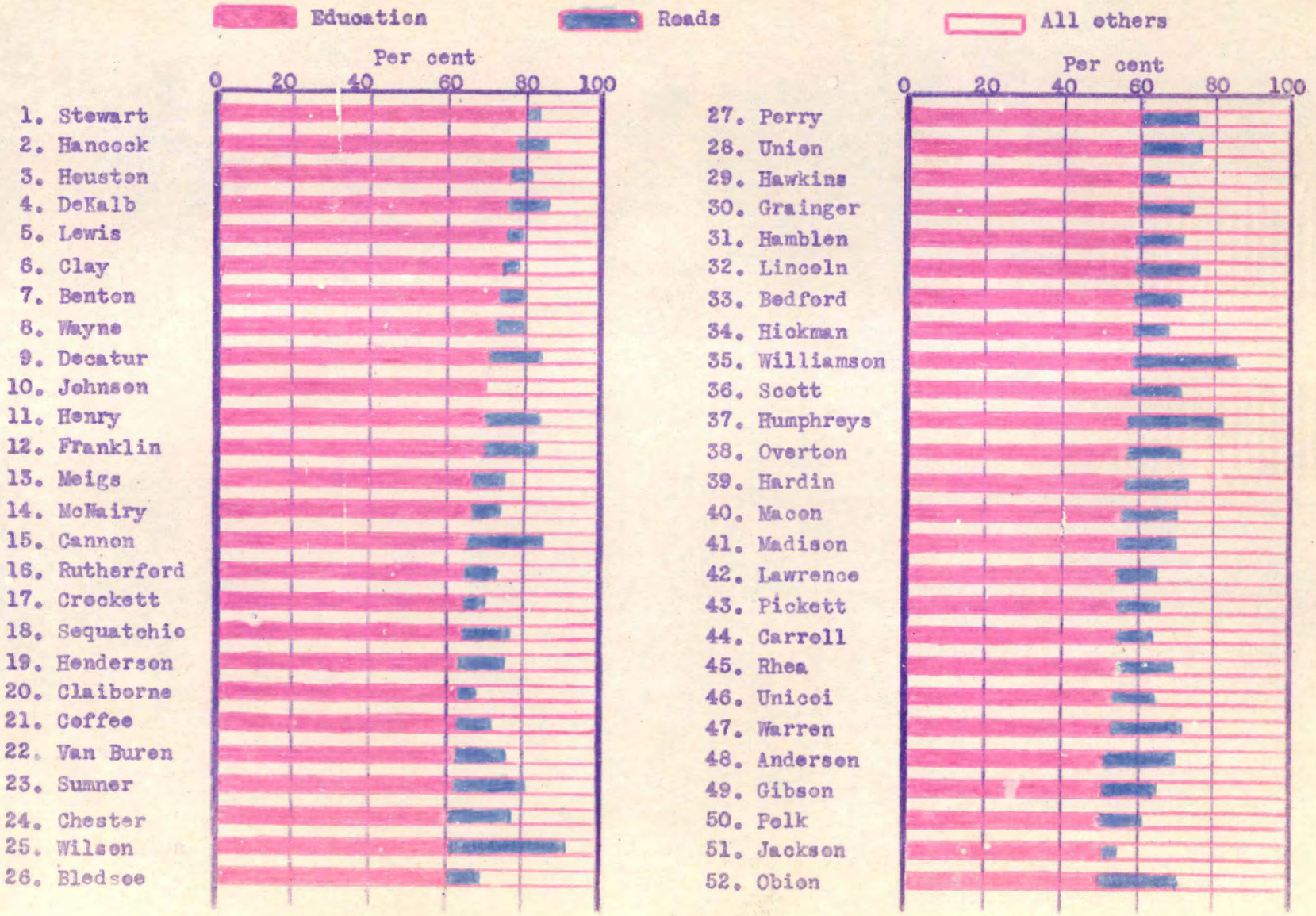
Rank	County	Education	Roads	Rank	County	Education	Roads	Rank	County	Education	Roads
1	Stewart	80.6	3.2	32	Linc.	58.9	17.1	64	Hamil.	44.8	6.9
2	Hanc.	77.8	7.4	33	Bedf.	58.4	12.3	65	White	44.8	28.1
3	Houston	76.7	5.6	34	Hickm.	58.4	9.7	66	Monroe	44.1	21.5
4	DeKalb	75.7	10.9	35	Wmson.	58.1	27.3	67	McMinn	43.4	8.1
5	Lewis	75.4	3.5	36	Scott	57.9	12.7	68	Marsh.	42.8	11.9
6	Clay	74.4	4.9	37	Humph.	57.2	24.4	69	Maury	42.2	15.1
7	Benton	73.6	6.5	38	Overt.(1)	57.2	13.5	70	Blount	41.6	19.3
8	Wayne	72.9	7.7	39	Hardin	56.2	17.0	71	Sulli.	41.6	23.4
9	Decat.	71.0	13.5	40	Macon	55.6	14.1	72	Robert.	41.5	14.4
10	John.	70.5	(2)	41	Madis.	54.7	15.1	73	Grundy	40.5	32.3
11	Henry	70.0	14.3	42	Lawr.	54.5	10.3	74	Giles	39.6	10.7
12	Frank.	69.3	13.1	43	Pick.	54.5	11.0	75	Marion	39.1	6.1
13	Meigs	66.8	8.2	44	Carroll	54.3	9.3	76	Hayw.	39.0	29.9
14	McNairy	66.7	8.0	45	Rhea	54.1	15.5	77	Moore	39.0	2.6
15	Cannon	65.7	19.9	46	Unicoi	53.1	11.4	78	Loudon	37.9	19.1
16	Ruther.	64.9	9.8	47	Warren	53.0	18.9	79	Smith	35.7	7.9
17	Crock.	64.9	5.7	48	Ander.	51.1	18.2	80	Jeff.	35.5	16.4
18	Sequa.	64.3	12.4	49	Gibson	50.9	15.6	81	Lake	35.5	7.3
19	Hender.	63.2	11.4	50	Polk	50.3	10.1	82	Trousd.	35.3	41.9
20	Claib.	62.9	3.9	51	Jacks.	50.2	4.1	83	David.	34.9	27.0
21	Coffee	62.7	8.7	52	Obion	50.0	19.7	84	Cheat.	34.3	6.4
22	V. Buren	62.4	13.7	53	Montg.	49.7	29.3	85	Roane	34.2	10.6
23	Sumner	61.9	18.1	54	Dicks.	49.5	15.2	86	Fentr.	33.0	10.2
24	Chest.	61.0	15.2	55	Weak.	49.5	21.0	87	Dyer	31.5	9.4
25	Wilson	61.0	28.9	56	Sevier	48.5	14.8	88	Greene	29.5	35.7
26	Bledsoe	60.6	8.9	57	Knox	48.4	22.4	89	Carter	29.3	49.2
27	Perry	60.4	15.0	58	Brad.	47.4	15.5	90	Shelby	28.7	16.3
28	Union	59.7	15.9	59	Cumber.	47.0	27.4	91	Putn.	26.0	34.5
29	Hawkins	59.7	7.4	60	Lauder.	46.9	23.7	92	Hardc.	23.8	65.9
30	Graing.	59.2	14.7	61	Morgan	46.5	13.1	93	Tipton	19.1	60.1
31	Hamb.	59.0	11.3	62	Campb.	46.4	18.7	94	Fayet.	16.8	71.8
				63	Cocke	45.3	14.6	95	Wash.	16.5	33.5
									St.Av.	42.8	20.5

(1) Should be 49.8 for education and 11.8 for highways. Miscalculation in total found in table of expenditures from which these percentages were calculated.
(2) Contained in miscellaneous expenditures.

Source: Report of State Tax Committee, 1930.

Chart 27.

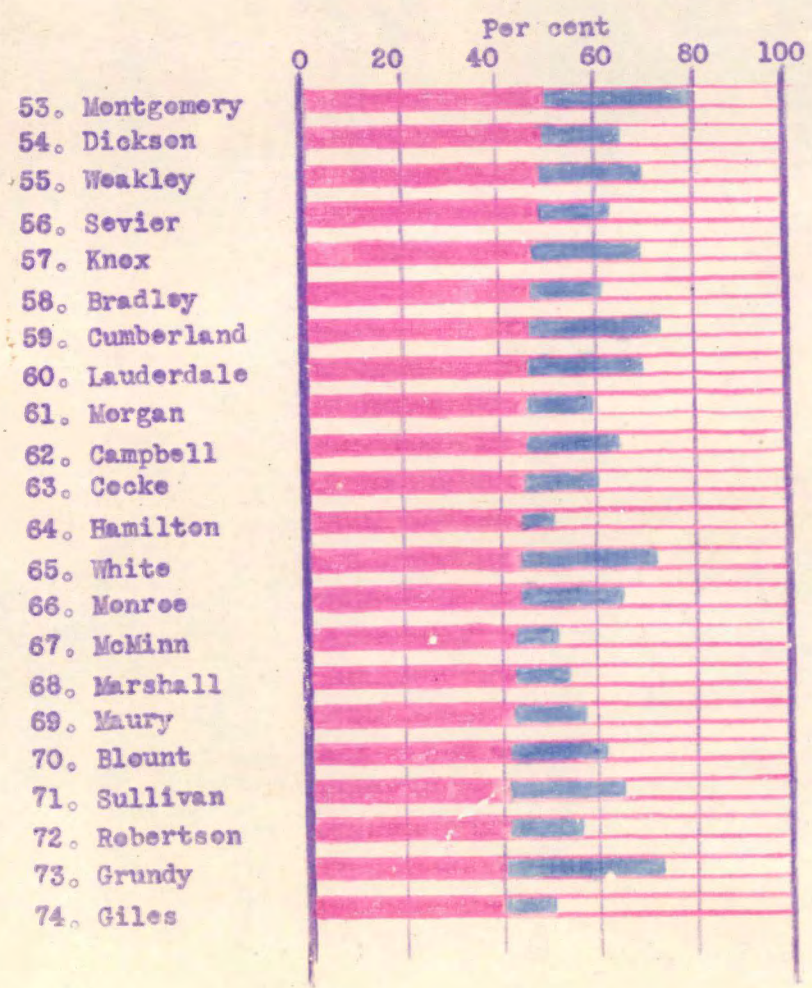
EXPENDITURES IN TENNESSEE COUNTIES: PERCENTAGE EDUCATION, HIGHWAYS AND BRIDGES, AND ALL OTHER IS OF THE TOTAL OPERATING EXPENSE, 1929

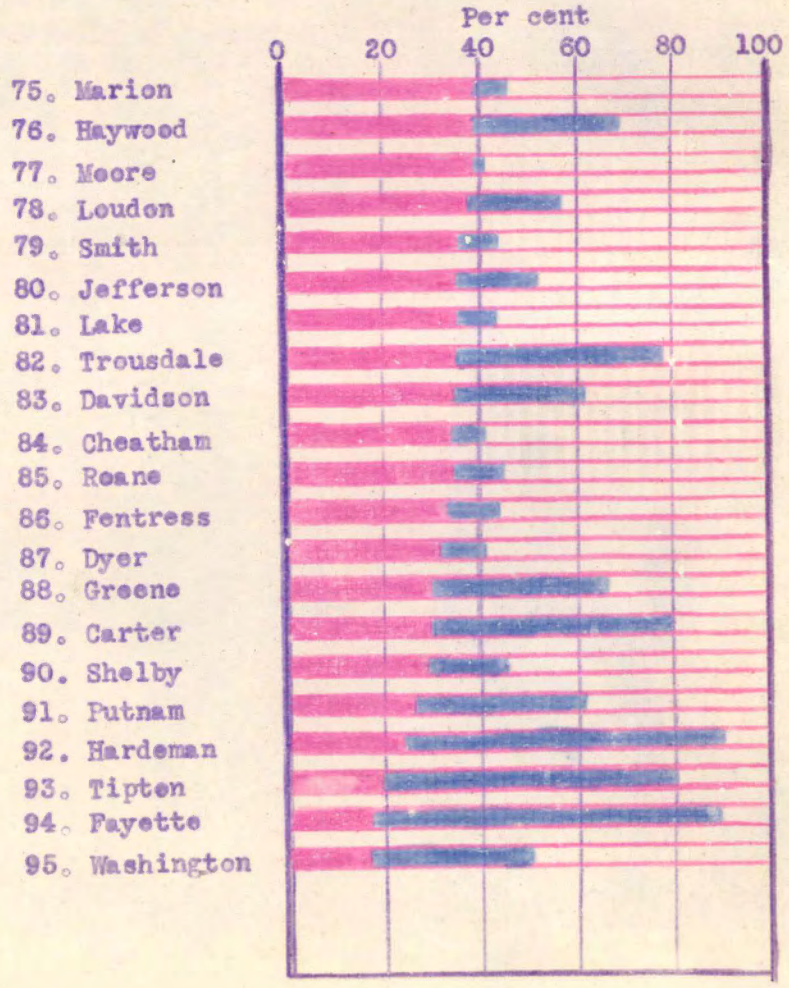


(continued)

Chart 27 (cont.)

EXPENDITURES IN TENNESSEE COUNTIES: PERCENTAGE EDUCATION, HIGHWAYS AND BRIDGES, AND ALL OTHER IS OF THE TOTAL OPERATING EXPENSE, 1929 (continued)





Source: See Table 46.

Summary

The above discussion points out that the benefits from taxation in the various counties are in the form of numerous kinds of public services, with education and highways being the most important. It also shows that the benefits, as measured by the percentage of the total expenditures, from the different functions and services vary greatly from county to county. In some counties so large a percentage of the total available funds is spent for one or two functions, as education and highways, that the amount and quality of other public services is reduced to a minimum.

It is apparent that: (1) The benefits cannot be measured in dollars and cents. They can be measured only by comparisons or relatively. (2) As measured by comparisons, the benefits from taxation vary greatly from county to county, both as to type and value. (3) The "benefits" received from the general property tax are not in proportion to the incidence of the tax. This is shown by the fact that some counties receive a greater quantity and better quality of public services than other counties, while the burden of taxation falls as heavily on the taxpayer of one county as of the other. Another example is the fact that the property owner with no children probably pays as much or more tax for schools than the family with several children to be educated.

Appendix B gives the conclusions of Dr. Seligman on general property tax.

APPENDIX A

Table 1.

Percentage Farm Taxes Were of Total Gross Receipts on Tennessee Farms by Counties, 1929

County	Gross receipts (000)	Farm taxes	% farm taxes were of gross receipts	County	Gross receipts (000)	Farm taxes	% farm taxes were of gross receipts	County	Gross receipts (000)	Farm taxes	% farm taxes were of gross receipts
Ander.	$975	$49,116	5.04	Hamilt.	$1729	$86,606	5.01	Morgan	$ 599	$34,268	5.72
Bedf.	2542	105,978	4.17	Hanc.	933	41,581	4.46	Obion	4,369	179,622	4.11
Bent.	1272	49,796	3.91	Hards.	2911	84,049	2.89	Overton	1,328	54,713	4.12
Bleds.	776	30,793	3.97	Hardin	2096	88,702	4.23	Perry	799	46,623	5.84
Blount	1961	146,127	7.45	Hawkins	2849	125,959	4.42	Pickett	497	18,917	3.81
Bradley	1408	56,902	4.04	Haywood	4531	97,257	2.15	Polk	716	21,223	2.96
Campb.	1180	58,010	4.92	Hender.	3087	104,718	3.39	Putnam	1,683	84,113	5.00
Cannon	1139	40,875	3.59	Henry	3457	119,922	3.47	Rhea	1,214	45,371	3.74
Carroll	3815	128,664	3.37	Hickman	1377	76,258	5.54	Roane	1,321	79,597	6.03
Carter	1151	75,683	6,58	Houston	609	19,993	1.81	Robert.	5,551	158,774	2.86
Cheat.	1409	42,962	3.05	Humph.	1254	58,977	4.70	Ruther.	3,950	200,461	5.07
Chest.	1888	51,295	2.72	Jackson	1551	66,174	4.27	Scott	531	19,525	3.68
Claib.	1909	95,730	5.01	Jeffer.	2282	122,698	5.38	Sequat.	320	10,383	3.24
Clay	962	50,341	5.23	Johnson	1085	46,494	4.29	Sevier	1,855	95,632	5.16
Cocke	2012	97,984	4.87	Knox	3104	174,694	5.63	Shelby	7,482	261,261	3.49
Coffee	1393	67,230	4.83	Lake	2819	66,890	2.37	Smith	2,369	124,422	5.25
Crock.	3771	92,472	2.45	Lauder.	3948	117,154	2.97	Stewart	1,776	33,270	1,87
Cumber.	667	18,032	2.70	Lawrence	3414	102,298	3.00	Sullivan	2,688	98,949	3.68
David.	3302	183,217	5.55	Lewis	337	13,562	4.03	Sumner	4,823	143,069	2.97
Decat.	1369	45,227	3.30	Lincoln	3539	145,539	4.11	Tipton	5,360	115,292	2.15
DeKalb	1680	74,672	4.44	Loudon	1081	56,102	5.19	Trousd.	1,011	51,779	5.12
Dick.	1892	49,906	2.64	McMinn	1731	65,502	3.78	Unicoi	325	19,368	5.96
Dyer	5041	214,683	4.26	McNairy	2994	90,054	3.00	Union	1,100	65,866	5.99
Fayette	4982	124,115	2.49	Macon	1788	53,664	3.00	Van Buren	250	8,151	3.26
Fentr.	521	17,777	3.41	Madison	5091	118,496	2.33	Warren	1,695	57,392	3.39
Frank.	2054	87,291	4.25	Marion	646	35,891	5.56	Wash.	2,853	141,283	4.95
Gibson	8494	270,486	3.18	Marshall	2015	127,489	6.33	Wayne	1,056	29,578	2.80
Giles	3959	144,769	3.66	Maury	2768	154,957	5.60	Weakley	5,126	164,156	3.20
Graing.	1381	85,480	6.19	Meigs	814	37,999	4.67	White	1,300	53,988	4.15
Greene	5089	282,055	5.54	Monroe	1810	114,813	6.34	Williams.	3,537	142,723	4.04
Grundy	320	14,128	4.41	Montg.	4150	115,816	2.79	Wilson	3,579	167,179	4.67
Hamblen	1463	67,029	4.58	Monre	457	20,537	4.49	Total	215,097	$396,618	2.56

Source: 15th Census of Agriculture, Tennessee, Statistics by Counties, Second Series.

Table 2.

Per Cent Farm Taxes Were of Net Farm Income in Tennessee Counties, 1929

County	Net income (000)	Amount taxes	% taxes are of net inc.	County	Net income (000)	Amount taxes	% taxes are of net inc.	County	Net income (000)	Amount taxes	% taxes are of net inc.
Anderson	$ 615	$49,116	7.99	Hancock	$ 660	$41,581	6.30	Overton	$ 923	$54,713	5.93
Bedford	1,415	105,978	7.49	Hardeman	2,171	84,049	3.87	Perry	536	46,623	8.70
Benton	815	49,796	6.11	Hardin	1,505	88,702	5.89	Pickett	345	18,917	5.48
Bledsoe	554	30,793	5.49	Hawkins	2,001	125,959	6.29	Polk	483	21,223	4.39
Blount	1,175	146,127	12.44	Haywood	3,445	97,257	2.82	Putnam	1,076	84,113	7.82
Bradley	821	56,902	6.93	Henderson	2,257	104,718	4.64	Rhea	828	45,371	5.48
Campbell	799	58,010	7.26	Henry	2,526	119,922	4.75	Roane	821	79,597	9.70
Cannon	734	40,875	5.57	Hickman	933	76,258	8.17	Robertson	3,972	158,774	4.00
Carroll	2,779	128,664	4.63	Houston	440	19,993	4.54	Rutherf.	2,458	200,461	8.16
Carter	609	75,683	12.43	Humphreys	858	58,977	6.87	Scott	354	19,525	5.52
Cheatham	981	42,982	4.38	Jackson	1,069	66,174	6.19	Sequat.	210	10,383	4.94
Chester	1,363	51,295	3.76	Jefferson	1,500	122,698	8.18	Sevier	1,229	95,632	7.78
Claiborne	1,246	95,730	7.68	Johnson	647	46,494	7.19	Shelby	5,306	261,261	4.92
Clay	624	50,341	8.07	Knox	1,351	174,694	12.93	Smith	1,649	124,422	7.55
Cocke	1,341	97,984	7.31	Lake	2,104	66,890	3.18	Stewart	1,331	33,270	2.50
Coffee	807	67,230	8.33	Lauderdale	3,035	117,154	3.86	Sullivan	1,611	98,949	6.14
Crockett	2,890	92,472	3.20	Lawrence	2,456	102,298	4.17	Sumner	3,265	143,089	4.38
Cumberland	423	18,032	4.26	Lewis	219	13,562	6.19	Tipton	4,281	115,292	2.69
Davidson	1,450	183,217	12.64	Lincoln	2,207	145,539	6.59	Trousd.	681	51,779	7.60
Decatur	979	45,227	4.62	Loudon	640	56,102	8.77	Unicoi	177	19,368	10.94
DeKalb	1,130	74,672	6.61	Macon	1,029	65,502	6.37	Union	725	65,866	9.08
Dickson	1,362	49,906	3.66	McMinn	2,183	90,054	4.13	Van Buren	156	8,151	5.23
Dyer	3,942	214,683	5.45	McNairy	1,251	53,664	4.29	Warren	997	57,392	5.76
Fayette	3,907	124,115	3.18	Madison	3,754	118,496	3.16	Wash.	1,788	141,283	7.90
Fentress	350	17,777	5.08	Marion	383	35,891	9.37	Wayne	731	29,578	4.05
Franklin	1,169	87,291	7.47	Marshall	1,177	127,489	10.83	Weakley	3,752	164,156	4.38
Gibson	6,426	270,486	4.21	Maury	1,172	154,957	13.22	White	812	53,988	6.65
Giles	2,607	144,769	5.55	Meigs	566	37,999	6.71	Williams.	2,164	142,723	6.60
Grainger	922	85,480	9.27	Monroe	1,183	114,813	9.71	Wilson	2,282	167,179	7.33
Greene	3,532	282,055	7.99	Montgomery	2,784	115,816	4.16				
Grundy	193	14,128	7.32	Moore	241	20,537	8.52	Total	146,022	8,396,618	5.75
Hamblen	915	67,029	7.33	Morgan	378	34,268	9.07				
Hamilton	924	86,606	9.37	Obion	3,020	179,622	5.95				

Source: Compiled from 15th Census Report of U.S. Agriculture, Tennessee, 1st, 2nd, and 3rd Series by Counties.

APPENDIX B.

Conclusions of Dr. Seligman on General Property Tax (1)

"Theoretically, we have found that the general property tax is deficient in two respects. First, the theory presupposes that there is an ascertainable general property - a definite surplus of assets over liabilities. In primitive social conditions this is true. There is a composite mass of property, because there is no industrial differentiation. But in the modern age property is split up into a hundred elements, so that if we attempt to tax each element separately, it is often impossible to decide from which category deductions are to be made for indebtedness. An individual, for instance, owes more on his book accounts than is due to him. Granting that he therefore pays no tax on his book accounts, shall he be permitted to deduct this surplus of debt from the value of his real estate? This is manifestly inadmissible. And yet unless this is done he is taxed not on his property but on his surplus of debt - not on his real assets, but on what he owes; not on his ability but on his liability. The theory of property tax is not carried out; and it cannot be carried out because the conditions of the theory fail. The general mass of property has disappeared, and with it vanishes the foundation of the general property tax.

"Secondly, the property tax is faulty, because property is no longer a criterion of faculty or tax-paying capacity. Two equal masses of property may be unequally productive, and hence unequally affect the margin of income from which the public contributions are paid. The standard or ability has been shifted from property to products; the test now is not the extent, the productivity, of wealth. And since revenue is a better index than wealth, the vast class of earnings derived not from property but from exertion is completely and unjustifiably exempted by the taxation of property alone. The theory of the property tax again fails because the conditions of the theory have disappeared.

"Practically, the general property tax as actually administered is beyond all doubt one of the worst taxes known in the civilized world. Because of its attempt to tax intangible as well as tangible things, it sins against the cardinal rules of uniformity, of equality, and universality of taxation. It puts a premium on dishonesty and debauches the public conscience; it reduces deception to a system, and makes a science of knavery; it presses hardest on those least able to pay; it imposes double taxation on one man and grants entire immunity to the next. In short, the general property tax is so flagrantly inequitable, that its retention can be explained only through ignorance or inertia. It is the cause of such crying injustice that its alteration or its abolition must become the battle cry of every statesman and reformer."

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(1) E. R. A. Seligman, Essays in Taxation, pp. 60-61.

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