

THE EFFECTS OF PROPERTY TAXES ON BEEF CATTLE PRODUCERS IN
KANSAS AND OTHER STATES

by 1264

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CHAPTER I

INTRODUCTION

This paper is concerned with property taxes paid by beef cattle producers in Kansas and seven other states. These states are: Arkansas, Iowa, Michigan, Nevada, Oklahoma, Wyoming and Utah. These seven states were selected on a purely pragmatic basis since they provided to a certain extent comparable data.

To achieve a comparison the paper is divided into five parts:

- (1) General aspects of property taxation in the United States.
- (2) Major taxes in Kansas with emphasis on the property tax.
- (3) General property taxes of beef cattle produced in Kansas and the method of calculation.
- (4) Comparatative tax calculations for other states.
- (5) Summary and conclusions.

The objective of this report is to describe property taxation, both in the United States generally and in Kansas specifically. In addition, the report examines the differences in property taxation in Kansas from other states which have comparable data available.

CHAPTER II

FARM PERSONAL PROPERTY AND REAL ESTATE TAX

SITUATION IN THE UNITED STATES

Historically, property taxation dates back to the times agriculture was the dominant industry in the United States. In the beginning, the tax-levies were relatively low since the costs for public services and improvements also were low. This has changed considerably in recent years as Table 1 indicates.

Table 1 indicates that the trends in real estate property and farm personal property taxation have been sharply upward during the last ten years. Taxes levied on farm real estate property have more than doubled since 1950 and the taxes levied on farm personal property almost doubled during the same time period. Barlowe, observing the trends in property taxation,¹ arrives at the following statement:

"Property-tax payments including taxes on both realty and personalty, rose at a faster rate than farm incomes after 1940, with the result that property tax payments took a gradually increasing proportion of the average farm operator's net cash income. Some 10.2 per cent of the average farm operator's net cash income went for property taxes in 1950; 12.8 per cent in 1955; 14.7 per cent in 1960 and 16.3 per cent in 1963."

Thus rising property taxes represent a growing burden on property ownership. This growing burden finds the individual farmer rather helpless since property taxes are fixed. They do not vary with output or prices of farm products. The farmer has no command over this kind of cost factor since the local government decides about the amount of taxes levied on his

¹Barlowe, Raleigh, Taxation of Agriculture in Lindholm, Richard Property Taxation USA (Madison, Milwaukee, and London, The University Press of Wisconsin, 1967) p. 90.

property. The farmer has only limited opportunities to shift his taxes to the consumer in the form of higher prices since his influence as an individual farmer is small.² The major reasons for increases in property taxes are pressing revenue needs of local governments. In an article entitled "Assessment and Taxation of Tangible Personal Property on Farms", Harvey Shapiro states:³

"In recent years state and local government budgets have been severely strained as a result of expanding public service requirements, rising salary levels for public employees, and higher costs of materials. The governments have been compelled to raise taxes continually in order to fulfill their responsibilities."

It is Shapiro's estimation that in 1964 the property tax nationally provided about 88 per cent of all local revenues, thus being the major source of revenues. In 1950, property taxes contributed \$7.3 billion to state and local governments; whereas in 1962 this amount had increased to \$19 billion.⁴

The most worrisome financial problem on the state and local scene is caused by substantial and steady increases in public school expenditures. No other expenditure item comes close to this one. Highway and welfare expenses rank next.⁵ These three items are largely responsible for rising property tax levies.

²Ibid. p. 88.

³Shapiro, Harvey, "Assessment and Taxation of Tangible Personal Property on Farms," The National Tax Journal XVII (March 1965), p. 25 - 35.

⁴Ibid. p. 25.

⁵Murray, William G., "Tax Issues in the Midwest in 1965," Agricultural Economics Report 105 (Kansas Agricultural Experiment Station, Kansas State University, Manhattan, 1965) p. 1.

Table 1. Trends in Farm Real Estate and Tangible Farm Personal Property Taxation in the United States, 1940 - 1967.

Year	Total Real Estate Tax	Real Estate Tax per acre	Total Farm Property Tax	Taxes on Real Estate as % of Net Farm Income
	(Million Dollars)	(Dollars)	(Million Dollars)	(Per cent)
1940	401.1	.39	50.2	--
1950	742.4	.69	176.9	.46
1951	776.7	.73	206.1	--
1952	810.4	.76	222.9	--
1953	846.9	.79	213.2	--
1954	878.4	.82	205.5	--
1955	931.2	.88	209.6	6.8
1956	974.2	.92	203.8	--
1957	1,032.1	.99	209.5	--
1958	1,080.7	1.05	225.0	--
1959	1,154.7	1.13	245.9	8.5
1960	1,248.5	1.22	253.8	8.7
1961	1,326.5	1.29	270.2	8.7
1962	1,398.2	1.36	258.0	8.9
1963	1,468.3	1.43	294.8	9.3
1964	1,546.0	1.51	287.0	10.4
1965	1,647.6	1.61	295.0	9.1
1966	1,788.6	1.74	319.0	9.3
1967	1,939.6	1.89	--	10.8

Source: Farm Real Estate Taxes, Recent Trends and Developments, USDA, ERS - RET 8, Dec. 1968.

Agricultural Finance Review (various annual editions)
USDA ERS

Another reason for rising taxes is the "scatteration of urban and sub-urban developments".⁶ Barlowe means by this, new expanding development which does not take place in an orderly fashion but follows a scatteration pattern. People are attracted by a rural and quiet countryside which induces them to buy lots and build houses. After a while local taxes have to be increased in order to provide school facilities and other public services. This development has repercussions on the land values. The taxes on farm land rise because the tax assessors "gradually associate these higher values with all the land within the subdivision zone even though need and a current market exists for the urbanized use of only a fraction of the area."⁷

It is therefore very understandable that agriculture shows a keen interest in property tax relief. Agriculture is an industry that requires relatively large amounts of real and personal property and is, therefore, vulnerable to property taxes. However with the big amounts of investments necessary on farms, it seems that the trends of property taxes indicated in Table 1 will continue.

⁶Barlowe, Op. Cit. p. 91.

⁷Ibid., p. 97.

CHAPTER III

MAJOR TAXES IN KANSAS AS STATE AND LOCAL REVENUE SOURCES

This chapter describes major taxes in Kansas. Special emphasis is put on the problem of property taxation since this is causing major concern, especially within the rural population.

State net revenues for the fiscal year 1968 were as follows: grants, \$167.6 million or 27.1 per cent; sales and compensating tax, \$125.6 million or 20.3 per cent; income and inheritance tax, \$90.0 million or 14.6 per cent; motor fuel tax \$54.4 million or 8.7 per cent; motor vehicle registration, \$29.1 million or 4.6 per cent; cigarette tax \$17.5 million or 2.8 per cent; insurance companies tax \$9.4 million or 1.6 per cent; state property tax \$9.1 million or 1.6 per cent; and the alcoholic liquor tax, \$4.1 million or .6 per cent.¹

State Sales Tax

Retail sales taxes were put into effect in Kansas in 1937 at a rate of two per cent. In 1958, the rate was increased to 2.5 per cent and in 1965 to three per cent of gross receipts from retail sales of tangible personal property and taxable services.²

The sales tax is relatively easy and cheap to administer. It is collected by retailers who themselves have to remit it. Since the remitting of the sales tax is done monthly, revenues to the state government keep flowing steadily.

¹State of Kansas, Sixth Annual Economic Report of the Governor, Topeka, Kansas, 1968, p. 45.

²Report by the Citizens Advisory Committee, State and Local Public Finance in Kansas (Topeka, Kansas 1965), p. 53.

Arguments against the sales tax include its regressiveness. The ability to pay criterion is not given full consideration when persons of lower income classes pay more sales tax relative to their ability than do persons in the higher income brackets.³ On the other hand, the sales tax covers everybody who "buys", thus forcing everybody to participate in raising revenues.

Interstate comparisons of the sales tax reveal that depending on the laws in the state, exemptions are provided from sales tax for several items.⁴ Kansas is among the many states which exempt feed, seed, fertilizer, plants, livestock and baby chicks.⁵ But other states exempt, for example, farm machinery also. This favors the farmer in one state who is doing the same business as farmers in another state who has to pay sales tax on his machine purchases.

State Income Tax

The major reason to enact income tax in Kansas was to create relief for the property tax. The constitutional amendment was passed during the depression years. In 1933 individuals and corporations were required for the first time to pay income tax. The tax rates on income have been raised since the income tax law was established in 1933. The rate for the lowest income bracket was one per cent in 1933 and 2.5 per cent in 1965. The corresponding figure for the highest income bracket accounted for four per cent in 1933 and 6.5 per cent in 1965.

³Report by the Citizens Advisory Committee, Op. Cit., p. 54.

⁴Great Plains Agricultural Council Publication, Adapting Tax Systems to Great Plains Conditions, (Bozeman, Montana, August 1963) p. 23.

⁵Dopson, F. C., "An Empirical Study of Taxes Paid by Kansas Farmers in 1960." (An unpublished Master's Thesis, Kansas State University, 1962), p. 4.

In contrast to the sales tax, the income tax is more difficult and more expensive to administer but it is not as regressive as the sales tax since it is largely based on the ability to pay.⁶

State and Local Property Tax

Since the time Kansas became a state, property taxes were the main sources of local revenues. Although there have been several attempts to reduce the reliance on property taxes on the local scene, the tax base of the local governments remained "extremely narrow, being confined to the property tax."⁷

There are minor non-property tax sources in the counties but "levies on property accounted for over 95 per cent of tax revenue in 1961 as compared with about 98 per cent in 1930. School districts, townships and special districts rely almost entirely on property levies for local tax revenues."⁸ Table 2 indicates taxation trends in Kansas.

Summarized data concerning the Farm Personal Property Tax situation in Kansas were not available for recent years. However a trend is given according to Shapiro who found that the amount of taxes levied on farm personal property in Kansas has increased by 39.9 per cent during the period of 1957 - 1961 showing the same trends as the farm real estate tax in local tax districts in Kansas.⁹ The actual amount of personal property taxes rose from \$9.5 million in 1957 to \$16.1 million in 1962.

⁶Report by the Citizen's Advisory Committee, Op. Cit., p. 54.

⁷Ibid., p. 40.

⁸Ibid., p. 40

⁹Shapiro, Harvey, Farm Personal Property Taxes, 1957-1962. USDA - ERS-176.

Table 2. Trends in Total Property and Farm Real Estate Taxation in Kansas.

Year	Total Property Tax	Farm Real Estate Taxes per Acre	Taxes on Real Estate as % of Net Farm Income
	(Millions)	(Dollars)	(Per Cent)
1940	63.9	.36	--
1950	124.5	.72	5.8
1960	182.8	.92	16.0
1961	271.1	1.16	9.9
1962	281.0	1.23	10.6
1963	310.4	1.34	12.1
1964	331.0	1.36	13.2
1965	333.3	1.33	10.2
1966	372.0	1.52	11.1
1967	415.1	1.74	13.5
1968	--	1.94	--

Sources: Farm Real Estate Taxes, Recent Trends and Developments, USDA, ERS - RET 8, Dec. 1968.

Agricultural Finance Review (various annual editions) USDA, ERS
Kansas Farm Bureau, Property Taxes in Kansas, April 1968.

Reliance on property tax for state revenues has diminished since the beginning of the current century. Prior to this, property tax had been almost the only source of the state revenue. By 1958 the property tax provided "less than five per cent of the state tax revenue."¹⁰ By 1968 this figure had diminished to 1.6 per cent.¹¹ According to economic, political and social changes in Kansas during the last 40 years, the property tax has been replaced by an increased reliance on the income and sales taxes for state

¹⁰Leonard, Lawrence, "Property Taxation in Kansas, An Historical Analysis," The National Tax Journal XI (September 1958) p. 230-240.

¹¹State of Kansas, Op. Cit., p. 45.

revenue purposes. These changes came about as Kansas developed from an agrarian to an urban society. As a predominantly agricultural economy, the wealth of the economy consisted to a large extent of its rural land, which accounted for 65 per cent in 1863, of its livestock, farm improvement and farm products. The U.S. Census classified 90.6 per cent of the population of Kansas as rural.¹² Thus incomes generated from the rural land and livestock "were based on or closely associated with ownership of these properties."¹³ These simple conditions provided and explained the use of market values of property as an equal ground for the distribution of local and state tax burdens. As that homogenous economic structure changed at an increasing rate, as revenue demands rose the assumption of an equal tax basis was no longer true, "as the correlation between property ownership and individual incomes declined and as difficulties grew in assessing equitably the increasingly numerous and complex classes of property."¹⁴

Property taxation is experiencing strong criticism. Harsh words were used by Leonard:

"The aging structure of property tax law and administration began increasingly to exhibit unmistakable signs of inadequacy and inequity."¹⁵

The above citation indicates the major deficiency of property taxation, which caused legal authorities to provide for more equitable tax laws on the state scene. However, local and rural districts have not yet experienced essential improvements in property taxation. Thus current criticism related

¹²Leonard, Op. Cit., p. 234.

¹³Ibid., p. 234.

¹⁴Ibid., p. 235.

¹⁵Ibid., p. 235

to agricultural property taxation sounds very much like the former criticism of property taxation on the state level.

A main point which causes concern among the agricultural population is that of unequal assessment. Although for both personal property assessment and real estate assessment, the Property Valuation Department prescribes appraisal manuals which are to be used by the assessors when they put values on certain types of personal and real estate property, the criticism concerning unequal assessment has not stopped. "A glaring weakness of the property tax is the failure to assess all property on an equal basis."¹⁶

According to a report concerning State and local finance in Kansas, the assessment ratios in Kansas have shown the following:¹⁷

"The ratio study reveals that some counties assess real property on an average ratio of 11 per cent of actual value while others assess as high as 39 per cent. One county with an assessment ratio of 39 per cent shows a rural ratio of 47 per cent and an urban ratio of 22 per cent, indicating that this county assesses farm lands at more than twice the ratio of city property."

Similar variances are true for the assessment of farm personal properties within a county.

The reasons that an equal assessment of property has not been accomplished are summarized in seven points:¹⁸

1. Lack of adequately trained personnel.
2. Insufficient compensation to attract or retain competent personnel.
3. The lack of security for assessing officers.
4. Incomplete understanding by the public of the real goals and principles of equilization.

¹⁶Citizen's Advisory Committee, Op. Cit., p. 47.

¹⁷Ibid., p. 47.

¹⁸Ibid., p. 48.

5. The fear of increase in taxes because of any change in assessing methods or equilization program.
6. The efforts on the part of some taxpayers to bring pressure on assessing officials to reduce assessment of their property so as to reduce their taxes.
7. The taxpayer's resistance particularly on the part of those who are enjoying a tax advantage.

Property originally used as a measure of wealth, income and the ability to pay cannot provide any longer this kind of basis in the local scene "since all taxes must eventually be paid out of income of individuals, a concern of equity dictates that the incidence of a tax be related to one's ability to pay in terms of current income."¹⁹

Another point of criticism also related to the assessment of property is the uneven distribution of taxable property according to different locations in the state. As soon as a local governmental unit has figured out how much property tax is needed a tax is levied on the assessed value of the property within the local unit. Thus the property tax rates vary from local unit to local unit according to the revenue needs of the unit.

This is illustrated by a study made by Dopson, who found out that real estate taxes paid in 1960 on operated acres were \$1.00 in Lyon County, \$1.91 in Dickinson County, and \$0.72 in Graham and Scott Counties.²⁰ The basic cause for property tax problems can be found in the changing educational

¹⁹Kansas Farm Bureau, Manhattan, Kansas 1968., p. 2.

²⁰Dopson, F. C., "An Empirical Study of Taxes Paid by Kansas Farmers in 1960", Op. Cit., p. 16.

systems within the rural districts. The demand for better and larger local schools causes expenditures for school facilities to go up. According to Murray, "this combination of better schools and the merging of rural and town districts has meant higher property taxes and difficulties in equalizing assessments, especially where new enlarged districts cut across county boundaries."²¹

Murray again, in another publication, quantifies increased local school expenditures.²² According to this publication local school expenditures in twelve midwestern states have risen 71 per cent in the period of 1957-1963. Enrollment has increased 20 per cent and expense per student 39 per cent. These developments are mainly responsible for the upward trends in property taxation. Expenditures for highways and welfare are next in importance. Highway expenditures do not cause the same severe fund raising problem as school expenditures because gasoline taxes and vehicle license fees partly take care of the problem of financing highway expenditures.

The impact of rural property taxation is severe on farmers where town and farm school districts consolidate. Farmers seem to be more disadvantaged compared to the city residents. This is because farmers living in an area of high property valuation compared to the town district, have to bear an unproportional higher rate of valuation per student than the town

²¹Murray, W., "A Critical Survey of Farm Taxation in the North Central Region", Rural Taxation Problems, USDA - AERR - 61 (Urbana, Illinois, March 1963), p. 2.

²²Murray, William G., "Tax Issues in the Midwest in 1965," Op. Cit., p. iii.

district does. After the school districts are joined the "town people contribute a high proportion of the students and the farmers a high proportion of the property. As a result the immediate change in property tax is likely to be both an absolute and relative increase for farmers. This situation has made school consolidation costly for many farmers, although in some instances the quality of education provided the farmers may have increased substantially."²³

The Great Plains Agricultural Council concluded in one of its publications:²⁴

"Property--especially land, livestock, farm machinery and railroad and public utility is the obvious taxable source in these states. There is no danger that real estate will emigrate under pressure of taxation, and little danger that other property will do so. However, it is possible that the property tax discourages the construction of new buildings, or the development of enterprises using large amounts of taxable property."

This expresses a strong concern for the property tax and implies a demand for relief from a tax which is no longer well adapted to the local scene especially as the required school funds grow out of proportion as far as the ability of local citizens to provide these funds.²⁵ According to Murray there are different possibilities for relieving the burden of property taxation.²⁶

The indirect alternative for financing schools is to increase the amount of aid provided by the state for local schools. Directly, the property taxes

²³Ibid., p. 7.

²⁴Great Plains Agricultural Council Publication, "Adapting Tax Systems to Great Plains Conditions." Op. Cit., p. 31.

²⁵Murray, William G., "Tax Issues in the Midwest in 1965," Op. Cit., p. 9.

²⁶Ibid., p. 12.

of tax payers could be reduced. The third possibility aims at more equitable taxation by levying local non-property taxes.

CHAPTER IV

PROPERTY TAXES LEVIED ON BEEF CATTLE IN KANSAS.

In 1959 the Kansas legislature changed the assessment date of real and personal property from March 1 to January 1 in order to provide more time for the valuation process in taxing districts. At that time all livestock animals less than six months old were exempted from taxation. In 1963 a law was enacted in Kansas which stated that real and tangible personal property was to be assessed at 30 per cent of the justifiable value of the item in question. All property is subject to the property tax unless it is specifically exempted from taxation. In 1964 \$200 worth of household goods and personal effects were exempted from property taxation. In 1965 an attempt was made to exempt all livestock from taxation. This proposal did not succeed. However the statutes were amended to exempt horses, cattle and mules less than 12 months old.

In 1968 the Kansas Farm Bureau adopted a resolution expressing concern of livestock producers over property taxes:¹

"There appears to be a definite trend to exempt personal property from ad valorem taxation. Although we recognize that livestock brought into the state for grazing or for feeding has in the past developed substantial ad valorem tax revenue for local school districts and local units of government, we must also recognize that there is a strong national trend to exempt livestock from ad valorem taxation. If Kansas is to compete with other states, we cannot afford to ignore this trend. For that reason we will support the complete exemption of livestock from ad valorem taxation."

The concern of farmers is understandable since livestock production requires large amounts of farm real estate property. If there are considerable differences between the states in the taxation of cattle, then the

¹Kansas Farm Bureau, Manhattan, Kansas, "Assessment of Livestock", (Manhattan, 1969) p. 2.

state which imposes the highest taxes disadvantages its cattle industry. An attempt was made in this study to calculate the amount of property taxes paid by beef cattle producers in Kansas. Then the results were compared with several other states.

Method

In order to calculate property taxes paid per calf produced it was necessary to know the assessed value of property used in calf production. Appendix Table 1 gives the assessed values for different types of farm land in Kansas for 1967 and 1968. Appendix Table 2 gives the assessed values for different classes of cattle and for horses, also for 1967 and 1968. The data listed are average figures for the entire state of Kansas. Although these are aggregate figures a considerable increase in assessed values (on the average, \$3.71) within different farm land types can be noticed. Among different livestock classes the picture is not the same. There were increases and decreases of the assessed values when comparing 1967 and 1968 valuations. The Statistical Report of Property Assessment and Taxation of Kansas does not list separately, valuation results of farm buildings and machinery. Thus an assumption was taken that \$10.00 assessed value of buildings and machinery per cow and calf go into the calf producing livestock business.²

The actual calculation of the tax paid per calf produced is based on the assumption of a hypothetical but typical cow - calf livestock system existing in Kansas. The size of the herd was assumed to be 100 cows. Further, a spring calving system was assumed.³

²According to an estimate by an agricultural extension economist.

³Assumptions made according to information of the Animal Husbandry Department.

The assumed unit consists of 100 cows, two years old and older, 85 calves less than one year, 13 yearling heifers older than one year for replacement purposes, four bulls two years and older and two horses. Before the herd will consist of the same distribution of animals the following spring, it will have a different distribution in fall after ten cull cows, 72 calves, three cull yearling heifers have been sold. Since the assessment date of the personal property is January 1, a different animal distribution within the herd has to be used. During the winter time, the herd will consist of 90 cows, 13 calves, ten yearlings, four bulls, and two horses after ten cows, 77 calves and three yearlings have been sold. The ten yearlings become cows. After spring calving time the herd will have the original distribution again.

Appendix Table 3 summarizes the procedure taken in order to find the property tax paid per calf produced. Underlying the calculations for different areas in the state and the average figure for Kansas is the same cowherd consisting at assessment time of 90 cows, 13 calves, 13 yearlings, four bulls, and 2 horses. The 13 calves are exempted from taxation since they are younger than 12 months. Average estimates of the assessed values of different livestock classes (see Appendix Table 2) were used since county figures were not available. The 90 cows were assumed to be older than two years and being on rough feed. The average assessed values for yearlings in 1968 was \$30.84. The bulls were assumed to be registered and two of them under two years (average assessed value for 1968 \$70.50) two of them over two years (average assessed value for 1968 \$81.58). The two horses necessary for this assumed cow-calf operation were considered to have an average assessed value of \$21.35 in 1968. Different values multiplied by their assessed values add to the total of assessed livestock value. Adding

to this the assessed values of real estate investments per cow and calf which are varying from area to area and the assessed value of farm machinery equipment and buildings per cow and calf (it was generally assumed to take on an assessed value of \$10.00 per cow and calf) a total valuation was received. This total was multiplied by the average mill levy of the state or that of different areas in Kansas. The result gives the property taxes per assumed livestock system. In order to arrive at a per calf basis the total amount of taxes paid was divided by 85, the assumed calf-crop percentage. (See Appendix Table 3 and its footnotes.)

In order to see to what extent the amount of taxes vary in several areas in Kansas, the state was divided into four areas: Eastern Kansas, the Flint Hills area, Central and Western Kansas. The setup of the hypothetical cow-herd was assumed to stay the same. But farm land investments were assumed to differ with each area.

According to an Agricultural Extension Economist in the Eastern Section of Kansas five acres of grass and four tenths acres of cropland were needed per cow and calf. The corresponding figures for the Flint Hills area was considered to be six acres of grassland and five tenths acres of cropland. In the Central portion eight acres grassland and six tenths acres cropland would be needed and in the Western area 13 acres of grassland and one acre cropland were assumed to be necessary. For the state average, eight acres of grassland and one acre of cropland were assumed necessary per cow and calf. For each area average mill levies were calculated, as well as average assessed values for the farm land. The assumed figure of farm real estate investment per cow herd are estimations of an Agricultural Extension Economist. Appendix Tables 4 through 9 give the calculations and the data used for the calculation.

The Statistical Report of Property Assessment and Taxation of Kansas lists average assessed values per acre among different farm land classes in each county.⁴ In order to arrive at an average figure of assessed values for cropland and grassland, the listed figures for all the counties of the according area were added together and divided by the number of counties. The averages for Tamegrass No. 1 and No. 2 and Native Grass No. 1 and No. 2 were added and divided by four, thus getting the average assessed value per acre of grassland in the area. The same was done for cropland: Bottomland No. 1, Bottomland No. 2, Upland No. 1 and Upland No. 2, thus getting the average assessed value per acre cropland. These average values as well as the average mill levy went into the calculation. (See Appendix Tables 5, 6, 8, and 9). For the state average calculation the all-county figures were used to reach the average assessed values for grassland and cropland and the average mill-levy. (See Appendix Table 3 and footnotes).

Results

The average tax calculated for Kansas in 1968 was \$4.45 per calf produced. (See Appendix Table 3). The corresponding figure for 1967 was \$4.46, indicating there was almost no change. The results for the four areas (see Appendix Tables 4 and 7) were: Eastern area \$4.17, Flint Hills \$3.60, Central Kansas \$3.40 and Western Kansas \$3.13 per calf produced. The average of these four areas was \$3.57.

Comparing the results for different areas it becomes obvious that there is a substantial decrease of general property taxes paid when going from the

⁴Property Valuation Department, "Statistical Report of Property Assessment and Taxation" (Topeka, Kansas 1968), p. 27-131.

eastern part of the state to the western section. There also is substantial differences between the two average figures calculated in Appendix Table 3 (average for entire Kansas in 1968: \$4.45) and the average figure out of the four areas (calculated in Appendix Table 7). These differences occurred not because the assessed values were less in the west but rather because the average mill levy was less. In the eastern section the average mill levy was calculated to be 80.90 in 1968, although the mainly urban counties Johnson, Shawnee, Wyandotte and Leavenworth have been omitted from these calculations. The Flint Hills area had a mill levy of 69.18, the Central area 64.64 and the Western area 59.63. The state average mill levy in 1968 was 84.37 ranging from 37.26 in Stevens County to 191.86 in Wyandotte County.⁵ The mill levy used on farm real estate and personal property is largely responsible for tax increases. The average mill levy in Kansas was 68.97 in 1965, 75.11 in 1966, 78.00 in 1967, and 84.37 in 1968.

In order to make comparisons with other states, two more calculations were made to arrive at average property tax paid in Kansas by beef cattle producers:

1. The hypothetical herd assumed for the calculations in different areas of Kansas was used to calculate the personal property tax considering the livestock investment only excluding the investment for farm real estate investment. The hypothetical herd had a total assessed value of \$4,261.40. (See Appendix Table 3.) This total assessed value was multiplied by the 1968 mill levy of each county in Kansas. The sum was divided by 85, the assumed calf crop. The results gave the amount of personal property tax

⁵Property Valuation Department, "Statistical Report of Property Assessment and Taxation", Op. Cit., p. 22.

paid in each county. The results ranged from \$1.87 personal property tax per calf produced in Stevens County to \$9.62 in Wyandotte County. (See Appendix Table 11). Johnson County had a tax of \$8.48, Shawnee County \$6.36 and Leavenworth County \$5.65. But these four counties have, as pure urban counties, an unproportionally high average mill levy. Calculating the average figure out of all counties, \$3.50 was obtained.

2. Another approach used to arrive at the average tax was to calculate the product of total assessed value of all cattle classes listed in the Report of Property Assessment and the average state mill levy. The total assessed value was \$101,891,532 in 1968 and the total number of cattle assessed was 2,627,285. The result gave an average assessed value per unit of \$41.31. (See Appendix Table 10.) This value multiplied times the average mill levy in the state of Kansas (for 1968, 84.37) gave \$3.48 property tax paid per unit. The corresponding figure for 1967 was \$3.42. (See Appendix Table 10.)

An attempt was made to examine the hypothetical values by comparing them to Farm Management Association records. Forty records of the farm type "cowherd" were selected out of the records for Farm Management Association No. 6. The records listed the total amounts of Personal Taxes and Real Estate Property Taxes paid per farm. Also the number of calves produced per year was listed as well as total farm expenses. These data were used to calculate the following ratios:

1. The percentage of taxes as a cost item in relation to total farm expenses.
2. The amount of general tax paid per calf produced by dividing the total of taxes by the number of calves produced.

It was found that these data cannot give reliable results in this case. Depending on the amount of cropland, of other livestock programs, of the types of ownership and of the items taxed--which are not separately listed--the variation of results is so large that no conclusions are possible. How do these results of property taxation as cost item compare to the total costs necessary to produce a 400 pound calf?

According to an estimation of the Department of Animal Husbandry, the costs of production per calf were \$104.50 in 1968. (See footnote 6). This sum includes the general property tax as a cost item.⁶ The tax takes on a percentage value of the total cost which does not include the interest on investment, 3.34.

⁶ \$35.00	- Summer pasture (six months)
35.00	- Winter feed (six months)
6.00	- Labor
10.00	- Breeding cost
5.00	- Veterinary expenses, insurance
10.00	- Use of equipment
3.50	- Taxes (Here the average amount of taxes paid per calf of \$3.57 was used which was calculated in Appendix Table 7.)
<u>\$104.50</u>	

CHAPTER V

COMPARISON OF PROPERTY TAXES PAID BY BEEF CATTLE
PRODUCERS IN OTHER STATES

Results obtained for Kansas were compared to the following states: Arkansas, Iowa, Michigan, Nevada, Oklahoma, Wyoming and Utah. Eight other states were requested to provide information but no satisfactory information was received. A summary of the results is given in Appendix Table 12. Explanation of these results is given for each state separately in the following pages. The methods used correspond to those used for the calculations in Kansas.

Arkansas

Information furnished by the Tax Division of the Public Service Commission in Arkansas¹ stated that, "data concerning assessed value of cattle and different types of land in the various counties in Arkansas or in the aggregate for the state, that no such statistical tabulation is available." However, a leaflet used by the county assessors as a guide to assess cattle was furnished. According to the reply the assessed values represent 20 per cent of the market value of the cattle in Arkansas and the mill levy rate varies from taxing unit to taxing unit ranging from a low of 25 mills to a high of 95 mills. As far as land is concerned no estimate of assessed values was given. The actual calculation of the aggregate amount of personal property tax paid per calf is given in footnote 2 on page 25.

¹Tax Division of Public Service Commission, Little Rock, Arkansas
(Letter of August 11, 1969)

Iowa

Using the average assessed values for different livestock classes as assessed in 1968 and the average mill levy on personal property in Iowa in³ 1967 (the mill levy for 1968 was not available) a total of \$5,376.78 assessed value was obtained.⁴ A total of \$395.57 of property taxes was calculated which was divided by 85, the assumed calf crop. A result of \$4.23 property tax paid per calf was found for Iowa.

² 90 cows ^a	\$2,700.00
13 calves ^b	100.00
10 yearlings ^c	200.00
4 bulls ^d	300.00
2 horses ^e	50.00
	<hr/>
	\$3,350.00

\$3,350.00 assessed value. 60.00 (mill levy)^f = \$20.00 ÷ 85 = \$2.36 per calf.

^aAccording to the assessment guide for livestock assessment in Arkansas the average assessed value for Grade A beef-cows was used (\$30.00 assessed value).

^b13 calves belong to the non-producing group of beef cows. Six are assumed to be under 6 months (\$5.00 assessed value) 7 of them between 6 months and 1 year (\$10.00)

^c10 yearlings are assumed to be registered beef cattle between 1 and 2 years old (\$20.00 assessed value).

^dFour registered bulls were assumed. Two A bulls (\$100.00 assessed value) and two B bulls (\$50.00 assessed value).

^eTwo common riding horses were assumed (average assessed value \$25.00).

^fThe mill levy of 60 was found as simple average out of the given extremes of 25 mills and 95 mills.

³Department of Revenue Property Tax Division, "Assessment of all Livestock and Taxes Levied in 1967", Several Statistics issued by the Tax and Valuation Department, Des Moines, Iowa.

⁴ 90 cows ^a	\$4,611.60
13 calves ^b	---
10 yearlings ^c	359.70
4 bulls ^d	356.88
2 horses ^e	48.60
	<hr/>
	\$5,376.78 assessed value

Michigan

Within the state of Michigan an extensive exemption of agricultural personal property has been granted. The act 347, P.A. 1968 states:⁵

"Tenth, that property actual being used in agricultural operations and the farm implements held for sale or resale by retail servicing dealers for use in agricultural production.

'Agricultural operations' shall mean farming in all its branches, including cultivation of the soil, growing and harvesting of any agricultural, horticultural or floricultural commodity, dairying, raising of livestock, bees, fur bearing animals or poultry, turf and tree farming and any practices performed by a farmer or on a farm as an incident to or in conjunction with such farming operations."

Nevada

Since the Nevada Tax Commission furnished only incomplete information concerning the taxation of range, the results of a study devoted to the range cattle industry in Nevada were used.⁶ Detailed figures are given for property taxes paid in 1963 in the western and southern regions of

⁴ Continued

\$5,376.78 73.57 (mill levy)^f = \$395.57 ÷ 85 = \$4.23.

^aThe Iowa Department of Revenue listing the assessment of livestock for 1968 gives a state average assessed value for cows of \$51.24.

^bIowa does not assess calves younger than one year.

^cHeifers one year and older are listed to have a state average assessed value of \$35.97 per head.

^dBulls have an average assessed value of \$89.22 in Iowa.

^eHorses are assessed at \$24.30 on the average in Iowa.

^fThe average net millage on personal property in rural districts in Iowa was 73.57.

⁵Reprints of the Dept. of Treasury of new legislation in 1968 in Michigan.

⁶Rogers, F. and Helmig, W., "Characteristics of the Range Cattle Industry in Nevada, Region 1 and 2" (Max C. Fleischman College of Agriculture, University of Nevada, March 1966).

of Nevada. Depending upon the size of the cattle ranch the property taxes paid per animal unit within the cow-calf livestock system were \$5.59 on small, \$3.00 on median and \$2.41 on large ranches. The simple average of these figures is \$3.66. In southern Nevada the corresponding figures for 1963 were on small ranches \$3.19; on median ranches \$3.36; on large ranches \$2.46. The average is \$3.00 per head. The publication did not give any assumptions how these figures were calculated.

Oklahoma

Information concerning taxes levied on cattle in Oklahoma was furnished by the Oklahoma Tax Commission:

"Oklahoma does not levy an ad valorem tax for state purposes, and this is one reason why available data are scarce. Local ad valorem tax rates vary considerably from county to county and from school district to school district, and could only be obtained from each of the 77 county seats. However we have enough information on hand to compute some fairly reliable averages, working on the assumption that all cattle are located in taxing districts not subject to city tax levies, where any exist." Thus the Oklahoma Tax Commission did furnish an "average tax burden per head" for all the counties in Oklahoma. The state average was given as \$1.61. There were no assumptions given to explain the calculations. The range for the state of Oklahoma was quoted as \$1.03 to \$2.03.

Wyoming

The information given by the Ad Valorem Tax Division in Wyoming did not list livestock classes but just "cattle".⁷ The total number of cattle was

⁷Ad Valorem Tax Department of Wyoming, "Twenty-fifth Biennial Report of the State Board of Equalization", (Cheyenne, Wyoming 1968), p. 70.

given and the total amount of assessed valuation. Out of this information the valuation per head was found to be \$38.18. In order to find the tax per head the assessed value per head was multiplied by the state average mill levy of 54.98 in 1968. This gave the result of \$2.10 property tax paid per head in Wyoming.

Utah

Information furnished by the Property Tax Division in Utah gave the taxes charged on "range cattle"--not differentiating between range cattle classes.⁸ The amount of taxes charged was given for each county, also the number of range cattle was given for each county. Calculations indicated a range of \$.84 to \$1.63. The average for Utah was found to be \$1.28 tax per range cattle.

⁸Property Tax Division, "Statistical Studies of Assessed Valuations", (Utah, 1968).

CHAPTER VI

SUMMARY AND CONCLUSION

Results of the four alternative calculations (see Appendix Table 12) indicated that alternatives 1 and 2 have to be discussed separately from alternatives 3 and 4.

Underlying the calculations for alternative 1 and 2 are, in addition to the total assessed valuation for livestock investment, also the assessed valuation for real estate investment. The difference between alternative 1 and 2 of 88 cents is due to the average mill levy for all Kansas has been used. For the calculation of alternative 2 lower mill levies have been used according to the local average. And the average mill levy was less for the western area of Kansas. The use of the average mill levies calculated by using the county average mill levies is questionable since the average county mill levy is usually higher than the rate at which agricultural personal and real property is levied with taxes. But these figures had to be used since a more exact breakdown of the valuation of agricultural property was not given.

The calculation of alternatives 3 and 4 gave almost identical results. Both were calculated without the inclusion of farm real estate valuation. These values also should be lower in realty since the mill levy averages used are too high when considering agricultural property only.

The comparison of figures obtained for Kansas to other states is problematic since an overall comparable calculation was not possible due to the lack of uniform data. Thus the implications of these comparisons is rather limited since the nature of the calculations is based on aggregate

values. Thus besides the comparison of personal taxes on beef cattle investment, the taxes paid per acre of real estate farm land have been compared to the other states. This latter comparison is more unique since the information was obtained from one source only. Better and more exact data with regard to the taxation of beef cattle can only be obtained in cooperation with farmers and the responsible property assessors. By making use of the personal records of the farmers and that of the assessors better results could be obtained.

In Arkansas both personal and real estate taxes were less than in Kansas. (See Appendix Table 12.) In Iowa real estate property taxes were higher than in Kansas but personal property taxes were the same as Kansas. Michigan, which exempts livestock from taxation, relies on a much higher real estate property tax than Kansas does. Since it is not known how the property taxes were calculated for Nevada, personal property taxes cannot be compared. However, the real estate taxes per acre in Nevada are much less than in Kansas. Oklahoma, Wyoming and Utah all charge less tax on both personal property and real estate property than does Kansas.

APPENDIX

Appendix Table 1. Average assessed values of farm real estate land in Kansas for 1967 and 1968 (per acre).

	Assessed value 1967	Assessed value 1968
	(dollars)	(dollars)
Irrigated Land No. 1	46.86	57.27
Irrigated Land No. 2	38.75	44.46
Bottom Land No. 1	53.32	57.00
Bottom Land No. 2	41.96	44.15
Upland Land No. 1	30.16	33.47
Upland Land No. 2	25.56	26.15
Tame Grass No. 1	23.32	26.86
Tame Grass No. 2	23.32	22.34
Native Grass No. 1	16.23	18.43
Native Grass No. 2	13.71	13.48
Average Value for cropland ¹	37.75	40.18
Average Value for grassland ²	18.64	21.90

Source: Property Valuation Department, Statistical Report of Property Assessment and Taxation (Topeka, Kansas 1967 and 1968), p. 26.

¹In order to get these average figures for cropland in 1967 and 1968 the assessed values for Bottom Land No. 1 and 2 and Upland No. 1 and 2 were added and divided by four.

²In order to get these average figures for grassland in 1967 and 1968 the assessed values for Tame Grass No. 1 and 2 and Native Grass No. 1 and 2 were added and divided by four.

Appendix Table 2. Average assessed values of different cattle classes and horses in Kansas for 1967 and 1968.¹

	Assessed value 1967	Assessed value 1968
	(dollars)	(dollars)
Cattle on rough feed, Heifers - 1 year and under 2	30.67	30.84
Cattle on rough feed, Steers - 1 year and under 2	40.89	40.28
Cattle on rough feed, Steers - 2 years and over	48.52	51.83
Cattle on full or half feed, Heifers - 1 year and under 2	51.44	45.60
Cattle on full or half feed, Steers - 1 year and under 2	53.89	54.65
Cattle on full or half feed, Steers - 2 years and over	60.00	55.25
Cattle Registered 1 year and under 2 (males)	70.67	70.50
Cattle Registered 1 year and under 2 (females)	59.61	55.91
Cattle Registered 2 years old and over (males)	81.33	81.58
Cattle Registered 2 years old and over (females)	63.84	60.90
Miscellaneous cattle classes, beef cows and heifers 2 years and over	45.15	40.07
Horses, 1 year old and over	21.58	21.35

Source: Property Valuation Department, Statistical Report of Assessment and Taxation (Topeka, Kansas 1967 and 1968), p. 2.

¹ In order to get these average figures the total of each cattle class was divided by the total number of animals listed for the class.

Appendix Table 3. Calculation of personal property tax and real estate tax paid per produced calf using a hypothetical cow herd.

	1967	1968	
	(dollars)	(dollars)	
90 cows ¹	4,063.00	4,664.70	
13 calves ²	---	---	
10 yearlings ³	306.70	308.40	
4 bulls ⁴	282.68	304.00	
2 horses ⁵	<u>43.16</u>	<u>42.70</u>	
	4,669.04	4,261.40	
			$\$4,669.04 \times 78.00 = \$364.18 + 85 = \$4.28^6$
			$\$4,261.40 \times 84.37 = \$359.53 + 85 = \$4.23^7$
8 acres grassland ⁸	149.12	175.20	
1 acre cropland	37.75	40.18	
Buildings, Equipment, Machines ¹⁰	<u>10.00</u>	<u>10.00</u>	
	1,968.87	225.38	
			$\$4,865.91 \times 78.00 = \$379.54 + 85 = \$4.46^{11}$
			$\$4,486.78 \times 84.37 = \$378.55 + 85 = \$4.45^{12}$

Appendix Table 3 continued

¹The number of 90 cows was multiplied by the assessed value for mix cattle classes, beef cows 2 years and older. (See assessed values for 1967 and 1968 in Appendix Table 2.)

²Calves are exempted from taxation in Kansas.

³The number of 10 yearlings was multiplied by the assessed value for heifers on rough feed 1 year old and under 2 years.

⁴The assessed values for the 4 bulls were used out of two classes. All of them were assumed to be registered. Two bulls were assumed to be under two years, two of them over two years. The multiplications added for each year make up for the total listed in the table.

⁵The assessed values for the horses were used as indicated in Appendix Table 2.

⁶In order to find the tax paid per produced calf the total of the assessed valuation was multiplied by the average mill levy for Kansas in 1967. The result of total taxes estimated was divided by 85 the assumed calf crop for the hypothetical herd. The result indicates the tax paid per calf.

⁷The same procedure was done for 1968 as explained in footnote 6 now using the average mill levy of 1968: 84.37.

⁸In order to calculate the general property tax paid calf the real estate property valuation and the valuation of buildings, equipment and machinery going into the cow calf business has to be done. The average amount of grassland per cow and calf for Kansas was estimated by an Agricultural Extension Economist to be 8 acres. These 8 acres were multiplied by the average assessed value for grassland in 1967 and 1968 listed in Table 1.

⁹One acre of cropland was estimated to be necessary for cow and calf. The average figure for cropland is listed in Appendix Table 1.

¹⁰The buildings, equipment and machines necessary for cow and calf were estimated to have a value of \$30.00 on the average in Kansas. Thirty per cent of this value was assumed to be the value assessed for the items indicated.

¹¹Both the totals for the assessed valuation of livestock and real estate property including buildings, equipment and machines were added. The total of \$5,516.67 was multiplied by the average mill levy in 1967 (78.00). \$430.30 is the total amount of taxes paid for the hypothetical cowherd. This divided by the assumed calf crop of 85 per cent gives the tax paid per calf in 1967.

¹²The same procedure as indicated in footnotell was used to calculate the tax per calf for 1968.

Appendix Table 4. Calculation of personal property tax and real estate tax per produced calf in eastern Kansas and the Flint area of Kansas for 1968.

Eastern Kansas: ¹		
5 acres grassland @ \$21.60	\$108.00	
.4 acre cropland @ \$41.83	16.73	
Buildings, equipment and machines assessed for	<u>10.00</u>	
	\$124.73	
		\$4,386.13 x 80.90 = \$354.83 ÷ 85 = \$4.17
Flint Area of Kansas: ²		
6 acres grass assessed @ \$21.00	\$126.00	
.5 acre cropland assessed @ \$43.19	16.73	
Buildings, equipment and machines assessed for \$10.00	<u>10.00</u>	
	\$157.59	
		\$4,418.99 x 69.18 = \$305.71 ÷ 85 = \$3.60

¹It was assumed according to an estimation of an Agricultural Economist that in eastern Kansas 5 acres grassland and .4 acres cropland are used per cow and calf. The assessed values for cropland and grassland are average values out of 18 counties. The calculation of these average values are given in Appendix Table 5. \$10.00 assessed value for buildings, equipment and machinery go also into this calculation as indicated in footnote 10 for Appendix Table 3. The total of assessed valuation for real estate and buildings was added to the total livestock valuation of \$4,261.40. The sum of \$4,386.13 was multiplied by the average mill levy for the 18 counties used in eastern Kansas as indicated in Appendix Table 5. The result gives the total tax which was divided by 85 the assumed calf crop.

²The same approach as indicated in footnote 1 was used to calculate an average figure for the Flint Hill area. The average assessed values and the average mill levy are calculated in Appendix Table 6.

Appendix Table 5. Calculation of average assessed values for grassland and cropland and the average mill levy for eastern Kansas in 1968.¹

County	Mill levy	Assessed value bottom No. 1	Assessed value bottom No. 2	Assessed value upland No. 1	Assessed value upland No. 2	Assessed value tame No. 1	Assessed value tame No. 2	Assessed value native No. 1	Assessed value native No. 2
Allen	\$73.71	\$46.25	\$37.64	\$34.45	\$28.98	\$29.01	\$28.43	\$27.93	\$23.71
Anderson	53.82	55.13	49.26	46.73	40.11	37.47	31.32	25.50	19.71
Atchison	85.05	59.79	45.33	34.85	24.91	28.87	17.55	18.13	11.53
Bourbon	77.77	51.14	41.47	35.58	30.18	29.19	24.69	22.10	14.15
Brown	68.62	71.22	57.13	69.63	49.45	24.45	15.13	9.23	6.04
Cherokee	87.22	21.08	21.84	21.77	21.19	18.22	15.03	14.97	12.79
Crawford	92.21	--	--	--	22.87	--	19.99	--	16.72
Douglas	88.96	89.29	70.55	44.82	39.86	35.35	24.76	25.30	20.57
Doniphan	88.96	65.28	30.18	62.34	24.99	--	16.46	--	--
Franklin	79.57	53.12	40.83	45.12	33.75	44.90	32.32	27.54	16.48
Jackson	92.81	55.44	39.45	32.40	21.17	20.26	13.55	17.86	12.01
Jefferson	83.94	68.48	40.27	32.11	15.67	12.31	5.22	5.15	3.46
Labette	88.68	26.61	22.27	23.87	20.49	19.96	18.73	17.01	15.28
Linn	80.89	32.65	37.28	38.75	26.97	25.29	19.92	20.28	11.71
Neosho	75.67	61.20	51.25	42.57	34.74	37.34	28.39	25.68	17.26
Nemaha	72.40	60.55	52.93	47.86	34.36	37.91	28.74	30.33	25.21
Miami	76.54	50.33	48.23	51.19	41.95	43.26	37.59	25.62	16.09
Montgomery	89.17	54.11	45.06	30.37	25.77	22.63	21.10	15.10	8.52
$\$1,455.99 \div 18$									
Average	= \$80.90	\$54.21	\$42.90	\$40.80	\$29.41	\$29.14	\$22.14	\$20.48	\$14.77
Average assessed value for cropland:		\$41.83		Average assessed value for grassland:		\$21.60			

Source: Property Valuation Department, Statistical Report of Property Assessment and Taxation (Topeka, Kansas), p. 27 - 131

¹The Statistical Report of Property Assessment lists for each county the average assessed values for different farm land classes. These values have been and the average was built for eastern Kansas omitting Johnson, Shawnee, Leavenworth and Wyandotte counties as being pure urban counties. Out of the averages for bottom No. 2 and upland 1 + 2 the average assessed value for cropland was. The average value for grassland was found out of tamegrass No. 1 + 2 and native grass 1 + 2. Also the average mill levy was found as a simple average of all 18 counties.

Appendix Table 6. Calculation of average assessed values for grassland and cropland and the average mill levy for the Flint Hill area in Kansas for 1968.

County	Mill levy	Assessed value bot- tom No. 1	Assessed value bot- tom No. 2	Assessed value up- land No. 1	Assessed value up- land No. 2	Assessed value tame No.1	Assessed value tame No.2	Assessed value na- tive No. 1	Assessed value na- tive No. 2
Washington	\$58.89	\$65.98	\$52.24	\$42.68	\$32.02	\$31.57	\$24.70	\$30.79	\$24.58
Marshall	60.44	65.51	49.32	43.35	31.98	31.45	25.88	23.63	14.77
Clay	69.45	28.66	25.60	16.49	14.70	23.02	12.88	17.80	7.15
Riley	92.61	56.81	48.79	33.06	23.11	23.61	14.97	17.86	5.83
Pottawatomie	73.56	62.67	43.16	29.54	20.68	28.42	19.93	21.22	14.31
Dickinson	74.49	57.22	46.39	31.97	26.93	21.67	19.56	20.53	18.28
Geary	91.82	66.89	48.33	45.18	29.83	36.75	25.20	24.77	17.50
Wabaunsee	67.02	50.45	36.61	30.00	26.16	35.28	20.17	28.79	13.96
Marion	62.77	70.85	51.66	39.13	28.48	33.24	26.63	25.46	22.93
Morris	75.94	53.35	35.45	31.49	23.28	--	--	22.79	15.00
Lyon	73.53	71.85	49.38	43.53	30.37	32.84	19.25	19.31	14.96
Butler	78.58	57.90	41.37	32.88	25.98	29.65	26.33	19.19	12.75
Chase	53.68	63.54	59.14	45.43	43.01	29.54	22.60	20.14	9.63
Greenwood	65.69	71.00	62.07	53.80	42.79	38.68	27.31	29.61	19.84
Cowley	73.86	51.29	37.52	28.04	21.84	19.38	14.93	20.15	17.98
Elk	57.54	59.68	52.56	47.54	40.44	33.57	29.17	23.48	12.86
Chautauqua	72.33	83.70	57.86	36.84	33.17	23.98	23.58	23.00	21.59
Wilson	59.83	58.43	46.10	30.64	25.04	18.19	14.98	15.22	12.20
Woodson	58.74	61.31	49.42	44.32	36.20	37.06	27.48	24.33	14.62
Coffey	68.32	57.02	40.51	34.22	28.75	--	--	27.30	21.67
Osage	63.80	67.36	44.93	25.48	18.36	21.90	15.49	19.12	15.63
Average	\$69.18	\$61.02	\$46.59	\$36.45	\$28.72	\$26.16	\$19.57	\$22.59	\$15.63
Average assessed value for cropland:		\$43.19	Average assessed value for grassland:				\$21.00		

Source and procedure same as indicated in Appendix Table 5.

Appendix Table 7. Calculation of personal property tax and real estate tax per produced calf in central and western Kansas for 1968.

Central Kansas: ¹		
8 acres grassland assessed @ \$23.52	\$188.16	
.6 acre cropland assessed @ \$42.47	25.54	
Buildings, equipment and machines assessed for \$10.00	<u>10.00</u>	
	\$223.70	
		$\$4,485.10 \times 64.64 = \$289.17 \div 85 = \$3.40$
Western Kansas ²		
13 acres grassland assessed @ \$12.74	\$165.62	
1 acre cropland assessed @ \$25.58	25.58	
Buildings, equipment and machines assessed for \$10.00	<u>10.00</u>	
	\$201.20	
		$\$4,462.60 \times 59.63 = \$260.10 \div 85 = \$3.13$
	Average out of four areas	\$3.57

¹The same approach as indicated in footnote 1 in Appendix Table 4 was used to calculate the average figure for central Kansas. The average assessed values for grassland and cropland going into this calculation and the average mill levy are calculated in Appendix Table 8.

²The average figures going into the calculation for western Kansas are given in Appendix Table 9.

Appendix Table 8. Calculation of average assessed values for grassland and cropland and the average mill levy for the central part of Kansas in 1968.

County	Mill levy	Assessed value bot- tom No. 1	Assessed value bot- tom No. 2	Assessed value up- land No. 1	Assessed value up- land No. 2	Assessed value tame No. 1	Assessed value tame No. 2	Assessed value na- tive No. 1	Assessed value na- tive No. 2
Harper	\$64.07	\$44.01	\$37.67	\$41.02	\$26.43	\$20.60	\$14.82	\$16.83	\$11.15
Sumner	82.53	45.90	--	34.23	--	24.61	--	22.60	--
Kiowa	52.72	--	--	19.83	11.73	6.47	--	5.55	5.22
Pratt	55.05	61.46	49.04	40.38	23.96	38.80	26.83	38.89	18.30
Kingman	49.35	--	49.49	59.51	39.26	43.18	26.82	39.43	24.14
Sedgwick	100.09	71.62	63.36	59.66	51.74	58.88	62.91	35.77	25.97
Edwards	53.76	--	--	36.28	27.56	15.50	--	12.25	9.39
Stafford	52.96	--	27.03	35.50	28.30	29.29	14.46	17.66	13.10
Reno	84.81	49.81	35.25	44.35	32.73	25.69	17.73	26.67	16.59
Harvey	85.64	57.87	49.40	55.33	46.30	41.79	29.65	25.07	21.80
Pawnee	48.88	57.64	37.86	48.65	38.48	36.76	--	21.78	16.77
Rush	54.00	53.18	49.97	38.12	35.05	35.23	24.07	24.24	21.63
Barton	57.39	54.56	48.12	47.97	42.53	37.31	30.32	28.70	22.83
Rice	58.41	50.21	40.31	41.16	36.85	19.24	14.90	19.26	18.34
McPherson	68.63	54.76	50.80	45.05	--	--	--	22.31	--
Ellis	71.43	29.67	23.46	22.94	19.94	15.57	12.56	16.19	10.09
Russell	63.69	--	--	--	--	--	--	--	--
Ellsworth	49.59	--	60.00	--	36.61	--	--	--	17.70
Saline	91.51	70.98	54.22	45.61	29.89	37.72	22.65	21.12	18.58
Lincoln	59.98	49.07	49.04	37.07	27.09	--	--	16.08	15.46
Ottawa	53.89	72.14	53.98	50.59	41.80	30.50	28.68	24.88	13.60
Rooks	58.48	41.18	34.99	23.55	16.26	--	--	12.56	10.04
Osborne	63.10	53.50	42.90	33.83	27.27	59.21	23.22	20.63	16.31
Mitchell	62.19	65.71	49.35	37.09	30.26	30.10	34.50	21.13	17.04
Cloud	68.68	60.43	50.83	41.52	27.67	27.32	22.21	23.77	20.42
Philips	63.39	49.98	38.56	30.82	21.15	24.32	15.89	16.93	15.13

Appendix Table 8 (continued)

County	Mill levy	Assessed value bot- tom No. 1	Assessed value bot- tom No. 2	Assessed value up- land No. 1	Assessed value up- land No. 2	Assessed value tame No. 1	Assessed value tame No. 2	Assessed value na- tive No. 1	Assessed value na- tive No. 2
Smith	\$60.48	\$48.45	\$40.23	\$31.67	\$23.72	\$21.58	\$17.87	\$18.87	\$15.94
Jewell	70.48	49.33	36.13	33.71	24.62	21.99	16.77	19.58	15.69
Republic	69.51	62.43	46.60	48.94	34.75	38.07	28.98	36.38	20.57
Average	\$64.64	\$54.51	\$44.74	\$40.16	\$30.90	\$30.82	\$24.25	\$22.41	\$16.60
Average assessed value for cropland:		\$42.57		Average assessed value for grassland:		\$23.52			

Source and procedure the same as indicated in Appendix Table 6.

Appendix Table 9. Calculation of average assessed values for grassland and cropland and the average mill levy for the western part of Kansas in 1968.

County	Mill levy	Assessed value bot- tom No. 1.	Assessed value bot- tom No. 2	Assessed value up- land No. 1	Assessed value up- land No. 2	Assessed value tame No. 1	Assessed value tame No. 2	Assessed value na- tive No. 1	Assessed value na- tive No. 2
Barber	\$65.03	\$29.57	\$24.34	\$27.77	\$19.81	\$13.16	\$ 9.45	\$ 9.46	\$ 7.83
Comanche	60.85	--	--	24.05	--	--	--	12.92	--
Clark	45.17	--	--	34.98	22.94	19.84	13.67	18.99	10.66
Meade	62.91	14.29	14.94	18.00	12.98	5.75	6.41	8.53	4.87
Stevens	77.30	--	--	17.86	10.58	6.59	--	5.03	--
Seward	37.26	--	--	26.56	13.16	24.79	10.75	18.30	7.67
Morton	37.76	33.31	25.87	24.78	18.47	15.70	12.13	9.94	6.48
Stanton	39.68	35.75	29.54	26.57	17.59	16.63	11.65	8.83	5.79
Grant	42.66	35.54	31.72	25.49	18.62	15.49	11.69	8.93	5.74
Haskell	41.92	--	--	29.36	10.31	17.71	7.56	19.88	6.71
Gray	74.90	14.67	--	--	17.29	8.46	8.20	7.66	10.34
Ford	73.17	53.55	29.92	38.68	22.14	32.88	23.46	16.84	10.25
Hodgeman	49.85	44.27	29.46	35.49	22.68	--	--	16.87	8.13
Finney	63.94	20.99	18.05	18.62	16.01	11.08	6.21	9.26	6.25
Kearney	38.44	25.46	22.25	28.21	17.23	20.38	16.42	19.03	6.95
Hamilton	54.02	--	--	20.97	13.04	--	--	9.07	4.74
Greely	47.54	--	--	27.26	18.02	23.72	16.59	19.09	8.07
Wichita	43.67	--	--	29.20	18.55	--	--	20.20	8.65
Scott	54.97	--	--	31.82	18.62	--	--	17.35	6.91
Lane	60.05	26.27	24.75	26.65	16.04	16.56	11.21	15.07	7.98
Ness	56.57	--	--	29.85	26.24	--	--	26.14	12.49
Wallace	56.03	--	--	23.03	--	--	--	8.99	--
Lyon	73.53	63.54	59.14	45.43	43.01	29.54	22.60	20.14	9.63
Gove	67.99	--	29.74	26.36	21.56	--	--	10.04	8.56
Trego	67.25	--	--	19.05	14.41	--	--	11.29	9.59
Graham	63.80	--	29.29	17.59	--	--	--	9.65	--
Sheridan	73.93	29.45	19.63	29.53	19.46	--	--	11.82	7.50

Appendix Table 9 (continued)

County	Mill levy	Assessed value bot- tom No. 1	Assessed value bot- tom No. 2	Assessed value up- land No. 1	Assessed value up- land No. 2	Assessed value tame No. 1	Assessed value tame No. 2	Assessed value na- tive No. 1	Assessed value na- tive No. 2
Thomas	63.47	\$24.10	\$15.79	\$29.59	\$21.63	\$15.69	12.08	14.40	6.95
Sherman	82.41	25.87	23.13	27.08	21.96	25.30	10.12	9.86	8.49
Cheyenne	62.13	25.48	15.83	27.39	15.03	9.07	7.47	10.09	6.61
Rawlins	83.67	15.41	12.64	14.92	12.00	--	--	5.27	5.17
Decatur	62.22	--	26.09	--	26.78	--	--	--	10.30
Norton	83.84	43.68	28.46	19.36	18.31	20.33	15.87	18.77	10.23
Average	\$59.63	\$31.17	\$25.52	\$26.83	\$18.81	\$17.43	\$12.29	\$13.36	\$ 7.90
Average assessed value for cropland:		\$25.58	Average assessed value for grassland:		\$12.74				

Source and procedure the same as indicated in Appendix Table 6.

Appendix Table 10. Total assessed values for different cattle classes in Kansas for 1967 and 1968.

Cattle classes	1967		1968	
	Number	Assessed value (dollars)	Number	Assessed value (dollars)
Cattle on rough feed, heifers (1 year old and under 2)	411,354	12,617,806	365,081	11,260,640
Cattle on rough feed, steers (1 year old and under 2)	330,312	13,505,185	299,580	12,068,948
Cattle on rough feed, steers (2 years and over)	11,016	534,540	8,217	425,915
Cattle on full or half feed, heifers (1 year old and under 2)	109,450	4,952,065	96,268	4,389,250
Cattle on full or half feed, steers (1 year old and under 2)	162,728	8,770,670	160,928	8,795,000
Cattle on full or half feed, steers (2 years and over)	12,752	765,075	17,558	970,115
Registered cattle, males (1 year old and under 2)	9,594	678,022	9,562	674,129
Registered cattle, females (1 year old and under 2)	17,451	1,040,275	16,727	935,215
Registered cattle, males (2 years old and over)	15,915	1,294,498	16,511	1,347,050
Registered cattle, females (2 years and over)	53,708	3,428,675	53,803	3,267,045
Misc. cattle classes, beef cows and heifers (2 years and over)	1,345,898	60,773,345	1,379,220	55,269,410
Misc. bulls, 1 year and over	43,132	2,512,405	42,862	2,488,815
Total	2,523,311	110,772,561	2,627,285	101,891,532
Average amount of personal property tax paid per cattle in Kansas (1967):	\$43.90 x 78.00 = \$3.42 ¹			
Average amount of personal property tax paid per cattle in Kansas (1968):	\$41.31 x 84.37 = \$3.48 ²			

Source: Property Valuation Department, Statistical Report of Property Assessment and Taxation (Topeka, Ks.) 1968, p. 1. \$43.90 was found by dividing the total assessed value of cattle by the total number of cattle. This was multiplied by the average mill levy for Kansas in 1967 (78.00). The result is the average amount of personal property tax paid per cattle.

²Same procedure as described in footnote 1.

Appendix Table 11. Personal property tax paid per produced calf in all the counties of Kansas using a hypothetical cow herd as basis for the calculation.¹

County	Personal property tax per calf (dollars)	County	Personal property tax per calf (dollars)
Allen	2.69	Comanche	3.05
Anderson	2.70	Cowley	3.70
Atchison	4.26	Crawford	4.62
Barber	3.26	Decatur	3.12
Barton	2.88	Dickinson	3.73
Bourbon	3.90	Doniphan	5.06
Brown	3.44	Douglas	4.46
Butler	3.94	Edwards	2.69
Chase	2.69	Elk	2.88
Chautauqua	3.63	Ellis	3.58
Cherokee	4.37	Ellsworth	2.49
Cheyenne	3.12	Finney	3.21
Clark	2.26	Ford	3.67
Clay	3.48	Franklin	3.99
Cloud	3.44	Geary	4.60
Coffey	3.43	Gove	3.41

Appendix Table 11 (continued)

County	Personal property tax per calf (dollars)	County	Personal property tax per calf (dollars)
Graham	3.20	Kiowa	2.64
Grant	2.14	Labette	4.45
Gray	3.75	Lane	3.01
Greeley	2.38	Leavenworth	5.65
Greenwood	3.29	Lincoln	3.01
Hamilton	2.71	Linn	4.06
Harper	3.21	Logan	3.19
Harvey	4.29	Lyon	3.68
Haskell	2.10	Marion	3.15
Hodgeman	2.50	Marshall	3.03
Jackson	4.65	McPherson	3.44
Jefferson	4.21	Meade	3.15
Jewell	3.53	Miami	3.83
Johnson	8.48	Mitchell	3.11
Kearney	1.93	Montgomery	4.47
Kingman	2.47	Morris	3.81

Appendix Table 11 (continued)

County	Personal property tax per calf (dollars)	County	Personal property tax per calf (dollars)
Morton	1.89	Riley	4.64
Nemaha	3.63	Rooks	2.93
Neosho	3.79	Rush	2.71
Ness	2.84	Russell	3.19
Norton	4.20	Saline	4.59
Osage	3.20	Scott	2.76
Osborne	3.16	Sedgwick	5.02
Ottawa	2.70	Seward	3.87
Pawnee	2.45	Shawnee	6.36
Phillips	3.18	Sheridan	3.71
Pottawatomie	3.68	Sherman	4.13
Pratt	2.76	Smith	3.03
Rawlins	4.19	Stafford	2.66
Reno	4.25	Stanton	1.99
Republic	3.48	Stevens	1.87
Rice	2.93	Sumner	4.13

Appendix Table 11 (continued)

County	Personal property tax per calf (dollars)	County	Personal property tax per calf (dollars)
Thomas	3.18	Wichita	2.19
Trego	3.37	Wilson	2.99
Wabaunsee	3.36	Woodson	2.94
Wallace	2.81	Wyandotte	9.62
Washington	2.95		
		AVERAGE	\$3.50

This calculation is based on the hypothetical herd explained in the footnotes of Appendix Table 3. The total livestock assessed valuation of \$4,261.40 was multiplied by the average mill levy for each county. The result was divided by 85, the assumed calf crop. The final result indicates the amount of tax paid per produced calf.

Appendix Table 12. Personal property taxes on beef cattle and taxes on farm real estate land in Kansas and other states.

State	Personal property taxes on beef cattle (per calf) 1968	Farm Real Estate Taxes per acre for 1965 - 1968			
		1965	1966	1967	1968
Kansas					
Alternative No. 1	\$4.45 ¹ (4.23)	\$1.33	\$1.52	\$1.74	\$1.94
Alternative No. 2	3.57 ²				
Alternative No. 3	3.48 ³				
Alternative No. 4	3.50 ⁴				
Arkansas	2.36 ⁵	.89	.94	1.06	--
Iowa	4.23 ⁵	3.81	4.24	4.18	--
Michigan	exempts livestock	3.13	3.50	3.89	--
Nevada, western	3.66 ⁶	.35	.36	.37	--
Nevada, southern	3.00				
Oklahoma	1.61 ⁷	.64	.70	.73	--
Wyoming	2.10 ⁸	.26	.27	.31	--
Utah	1.28 ⁹	.76	.76	.77	--

Sources: Sources for personal property taxes are given in Chapter V.

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Appendix Table 12 (continued)

¹Calculation for Alternative 1, see in Appendix Table 3. The figure in parenthesis gives the personal property tax paid per calf only--excluding the real estate tax going into the calculation.

²Calculation for Alternative 2, see in Appendix Table 7.

³Calculation for Alternative 3, see in Appendix Table 10.

⁴Calculation for Alternative 4, see in Appendix Table 11.

⁵The calculation made for Arkansas and Iowa is comparable to the calculation made for Kansas in Appendix Table 3 where only the assessed valuation for livestock investment went into the calculation and the average mill levy for Kansas in 1968 was used.

⁶The calculation made for Nevada is not comparable to any of the calculations made for Kansas since the figures for Nevada emerged out of a cost study related to the cattle industry in Nevada.

⁷The figures obtained for Oklahoma are not comparable to any calculation alternative made for Kansas.

⁸The calculation made for Wyoming is comparable to the calculation alternative number 3 made for Kansas.

⁹The figures calculated for Utah are not comparable to any calculation made for Kansas.

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THE EFFECTS OF PROPERTY TAXES ON BEEF CATTLE PRODUCERS IN
KANSAS AND OTHER STATES

by

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B.S., Justus Liebig University, 1968

AN ABSTRACT OF A MASTER'S REPORT

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requirements for the degree

MASTER OF SCIENCE

Department of Economics

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1970

One major concern among the farmers in Kansas are the rising property taxes.

The purpose of this report was to review the literature and local reports in order to analyze the trends of real estate and personal property taxation both in the United States and in Kansas. It was also attempted to relate the problem of property taxation more specifically to beef cattle producers in Kansas and the states of Arkansas, Iowa, Michigan, Nevada, Oklahoma, Wyoming and Utah. For this purpose a hypothetical cow-herd was assumed to calculate the personal property taxes per produced calf by using assessed values for livestock property as stated in the reports of the Property Valuation Department in Kansas and the other states. The real estate property taxes paid on beef cattle in Kansas were derived also from the assessed valuation of farm land property as given by the Property Valuation Department of Kansas. For the purpose of interstate comparisons of real estate taxation information established by the United States Department of Agriculture was used.

Findings from the results indicated that in Arkansas both personal and real estate taxes were less than in Kansas. In Iowa real estate property taxes were higher than in Kansas but personal property taxes were the same as in Kansas. Michigan, which exempts livestock from taxation relies on a much higher real estate property tax than Kansas does. Since it is not known how the property taxes were calculated for Nevada, personal property taxes cannot be compared. However, the real estate taxes per acre in Nevada are much less than in Kansas. Oklahoma, Wyoming and Utah all charge less tax on both personal and real estate property than does Kansas.

The results for the State of Kansas alone differed according to the method of calculation.

Four methods were applied using always the same hypothetical cow-herd. Method one and two took into account both personal and real estate property. Underlying method one was Kansas as a whole and the result was a tax of \$4.45 per produced calf. For method two, Kansas was divided into four parts with different assumptions of personal and real estate property. The average result accounted for \$3.75 tax per produced calf. In method three and four the real estate property was omitted from the calculation and took only live-stock property into account. Method three represented an aggregate calculation for Kansas. The result was \$3.48 per produced calf. Into method four went data from each county in Kansas. The result of that calculation gave an average result of \$3.50 per produced calf.

The result of method two was used to compare the cost item "property tax" to the total production costs of a 400 pound calf. Property taxes accounted for 3.34 per cent of the total production costs.