

Business Taxes in Kansas and Nearby States
Executive Summary
Final Report of the Kansas Inc. Business Tax Study

prepared for
Kansas Inc.

by
Patricia Oslund
Research Economist

Mohamed El-Hodiri, Principal Investigator
Professor of Economics, and
Director of Economic Research, IPPBR

Anthony L. Redwood
Professor of Business, and
Executive Director

Institute for Public Policy and Business Research
607 Blake Hall
University of Kansas
Lawrence, Kansas 66045

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Introduction

Business taxation continues to be a major concern of legislators, policy makers, and other community leaders. Kansas must offer a sufficiently attractive business climate in order to maintain jobs, income, and a high standard of living in the 1990s. The business climate in a state depends on the productivity of its labor, its proximity to major markets, the strength of its educational system, the quality of life in its communities, and a multitude of factors in addition to taxation. But taxes remain a focus of attention because, unlike quality of life factors, they fall under the direct control of state decision makers.

Kansas Inc. has recently funded a two-part study of business taxation and business costs in Kansas and five nearby states: Colorado, Iowa, Missouri, Nebraska, and Oklahoma. The first part of the study, presented in Volume 1 of *Business Taxes in Kansas and Nearby States*, describes state and local taxation in the region. The report presents a historical overview, and then turns to a detailed comparison of specific taxes on income, property, sales, and labor. The study considers the basic tax rate structures of the states and identifies the numerous tax incentives available to new and expanding businesses.

The second part of the study, presented in Volume 2 of *Business Taxes in Kansas and Nearby States*, takes a quantitative approach to interstate tax comparisons. The Institute for Public Policy and Business Research developed a tax and cost simulation model to analyze the impact of business taxes on typical firms in each of several important industries. The estimates of taxes and costs provided by the simulation model provide insights into whether taxes place Kansas at a competitive disadvantage.

**Summary of Volume 1:
Overview of State and Local Taxation in the Region**

Overview of State and Local Tax Structures

The states in the region surrounding Kansas exhibit a variety of tax structures. The states differ considerably in per capita intensity of taxation, and in the breakdown of tax collections between state governments and local authorities. The states have also made different choices about the types of taxes to employ, which has serious implications for the fairness and stability of their tax systems.

In terms of per capita tax collections, the states in the region fall into two groups. The higher taxed states, Colorado, Iowa, Kansas, and Nebraska, collected revenues between \$1700 and \$1550 during 1988. Kansas, with tax revenues of \$1681 per capita, ranked 23rd in the nation, substantially below the national average of \$1777. The lower taxed states in the region, Missouri and Oklahoma, each collected less than \$1400 per capita in 1988; they ranked 41st and 39th in the nation respectively.

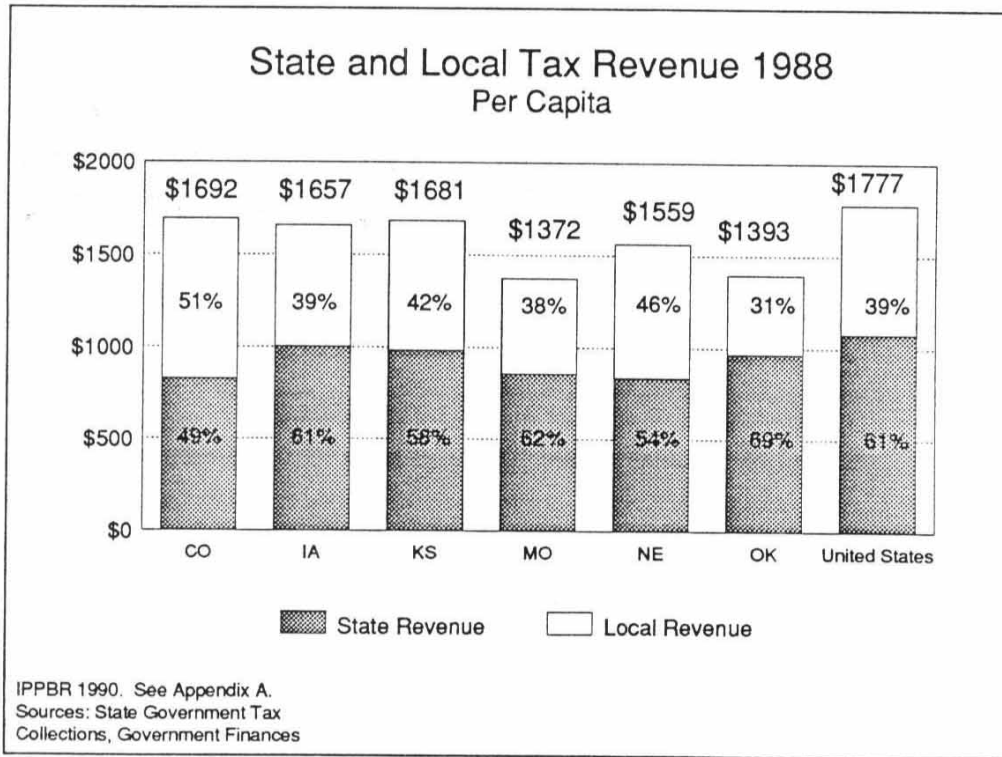


Figure 1

States divide the authority to tax among many jurisdictions. In addition to the state government itself, states empower counties, cities, school districts, and other special districts to collect taxes and to provide public services. As illustrated in Figure 1, local taxing authorities in Colorado, Iowa, Kansas, and Nebraska collect a share of total revenue at least equal to the national average of 39 percent. Missouri, and especially Oklahoma, depend more heavily on state rather than local level taxes.

Not only do the states differ in the breakdown between local and state taxes, but they also differ in the importance of various taxes within the tax structure. In 1988, general sales taxes provided the single largest source of state level tax revenue in the U.S, followed closely by the personal income tax. Within the region, 1988 data for Missouri and Nebraska followed the national pattern, while Kansas, Colorado, Iowa, and Oklahoma derived the largest percentage of their receipts from individual income taxes.

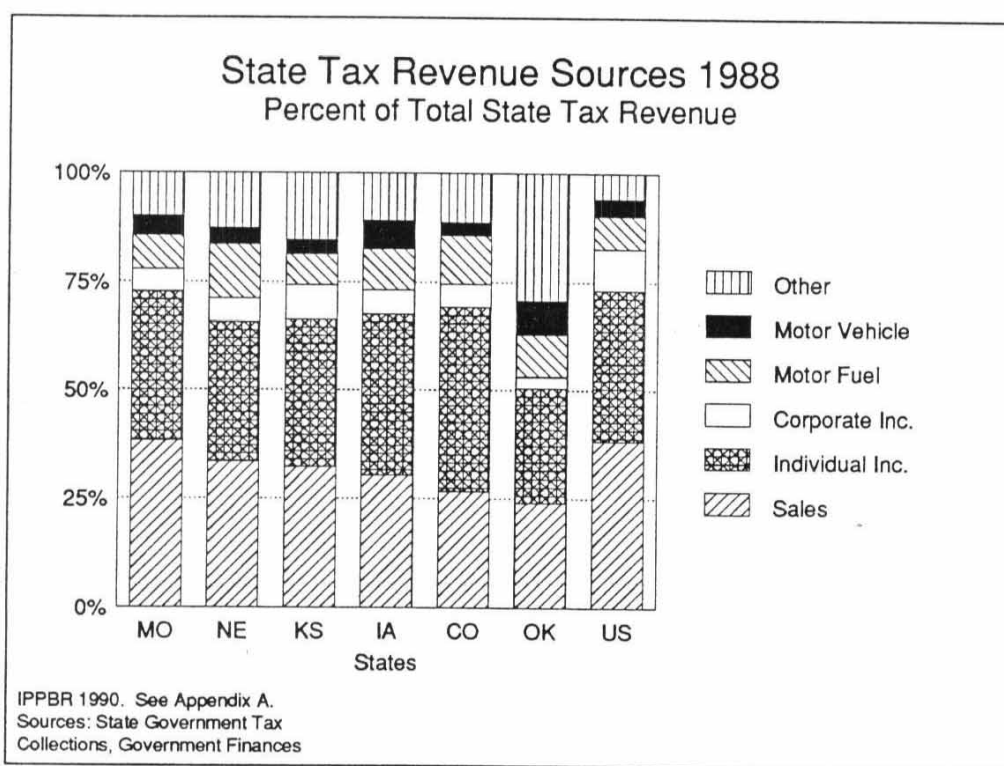


Figure 2

On average, the states in the region receive about 5 to 6 percent of their tax revenue from corporate income taxes. Kansas stands out in the region with corporate taxes comprising over 8 percent of revenue in 1988.

Local governments depend primarily on property taxes for financing. Within the region, the share of property taxes in local tax revenues runs from a high of over 98 percent in Iowa to a low of 57 percent in Missouri. In 1988, property taxes provided 82 percent of Kansas local tax receipts.

Local sales taxes have exhibited an upward trend in Kansas. While Kansas local governments derived a mere 3.3 percent of local tax revenue from sales taxes in 1981, by 1988 the share had risen to 12.4 percent.

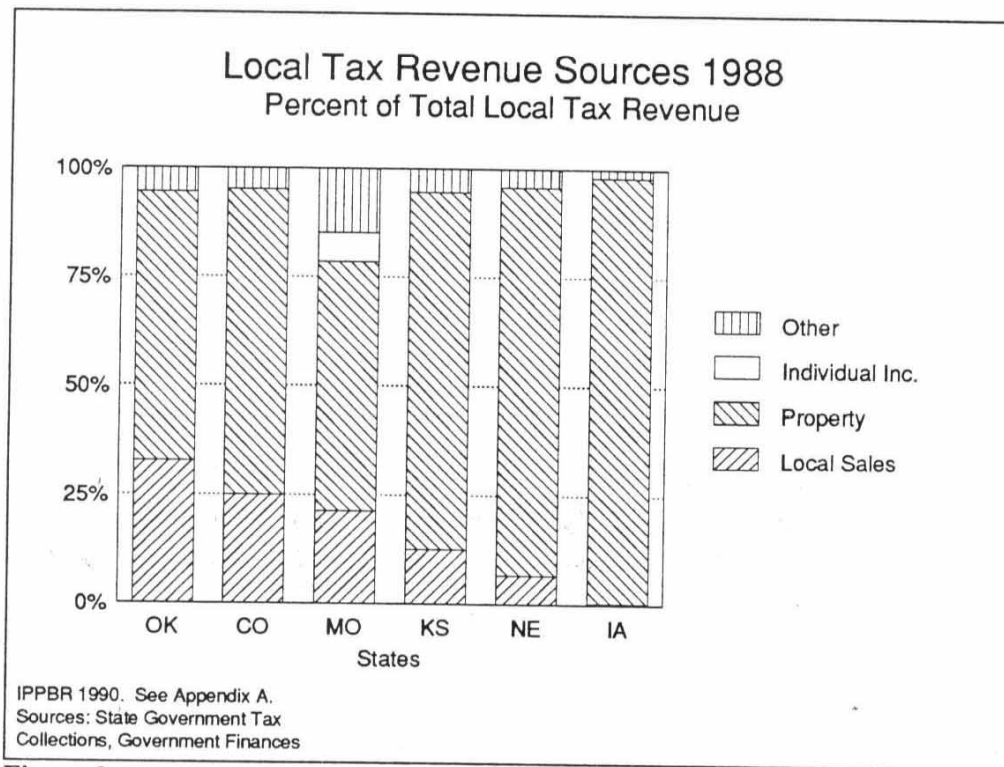


Figure 3

For the states in the region, increased dependence on sales taxes may make tax systems more regressive. This undesirable effect is probably modified in states such as Nebraska where basic goods such as food and medicines receive sales tax exemptions. Overall, the states have a difficult balancing act in providing stable revenue sources while maintaining a tax system that is perceived as fair.

The Individual Income Tax

The individual or personal income tax is indispensable to state finance throughout the region. In all of the states considered in this study, it provides the largest or second largest source of state taxes, ranging from a low of 25 percent in Oklahoma to a high of 40 percent in Colorado.

Tax rates rise progressively with income in all states except Colorado, which has recently adopted a flat rate of 5 percent. In the states with graduated systems, the rate faced by the highest tax bracket varies from 5.9 percent in Nebraska to 9.98 percent in Iowa. In Kansas, the rate currently stands at 6.1 percent.

Only Missouri imposes a local as well as a state income tax: Kansas City and St. Louis levy a tax of 1 percent of earnings.

Most recent reforms in state income tax systems owe their existence to major federal tax changes enacted in the Tax Reform Act (TRA) of 1986. TRA significantly lowered federal tax rates for individuals and corporations. Additionally, the act expanded the tax base to compensate for lower rates by removing deductions and exclusions, while at the same time removing very low income families from the tax rolls all together. As a result, federal adjusted gross income and hence taxable income rose.

Changes in federal tax law translated immediately into projected increases in state tax collections. This phenomenon became known as the state tax "windfall." Since most states couple their tax systems with the federal system, a given set of state tax rates will generate more revenue automatically as federal adjusted gross income rises. The Advisory Council on Intergovernmental Relations has estimated the windfall at over \$150 million for Kansas and over \$5 billion for the entire U.S.

In 1988, Kansas replaced a system of eight tax bracket rates with a simple two rate system. Kansas standard deductions rose, and the personal exemption and itemized deductions were brought into conformity with federal practice. The deduction for federal taxes was also eliminated. In 1989, Kansas continued tax reform. Basic rates were reduced for both tax brackets of single taxpayers, and for the lowest bracket of married taxpayers. Additionally, Kansas taxpayers were offered the option of paying higher rates with federal tax deductibility, or lower rates with no deductibility.

Table 1
Individual Income Tax

State	Rates	Federal Deduction	Adjusted Reforms Rate ¹	Since 1986
Colorado	5% flat rate on taxable income.	No	5%	Yes
Iowa	Graduated in 9 stepped increments from 0.4% to 9.98%. Highest bracket effective at \$45,000.	Yes	7.19%	Yes
Kansas	Choice of two methods. Rates shown for single taxpayers. With no federal deductibility, 3.65% of income less than \$35,000, plus 5.95% of income over \$35,000. With federal deductibility, graduated from 4.75% to 8.75%. Highest tax bracket effective at \$30,000.	Option	6.3% with federal deduction. 5.95% with no deduction.	Yes
Missouri	Graduated in 10 stepped increments from 1.5% to 6%. Highest bracket effective at \$9000. ²	Yes	4.32%	No
Nebraska	Graduated in 4 stepped increments from 2% to 5.9%.	No	5.9%	Yes
Oklahoma	Choice of two methods. With no federal deductibility, graduated from 0.5% to 6%. Top bracket effective at \$15,000 for married filers, \$7500 for single. With federal deductibility, graduated from 0.5% to 10%. Top bracket effective at \$23,000 for married filers, \$15,250 for single filers.	Option	7.2% with federal deduction. 6% with no deduction.	No

¹ Adjusted tax rate accounts for federal deduction. It is the rate which would be paid on additional income, calculated assuming that the taxpayer is in the 28% rate bracket for federal income taxes, and in the highest bracket for state taxes.

² Missouri also has an additional local personal income tax in the cities of Kansas City and St. Louis, equal to 1% of earnings.

SOURCES: Information provided by individual state departments of revenue and *State Tax Review*, Commerce Clearing House, 1989.

The Corporate Income Tax

Each of the states in the region levies a corporate income tax on net profits or taxable income derived from within the state. As a source of state finance, the corporate tax appears small, comprising less than 10 percent of total state tax revenue for the U.S. on average. In Kansas, dependence on the corporate income tax approximates the U.S. average and substantially exceeds the regional average. But while corporate income taxes may be a small source of total revenue, they are an important cost to businesses.

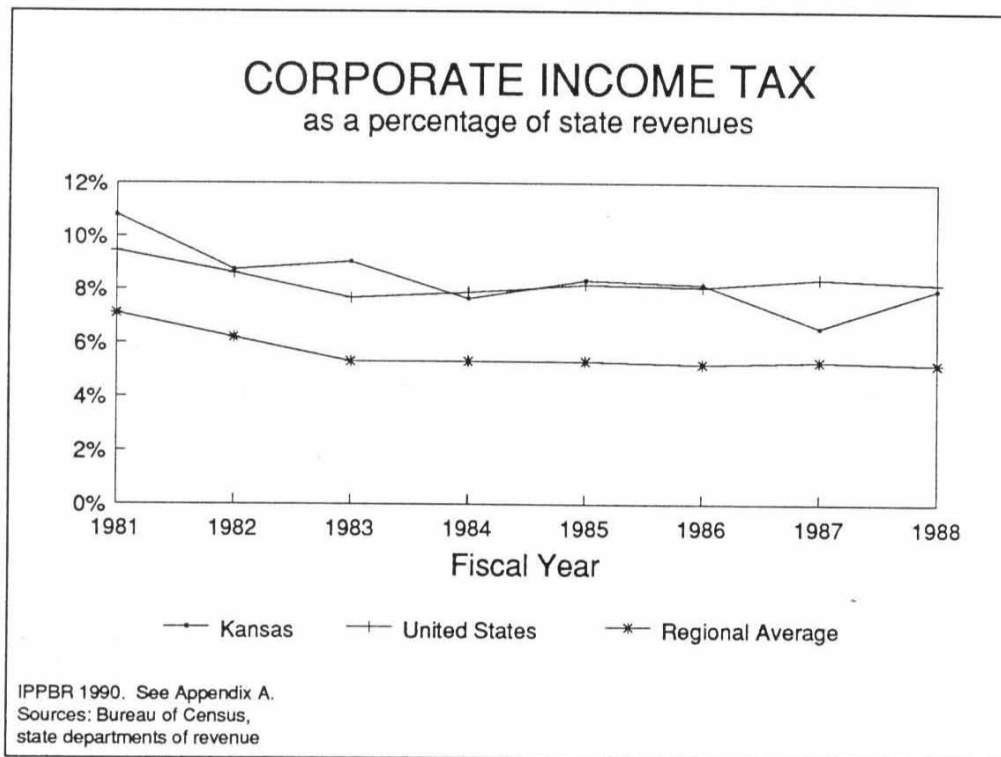


Figure 4

Tax rates in the region surrounding Kansas average between 5 and 6 percent. On the low end, Kansas taxes the first \$25,000 of income at 4.5 percent. On the high end, Iowa taxes incomes over \$250,000 at 12 percent. The rate structure in most states is moderately progressive, but Colorado is now in the process of implementing a flat rate system.

Direct comparisons of state tax rates can be misleading. The states exhibit considerable variations in the allowable deductions, in income allocation methods, and in economic development incentives, all of which influence corporate tax bills.

Two states in the region permit a deduction for federal taxes paid. Missouri allows a deduction of 100 percent of federal taxes, while Iowa allows a 50 percent deduction, both of which substantially reduce tax liabilities.

A recurrent problem in state income taxation is the treatment of income of multi-state firms. State tax laws divide the income of the firm over competing jurisdictions. However, since each state is free to decide its own allocation rules, there is no assurance that exactly 100 percent of income will be taxed overall.

Nationally, a "three factor" formula based on sales, payroll, and property serves as a standard for income allocation. Kansas follows this national standard in most cases. As an alternative to the three factor formula, some states (Iowa, Missouri, Nebraska, Colorado) rely on allocations based on sales and property, or on sales alone. The allocation formula can significantly change the amount of income subject to in-state taxation. This holds particularly for an export oriented firm, that is, a firm selling a large percentage of its output outside state boundaries. The higher the weight given to sales, the lower will be the allocation fraction for export oriented firms.

Table 2
State Corporate Income Tax Rates,
Federal Deductibility, and Effective Tax Rates

State	Statutory Rates	Marginal Adjusted Rates ¹	Federal Deductibility
Colorado	For FY 1987-1988: First \$50,000 -- 5.5% Excess of \$50,000 -- 6% Beginning in FY 1989: a flat rate of 5% will be phased in, fully effective July 1, 1993.	5.5% 6.0% 5.0%	No
Iowa	First \$25,000 -- 6% Next \$75,000 -- 8% Next \$150,000 -- 10% Over \$250,000 -- 12%	5.0% 6.6% 8.3% 10.0%	50% of federal income tax is deductible
Kansas	First \$25,000 -- 4.5% Over \$25,000 -- 6.75%	4.5% 6.75%	No
Missouri	Flat 5% ² Effective Jan. 1, 1990- Dec. 1991: Less than \$100,000 -- 5% \$100,000-\$335,000 -- 6% More than \$335,000 -- 6.5%	3.3% 3.3% 4.0% 4.3%	100% of federal income tax is deductible
Nebraska	First \$50,000 -- 5.17% Over \$50,000 -- 6.65%	5.17% 6.65%	No
Oklahoma	Flat 5%	5.0%	No

¹ The calculation assumes a marginal federal tax rate of 34%.
MARGINAL ADJUSTED RATE = STATUTORY RATE x (1 - .34 x deductibility fraction).

² Missouri also has a local corporate income tax in the cities of Kansas City and St. Louis. This earnings tax is equal to 1% of net profits from activities in the city.

SOURCES: Information provided by individual state departments of revenue, state statutes, and *All State Tax Guide*, Prentice Hall, 1988.

Economic Development Incentives

The states in the region take an active role in encouraging new and expanding businesses. States such as Nebraska have aggressively used tax incentives to pursue jobs and investment. Other states such as Kansas have included tax incentives in their economic development strategies in order to "level the playing field." All six states have introduced or expanded income tax incentives since 1986.

To generalize, income tax incentives generally fall into one of four categories: research and development incentives; venture capital credits; job and investment credits; and enterprise zone incentives.

Colorado, Kansas, Iowa, and Nebraska offer income tax credits to stimulate research and development activities. Kansas focuses on expansions of research and development activities, granting a corporate income tax credit of 6.5 percent of increased expenditures.

Venture capital credits attempt to increase the pool of funds available for entrepreneurs to start or expand businesses. Three states in the region, Kansas, Missouri, and Oklahoma, allow direct income tax credits for contributions to state authorized funds. Kansas permits credits for financial investments in certified venture capital funds, and in the Kansas local seed capital pools. The tax credit equals 25 percent of the cash investment in the qualified fund.

All of the states in the region use job and investment credits to try to attract new industries, and to stimulate the expansion of established industries. The amount of credit a firm receives depends directly on the amount of new activity it undertakes in the state. For most states, credits, once established, may be claimed for several years, provided that the firm keeps its new employees and investment in place.

The nature of job and investment credits varies considerably from state to state. In Kansas, basic job and investment credits are \$100 per new job and \$100 per \$100,000 in new investment. The credits can be claimed for up to 10 years. Businesses engaged in fabrication, processing, distribution, storage, sales, research, services, assembly, or administration qualify if they produce at least two new jobs.

Four states in the region designate special *enterprise zones* in order to attract private business to economically depressed areas. Special income tax incentives, generally targeted toward new jobs and investment, apply within the zone boundaries. Corporate income taxes in enterprise zones may be reduced through expanded job and investment tax credits and through income exemptions. Additional tax incentives found in the region include sales tax refunds and property tax abatements.

In Kansas, the basic 10 year job and investment credits are increased to \$350 per new job and \$350 per \$100,000 new investment within enterprise zones. Kansas grants an extra \$150 per employee credit for workers whose employment entitles a firm to a federal targeted jobs credit.

Despite criticisms from economists about the effectiveness of job and investment credits, the credits remain a popular business incentive. No state in the region has restricted or repealed its credits; on the contrary, many states have initiated or expanded their programs in the last few years.

The Property Tax

Both state and local governments levy property taxes on the value of land, buildings, equipment, and other property owned by firms and households. Property taxes are particularly important for local governments; indeed, they provide the single largest source of local revenue in all states in the study area.

The actual property tax paid by a firm results from a complex interaction of tax rates, the types and amount of property owned, the definition of the tax base, assessment practices, and whether the firm qualifies for any special tax incentives.

The concept of *effective property tax rates* provides a key to understanding property taxation and to comparing taxes across states. The definition of an effective tax rate is simple; it is the annual tax bill divided by the true market value of a piece of property.

Calculating an effective tax rate is easier in theory than in practice. In fact, any estimate of the rate must consider three components: the applicable mill levy, the statutory assessment ratio, and the relationship between appraised and market property values.

Effective rates vary not only among states, but also among the major categories of property: residential real estate, commercial real estate, business machinery and equipment, and inventories.

The effects of reappraisal and classification on the Kansas economy are now becoming clear. The tax burden has clearly shifted onto commercial and industrial real estate. While about 11 percent of property taxes were paid by these categories in 1988, the share had risen to over 25 percent by 1989. Effective tax rates on commercial and industrial real estate became by far the highest in the region after reappraisal and classification. At the same time, property taxes on machinery, equipment, and inventories, which were previously the highest in the region, fell substantially.

The overall impact of property tax changes on the Kansas business depends on the type of business examined. Capital intensive industries with large inventories have probably benefitted by the recent changes, while service firms and office facilities have probably suffered from higher taxes.

Table 3
Effective Property Tax Rates
(taxes as % of actual market value)

State	Real Estate Rates		Other Property Rates	
Colorado	Industrial	2.38%	Mach. and equip. 2.00%	
	Commercial	2.86%	Inventories not taxed	
	Residential	1.16%		
Iowa	Industrial	2.57%	Industrial machinery and computers .77%	
	Commercial	2.57%	Other business property not taxed.	
	Residential	2.07%	Inventories not taxed.	
Kansas		(1988) (1989)		(1988) (1989)
	Industrial	1.67% 3.34%	Mach. and equip.	3.91% 2.23%
	Commercial	1.48% 3.34%	Inventories	3.91% no tax
Missouri	Residential	.94% 1.38%		
	Industrial	1.80%	Mach. and equip. 1.57%	
	Commercial	1.80%	Inventories not taxed.	
Nebraska	Residential	.89%		
	Industrial	2.31%	Mach. and equip. 2.49%	
	Commercial	2.31%	Inventories not taxed.	
Oklahoma	Residential	2.18%		
	Industrial	.90%	Mach. and equip. .90%	
	Commercial	.90%	Inventories .90%	
	Residential	.91%		

Note: All rates are for 1988 except as shown. Effective rates were estimated by IPPBR based on information provided by the individual states.

State and local governments frequently offer property tax abatement as an incentive to attract new firms and to encourage industry expansions. However, academic studies of tax abatement have generally failed to prove that these incentives are actually critical factors in firm location decisions.

The percentage of tax abatement and the requirements for eligibility vary widely from state to state. Some state governments, Missouri, for example, limit abatements to state designated enterprise zones. In other states, including Kansas, abatements may be granted at the discretion of local governments, regardless of enterprise zone status. Property tax abatements may be targeted to

particular industries such as manufacturing, or they may be more general, extending to services, wholesalers, and retailers.

Kansas allows some of the most generous property tax abatements in the region. Local governments abate up to 100 percent of property tax liabilities for 10 years for new and expanding industries. General tax abatements are limited to property used in manufacturing, research and development, and warehousing. Property financed with industrial revenue bonds may be abated for a larger range of industries.

The Sales Tax

Most state governments, including those of all six states investigated in this study, impose an ad valorem tax on retail sales. Strictly speaking, sales taxes apply to goods sold within a state's boundary, while use taxes apply to items purchased out of state but brought into state for their final consumption.

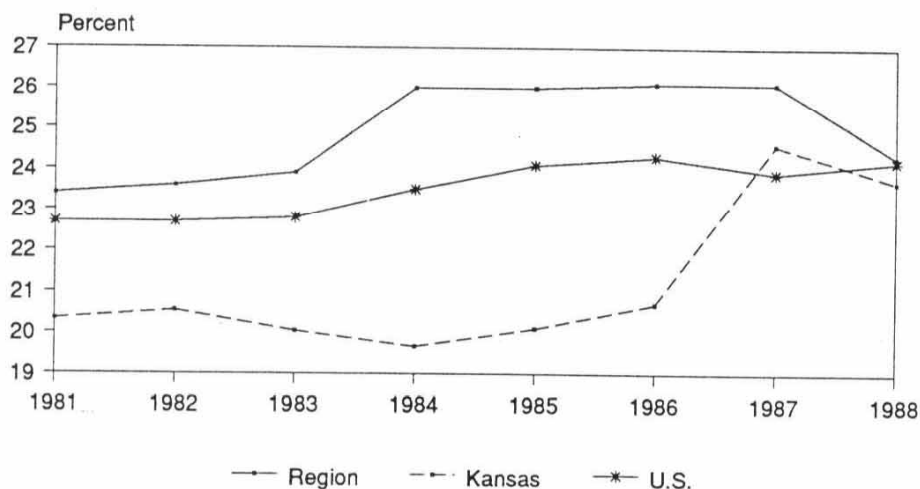
During the 1980s, the sales tax grew in importance throughout the region. Within the past five years, all of the states in the region have legislated increased sales tax rates, either on a permanent or a temporary basis. Local sales taxes have experienced a similar upward trend.

State sales tax rates in the region fall within a narrow range, between a low of 3 percent in Colorado and a high of 4.425 percent in Missouri. Both Missouri and Kansas have increased rates within the last year. Local sales tax rates add to the tax total, and in some jurisdictions rival state taxes in magnitude. For example, Denver taxes most sales at 3.5 percent in addition to the state tax. In parts of Kansas City, Missouri, local taxes stand at 2.25 percent, while in Overland Park, Kansas, taxes reach the state-allowed maximum of 2 percent.

Most states use a fairly broad concept of retail sales in defining their sales tax bases. In fact, the sales tax combines elements of a tax on consumption, a tax on investment, and a tax on production. The extent to which each of these three activities is taxed depends on state specific rules for sales tax exemptions and inclusions.

States tax consumption when sales taxes are levied on purchases commonly made by households. Although most tangible products are taxed, states commonly make exceptions for food and drugs. Within the region, Iowa, Nebraska, and Colorado exempt groceries, and all exempt prescription medications. States also include selected services in the tax base, generally including restaurant meals, hotels, and telephone charges. While none of the states has broadened its sales tax base to include all services, Iowa stands out for the number of services taxed.

Sales Tax as a Percent of State and Local Taxes



IPPBR 1990. See Appendix A.
Sources: State Government Tax
Collections, Government Finances

Figure 5

**Table 4
Sales Tax Rates**

State	State Tax	Local Tax
Colorado	3%. 0.2% tax on tourism related goods and services.	May be levied, not to exceed 4%.
Iowa	4%.	May be levied up to 1%; also local option hotel/motel tax may be levied, not to exceed 7%.
Kansas	4.25%.	May be levied at 0.5% or 1% by both counties and cities.
Missouri	4.425%. Will drop to 4.125% on July 1, 1990.	May be levied, not to exceed 3%; St. Louis County may levy up to 3.375% tax.
Nebraska	4%.	May be levied at 1-1.5%.
Oklahoma	4%.	May be levied, not to exceed 2%.

Source: Information from individual state departments of revenue.

Sales taxes affect investment when states levy taxes on the purchase of machinery, equipment, tools, building materials and services, or repairs. Within the region, exemptions for manufacturing machinery and equipment are common. For example, Kansas exempts machinery and equipment used directly in the manufacturing, processing, or storing of goods as of 1989. Missouri limits its manufacturing equipment exemption to new establishments, expansions, and replacements due to design or product changes.

Production, in contrast to consumption or investment, is taxed to the extent that materials, fuels, and supplies enter the sales tax base. All states in the region exclude materials which become component parts of new goods. Laws covering products which are consumed or used up during production vary more widely across the states. In Kansas and Oklahoma consumables are clearly tax exempt. Iowa excludes materials used in processing. Colorado excludes materials which "enter into processing" of manufactured products. Nebraska and Missouri exempt "ingredients."

Laws covering exemptions for electricity and fuels often apply only to manufacturing and other industrial processes; some portion of these important inputs generally remains taxed. Colorado, Oklahoma, and Iowa exempt fuels and electricity used in processing. Kansas extends the exemption to production of goods and services, and Nebraska adds irrigation and farming to the list of exempt uses. Missouri exempts natural gas entirely, and electricity if it exceeds 10 percent of total production costs.

Overall, the pattern of sales tax exemption is complex. From the point of view of competitiveness, the exemptions on equipment, machinery, and fuels stand out. Taxes on these inputs could significantly increase production costs.

Enterprise Zones

Enterprise zones are defined as economically distressed geographical locations in which private investment is stimulated through unique programs. The four most commonly offered incentives include property tax abatements, sales tax credits, job and investment credits, and low interest bond financing. Within the region, Colorado, Kansas, Missouri, and Oklahoma have developed enterprise zone programs.

The most important tax benefit offered in Kansas enterprise zones is a sales tax exemption for the sales and installation of machinery and equipment, and materials and services purchased for construction or remodeling.

Additionally, firms may receive expanded job and investment credits as enumerated earlier.

Kansas stands out in the region for the number of designated enterprise zones, over 200. In contrast, most states in the region strictly limit the number of zones; for example, Colorado allows only 12 zones. The large number of zones in Kansas makes it difficult to evaluate their effectiveness.

Unemployment Insurance and Worker Compensation

Unemployment Insurance

Labor costs constitute the single largest factor payment for most firms. State mandated programs such as unemployment insurance and worker compensation comprise a considerable portion of labor costs in most industries.

Unemployment insurance compensates a worker for wages lost while he or she is involuntarily unemployed but able and willing to work. Employers pay both federal and state taxes, but the state tax is by far the larger.

Three major factors affect the overall level of unemployment insurance rates in a state. First is the average benefit paid to an unemployed worker, second is the duration of the payment, and third is the percentage of the work force making unemployment insurance claims. States with a high level of benefits are likely to have high rates, as are states with volatile employment.

The average unemployment insurance rate per \$100 payroll is a broad indicator of differences in state unemployment insurance systems. Kansas rates fall close to the national average, and are in the mid-range for the region.

The average benefit per covered employee indicates the volume of withdrawals from the unemployment insurance fund. It depends both on the likelihood of unemployment in the state, and on the level of benefits to which a worker is entitled. Ranked by this criterion, Kansas and Colorado are highest in the region, both with benefits approximately equal to the national average.

The unemployment insurance trust fund balance shows the reserves available to pay future claims. Kansas is clearly the leader in this category. With balances of over \$412 per worker, Kansas exceeds the national average by \$100. With an average level of withdrawals and a healthy trust fund balance, Kansas rates are likely to increase more slowly than the national average.

Table 5
Unemployment Insurance Benefits and Net Worth, 1988

	Average Benefit Per Worker ¹	UI Fund Net Worth ²	Average Rate Per \$100 Payroll ³
Colorado	\$175.74	\$81.44	\$.79
Iowa	\$147.26	\$343.05	\$1.69
Kansas	\$176.31	\$412.14	\$.94
Missouri	\$130.73	\$213.48	\$.64
Nebraska	\$96.69	\$176.76	\$.57
Oklahoma	\$157.98	\$128.77	\$1.08
National Av.	\$175.77	\$313.73	\$1.03

¹ Average unemployment compensation benefits paid per covered worker per year.

² Net worth of state unemployment compensation fund per covered worker. Balance of trust fund minus loans from federal government.

³ Rates are for 1987.

SOURCES: Grant Thornton, *The 10th Annual Grant Thornton Manufacturing Climates Study (1989)*, and U.S. Department of Labor, *Unemployment Insurance Financial Data*.

Worker Compensation

Worker compensation laws provide benefits to injured workers, and to families in the case of a worker's death. States require that firms buy insurance to provide compensation payments.

Several factors determine the worker compensation rate schedule for a state. The size of benefits paid to injured workers, decided by state law, exerts a primary effect. Other factors include the safety records of various industries within the state, and state regulation, which may limit rate increases.

The rate paid by an individual firm depends on state and firm specific factors. The industry specific state rate serves as a base for a firm's insurance assessment. But a firm's payments are modified depending on its individual safety record, and on whether it qualifies for a volume discount.

For most industries, Kansas rates rank among the lowest in the region.

Table 6
Worker Compensation Rates (1988)

	CO	IA	KS	MO	NE	OK
Electronics	4.32	1.77	1.72	2.31	2.26	3.61
Construct. Mach. Mfg.	8.74	5.60	3.57	3.90	5.62	6.53
Plastics	7.01	4.94	4.77	5.98	3.12	7.17
Data Processing	.89	.96	0.90	1.08	2.12	2.23

Source: National Council on Compensation Insurance.

Conclusions from Volume I

States face two sometimes contradictory approaches to developing a favorable tax climate:

- providing special incentives and abatements to new investment activities. This allows state and local governments to direct large tax cuts to a relatively small base of new and expanding firms.
- establishing moderate overall tax rates and eliminating exemptions, putting new and established firms on a more equal footing.

A possible drawback to the first approach is that the tax burden may be shifted to long-established firms, preventing them from accumulating the financial capital to expand and modernize. While the second approach may be superior from the point of view of fairness, it may be self-defeating in an overall atmosphere of inter-state tax competition.

Kansas policy in the 1980s has exhibited a mixture of the two approaches. Special incentives such as property tax abatements and job and investment credits have been expanded both to attract new firms and to avoid losing business expansions to lower taxed states. In this sense, incentives have been used to "level the playing field."

At the same time, Kansas has initiated some basic tax reforms which should make the state more attractive to new and established firms alike. For example, manufacturing and processing equipment has been exempted from the sales tax, and inventories have been removed from the property tax base.

Summary of Volume 2: Results from a Tax Simulation Model

How do State and Local Taxes Affect Businesses?

Throughout the 1980s, state and local governments played an increasingly active role in trying to attract and retain jobs. Their efforts were particularly intense in areas which experienced declines in traditional manufacturing and extractive industries due to changes in global competitive conditions.

Tax policy was a major focus of the attempt to stimulate a healthy economy, both nationally and in the states.

Much of the push for state tax reform during the 1980s was directed toward the use of special tax credits and abatements. Tax incentives, along with other inducements such as industrial revenue bond financing, dominated much of the state and local involvement in efforts to encourage business growth.

There is considerable debate about whether the general level of state and local taxation, or any of the specific abatement programs, influence job and investment growth. Studies examining the impact of a state's general tax structure have arrived at mixed and often contradictory conclusions.

Academic studies have offered policy makers little clear guidance about the proper role of taxation in state economic development strategies.

Simulation Model Goals, Assumptions, and Data

The IPPBR Tax Simulation model provides a flexible method for comparing taxes and costs across states.

The model produces estimates of key variables affecting a firm's location decision: the amount of the firm's federal, state, and local taxes, the cost of the firm's inputs, and the costs of assets such as land and buildings.

The model has been used to examine costs and taxes for typical firms in 15 industries, chosen to be a representative sample of economic activity. The list of industries includes agriculture-based industries such as meat products, traditional heavy industry such as construction machinery manufacturing, high technology manufacturing such as pharmaceutical products, and service industries such as telephone communications and data processing.

The model is designed to deal with alternative assumptions about firm characteristics:

- Location: The model specifies the state in which the firm is located, and city size--urban area, medium sized city (under 50,000 population), or small city (under 15,000 population).
- Incentives: New firms are assumed to qualify for all available tax incentives. In contrast, mature firms fail to qualify for incentives targeted toward new activity.
- Income apportionment: For the purpose of this study, firms are assumed to be export oriented. All of their payroll and property, but only 10 percent of their sales, are considered to be in-state. However, the model can easily accommodate alternative assumptions.

Two versions of the model have been developed. The versions differ in the extent to which state-to-state and city-to-city variations in non-tax costs are built into the model. The appropriate set of assumptions depends on the type of question the user is trying to address.

If the user is interested in distinguishing differences in state tax structures, a model which holds all other costs constant across locations is suitable (partial model).

On the other hand, if the user is interested in broader issues of cost competitiveness, an extended model that builds in local cost adjustment factors for labor, land, utilities, and other key inputs, is more appropriate (full model). It should be noted that the second approach reflects feedback effects between costs and taxes.

Results of the Partial Simulation Model (variations in taxes only)

From the point of view of a new firm that receives all available tax credits and abatements, tax burdens in Kansas locations are moderate compared with burdens in other states.

For new firms, taxes in Kansas urban areas rank between third lowest and eighth lowest out of 11 large cities in the region. Kansas medium and small sized cities rank in the mid-range for the region, with average ranks between 2.9 and 4.4 out of six states.

In general, Kansas ranks better for manufacturing than for non-manufacturing, since many tax incentives are not available to service type industries in Kansas.

A mature firm faces a less favorable situation in Kansas than does a new firm. Taxes for firms in Kansas locations are generally the highest in the region. Taxes exceed the regional average by a significant percentage for both manufacturing and non-manufacturing industries, but the difference is more pronounced for manufacturing.

Table 7
Summary Table: New Firms Receiving Tax Credits and Abatements
Partial Model: Variation in Taxes Only

	<i>Manufacturing</i> Kansas as % of Region	<i>Other</i> Kansas as % of Region	<i>Manufacturing</i> Kansas Rank	<i>Other</i> Kansas Rank
<i>Kansas Urban Areas</i>				
(11 = highest taxes or costs)				
Johnson Co., Kansas				
Costs: Non-tax	99.9%	99.8%	1.5	2.4
Taxes	97.4%	98.8%	3.6	6.2
Tax and Non-Tax Costs	99.7%	99.6%	2.6	5.4
Wyandotte Co., Kansas				
Costs: Non-tax	100.1%	99.8%	8.6	3.8
Taxes	98.0%	100.8%	5.6	8.6
Tax and Non-Tax Costs	99.9%	99.9%	7.0	8.2
Wichita, Kansas				
Costs: Non-tax	99.9%	99.8%	2.6	3.2
Taxes	97.6%	99.2%	4.7	6.8
Tax and Non-Tax Costs	99.7%	99.7%	3.6	6.6
<i>Kansas Medium Sized City</i>				
(6 = highest taxes or costs)				
Costs: Non-tax	99.9%	99.8%	1.1	1.6
Taxes	98.2%	100.2%	2.9	4.4
Tax and Non-tax Costs	99.7%	99.8%	2.4	4.2
<i>Kansas Small Sized City</i>				
(6 = highest taxes or costs)				
Costs: Non-tax	99.9%	99.8%	1.0	1.8
Taxes	98.3%	100.9%	3.1	4.4
Tax and Non-tax Costs	99.8%	99.9%	2.8	4.4

Note: small variations in non-tax costs are due to interest differences due to financing the sales tax on plant and equipment.

Table 8
Summary Table: Mature Firms Receiving No Tax Credits or Abatements
Partial Model: Variation in Taxes Only

	<i>Manufacturing</i> Kansas as % of Region	<i>Other</i> Kansas as % of Region	<i>Manufacturing</i> Kansas Rank	<i>Other</i> Kansas Rank
<i>Kansas Urban Areas</i>				
Johnson Co., Kansas			(11 = highest costs or taxes)	
Costs: Non-tax	100.0%	100.0%	4.0	4.4
Taxes	105.2%	102.8%	8.4	8.6
Tax and Non-Tax Costs	100.5%	100.5%	8.3	8.6
Wyandotte Co., Kansas				
Costs: Non-tax	100.0%	100.0%	6.0	6.2
Taxes	111.7%	106.9%	10.9	11.0
Tax and Non-Tax Costs	101.1%	101.2%	10.9	11.0
Wichita, Kansas				
Costs: Non-tax	99.9%	100.0%	3.0	2.6
Taxes	106.9%	103.7%	9.6	9.6
Tax and Non-Tax Costs	100.6%	100.6%	9.5	9.6
<i>Kansas Medium Sized Cities</i>				
Costs: Non-tax	99.9%	100.0%	(6 = highest costs or taxes)	
Taxes	109.2%	105.6%	3.0	3.4
Tax and Non-Tax Costs	101.0%	101.1%	5.9	6.0
<i>Kansas Small Sized Cities</i>				
Costs: Non-tax	99.9%	100.0%	(6 = highest costs or taxes)	
Taxes	110.9%	107.0%	3.0	3.4
Tax and Non-Tax Costs	101.3%	101.5%	5.8	6.0

Note: small variations in non-tax costs are due to interest differences due to financing the sales tax on plant and equipment.

Table 9
Tax Savings Due to Incentives
Manufacturing Firms in Kansas Medium Sized Cities

Total Taxes per Employee	
New Firm	\$11,230
Mature Firm	\$13,455
Tax Saving	\$ 2,225

Source: IPPBR Tax Simulation Model (partial model version).

Table 10
Taxes per Employee: Kansas and Regional Average
Results for Medium Sized Cities

Sales, Costs, Taxes	<i>Manufacturing</i>			<i>Other</i>		
	Kansas	Regional Average	Kansas % Region	Kansas	Regional Average	Kansas % Region
Annual Sales	\$166,848	\$166,848	100.0%	\$120,440	\$120,440	100.0%
Annual Costs	\$139,222	\$139,276	100.0%	\$99,966	\$99,968	100.0%
Annual State and Local Taxes						
State Income Tax	\$1,081	\$572	188.9%	\$732	\$351	208.7%
Unemploy. and Workers' Comp.	\$737	\$890	82.8%	\$563	\$731	77.0%
Property	\$3,281	\$2,161	151.8%	\$2,296	\$1,466	156.6%
Franchise	\$59	\$40	146.5%	\$39	\$27	143.7%
Sales Tax	\$441	\$685	64.4%	\$775	\$782	99.0%
On Initial Investment	\$224	\$359	62.3%	\$379	\$385	98.5%

Source: IPPBR Tax Simulation Model (partial model version).

The capital intensity of the manufacturing firms makes them particularly vulnerable to the high level of Kansas property taxes.

The difference between the tax burden of a new firm and that of a mature firm provides a measure of the value of tax incentive packages. Tax incentives, including property tax abatements, save the typical new manufacturing firm about \$2,225 per employee, or about 20 percent of total taxes.

The high overall level of taxation for mature firms in Kansas is primarily due to two factors:

- Kansas property taxes exceed the regional average by about 52 percent for manufacturing and by 56 percent for export oriented non-manufacturing firms.
- Kansas income taxes exceed the regional average by about 89 percent for manufacturing firms and 108 percent for export oriented non-manufacturing firms.

The high income tax estimates can be traced directly to the assumption that the firms are export oriented. In Kansas, a firm is liable for income tax based on in-state percentages of three factors, payroll, property, and sales. In contrast, several other states in the region base their income tax allocations on sales only, or on a combination of sales and property. For firms with most of their sales out-of-state, the single and two-factor formulas generally result in a lower state tax liability.

Results of the Full Simulation Model (variations in taxes and costs)

For new firms which receive all available tax credits and abatements, Kansas locations appear extremely attractive. As shown in Table 11, Kansas production costs are moderate in medium sized and small sized cities, and in Johnson County and Wichita. Business taxes fall in the average range. The combined rank based on tax and non-tax costs shows Kansas to be a favorable location for both new manufacturing firms and new service firms.

The ranks of Kansas locations for mature firms are uniformly worse than the corresponding ranks for new firms. Table 12 shows Kansas taxes to be among the highest in the region. However, the moderate level of basic business costs in part counteracts the effect of high business taxes. The ranks for Kansas locations based on tax and non-tax costs are generally better than those based on taxes alone.

Business taxes and tax incentives have been tied, correctly or incorrectly, to state efforts for economic development and growth throughout the region. State development strategies exhibit two broad roles for business taxes. Taxes may be used in a pro-active sense, targeting investment through large incentives. Alternatively, the strategy may be to neutralize the tax issue by removing or reducing those taxes found to impede growth. This approach is spelled out in the Redwood-Krider report on

Kansas economic development,¹ which recommends bringing Kansas taxes into line with competing states.

The goal of neutrality is achieved for new firms locating in Kansas. As Tables 7 and 11 indicate, the level of taxes and the level of combined tax and non-tax costs are close to the regional average. However, new firms which prosper ultimately find themselves in the position of mature firms. The tax situation facing mature firms is far from neutral, as shown in Tables 8 and 12. This may cause problems for business retention within the state.

¹ Anthony Redwood and Charles Krider, *Executive Report, Kansas Economic Development Study: Findings, Strategy, and Recommendations*, Report No. 108 (Lawrence, Kansas: Institute for Public Policy and Business Research, June, 1986).

Table 11
Summary Table: New Firms Receiving Tax Credits and Abatements
Full Model: Variations in Taxes and Costs

	<i>Manufacturing</i> Kansas as % of Region	<i>Other</i> Kansas as % of Region	<i>Manufacturing</i> Kansas Rank 11 = highest	<i>Other</i> Kansas Rank 11 = highest
<i>Kansas Urban Areas</i>				
Johnson Co., Kansas			(11 = highest costs or taxes)	
Costs: Non-tax	99.8%	99.2%	4.8	4.0
Taxes	97.3%	100.9%	5.9	6.6
Tax and Non-tax Costs	99.6%	99.4%	4.8	4.6
Wyandotte Co., Kansas				
Costs: Non-tax	100.7%	100.6%	8.3	7.8
Taxes	95.5%	98.2%	3.7	5.8
Tax and Non-tax Costs	100.2%	100.3%	8.3	8.0
Wichita, Kansas				
Costs: Non-tax	100.3%	99.9%	6.4	5.0
Taxes	95.5%	98.7%	3.6	5.2
Tax and Non-tax Costs	99.9%	99.7%	6.8	6.2
<i>Kansas Medium Sized Cities</i>				
Costs: Non-tax	99.0%	98.6%	(6 = highest costs or taxes)	
Taxes	103.0%	102.7%	2.1	3.0
Tax and Non-tax Costs	99.2%	99.2%	4.0	4.6
			2.1	2.4
<i>Kansas Small Sized Cities</i>				
Costs: Non-tax	99.5%	100.1%	(6 = highest costs or taxes)	
Taxes	97.3%	100.4%	4.0	5.0
Tax and Non-tax Costs	99.3%	100.1%	2.4	4.2
			3.4	4.2

Note: small variations in non-tax costs are due to interest differences due to financing the sales tax on plant and equipment. Source: IPPBR Tax Simulation Model.

Table 12
Summary Table: Mature Firms Receiving No Tax Credits or Abatements
Full Model: Variations in Taxes and Costs

	<i>Manufacturing</i> Kansas as % of Region	<i>Other</i> Kansas as % of Region	<i>Manufacturing</i> Kansas Rank 11 = highest	<i>Other</i> Kansas Rank 11 = highest
<i>Kansas Urban Areas</i>				
Johnson Co., Kansas			(11 = highest costs or taxes)	
Costs: Non-tax	100.1%	99.7%	6.0	5.4
Taxes	104.9%	103.9%	8.4	8.2
Tax and Non-tax Costs	100.6%	100.4%	6.3	6.6
Wyandotte Co., Kansas				
Costs: Non-tax	100.9%	101.2%	8.0	9.0
Taxes	108.5%	103.5%	10.3	8.8
Tax and Non-tax Costs	101.7%	101.8%	9.9	9.6
Wichita, Kansas				
Costs: Non-tax	100.5%	100.4%	7.0	7.0
Taxes	104.3%	102.1%	7.6	7.0
Tax and Non-tax Costs	100.9%	100.8%	8.0	8.2
<i>Kansas Medium Sized Cities</i>				
Costs: Non-tax	99.0%	98.8%	(6 = highest costs or taxes)	
Taxes	113.9%	108.1%	6.0	6.0
Tax and Non-tax Costs	100.4%	100.5%	4.5	3.6
<i>Kansas Small Sized Cities</i>				
Costs: Non-tax	99.5%	100.3%	(6 = highest costs or taxes)	
Taxes	109.3%	106.3%	5.8	5.8
Tax and Non-tax Costs	100.7%	101.6%	4.6	5.2

Note: small variations in non-tax costs are due to interest differences due to financing the sales tax on plant and equipment. Source: IPPBR Tax Simulation Model.

Industry Trends: 1980-1987

For each industry included in the tax simulation study, background information on employment trends was gathered. First, Kansas employment data for 1987 were distributed by county. Industries were classified as urban, rural, or mixed, according to the pattern that emerged. Next, Kansas growth rates for 1980 through 1987 were compared with similar United States data.

Most of the Kansas industries considered in this study operate in both metropolitan and non-metropolitan settings. Exceptions among manufacturers are the meat products industry, which is primarily rural, and the converted paper products industry, primarily urban. Among the service industries, computer services and research, development, and testing firms prefer urban locations. Surprisingly, headquarters and administrative facilities are found in both urban and rural counties, with significant employment in Saline, McPherson, Montgomery, and Seward counties as well as in urban areas.

Of the industries analyzed, commercial printing and meat products exhibited the highest growth rates in Kansas during the 1980s. For both industries, Kansas growth rates far exceeded those for the U.S.

Kansas failed to capture a large market share of two industries which grew rapidly at the national level: computer services and research, development, and testing. As would be expected, what growth did occur was, for the most part, confined to Kansas urban areas. The poor performance of Kansas in these "high tech services" cannot completely be explained by Kansas's geographic location, far from both coasts. For the region surrounding Kansas, growth rates were close to the national average.

Kansas employment fell rapidly in several industries that experienced national employment declines. In particular, fabricated structural metal products decreased employment at a rate averaging 6.7 percent per year, construction machinery at a rate of 3.6 percent per year, and telephone communications at a rate of 7.9 percent per year. The national decline in telecommunications workers can be attributed to the restructuring of the industry during the early 1980s, but note that Kansas lost employment over twice as fast as the national industry.

Overall, Kansas employment in the selected manufacturing industries fell at an annual rate of about 0.4 percent, while employment in the service type industries fell at a rate of about 1 percent.

Table 13
Industry Trends: United States and Kansas
1980-1987

Industry	U.S. Employ. 1980	U.S. Employ. 1987	Annual Av. Growth	KS Employ. 1980	KS Employ. 1987	Annual Av. Growth	Kansas Location
Meat Products	321,810	337,806	0.70%	8,936	12,448	4.85%	rural
Grain Mill Products	119,375	101,337	-2.31%	3,598	2,768	-3.68%	mixed
Misc. Converted Paper Products	266,930	231,838	-1.99%	2,242	2,753	2.98%	urban
Commercial Printing	415,538	557,821	4.30%	4,221	6,410	6.15%	mixed
Pharmaceutical Products	168,506	174,747	0.52%	1,704	1,807	0.84%	mixed
Misc. Plastic Products	515,562	588,481	1.91%	5,310	5,347	0.10%	mixed
Fabricated Structural Metal Products	465,904	388,945	-2.55%	6,630	4,070	-6.73%	mixed
Construction and Related Machinery Mfg.	386,717	197,855	-9.13%	6,198	3,856	-6.56%	mixed
Electronic Components	510,706	567,143	1.51%	1,335	1,348	0.14%	mixed
Motor Vehicles and Equip.	778,449	740,610	-0.71%	8,336	6,450	-3.60%	mixed
Subtotal: Manufacturing	3,949,497	3,886,583	-0.23%	48,510	47,257	-0.37%	
Telephone Communications	1,051,108	811,361	-3.63%	17,500	9,824	-7.92%	mixed
Wholesale Trade: Machinery and Equip.	1,188,019	1,321,727	1.54%	15,856	15,137	-0.66%	mixed
Computer and Data Processing Services	303,317	618,607	10.72%	2,804	3,095	1.42%	urban
Research, Development, and Testing	134,550	193,521	5.33%	477	518	1.18%	urban
Headquarters and Administration	2,767,606	3,187,354	2.04%	21,764	23,572	1.15%	mixed
Subtotal: Services	5,444,600	6,132,570	1.71%	58,401	52,146	-1.61%	
Total	9,394,097	10,019,153	0.92%	106,911	99,403	-1.03%	

Source: *County Business Patterns*

State and Local Taxes for Individual Industries

State and local taxes were calculated on a per employee basis for each industry. For new Kansas firms receiving all available tax incentives, estimates of taxes per employee range from a low of \$1,257 for computer and data processing services to a high of \$4,873 for telephone communications. For mature Kansas industries, taxes per employee range from \$1,464 for computer services to \$11,257 for motor vehicles and parts.

Per capita taxation depends heavily on the capital intensity of the industry, and on whether the industry qualifies for tax incentives. In Kansas, many service industries are outside the scope of tax credits and abatements.

For new firms in most manufacturing industries, Kansas provides a favorable state and local tax environment, with taxes estimated at 70 to 85 percent of the regional average for medium sized cities.

For new service firms, the attractiveness of Kansas locations depends markedly on whether the industry qualifies for incentives.

For manufacturing and service industries alike, firms operating in Kansas locations face a tax burden about 30 percent higher than the regional average for medium sized cities.

Differences in state and local taxes do not translate directly into changes in total taxes. Since state and local taxes are deductible from federal taxable income, relatively high state and local taxes result in relatively low federal taxes. In other words, the operation of the federal tax system partially offsets the impact of state and local tax systems.

Relatively low basic costs in most Kansas locations help to counteract the effect of relatively high taxes for mature firms.

Table 14
State and Local Taxes Paid per Employee
Kansas and Region

Industry	<i>New Firms</i>			<i>Mature Firms</i>		
	Kansas Tax/Emp.	Region Tax/Emp.	Ks. % of Reg.	Kansas Tax/Emp.	Region Tax/Emp.	Ks. % of Reg.
Meat Products	\$2,202	\$1,962	112.3%	\$4,102	\$2,974	138.0%
Grain Mill Products	\$1,997	\$2,481	80.5%	\$3,883	\$3,426	113.4%
Misc. Converted Paper Products	\$1,631	\$2,143	76.1%	\$3,891	\$2,981	130.5%
Commercial Printing	\$2,004	\$2,533	79.1%	\$5,141	\$3,737	137.6%
Pharmaceutical Products	\$2,615	\$3,601	72.6%	\$7,032	\$5,319	132.2%
Misc. Plastic Products	\$1,610	\$1,921	83.8%	\$3,464	\$2,618	132.3%
Fabricated Structural Metal Products	\$2,522	\$3,383	74.6%	\$5,674	\$4,599	123.4%
Construction and Related Machinery Mfg.	\$2,237	\$2,996	74.7%	\$5,301	\$4,198	126.3%
Electronic Components	\$2,388	\$3,278	72.8%	\$6,240	\$4,839	128.9%
Motor Vehicles and Equip.	\$4,452	\$6,206	71.7%	\$11,257	\$8,787	128.1%
Average: Manufacturing	\$2,366	\$3,050	77.6%	\$5,598	\$4,348	128.8%
Telephone Communications	\$4,873	\$3,479	140.1%	\$4,829	\$3,610	133.8%
Wholesale Trade: Machinery and Equip.	\$1,894	\$2,630	72.0%	\$4,115	\$3,329	123.6%
Computer and Data Processing Services	\$1,257	\$1,006	124.9%	\$1,464	\$1,176	124.5%
Research, Development, and Testing	\$3,774	\$5,114	73.8%	\$9,228	\$6,913	133.5%
Headquarters and Administration	\$2,030	\$1,544	131.5%	\$2,386	\$1,761	135.5%
Average: Services	\$2,766	\$2,755	100.4%	\$4,404	\$3,358	131.2%
Average: All Industries	\$2,499	\$2,952	84.7%	\$5,200	\$4,018	129.4%

Source: IPPBR Tax Simulation Model. The partial model (variations in taxes only) was used for these estimates. All results are for medium sized cities. Estimates are annual averages over a fifteen year period.

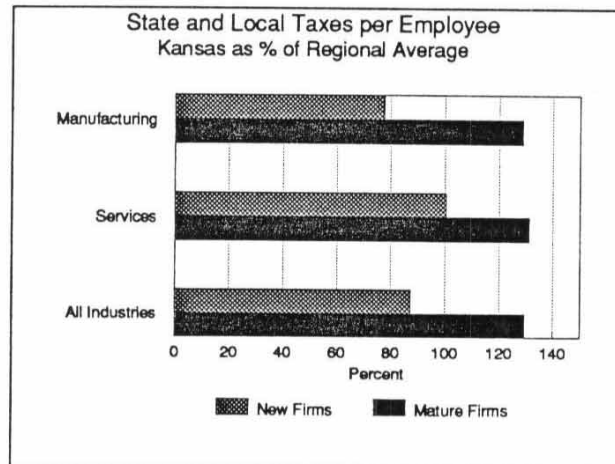


Figure 6

Table 15
Basic Costs and Combined Costs and Taxes per Employee
Kansas and Region

Industry	Kansas Costs	Region Costs	Ks. % of Reg.	Kansas Cost+Tax	Region Cost+Tax	Ks % of Reg.
Meat Products	\$200,312	\$201,361	99.5%	\$209,399	\$209,131	100.1%
Grain Mill Products	\$327,652	\$330,803	99.0%	\$337,606	\$338,947	99.6%
Misc. Converted Paper Products	\$135,829	\$136,868	99.2%	\$145,733	\$145,554	100.1%
Commercial Printing	\$50,133	\$50,989	98.3%	\$62,999	\$62,335	101.1%
Pharmaceutical Products	\$169,081	\$170,557	99.1%	\$187,333	\$186,696	100.3%
Misc. Plastic Products	\$78,292	\$78,943	99.2%	\$86,650	\$86,288	100.4%
Fabricated Structural Metal Products	\$68,360	\$69,311	98.6%	\$82,037	\$81,647	100.5%
Construction and Related Machinery Mfg.	\$96,601	\$97,694	98.9%	\$109,782	\$109,462	100.3%
Electronic Components	\$48,484	\$49,251	98.4%	\$64,202	\$63,399	101.3%
Motor Vehicles and Equip.	\$206,561	\$208,002	99.3%	\$234,280	\$232,958	100.6%
Average: Manufacturing	\$138,130	\$139,378	99.1%	\$152,002	\$151,642	100.2%
Telephone Communications	\$138,398	\$139,314	99.3%	\$345,971	\$345,575	100.1%
Wholesale Trade: Machinery and Equip.	\$161,180	\$161,940	99.5%	\$171,037	\$170,832	100.1%
Computer and Data Processing Services	\$60,071	\$60,775	98.8%	\$64,307	\$64,466	99.8%
Research, Development, and Testing	\$29,880	\$30,680	97.4%	\$50,088	\$48,680	102.9%
Headquarters and Administration	\$106,395	\$107,472	99.0%	\$149,376	\$149,583	99.9%
Average: Services	\$99,185	\$100,036	99.1%	\$156,156	\$155,827	100.2%
Average: All Industries	\$125,149	\$126,264	99.1%	\$153,387	\$153,037	100.2%

Source: IPPBR Tax Simulation Model. The full model (variations in taxes and costs) was used for these estimates. All results are for medium sized cities. Estimates are annual averages over a fifteen year period.

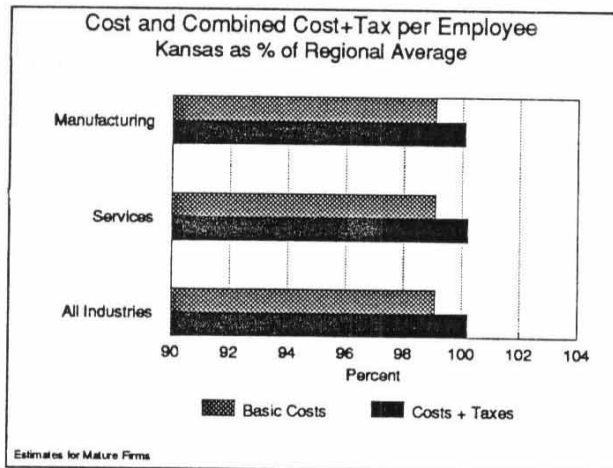


Figure 7