UNIVERSITY OF KANSAS
INSTITUTE FOR PUBLIC POLICY AND BUSINESS RESEARCH

KANSAS BUSINESS COSTS AND TAXES: A COMPARISON WITH OTHER STATES 1994 UPDATE

PART 1: FOUNDATIONS OF STATE AND LOCAL TAX AND COST STRUCTURES

PART 2: COSTS AND TAXES FOR SELECTED INDUSTRIES

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This report is based on an investigation of business taxes and costs in Kansas, the region, and the nation. The study was funded by Kansas, Inc. It updates similar studies published by Kansas, Inc. in 1990 and 1992. The purpose of the study is to provide policy makers with background information on state and local tax structure, and to assess the relative competitiveness of Kansas as a location for doing business.

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The opinions expressed in this report are solely those of the authors.

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REPORT OVERVIEW

Over the last several years, Kansas, Inc. has funded several studies of business taxes and costs in Kansas. The previous studies have focused most of their attention on a single cost, business taxation. These studies have examined the Kansas tax structure in a regional and national context. They have in part satisfied a need for a compendium of up-to-date information for Kansas policy makers and community leaders.

Concerns about business taxes are rooted in the idea that Kansas must offer a sufficiently attractive business climate in order to increase jobs and income, and to ensure a high standard of living in the 1990s. It must be emphasized that the business climate in a state depends on the wages and 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 business taxes remain central to the discussion because, unlike many basic cost and quality of life factors, they fall under the direct control of state and local decision makers and can be changed relatively rapidly.

The current report updates information on basic business costs and taxation in Kansas and the surrounding region of Colorado, Iowa, Missouri, Nebraska, and Oklahoma. In addition, the study adds four states to the comparisons: California, Illinois, New Jersey, and New York.

The report is organized into two main sections. Part 1 (Chapters 1-9) is primarily descriptive. It retains much of the emphasis on business taxation of the earlier work. This section presents a historical overview, and then turns to a detailed comparison of specific taxes on income, property, sales, and labor. In this section, we consider the basic tax rate structures of the states and identify the numerous tax incentives available to new and expanding businesses. We also examine differences in basic business costs related to labor, energy, and land prices.

Part 2 (Chapters 10-11) provides analytical results based on a simulation model of business costs developed by IPPBR as part of its work with Kansas, Inc. The model uses as inputs the descriptive information on taxes and costs gathered during the first stage of the research. In short, the model then summarizes the impact of state tax structures and basic business costs on the bottom lines of typical firms. The estimates provided by the simulation model place interstate tax differentials in the context of overall cost differentials.

Without the aid of such a simulation model, it is often difficult to foresee how the combined state and local tax situation will affect firms operating in various industries. One complexity is that industries differ in their usage of resources. For example, the impact of the property tax is directly related to the capital-intensity of an industry. A second complexity is that federal, state, and local taxes interact with each other, so that taxes paid at one level become deductions at another. A third complexity involves the effect of tax

incentives. States differ in the industries at which they target incentives, the timing of incentives, and the extent to which incentives target investment versus employment. Overall, the tax-competitiveness of a state is best gauged by a model that properly weights the impact of various taxes and incentives.

Part 1 of the report demonstrates that Kansas is an average state with regards to most business taxes and costs. However, Part 1 also raises concerns about the level of property taxes within the state. Part 1 also examines the importance of economic development incentives to a firm's bottom line.

Part 2 of the report quantifies the impacts of the various taxes, costs, and incentives described in Part 1. This section of the report shows the results of a simulation model which has been developed at IPPBR with Kansas, Inc.'s financial assistance. The model produces two key findings:

1. From the point of view of a firm seeking to make a new investment, the overall Kansas cost and tax climate appears neutral to moderately favorable in comparison with other states in the region. Estimated profits per employee exceed the regional average.
2. From the point of view of a mature firm, Kansas property taxes make it the highest taxed state in the region. To some degree, moderate costs for labor and utilities mitigate the impact of high taxes, placing Kansas in the mid-range of the region in terms of overall costs. Still, overall profits per employee fall short of the regional average by one to eight percent, depending on the industry.

CHAPTER 1: AN OVERVIEW OF STATE AND LOCAL TAXATION

The Increasing Importance of State and Local Expenditures

The last decade has witnessed a shift in responsibility for the provision of government services from the federal government to states and localities. During the nine years between 1983 and 1992, real per capita federal spending, exclusive of transfers to the states, has grown by 8.8 percent, or about 0.9 percent per year. During these same years, state and local spending has increased by 32.1 percent, or 3.1 percent per year. This amounts to $1,097 per capita, measured in real 1992 dollars.

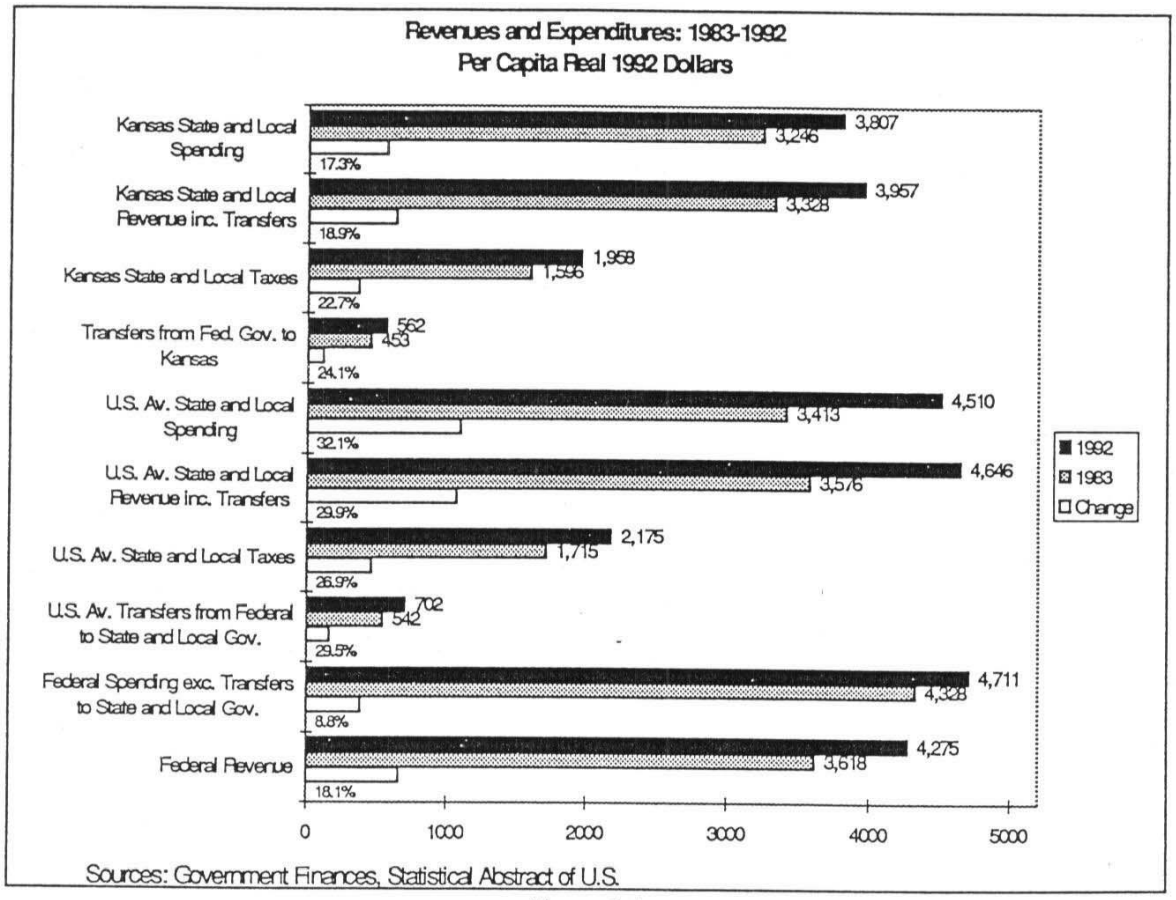

Figure 1-1

This growth in spending has been financed from three primary sources: increases in state and local taxes, increases in fees for government services, and increases in intergovernmental transfers from the federal government. In Kansas, the growth of real per capita state and local expenditures and revenue has been considerably less than the

national average: 17.3 percent and 18.9 percent, respectively. But even in Kansas, the growth rate of state and local spending has outstripped that of federal spending.

On average, state and local taxes provide a little less than half of the revenues available to state and local governments. As the level of per capita spending has risen in the states, so has the per capita level of taxation. Taxation has been a primary concern in state legislatures. Although the states share the common problem of financing government services, they differ substantially in the choices that they make in order to raise revenue. In other words, individual states and localities employ a variety of tax structures.

Our study provides a description of state and local expenditures and tax structures in order to gain an understanding of the overall intensity of spending and taxation in each state. The study identifies patterns and trends in state and local taxation.

The study focuses on ten states. We begin by looking at Kansas and the nearby states of Colorado, Iowa, Missouri, Nebraska, and Oklahoma. We then turn our consideration to several large industrial states: California, Illinois, New Jersey, and New York. These states are included in the analysis for two purposes: first, they add a richness of comparison that would be lost by considering national averages alone; and second, these states are the targets which the Kansas Department of Commerce and Housing has identified for industrial recruitment.

Data Sources

Two Bureau of the Census publications provide the core of information in this section: *Government Finances* and *State Government Finances*. The data in these publications are collected and compiled in a consistent manner for all fifty states. At the time of the writing of this report, the most recent published data for local governments refer to fiscal year 1992. Some state-level data are available electronically from the Census Bureau for fiscal year 1993. In a few cases, we have supplemented data from the Census with data from individual state departments of revenue; however, the use of these data requires that they be modified to conform with Census definitions.

Comparisons of Tax Revenues

Per capita tax revenues are one indicator of the general level of taxation in a state. At the same time, the per capita revenue figure indicates the availability of funds to provide government financed services. Figure 1-2 shows that (as of 1992) the states in this region fall into two groups with respect to this measure. The higher taxed states–Colorado, Iowa, Kansas, and Nebraska–collect revenues of about $2,000 per capita. Kansas, with tax revenues of $1,958 per capita, ranks 28th highest in the nation, about 10 percent below the national average of $2,175 per capita. The lower taxed states in the region, Missouri and Oklahoma, each collect less than $1,700 per capita; they rank 41st and 44th in the nation, respectively. In Missouri, low tax collections result from a history of policy choices;

Missouri collections per capita have ranked among the lowest ten in the nation throughout the period covered by this report (1980-1992). The situation differs somewhat in Oklahoma, where total collections depend heavily upon oil and gas severance taxes. Oil and gas severance taxes peaked in 1983, yielding Oklahoma $778 million, or about one-third of total state-level revenues. By 1992, severance taxes had declined to $355 million. Oklahoma has failed to replace these revenues from other sources. Per capita taxation in the large comparison states - California, Illinois, New Jersey, and New York - is substantially higher than in the region surrounding Kansas.

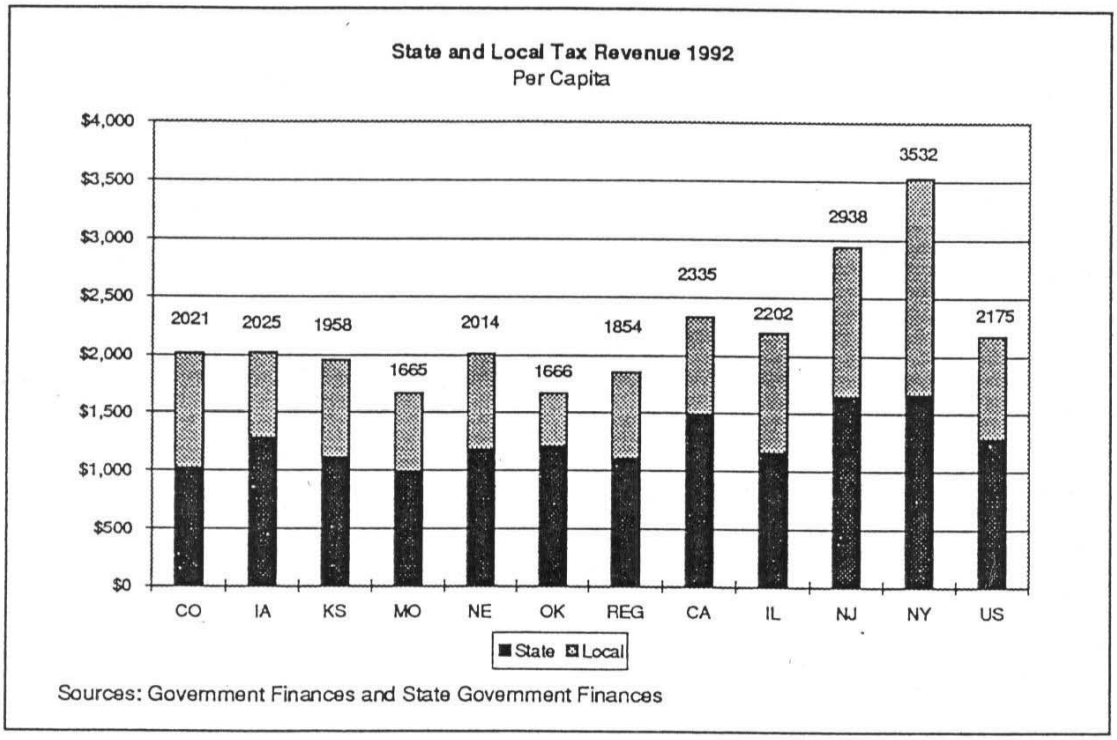

Figure 1-2

Another indicator of the general level of taxation is the ratio of taxes to personal income (Figure 1-3). By this measure, Kansas ranks in the middle of the region, and ranks 32nd in the nation. With the exception of New York, the ratios for the large comparison states fall near the U.S. average. Only New York stands out as an exceptionally high-taxed state by this measure–it has the second highest ratio of taxes to income among all the states.[1]

[1] Alaska has the highest per capita taxes and the highest ratio of taxes to income in the nation. The bulk of these taxes are natural resource severance taxes.

State and Local Taxes

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 a national average, local taxing authorities collect about 41 percent of total revenue. Within the region surrounding Kansas, Oklahoma at one extreme collects only 27.6 percent of total taxes locally, while Colorado collects 49.8 percent. Kansas collects 43.3 percent of taxes locally (as of 1992).

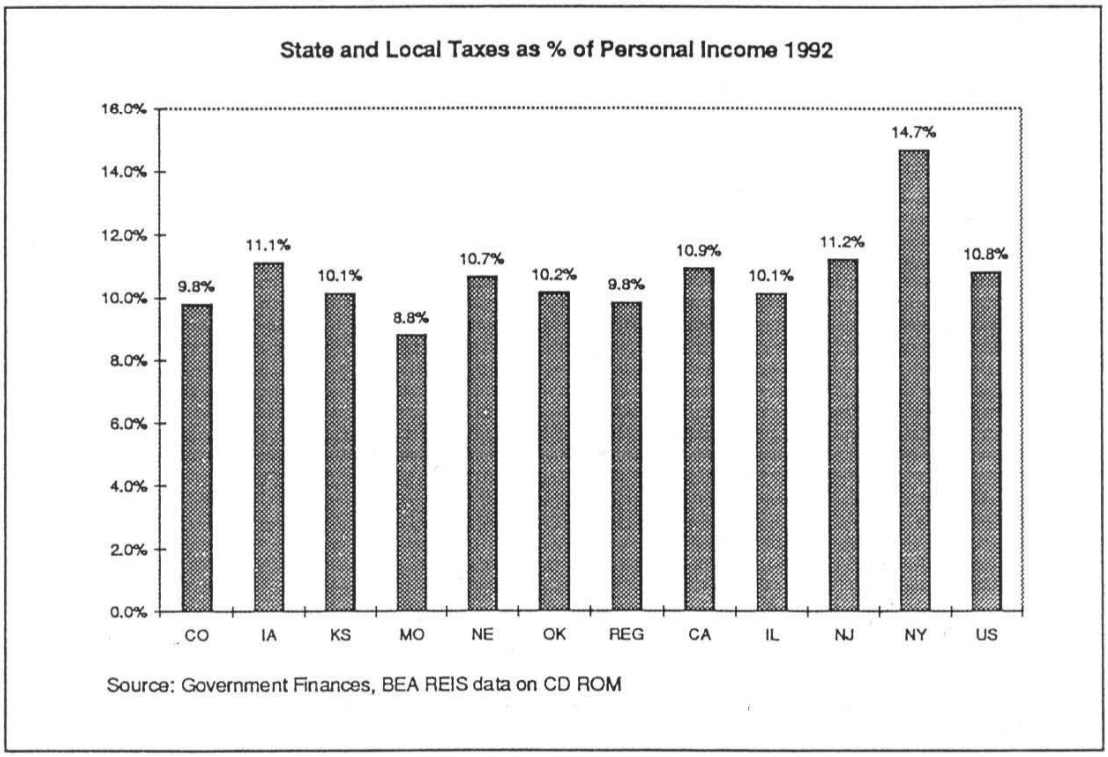

Figure 1-3

It should be pointed out, however, that there is no simple relationship between the amount of funds collected at the local level and the degree of support for locally provided services. All of the states in this study redistribute a substantial amount of funds from state to local jurisdictions, primarily to support education, and secondarily to support public welfare programs.

Composition of State 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. As of 1993, general sales taxes provide the single largest source of state-level tax revenue in the U.S. (32.5%),

followed closely by the individual income tax (31.9%). Kansas follows the national pattern, with the sales tax providing 35.8 percent of tax revenues, and the individual income tax providing 31.8 percent. On average, the states in the region receive about 4 percent of their tax revenue from corporate income taxes. Kansas stands out in the region with corporate taxes comprising 6.7 percent of revenue in 1993, close to the national average of 6.9 percent. Most of the states in the region surrounding Kansas impose severance taxes on natural resource extraction. However, only in Oklahoma does this provide a large share of state finances.

The makeup of state taxes has shifted over time. Figure 1-4 compares the years 1984 (the first year for which the severance tax became an important Kansas revenue source) and 1993. Between these two years, the nation as a whole saw a slight increase in collections from individual income and general sales taxes. At the same time, the share of revenue from corporate income and severance taxes fell. In Kansas, the share of taxes due to the general sales tax increased significantly, from 29.0 to 35.8 percent. The contribution of the severance tax fell from 6.5 to 3.1 percent, while the contribution of corporate income taxes fell from 7.6 to 6.9 percent.

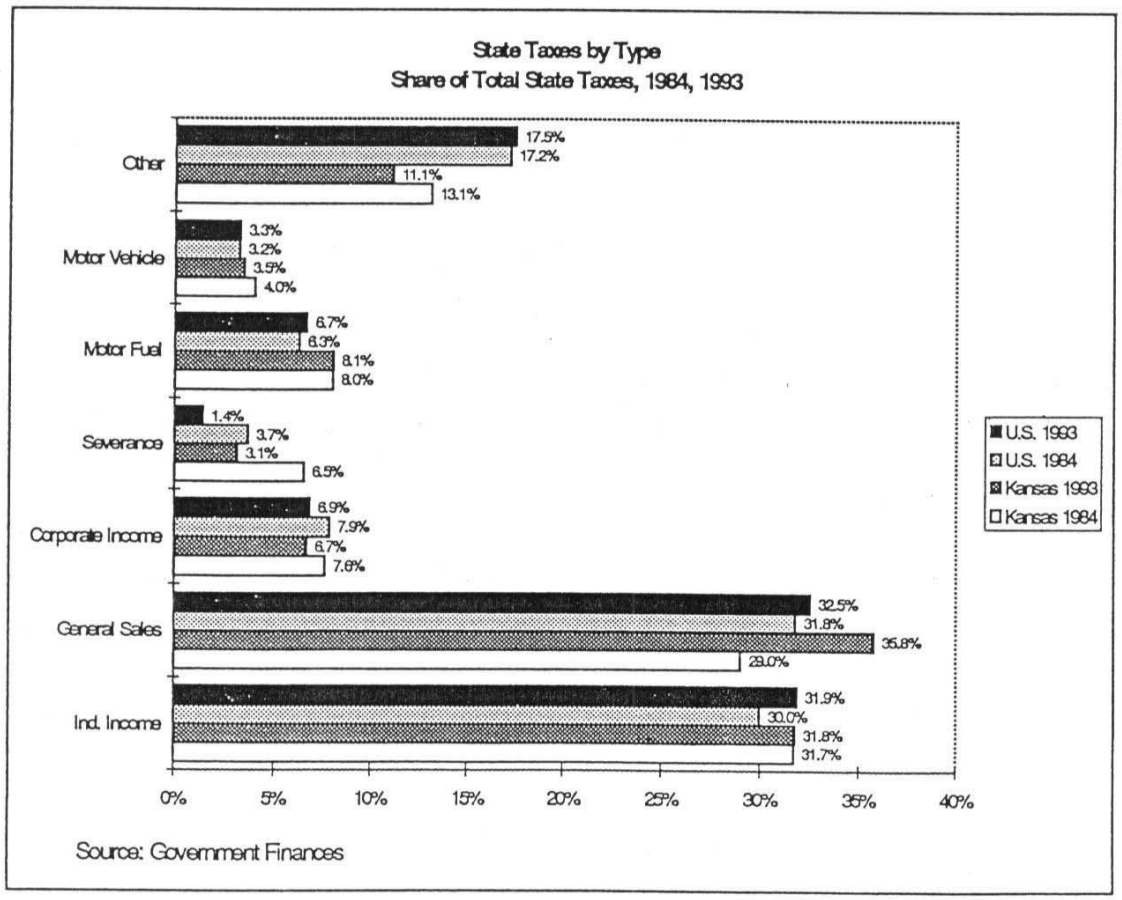

Figure 1-4

Composition of Local Taxes

Local governments depend primarily on property taxes for financing, as illustrated in Figure 1-5. Within the region, the share of property taxes in local tax revenues runs from a high of almost 96 percent in Iowa to a low of about 53 percent in Oklahoma. Within the large comparison states, the share of property taxes ranges from over 98 percent in New Jersey to about 63 percent in New York. As of 1993, property taxes provide 79.6 percent of local revenue in Kansas. This compares with a national average of 75.6 percent (1992). Since the mid-1980s, the share of property taxes in total local tax revenue has remained relatively constant for the nation as a whole. In Kansas, the share has declined from 87.1 percent in 1984 to the current level.

A second major source of local tax revenue is the general sales tax. Nationally, sales taxes comprise about 10 percent of local tax revenue, a share that has held fairly constant over the last decade. Within the region, the states show very different patterns of reliance on the sales tax. Oklahoma collects over 40 percent of local tax revenues in the form of local sales taxes, while Iowa collects less than 2 percent from this source. Among the large comparison states, shares range from 0 percent in New Jersey to about 15 percent in New York. Kansas collects 12.2 percent as of 1993, up from 6.6 percent in 1984. Kansas clearly shows increased reliance on the local sales tax.

Consequences of State and Local Tax Structures

The primary goal of state and local taxation is, of course, to raise revenue for public services. However, the composition of state and local taxes has important consequences for the stability of a state's tax system, and for the distribution of the tax burden among social groups.

The term "stability" needs definition when applied to state and local taxes. An individual tax, such as the property tax, is stable if it exhibits only small fluctuations in its revenue generating ability between periods of recession and expansion. In a study of Georgia state-level revenues, White [1983] ranked taxes in terms of stability. Tobacco and sales taxes proved to be the most stable elements of the system, while income taxes, both corporate and personal, proved highly unstable. White formulated the problem of state tax structures in terms of a trade-off between growth potential and instability. He found that although income taxes were among the least stable in the system, they also provided the greatest possibility of long- term revenue growth. He proposed that states balance their tax systems by including high-growth and high-risk taxes along with more stable elements.

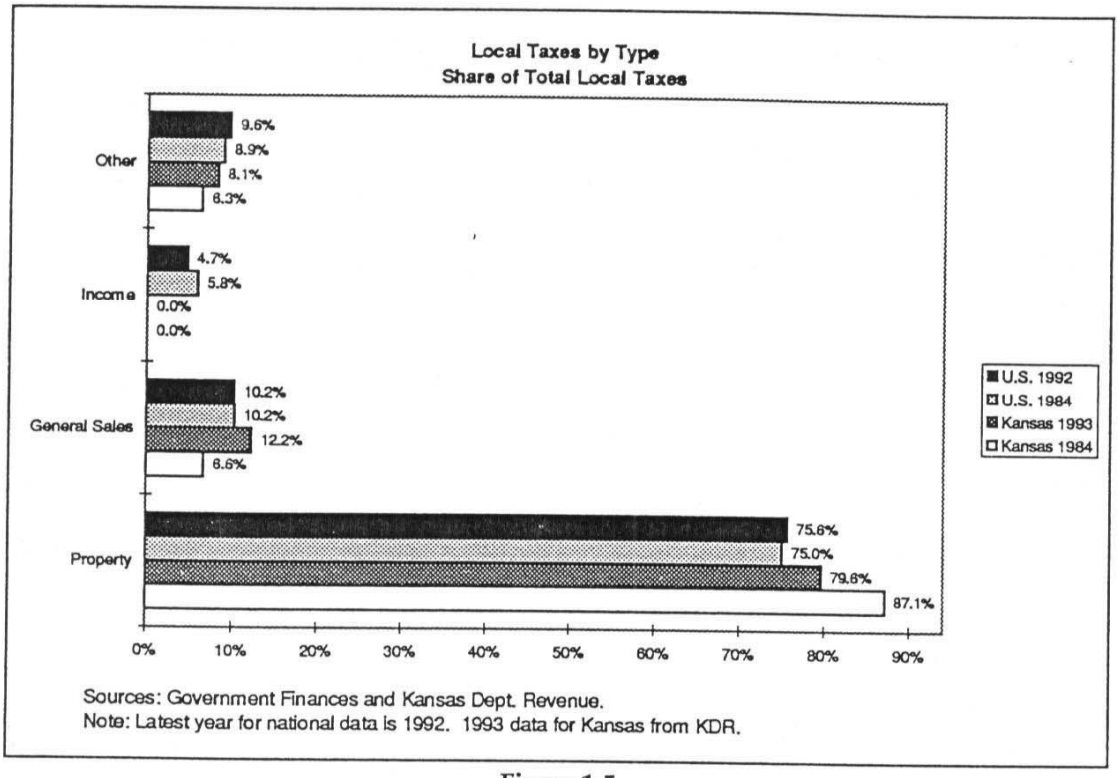

Figure 1-5

With regard to the sales tax, another commonly discussed issue is that of tax base erosion. This can be seen as an issue of long-run stability. Stated simply, the share of disposable income spent on services is rising in the U.S. Yet, until recently, the sales tax was rarely applied to service industries. Hence, the tax base for the sales tax failed to keep pace with the growth of the economy. The issue of tax base erosion is a serious justification for applying the sales tax to selected consumer services. Recently, many states, including Kansas, have considered proposals that would increase the number of both consumer and business services subject to the sales tax. In Kansas, a limited number of business services, including utilities and construction labor, were added to the tax base in 1991. These were removed during the 1995 legislative session.

At the local level, property tax revenues are stable in the sense that community-wide assessed property valuations respond slowly to changes in business conditions.[2] They are also stable in another sense–tax rates are set after the tax base is known, rather than before, and tax rates are revised each year. Therefore, a given level of revenue can be maintained with certainty. Reliance on sales taxes at the local level is likely to introduce an element of

[2] Of course, mass reappraisal can lead to dramatic changes in assessed values. While appraised values reflect general market trends, they do not reflect short-term fluctuations caused by the business cycle.

instability into local finance systems in two ways. First, local sales tax collections fluctuate to some extent with employment and income; and second, local sales tax revenues are more difficult to forecast than are property tax collections. Local income taxes introduce a further source of instability.

Equity is an independent standard from stability for evaluating state and local tax systems. It is important to determine how the tax system affects families of different income levels. Under a progressive tax, lower income families pay a smaller percentage of their total income in taxes than do higher income families. Lower income families pay out the same percentage of their incomes as higher income families under a proportional tax; they pay out a greater percentage under a regressive tax. Many authors have examined the progressivity of individual taxes and of state and local tax structures [Musgrave and Musgrave, 1986; Davies, 1986; Pechman, 1985]. A 1985 study done by Joseph Pechman of the Brookings Institution reached several important conclusions:

1. Combined state and local taxes are much less progressive than are federal taxes. Depending on the assumptions made, they appear to be regressive or at best mildly progressive.
2. Income taxes are progressive. Although Pechman examines combined federal-state income taxes, it is likely that his results carry through for state systems, particularly where rates are graduated according to income class.
3. Whether property taxes are progressive or regressive depends critically on whether the property owner can pass the tax on in terms of higher prices. Under the assumption that property owners absorb costs due to taxes, Pechman finds that the tax is progressive, since property owners tend to be in higher income classes. Under the alternative assumption that owners pass on the tax to renters and consumers, Pechman finds that the tax is proportional for most income groups, but takes a disproportionate share from low income families.
4. Sales taxes are regressive. This conclusion holds up under a variety of different assumptions.

Many states attempt to mollify the regressive aspects of the sales tax. For example, almost all states exempt prescription medicines. Within the region, Colorado, Iowa, and Nebraska also exempt food. Clearly, the states have a difficult balancing act to perform in providing stable revenue sources while maintaining a tax system that is perceived as fair.

Summary

Based on two key indicators of the overall level of state and local taxation, the Kansas tax load appears to be in the average range for the nation. Kansas ranks as the 28th highest state when comparing state and local taxes per capita ($1,958 in 1992). It ranks 32nd highest looking at state and local taxes as a percent of income (10.1 percent in 1992).

An examination of the composition of taxes at the state level shows Kansas' state government to be more dependent on general sales taxes than is the nation on average. Kansas collects 35.8 percent of total revenue from this source versus the national average of 32.5 percent. The share of revenue collected from income taxes approximates the national average. At the same time, Kansas is significantly less dependent on miscellaneous other taxes and fees than is the nation as a whole. At the local level, Kansas depends more highly on property taxes than does the nation on average, even after Kansas tax reforms of recent years. Sales taxes provide the second largest source of local tax revenues.

States face a difficult challenge in designing tax systems that meet three criteria: that they produce sufficient revenue for the finance of state and local government services; that they meet politically acceptable levels of revenue stability; and that they are perceived to be "fair" in their treatment of taxpayers at different income levels.

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CHAPTER 2: THE INDIVIDUAL INCOME TAX

Introduction

Individual state and local income taxes affect economic development in at least two different ways. First, they affect the perceptions of corporate firm managers who are considering facility relocations or expansions. If an area has high individual income taxes, firm managers realize that key personnel may be reluctant to move to the area, or that key personnel may need to be paid more to compensate for high taxes. Second, state and local taxes affect many businesses directly. Businesses may be organized as sole proprietorships or as partnerships rather than as corporations. The profit of these firms is taxed at individual income tax rates. Because of the link between economic development and individual taxes, we include them in this study.

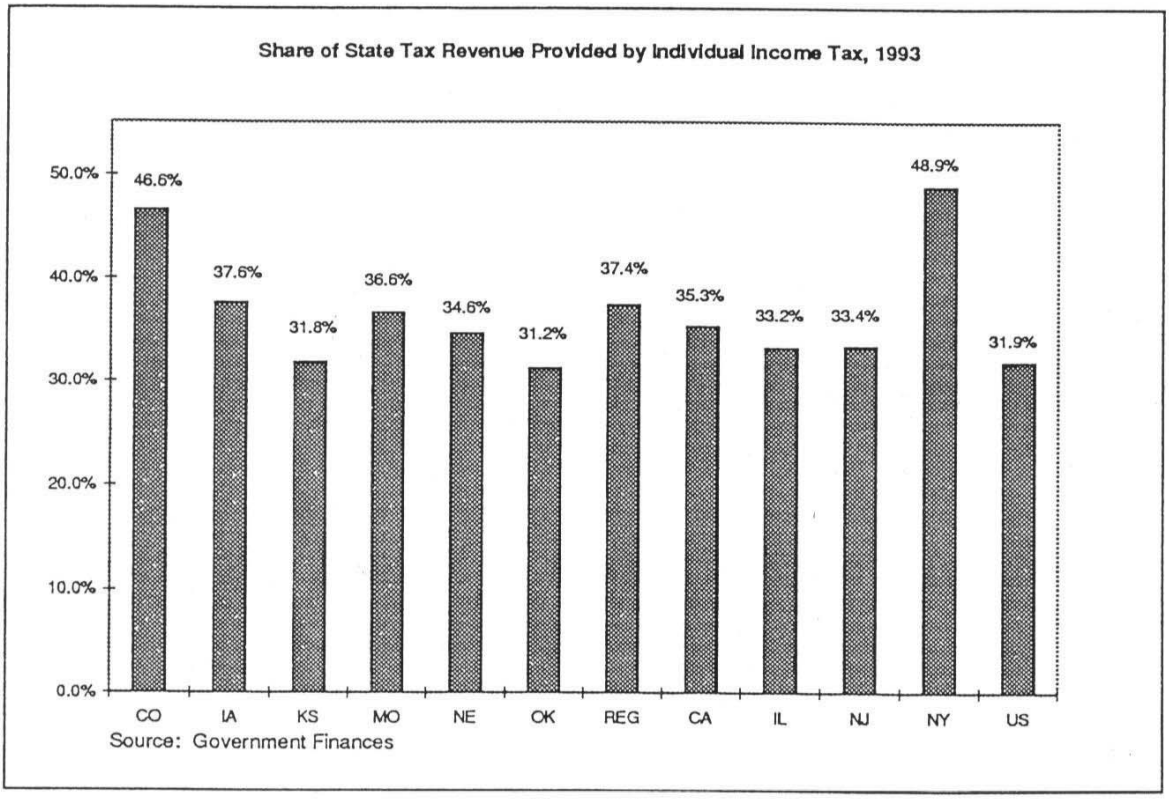

Figure 2-1

On average, state governments depend on individual or personal income taxes for close to one-third of their tax revenue (31.9 percent in 1993). Forty-three of the 50 states impose the tax. Among the states included in this study, it provides the largest or second largest source of state taxes, ranging from a low of 31.2 percent in Oklahoma to a high of 48.9 percent in New York. For Kansas, the share of taxes collected from this tax is the second lowest in the region (after Oklahoma), and approximates the national average.

In some states, local governments are also authorized to impose income taxes. Of the states included in this study, such taxes are found in Iowa, Missouri, Illinois, and New York. But only in Missouri and New York do they contribute a significant share of local tax revenue (6.2 and 9.7 percent, respectively).

Description of Income Taxes

States differ widely in their tax rate structures. A key to these differences is the degree of progressivity of the tax systems, that is, the extent to which tax rates increase as income increases. All states in this study with the exceptions of Colorado and Illinois implement progressive rate structures. In some states, the highest rate bracket is implemented at such a low income level that most working adults would find themselves in the highest marginal rate bracket. For example, the highest bracket applies for incomes over $9,000 in Missouri and for incomes over $13,000 (single taxpayer) in New York. In other states, the highest bracket becomes effective only at high income levels. California is the extreme case, with the highest bracket effective at $214,929 (single taxpayer). Kansas rates reach the highest bracket for single taxpayers with incomes over $30,000 and married taxpayers with incomes over $60,000.

In addition to the rate schedules, it is important to consider the deductions and exemptions that a state allows. Where allowed, deductions for federal income taxes paid provide a substantial reduction in taxable income. Nationally, nine states allow some form of federal reduction. Among the states covered by this study, Iowa allows a full deduction, Missouri allows a partial deduction, and Oklahoma allows a deduction as an option. Most states allow standard or itemized deductions of various expenses, and allow exemptions for taxpayers and their dependents.

Comparison of Income Taxes across States

Comparisons of state income taxes must in some way summarize a state's rates and brackets, deductions, and exemptions. We have calculated a set of comparisons based on a representative household consisting of a married couple with two dependents with a federal adjusted gross income of $45,000. The couple is assumed to take standard rather than itemized deductions. We filled out 1993 state tax forms for the household in each of ten states, and then calculated an effective tax rate equal to the state taxes paid divided by adjusted gross income).[3]

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[3] At the time that we did our calculations, 1994 tax forms were not available for all of the states. However, none of the states covered by this study initiated major changes in its individual income tax between 1993 and 1994. Hence we expect the ranking of states to remain valid.

Table 2-1
State Individual Income Tax, 1994

State	Rate	Federal Deductibility	Estimated Comparison Rate (1993) [1]
Colorado	5% flat rate on taxable income.	No	3.21%
Iowa	Graduated in 9 stepped increments from 0.4% to 9.98%. Highest bracket effective at $47,700.	Yes	5.27%
Kansas	Graduated with three brackets each for married and single taxpayers. Marginal rates for married filers begin at 3.5% for incomes below $30,000 and end at 6.45% for incomes over $60,000. Rates for single filers begin at 4.4% for incomes below $20,000 and end at 7.75% for incomes over $30,000.	No	2.62%
Missouri	Graduated in 10 stepped increments from 1.5% to 6%. Highest bracket effective at $9,000.[2]	Partial [3]	3.65% + local tax
Nebraska	Rates for married couples filing jointly range between 2.62% of the first $4,000 of taxable income and 6.99% of taxable income over $46,750. Rates for single individuals range between 2.62% of the first $2,400 and 6.99% of taxable income over $26,500.	No	2.77%
Oklahoma	Choice of two options. If federal income taxes are deducted, eight increments graduated from 0.5% to 7%. Top bracket effective at $21,000 for married persons filing jointly, and $10,000 for all others. If federal income taxes are not deducted, 11 increments graduated from 0.5% to 10%. Top bracket effective at $24,000 for married persons filing jointly, and $16,000 for others.	Option	4.48%
California	Graduated in 8 stepped increments from 1% to 11%. For single and for married filing separately, top bracket effective at $214,929. For married joint taxpayers and surviving spouses with dependents, top bracket effective at $429,858. For unmarried heads of households, top bracket effective at $292,550.	No	2.08%
Illinois	3% flat rate on federal adjusted gross income.	No	2.73%
New Jersey	Rates range from 2% to 7%. Top bracket effective at $75,000 for married individuals filing separately and singles and at $150,000 for married individuals filing jointly, heads of households and surviving spouses. After 1994, rates range from 1.7% to 6.58%.	No	2.00%
New York	Rates range from 4% to 7.875%. Top bracket effective at $26,000 for married individuals filing jointly and surviving spouses, at $17,000 for heads of households, and at $13,000 for singles and married individuals filing separately.[4]	No	4.26% + local tax

[1] Comparison rate is for a married couple with two dependents, filing jointly, with federal adjusted gross income of $45,000. State tax liability (1993) calculated using state tax tables and forms. Comparison rate = (state taxes/fed. AGE).

[2] The cities of Kansas City and St. Louis, Missouri, impose a tax of 1% of earnings.

[3] First $5,000 of federal income tax for single filers and first $10,000 for joint filers is deductible.

[4] NYC imposes tax with rates from 2.51% to 4.46%. Yonkers imposes tax equal to 15% of NY state income taxes.

SOURCES: Information provided by state departments of revenue; Commerce Clearing House, *State Tax Review*, 1994; Commerce Clearing House, *State Tax Guide*, 1994; and Research Institute of America, *All States Tax Guide*, 1994.

Effective state individual rates for the states in our study range from a low of 2.0 percent in New Jersey to a high of 5.3 percent in Iowa. When local taxes are included, New York City posts the highest income tax rate of the locations examined--an effective rate estimated at 6.4 percent for the representative family. The estimated Kansas rate, 2.6 percent, falls within the middle group of states, and is similar to that found in Illinois and Nebraska. Kansas rates for the family are significantly lower than rates in the neighboring states of Missouri and Oklahoma.

It should be emphasized that our comparison of tax rates is only valid for the representative middle income family. High income families will pay relatively higher taxes in states such as Iowa and California that employ high marginal tax rates for upper income brackets. Similarly, single taxpayers will pay relatively higher taxes in states in which exemptions are allowed only for dependents, or in states where the singles face higher marginal rates than married couples of comparable income. The brackets and rates of many states differentiate between married and single taxpayers. Within these states, the rate bracket cutoffs for married taxpayers are often twice those for single taxpayers. This avoids any possibility of a state-imposed "marriage penalty." Kansas is unique in the country in that it actually applies a different upper bracket rate to married and single taxpayers. This creates a Kansas marriage bonus that increases with income. A married couple with taxable income of $40,000 pays about $800 less than a single taxpayer with the same income; a married couple with taxable income of $150,000 pays $2,200 less than a single taxpayer with the same income. [4]

Another qualification of our results is that the level of income chosen for comparison, $45,000, has not been adjusted for the differences in prevailing wage rates or in cost of living across locations. Average wages range from about $20,000 per employee (Iowa) to almost $32,000 per job (New York).[5] An alternative approach, not implemented in this study, would be to adjust the representative family's gross income for wage differences. Such an approach would tend to make Kansas tax rates appear somewhat lower in comparison to those in high income states.

Summary

Individual income taxes form a cornerstone of state finance. Nationwide, individual income taxes provide close to one-third of total state tax revenue. Individual income taxes affect economic development through their effect on corporate managers and key employees, and through their effect on non-corporate businesses.

In order to make valid comparisons of tax levels across states, it is important to design a measure that takes rates and brackets, exemptions, and deductions into account. One

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[4] Calculations performed by IPPBR.

[5] Bureau of Economic Analysis, REIS data. We used the average statewide wage per job.

such measure is the effective tax rate paid by a representative household. The representative household used for this study consists of a couple with two dependents, earning $45,000. The effective rate at this income level ranges from a low of 2.0 percent in New Jersey to a high of 5.3 percent in Iowa, with Kansas in the middle at 2.7 percent. When local income taxes are included, New York City posts the highest income tax rate of the locations examined.

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CHAPTER 3: THE CORPORATE INCOME TAX

Introduction

All of the states considered in this study levy a corporate income tax on net profits or taxable income derived within the state. As a source of state finance, the corporate tax appears small, comprising about 7 percent of total state tax revenue for the U.S. on average. In Kansas, dependence on the corporate income tax (6.7 percent of tax revenue) approximates the U.S. average, but substantially exceeds the regional average of 3.8 percent. While corporate income taxes may be a small source of total revenue, they are an important cost to businesses. Of taxes paid by firms to state and local governments, the corporate income tax generally ranks second in dollar amount after the property tax.[6]

In real terms (1992 dollars), state corporate income taxes average about $90 per capita for the nation as a whole. The per capita level of taxation in Kansas is similar to the national level, and exceeds the regional average. California and New York stand out among the large comparison states, each collecting close to $150 per capita. State corporate tax collections show no clear trends over the last several years.

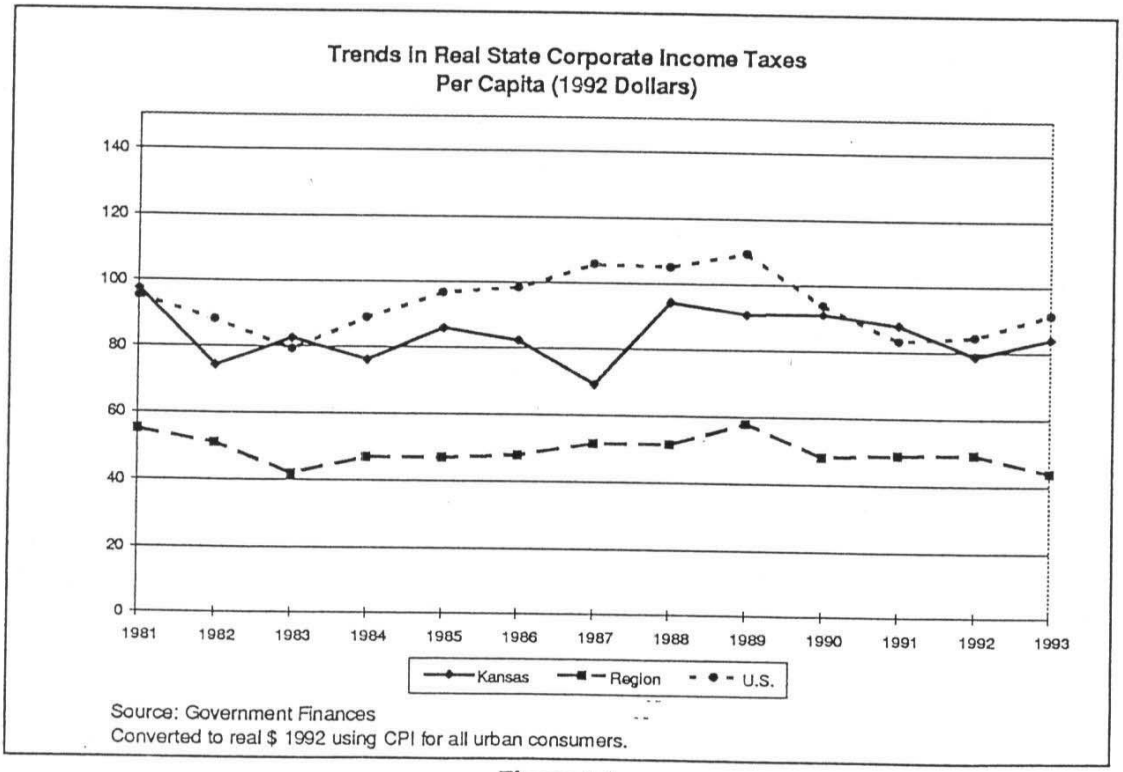

Figure 3-1

[6] See the results of the simulation model in the second section of this report.

Tax Rates

State corporate tax rates in the U.S. typically range from 5 to 10 percent. Of 45 states imposing general corporate income taxes in 1994, the majority (32 states) charge a flat tax rate, while the remaining states impose graduated rates that increase with income. Within the region surrounding Kansas, rates range from 4 to 12 percent. On the low end, Kansas has a tax rate of 4 percent, although this applies to only the first $50,000 of income. On the high end, Iowa taxes corporate incomes over $250,000 at 12 percent. Among the large comparison states, rates range from 7.3 to 9.3 percent. In addition to state-level corporate income taxes, some cites impose an additional levy. This amounts to 1 percent in Kansas City, Missouri and St. Louis, and 8.85 percent in New York City.

It is important to note that 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. We examine several major differences in state corporate income tax structures in the sections that follow.

Deduction for Federal Taxes

All of the states examined in this study use the federal definition of taxable income as a starting point for state tax calculations. To generalize, federal taxable income is then modified through additions and deductions. One major deduction is for federal taxes paid. Within the region surrounding Kansas, Missouri and Iowa each allow a deduction of 50 percent of federal taxes. Table 3-1 quantifies the impact of this deduction, by contrasting statutory and adjusted marginal tax rates.

Income Allocation for Multi-State Firms

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 among competing jurisdictions. Each state remains free to decide its own allocation rules and to choose its own set of definitions of in-state sales. Hence there is no assurance that exactly 100 percent of income will be taxed overall. Provisions known as UDITPA (Uniform Division of Income for Tax Purposes Act) have introduced some uniformity into inter-state taxation. The evenly weighted three-factor formula (discussed below) is a major provision of UDITPA, and as of 1994 this method of allocation is used exclusively in 18 of the 45 states imposing a corporate income tax, and is offered as an option in five others.[7] The most common alternatives to the evenly weighted three-factor formula are the double weighted sales formula and the single-factor formula based on sales alone.

A key issue in the taxation of multi-state firms is whether a firm is treated as unitary or nonunitary. Unitary income is subject to allocation by a formula (see Table 3-3), while nonunitary income is allocated entirely to a specific state. Roughly speaking, a business

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[7] Compiled from Commerce Clearing House, *State Tax Guide.*

is treated as unitary if its income in one state is dependent on the activity of the firm in other states. There is no inherent advantage or disadvantage to a firm being treated as unitary; which treatment is the more favorable depends on the firm's individual circumstances.

Table 3-1
State Corporate Income Tax Rates,
Federal Deductibility, and Effective Tax Rates

State	Rate	Adjusted Rate[1]	Federal Deductibility
Colorado	Flat 5%	5.0%	No
Iowa	First $25,000 – 6%	5.0%	50% of federal income tax is deductible
	Next $75,000 – 8%	6.6%	
	Next $150,000 – 10%	8.3%	
	Over $250,000 – 12%	10.0%	
Kansas	First $50,000 – 4.0%	4.0%	No
	Over $50,000 – 7.35%	7.35%	
Missouri	6.25% [2]	5.2%	50% of federal income tax is deductible
Nebraska	First $50,000 – 5.58%	5.58%	No
	Over $50,000 – 7.81%	7.81%	
Oklahoma	Flat 6%	6.0%	No
California	Flat 9.3%	9.3%	No
Illinois	Flat 7.3% [3]	7.3%	No
New Jersey	Flat 9%	9.0%	No
New York	Flat 9% [2]	9.0%	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 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 cities. New York City has a tax equal to 8.85 percent of allocated income.

[3] Includes the Illinois income tax of 4.8% and the personal property replacement tax of 2.5%.

SOURCES: Information provided by individual state departments of revenue; state statutes; Commerce Clearing House, *State Tax Guide*, 1994; Research Institute of America, *All States Tax Guide*, 1994.

The formula used to allocate income is a critical determinant of a business's tax liability. Nationally, the three-factor UDITPA formula–based on property, payroll, and sales– serves as a standard for income allocation. The example in Table 3-2 demonstrates how the

income allocation works. The firm calculates the ratio of in-state dollars to total dollars for each factor, and then averages the three ratios. The resulting average, 0.54 under a three-factor formula in the example, gives the fraction of total income taxed by the particular state.

As an alternative to the three-factor formula, some states rely on allocations based on sales and property, or on sales alone. As shown in the example in Table 3-2, the allocation formula can change significantly 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 such firms. Under a sales-only criterion, the export-oriented firm typically pays minimal taxes in the state where it concentrates production. While the firm will also pay some taxes out-of-state, this amount is largely independent of the amount paid in-state. The export-oriented firm finds a distinct advantage in locating its production facility in a state with a sales-only allocation formula.

Table 3-2
Example of Apportionment for a Multi-State Unitary Firm
Under Alternative Allocation Formulas

	Total	In-State	Ratio: In-State to Total
Sales	$400,000	$30,000	.075
Payroll	$200,000	$150,000	.75
Property	$200,000	$160,000	.80
In-State Allocations:			
3 factor: 1/3 each sales, payroll, property			.54
2 factor: 1/2 sales, 1/2 property			.42
single factor: sales only			.075

Source: Calculated by IPPBR.

Almost every variety of income allocation method can be found in the region surrounding Kansas. Oklahoma relies exclusively on the three-factor method, and Kansas uses the three-factor method in most cases. Colorado offers firms a choice of using a two-factor method based on sales and property, or the traditional three-factor method. For those firms with no other activity in Colorado except sales, the state provides an option of paying 0.5 percent of Colorado-based gross receipts. In Missouri, firms may choose between the three-factor method or a method based on sales alone. According to the Missouri Department of Economic Development [1989], about 90 percent of firms choose

the sales-only formula. Iowa bases income allocations on sales alone; in Nebraska, a single-factor formula was phased in during the early 1990s.

Within the large comparison states, Illinois and New Jersey employ an evenly weighted three-factor formula. California and New York use a three-factor formula, but double the weight applied to sales. California converted to a two-factor formula from an evenly weighted three-factor formula in 1994.

Table 3-3
Allocation Methods for Income of Multi-State Firms

Colorado	Choice of two-factor formula (½ sales, ½ property), or three-factor formula (1/3 each sales, property, payroll). For companies with no other Colorado activity except sales, with no owned or rented real estate in Colorado, and with gross sales under $100,000, an alternative is to pay 0.5% of gross receipts on sales in Colorado.
Iowa	Single-factor formula based on sales. Sales in Iowa defined as products shipped to or delivered to Iowa destinations.
Kansas	Three-factor formula (1/3 each sales, property, payroll). For firms with a payroll factor exceeding 200% of the average of the property factor and the sales factor, a two-factor formula based 50% on sales and 50% on property is an option.
Missouri	Choice of single-factor formula based on a sales-only or a three-factor formula (1/3 each sales, property, payroll). When the sales-only formula is used, sales considered to be in Missouri include all sales with destinations and origins in Missouri, plus 50% of sales with destinations in Missouri and origins outside Missouri, plus 50% of sales with origins in Missouri and destinations outside Missouri.
Nebraska	A single-factor formula based on sales was phased in between 1988 and 1992. Nebraska sales are sales shipped to or delivered to Nebraska destinations.
California	Three-factor formula (property, twice sales, payroll). Companies can use equally weighted formula if over 50% of sales are from extractive or agricultural business.
Illinois	Three-factor formula (1/3 each sales, property, payroll).
New Jersey	Three-factor formula (1/3 each sales, property, payroll).
New York	Three-factor formula (property, twice receipts, payroll).
Oklahoma	Three-factor formula (1/3 each sales, property, payroll).

SOURCES: Information provided by individual state departments of revenue, state statutes, and Commerce Clearing House, *State Tax Guide*, 1994.

We make one final note on income allocation. The definition of an in-state sale is itself a matter of state tax policy. Most states employ a destination test; that is, the sale is in-state if the goods or services are shipped or delivered to a purchaser in-state. However, Missouri uses an alternative definition for firms choosing the sales-only method. In this context, Missouri sales consist of all sales with their origin and destination in Missouri, plus one half of sales with an origin in Missouri and a destination out-of-state, or a destination in Missouri and an origin out of state. The Missouri legislature formalized the definition of a Missouri sale during its 1988 session. As a result, the Missouri formula is not as favorable to interstate exporting firms as is the single-factor sales formula found in other states.

Income Tax Based Economic Development Incentives

Types of Incentives

The states in the region surrounding Kansas take an active role in trying to encourage 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 in the region surrounding Kansas have introduced or expanded income tax incentives since 1986. Incentives are also prevalent throughout the large comparison states.

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. The specific programs and policies of each state are presented in detail below.

Research Incentives

Within the region, Colorado, Kansas, Iowa, Missouri, and Nebraska all offer income tax credits to stimulate research and development activities (see Table 3-4). In 1988, Colorado legislated tax credits for research and development expenditures made within enterprise zones. The law limits the credit to 3 percent of the amount by which research and development spending increases over its previous average. Kansas also focuses on the expansion of research and development activities, granting a credit of 6.5 percent of increased expenditures. Iowa allows a 6.5 percent credit on increased spending on qualified research activities. In 1994, Missouri initiated a research credit similar to that in Iowa: 6.5 percent of increases in research expenditures. Finally, Nebraska grants incentives for research and development under its Employment and Investment Growth Act. Benefits include sales tax refunds and income tax credits for jobs and investment.

Three of the four large comparison states also offer research and development incentives. California allows a credit of 8 percent of increases in qualified research expenses over base year expenditures, plus 12 percent of basic research expenses. Illinois allows a credit of 6.5 percent of increases in qualifying research expenditures. New York increases the investment tax credit, normally 5 percent, to 9 percent for research and development property.

Table 3-4
Research and Development Tax Credits

Colorado	Credit for research and experimental activities conducted in enterprise zones. The credit is equal to 3% of the increase in the taxpayer's expenditures on R&D. No more than one-fourth of the credit may be taken in any one tax year. Unused credits may be carried over.
Iowa	6.5% of the apportioned share of increases in qualifying research expenditure in Iowa. Qualifications are tied to federal credit as it was defined in 1985.
Kansas	6.5% credit for research and development expenditures in Kansas , based on amount by which such expenditures exceed the taxpayer's average actual expenditures for R&D in the taxable year and the two preceding taxable years. In any taxable year, the maximum deduction from tax liability is 25% of the earned credit plus carryovers. Any amount by which the allowed portion of the credit exceeds the taxpayer's total Kansas tax liability may be carried forward until used.
Missouri	6.5% credit on a firm's qualified research expenses in the state in excess of the average R&D expenditures for the previous three years.
Nebraska	Research and development firms are eligible for incentives based on jobs and investment under the Employment Expansion and Investment Incentive Act.
Oklahoma	No specific credits for R&D expenditures.
California	Non-refundable credit for qualifying research and development expenses conducted in California. The credit is equal to 8% of the excess of qualified research expenses for the year over base period research expenses and 12% of basic research expenses.
Illinois	For costs incurred prior to 1995, a company is entitled to a non-refundable credit of 6.5% of qualifying expenditures made for the purpose of increasing research activities in Illinois. Qualifying expenditures are increases in the current year's activity over the average for the previous three years.
New Jersey	No specific credits for R&D expenditures.
New York	Increase in investment tax credit, normally 5 percent, to 9 percent for research and development property.

SOURCES: Information provided by: individual state departments of revenue; Commerce Clearing House, *State Tax Review*; Business Information Services, *State Tax and Financial Incentives*, 1994; and Research Institute of America, *All States Tax Guide*, 1994.

Table 3-5
Venture and Seed Capital Tax Credits

State	Income Tax Incentive
Colorado	No venture or seed capital income tax credits.
Iowa	10% credit for investment in a qualified seed capital fund or in the initial offering of securities by a qualified business. The fund or business must engage in one or more of the following activities: manufacturing, processing, or assembling products; agriculture, forestry, or fisheries; research and development associated with the above.
Kansas	Credit of 25% for cash investments in certified Kansas venture capital funds, or Kansas local seed capital. At least 60% of a certified venture capital fund's investments (100% for Kansas Venture Capital, Inc.) must be in Kansas businesses, for the purpose of enhancing productive capacity. Local seed capital pools are funds for the use of small businesses for the following purposes: development of prototype products or processes; marketing or feasibility studies; business plans for the development of new products or processes.
Missouri	Credit of 30% against corporate income or franchise tax for cash investments in qualified Missouri venture capital funds. Unused portions may be carried forward for 10 years. Credit of 50% allowed against corporate income or franchise tax for investments in Missouri Small Business Incubator Fund. Credit of 30% of qualified investment in a Missouri small business (small business seed capital legislation).
Nebraska	No venture or seed capital income tax credits.
Oklahoma	Credits for companies that make investments under the Oklahoma Capital Investment Act. To qualify for the credit, companies must purchase guarantees issued under the Act. The amount of the credit is determined by the Oklahoma Capital Investment Board and is based on the amount of guarantees purchased. Unused credits may not be carried forward.
California	No venture or seed capital income tax credits.
Illinois	No venture or seed capital income tax credits.
New Jersey	No venture or seed capital income tax credits.
New York	No venture or seed capital income tax credits.

SOURCES: Information provided by individual state departments of revenue; Commerce Clearing House, *State Tax Review*, 1994; Research Institute of America, *All States Tax Guide*; Business Information Services, *State Tax and Financial Incentives*, 1994.

Venture Capital Incentives

Venture capital credits attempt to increase the pool of funds available for entrepreneurs to start or expand businesses. Investors in venture capital pools receive a credit for such investments against their income tax. In essence, the credits lower the cost of the investment. Three states in the region allow direct income tax credits for contributions to state-authorized funds (see Table 3-5). By contrast, none of the large comparison states offers these credits. This may reflect the greater availability of venture capital from private sources in the larger states.

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, allowing any unused portion of the credit to be carried over to future tax years. Contributors to a Missouri venture capital fund are entitled to credits of 30 percent against Missouri income or franchise taxes. These credits may be transferred or sold, and any unused credits may be carried over for up to 10 years. The investors also share in the fund's earnings. In Iowa, a credit of 10 percent is offered for investment in a qualified seed capital fund or in the initial offering of securities by a qualified business. The fund or business must engage in one or more of the following activities: manufacturing, processing, or assembling products; agriculture, forestry, or fisheries; and research and development associated with the above. In Oklahoma, companies that make investments under the Oklahoma Capital Investment Act qualify for credits. The amount of the credit is determined by the Oklahoma Capital Investment Board.

Job and Investment Credits

By far the most important of the income tax credits are those related to jobs and investment. All of the states in the region and all of the comparison states use job and investment credits to try to attract new industries and to encourage the expansion of established industries (see Tables 3-6 and 3-7). The amount of credit that a firm receives depends directly on the amount of new or expanded activity it undertakes in the state. In many states, credits may be claimed for several years, provided that a firm keeps its new employees and investment in place.

The nature of job and investment credits varies considerably from state to state. Credits can be analyzed along the following lines:

1. to what extent do the credits target high-quality jobs?
2. to what extent are the credits targeted toward particular industries?
3. do the credits emphasize job creation, investment, or a combination of the two?
4. to what extent are the credits limited to particular geographic areas such as enterprise zones?

Note that there is one key difference between enterprise zone programs and other economic development programs: enterprise zones attempt to stimulate development in

limited geographic areas, and to bring jobs and investment to declining or disadvantaged regions.

Our discussion will provide a description of job and investment credits in Kansas and in selected other states that illustrate the range of incentive programs (details for all 10 states included in this study are found in Tables 3-6 and 3-7). Our analysis will focus on the four dimensions defined above.

Kansas

Kansas actually offers two alternative job and investment incentive programs. The first incentives program offers $1,500 for each job created, raising the credit to $2,500 in nonmetro areas. In addition, firms are offered $1,000 for each $100,000 of new investment. Most industries other than retail are eligible for incentives under this legislation. Headquarters and back-office establishments must meet a new employment threshold of 20 jobs to qualify, other nonmanufacturing must add five new jobs, and manufacturing must add two new jobs.

This first program clearly emphasizes total job creation. There is no specific targeting toward particular types of jobs, and only minimal targeting (in terms of differential thresholds) in terms of industries. The legislation contains an element of geographic targeting with its emphasis on rural areas. But unlike traditional enterprise zone legislation, the Kansas incentive defines the targeted geographic area very broadly.

The second Kansas incentive program (high performance incentives) offers a 10 percent investment credit for investments over $50,000, a workforce training credit on training expenses exceeding 2 percent of payroll, and other benefits. To qualify, the firm must pay wages that are above the industry average for the county in which they locate. This, along with the training credit, directs the credit at firms that produce high-quality jobs. A firm must be a manufacturer, an export-oriented service firm, or the headquarters or back-office establishment of a national or multi-national firm; hence the credit is targeted toward industries that comprise the Kansas export base. Finally, the credit may be received by firms that invest without actually adding to their workforce. This incentive is directed at firms that add capital as a means of enhancing productivity.

Missouri

In Missouri, job and investment incentives follow a more traditional pattern than found in Kansas. The state offers small annual credits for new and expanding firms, and extends the credits for up to ten years. Credits are based on the amount of new investment and the number of new jobs. Credits are directed at basic industries (manufacturing, wholesaling and warehousing, mining, R&D, and inter-exchange telecommunications facilities). To qualify, firms must add two jobs and $100,000 investment, or invest $500,000 with no job requirement. Office facilities also qualify, but with a higher jobs threshold.

Missouri makes extensive use of enterprise zones. There are currently 50 zones distributed among urban areas, small cities, and county areas. Within the enterprise zones,

job and investment credits are several times greater than in other areas of the state. Job credits begin at $400 per job per year, and can rise as high as $1,200 based on whether the employee is a resident of the enterprise zone, and whether the employee is classified as difficult to employ. In addition, Missouri enterprise zones offer a one-time job training credit of up to $400 per job. Investment credits are calculated as 10 percent of the first $10,000 investment, 5 percent of the next $90,000 investment, and 2 percent of any remaining investment. Minimum job and investment criteria are the same as those applying outside enterprise zones. Both job and investment credits are extended over a ten-year period. For the first two years that credits are earned, firms may receive partial refunds for any credits that exceed the firm's tax liability from its new or expanded facility.

Missouri offers an additional tax credit in enterprise zones for firms that hire at least 30 percent of new employees from special categories such as "hard to employ." For qualified firms, 50 percent of taxable income attributed to the enterprise zone is exempt from the Missouri income tax.

In summary, Missouri's income tax credits are very modest outside enterprise zones, but very generous within the zones. Investment credits are typically linked to job creation, but can be granted even without job creation if investment meets a higher threshold. Missouri targets basic industries outside of enterprise zones, but allows credits for almost all industries within a zone. Within enterprise zones, credits are targeted at creating employment for those who would otherwise have difficulty finding jobs.

Iowa

In 1994, Iowa implemented a new job and investment credit package intended to emphasize quality jobs. The credit is 1.5 percent of wages associated with new jobs, plus 10 percent of related investment. To obtain credits, firms must meet a number of qualifications. Most important of these are that the firm must pay 80 percent of employee health insurance, must pay wages of at least $11 per hour, and must make an investment of at least $10 million. In addition, the firm must satisfy three out of a list of six alternative qualifications, including that the firm offer a pension plan, produce high value-added goods or services, or invest in research and development. The Iowa program attempts to attract "good firms and good jobs."

Iowa takes the quality jobs concept a step further with its quality jobs enterprise zone program, also initiated in 1994. These are geographic areas in which interrelated clusters of firms may receive benefits. Within the zones, primary businesses must create at least 300 full-time jobs that pay an average of $15 per hour. Supporting businesses that supply property, materials, or services to primary firms also qualify. Benefits include a job credit of 1.5 percent of wages, a supplementary 1.5 percent credit for job training, plus a 10 percent credit for new investment.

Oklahoma

Oklahoma operates two alternative job and investment incentive plans. Under Oklahoma's long-standing job and investment incentive legislation, firms in manufacturing, processing, or computer services may receive benefits based on the number of new jobs and the amount of new investment. Job credits may be claimed for a total of 5 years. Within enterprise zones, job and investment credits double.

More interesting are the new (1994) Oklahoma Quality Jobs Act and the Saving Oklahoma Jobs Act. Under this legislation, incentives are targeted to manufacturing and other export-based industries. Firms must offer health care coverage to qualify, and must have an annual payroll of at least $1 million (firms with higher payroll levels may qualify for greater incentives). For firms with new payroll between $1 million and $2.5 million, Oklahoma offers an incentive payment of up to 2.5 percent of payroll for six years. The exact percentage payment depends on the results of a cost-benefit analysis. For firms with new payroll over $2.5 million, the payments may range up to 5 percent of payroll for 10 years. For firms that save existing jobs and that create at least one new job for every job saved, incentive payments of up to 5 percent of payroll for 3 years are authorized.

The innovative aspects of the new Oklahoma legislation include the use of cost-benefit analysis to determine the level of incentives, and the application of incentives to firms that retain existing jobs as well as to firms that create new jobs.

Summary

Corporate income taxes comprise only a small percentage of total state tax revenues, about 7 percent nationally. But they are nevertheless an important cost to businesses. Of taxes paid by firms to state and local governments, the corporate income tax generally ranks second in dollar amount after the property tax. Combined state and local income tax rates in the U.S. typically range between 5 and 10 percent of taxable income.

The income tax that will actually be paid by a firm depends not just on the tax rate, but upon the method that the state uses to allocate income and on the types and amounts of credits for which the firm may qualify. An evenly weighted three-factor formula is the most widely used method of allocating income of multi-state firms. But formulas that give extra weight to sales seem to be gaining momentum. Export-oriented firms can gain an advantage by locating their property and payroll in states that allow a sales-only formula.

Economic development tax credits are abundant in all of the states examined in this study. Most important among these credits are those aimed at stimulating jobs and investment. Many states enhance these job and investment credits in geographically targeted enterprise zones. States are beginning to experiment with incentives targeted at stimulating the growth of high-quality jobs. Examples of this approach include Kansas and Iowa. These programs are quite new, and the success of this approach remains to be proven.

Table 3-6
New Job and Investment Tax Credits

State	Incentives	Limitations	Eligibility Requirements
Colorado	1% investment credit.	100% of tax liability up to $5,000, 25% of amount over $5,000. Excess credits may be carried forward up to 3 years and backward up to 3 years.	All industries residing in Colorado. Qualifying investments are defined by Internal Revenue Code investment tax credit rules in effect prior to 1986.
	$50 per new employee.	50% of tax liability. 9 year carry forward.	All industries.
Iowa	6% of taxable wages that employers are required to contribute to the state unemp. insurance fund times the increase in employees. For 1994, the credit is equal to $834 per new job.	Excess credits may be forwarded up to 10 years.	Must enter into an agreement with an area community college to train new employees. Must increase employment by 10%. All industries.
	Starting in 1994, in addition to the above, job credit of 1.5% of wages and 10% of investment related to new jobs.	7 year carry forward.	To be eligible, a business 1) must obtain approval from a community for start-up or expansion; 2) must not be an in-state relocation; 3) must pay 80% of health insurance for full-time employees; 4) must agree to pay a median wage of at least $11 per hour; 5) must make an investment of at least $10 mil.; and 6) agree to create at least 50 FTE jobs. In addition, the firm must satisfy 3 of the following 6 requirements: 1) offer a pension plan or profit-sharing; 2) produce high value-added goods or services, or operate in an industry listed by Iowa as high value-added; 3) provide day-care; 4) invest at least 1% of pretax profits in R&D; 5) have an active productivity and safety improvement program; or 6) occupy an existing facility with at least 20,000 sq. ft. of vacant space.

State	Incentives	Limitations	Eligibility Requirements
Kansas	1992 legislation: $1,500 per new job, $2,500 in designated nonmetro areas. $1,000 per $100,000 new investment.	50% of tax liability. One-time credit. The credit can be carried over until used provided employment remains at its increased level.	Manufacturing businesses must create at least 2 FT jobs. Nonmanufacturing must create at least 5 new FT jobs. Retail firms do not qualify. Headquarters and back-offices must create 20 FT jobs.
	100 per job and $100 per $100,000 investment.	50% of tax liability in year taken.	Firms must add 2 jobs. Cannot claim this credit and the credits described above.
	High Performance Incentives Program: 10% investment credit for investments over $50,000; workforce training credit on training expenses exceeding 2% of payroll; other benefits.	100% of tax liability. 10 year carryover provision.	Establishment must be a manufacturer, an export-oriented service firm, or the headquarters or back office of a national or multi-national firm. Establishment must have no more than 500 employees. Firms must pay above-average wages for their industry in the county in which they are located.
Missouri	New firm: $75 per new job. $75 per $100,000 new investment. Expanding firm: $100 per new job. $100 per 100,000 new investment.	100% of tax liability. Credits may be claimed annually up to 10 years. The credit may be recalculated if jobs or investment change. Beginning of credit period may be delayed for 2 years.	Manufacturing, wholesaling and warehousing, mining, R&D, and inter-exchange telecommunications facilities qualify. New/expanding firms must create 2 jobs and invest $100,000, or invest $500,000 with no job requirement. Replacement facilities must create 2 jobs and invest $1 million. Office tenants must invest $100,000 and create 25 jobs by the fifth year in which the credit is taken.
Nebraska	*Small businesses*: $1,500 per new job, $1,000 per $75,000 new investment.	Cannot exceed 50% of tax liability in any taxable year, but credits can be carried over 5 years.	Firms must add 2 FT jobs and invest a minimum of $75,000. Most firms qualify, including research and development, data processing, telecommunications, finance, manufacturing, warehousing, transportation, wholesale trade, administration, livestock feeding, farming, ranching. Restaurants, contractors and repair persons, and most retailing firms do not qualify.

State	Incentives	Limitations	Eligibility Requirements
Nebraska cont.	*Large businesses:* 1.a. Tax credit of 5% of compensation paid to each new employee. Firm can claim employment credit annually for 7 years. b. 10% tax credit for investment in qualified depreciable property. c. Refund of sales and use taxes for all purchases of qualified depreciable property.	Up to 100% of tax liability. Firm stays eligible for 7 years. Unused credits must be used within 15 years.	Firm must invest at least $3 mil. *and* create 30 new jobs. Industries that qualify are the same as for smaller firms, except that livestock feeding and farming do not qualify.
	2. In addition to above: a. Personal property tax exemption for 15 years for turbine-powered aircraft and mainframe computers. b. Personal property tax exemption for 15 years for equipment used in the manufacturing or processing of agricultural products.	Up to 100% of tax liability for 7 years. Excess credits may be used during a 15 year period.	Firm must invest at least $10 million and add 100 new jobs. Same industries qualify as above.
	3. a. Refund of sales and use taxes for all purchases of depreciable property.		Firm must invest at least $20 million.
Oklahoma	Tax credit of 1% of investment in depreciable property, or $500 for each new full-time equivalent employee, whichever is greater. Investment must be at least $50,000 for property credit. Minimum salary must be at least $7,000 for jobs credit.	100% of tax liability for each of 5 years. Credits not used may be carried over for 9 years. Credits based on jobs can be claimed for 4 years subsequent to the initial year if employment levels are maintained.	Firm must be engaged in manufacturing or processing. Computer services firms may also claim the job credit for up to 50 new employees, provided the salaries of those employees are at least $35,000.

State	Incentives	Limitations	Eligibility Requirements
Oklahoma cont.	Oklahoma Quality Jobs Act and Saving Oklahoma Jobs Act (1994). Qualified firms with new payroll in excess of $2.5 million may receive an incentive payment of up to 5% of annual payroll. The actual percentage incentive is determined by the results of a cost-benefit analysis. Firms with new payroll between $1 mil. $2.5 mil. may qualify for an incentive payment of up to 2.5%. Incentive payments of up to 5% of payroll may be made for 3 years to firms that save existing jobs and that create at least one new job for every job saved.	Firm may receive quarterly direct incentive payments for 10 years. Firms receiving incentive payments are ineligible for many other credits and exemptions, including regular job and investment credits. Incentive payments may be made for up to six years for firms meeting only the smaller payroll standards. Payments may be made for up to 3 years for firms that save existing jobs.	Eligible industries include manufacturing, central and administrative offices, research and development labs, warehousing (if 75% of goods shipped out-of-state) and selected business service industries (if 75% of goods sold to out-of-state customers). Firms must offer basic health care coverage. Firms must have minimum new payroll of $2.5 million for maximum credit of up to 5%. Firms must have payroll of at least $1 million and employ at least 1% of the labor force in a county to qualify for the lower level of credit of up to 2.5%.
California	Job credit of up to $300 per employee per year for 2 years.		Applies only for hiring disabled or disadvantaged employees.
Illinois	Investment credit of 0.5% and job credit of 0.5% of investment.	Credit may be carried forward 5 years.	Investment includes buildings, equipment, and machinery that are used by manufacturing, mining, or retailing.
	Additional investment credit of 0.5% for high impact businesses not in enterprise zones.	Credits may be carried forward for 5 years.	Firms must invest at least $12 million and create 500 FTE jobs, or invest at least $30 million and retain 1,500 jobs.
New Jersey	No investment or new jobs tax credits apart from enterprise zones.		

State	Incentives	Limitations	Eligibility Requirements
New York	Investment tax credit of 5% (up to $350 mil. investment) and 4% of remainder. Credit is 9% for R&D property. In addition, an investment credit of up to 2.5% per year may be taken for two years after the initial investment.	7 year carry forward. To qualify for the additional 2.5% credit for 2 years, employment must be at least 103% of its base level. Smaller credit percentages are allowed for smaller employment increases.	Qualified property includes property principally used in producing goods by manufacturing, processing, assembling, refining, mining, extracting, farming, agriculture, horticulture, floriculture, viticulture or commercial fishing. Also includes industrial waste treatment facilities, air pollution control facilities, and R&D property.

Except as noted, credits are one time only and are not refundable, but do carry over.

SOURCES: Information provided by individual state departments of revenue and commerce; Commerce Clearing House, *State Tax Review*, 1994; Research institute of America, *All States Tax Guide*, 1994; and Business Information Services, *State Tax and Financial Incentives*, 1994.

Table 3-7
New Job and Investment Tax Credits Within Enterprise Zones

State	Tax Credit	Limitations	Eligibility Requirements
Colorado	3% investment credit.	100% of liability up to $5,000 plus 25% of tax liability above $5,000. Excess may be carried forward 3 years and back 3 years.	Business must qualify under federal investment tax credit guidelines which existed in 1986. Business must reside in an enterprise zone for at least one year.
	For new businesses, a tax credit of $500/employee during the first year and $500/position created during subsequent years.	Up to 100% of tax liability. Excess credits are refundable.	For job credits, must be a new facility used to operate a revenue producing enterprise. Effective 6/89, expansions may qualify if they result in 10+ new employees or add $1 mil. investment, or double the original facility investment.
	An additional $200/emp. during the first 2 years in the zone may be claimed for employees covered by a company-sponsored health insurance plan.	Up to 100% of tax liability. Not refundable, cannot be carried over.	
	Extra $500/new employee credit for processing agricultural products.	Up to 100% of tax liability. Excess refundable.	
Iowa	For qualified firms, new jobs credit equal to 1.5% of the gross wages paid by the eligible business, plus supplemental job credit of 1.5% for job training.	Credits may be carried forward for up to twenty years.	Iowa has created special "quality jobs" enterprise zones. To qualify for benefits, primary businesses must create at least 300 FT jobs paying an average of $15 per hour. Certain supporting businesses that supply necessary property, materials, or services to primary firms also qualify. For qualified firms, investment includes buildings and other improvements to real estate in the zone for use by the business.
	Corporate tax credit of up to 10% of new investment.	Credits may be carried forward for up to twenty years.	
Kansas	Job credits are $3,500 in designated nonmetro areas, versus $1,500 in rest of state. (see job and investment credits)		Effective 1993, enterprise zone program was completely revamped.

State	Tax Credit	Limitations	Eligibility Requirements
Missouri	Basic enterprise zone credits are $400/new employee, and 10% of first $10,000 investment, 5% of next $90,000, and 2% of any remaining investment.	100% of eligibility for 10 years. 50% of excess refunded up to $50,000 in first year of operation and $25,000 in 2nd year. Basic job and investment credits can be claimed for 10 years, provided the firm continues to meet eligibility criteria.	For any credits, a new firm must invest $100,000 and an expansion must invest $100,000 or, if less than $500,000, 25% of original investment. In either case, 2 workers must be added. All revenue producing businesses except utilities are eligible. Rental residential property for low-income persons qualifies.
	50% of taxable income attributable to enterprise zone business is exempt from Missouri income tax.	Exemption extends for 10 years, provided firm continues to meet eligibility criteria.	To be eligible for invest. credit or income exemption, 30% of firm employees must be zone residents or meet at least one of the following special employee criteria: a) when hired, employee was difficult to employ; b) when hired, employee had exhausted unemployment benefits and had been unemployed at least 3 months after end of benefits; c) when hired, employee had been eligible for AFDC or relief.
	Resident credit: $400 for each 12 month period the new business facility employee is resident of enterprise zone.	Continues throughout 10 year period.	Employee must be zone resident.
	Special employee credit: $400 for each 12 month period the new business facility employee meets special "hard to employ" criteria.	Continues throughout 10 year period.	Employee must meet at least one of a-c above.
	Training credit: up to $400 for each resident employee or "hard to employ" employee trained with company funds.	One-time credit.	Employee must be zone resident or difficult to employ.
Nebraska	No Enterprise Zones.		
Oklahoma	Tax credit of 2% of investment in depreciable property, or $1,000 for each new full time equivalent employee, whichever is greater.	100% of tax liability for each of 5 years. Credits not used may be carried over for 5 years.	Firm must be engaged in manufacturing or processing. Investment must be at least $50,000 for property credit. Minimum salary must be at least $7,000 for jobs credit.

State	Tax Credit	Limitations	Eligibility Requirements
California	Hiring credit is 50% of wages paid during the first year, and 40%, 30%, 20%, and 10% for the four subsequent years, respectively.	Credits not used may be carried over for as long as the enterprise zone designation is operative or for a maximum of 15 years.	Employers who conduct a qualified business inside an "designated program area" may claim the hiring credit for a portion of the wages paid to employees who, at the time of hire, were residents of a high-density unemployment area, and were unemployed for three months or more. Employers who conduct business in an enterprise zone may claim the credit for employees who were receiving subsidized training or other services under various federal and California programs.
Illinois	State investment tax credit of 0.5% is allowed a taxpayer who invests in qualified property in a zone (in addition to regular 0.5% investment credit and 0.5% credit for investments that increase jobs).	5 year carry forward.	Qualified property includes buildings, machinery, and equipment.
	$500 credit on Illinois income taxes for each job created in the zone for which a dislocated worker or economically disadvantaged individual is hired.		Firm must hire five or more new employees. Eligible employees are dislocated or disadvantaged individuals.
New Jersey	A one-time credit of $1,500 for each new full-time permanent employee who meets specific eligibility criteria. A one-time credit of $500 for each new full-time permanent employee who does not meet criteria.		For $1,500 credit, employee must be a resident of a zone city and must have been unemployed for at least 90 days immediately prior to employment by the taxpayer, or have been dependent upon public assistance as the primary source of income. Business must be engaged in active conduct of a trade or business in an enterprise zone and must agree to increase its number of full-time employees within the first year of certification.

State	Tax Credit	Limitations	Eligibility Requirements
New York	An investment tax credit of 10% is available based on investments in property located in an economic development zone. A second credit equal to 30% of the original investment tax credit is available for 3 additional years.	The taxpayer must employ at least 101% of the average number of people that were employed before the investment tax credit was taken.	Businesses must receive certification in order to receive benefits. Considerations for certification include whether jobs will be created or saved by the business, whether persons employed in these jobs will perform a substantial part of their activities in the zone, and whether the jobs opportunities will cause a shift in the composition of the workforce rather than create additional employment. Qualifying property includes research and development property, facilities used for industrial waste treatment or air pollution control, property used by manufacturing, processing, assembling, refining, mining, extracting, farming, agriculture, horticulture, floriculture, or commercial fishing.

Except as noted, credits are one-time only and are not refundable, but do carry over.

SOURCES: Information provided by individual state departments of revenue and commerce; Commerce Clearing House, *State Tax Review*, 1994; Research Institute of America, *All States Tax Guide*, 1994; and Business Information Services, *State Tax and Financial Incentives*, 1994.

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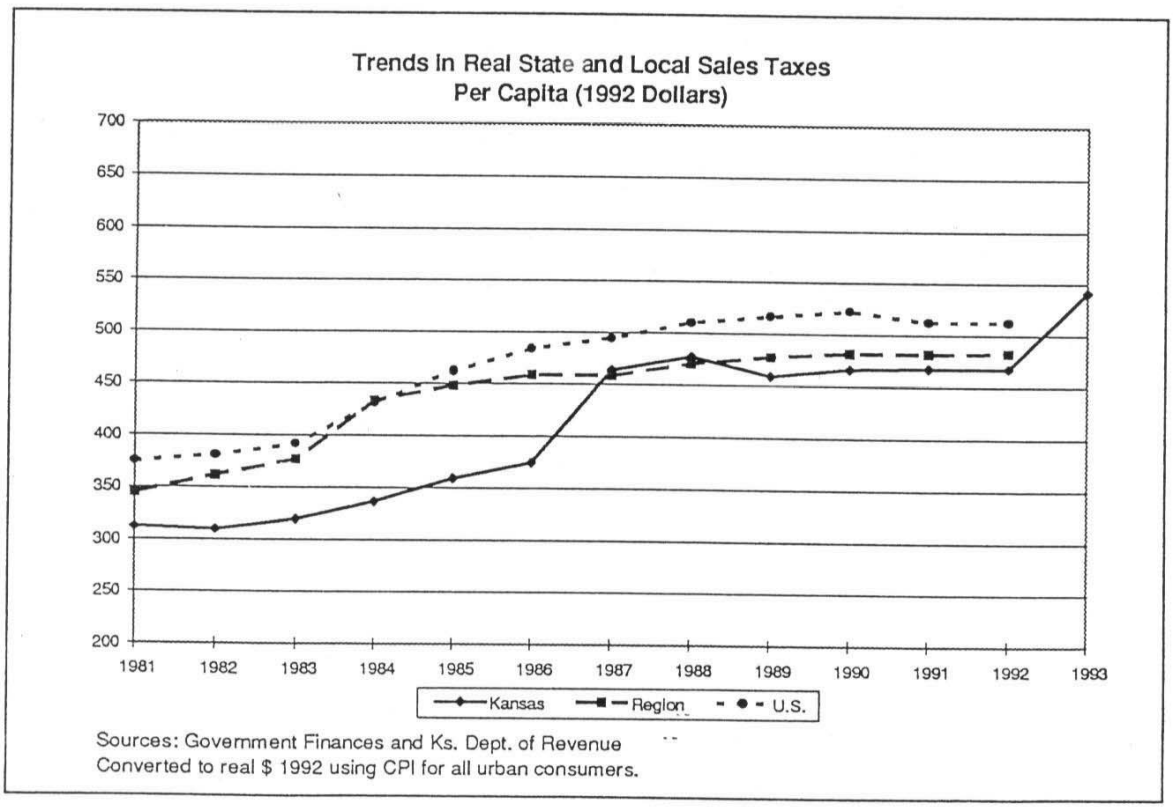
CHAPTER 4: SALES TAX

Overview

Most states governments (45 of 50) , including those of all ten states investigated in this study, impose a general *ad valorem* tax on retail sales. Local governments in 37 states, and in all of the states in this study except New Jersey, also impose some form of general sales tax. Strictly speaking, sales taxes apply to goods and some services sold within a state's boundary, while use taxes apply to items purchased out of state but brought into state for their final consumption. In general, sales and use taxes are applied at the same rate and to the same categories of goods and services.

In real per capita terms, state and local sales taxes in the U.S. average over $500 annually. They supply close to 26 percent of total state and local tax revenue. Until recently, Kansas sales taxes followed national and regional trends, rising sharply in the mid-1980s and then leveling off. Since 1992, Kansas sales taxes have risen substantially, due to rate increases implemented as part of Kansas school finance reforms.



Sources: Government Finances and Ks. Dept. of Revenue
Converted to real $ 1992 using CPI for all urban consumers.

Sales Tax Rates

State sales tax rates in the region fall within a narrow range, between a low of 3 percent in Colorado and a high of 5 percent in Nebraska (see Table 4-1). The large comparison states tend to have higher sales tax rates, with the exception of New York. Local sales taxes add to the tax total, and in some jurisdictions rival or exceed state taxes in magnitude. For example, local taxes in Denver add a 4.3 percent levy in addition to the 3 percent state tax; New York City taxes add 4.25 percent to the 4 percent state tax. Within the region, local taxes are imposed as follows: Kansas City, Missouri–2.25 percent; Kansas City, Kansas–2.0 percent; and Overland Park (Johnson County, Kansas)–1.6 percent.

Table 4-1

State and Local Sales Taxes 1994

State	State Sales Tax	Local Sales Tax
Colorado	3.0%	combined city and county rates range from 0.1% to 5.0%.
Iowa	5.0%	up to 1%.
Kansas	4.9%	may be levied up to 1% county and 1% city for general use. Additional 1% county or city tax may be used for health care services.
Missouri	4.225%	city and county up to 2% each.
Nebraska	5.0%	up to 1.5%.
Oklahoma	4.5%	cities up to 2% plus counties up to 4%.
California	6.0%	1.25% base. Up to 1.25% additional in some communities.
Illinois	6.25%	current rates up to 2.75%.
New Jersey	6.0%	not authorized.
New York	4.0%	4.25% in NYC. Other communities impose up to 4.5%.

Sources: Commerce Clearing House, *State Tax Guide*, 1994; Research Institute of America, *All States Tax Guide*; and information provided by individual states.

Sales Tax Base and Exemptions

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 (see Table 4-2).

Consumption

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. Among the states in this study, Colorado, Iowa, Nebraska, California, and New Jersey exempt groceries, and all except Illinois exempt prescription medications. States also include selected consumer 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 consumer services taxed. Measures that would have extended the sales tax to many categories of personal and business services in Kansas were in large measure defeated by the 1992 Legislature. At the same time, sales taxes were extended to labor used in housing construction (repealed in 1995).

Investment

Sales taxes affect investment when states levy taxes on the purchase of machinery, equipment, tools, construction materials and construction services, or repairs (see Table 4-3). All of the states in this study make some provisions for machinery and equipment exemptions, and most make provisions for exemption of construction materials. The specific requirements for exemption vary widely by state. Criteria by which these exemptions can be compared include:

1. the extent to which exemptions are limited to particular industries, particularly manufacturing;
2. the extent to which exemptions are limited to direct use in the production processes, and exclude auxiliary machinery and equipment;
3. the extent to which exemptions are limited to new firms; and
4. the extent to which exemptions are broadened in enterprise zones or other distressed areas.

We select several states for detailed discussion, in order to illustrate the range of possibilities.

Kansas

The basic investment exemption in Kansas applies to machinery and equipment used directly in manufacturing, assembling, processing, warehousing, or in-plant distribution of goods intended for resale. For qualifying new or expanding firms, the exemption

extends to all property and services used in constructing, expanding, or remodeling a facility. Firms in manufacturing industries must add two jobs to receive the "new or expanding" designation, firms in nonmanufacturing industries must add five jobs, and firms in retailing must add two jobs and locate or expand in a community of 2,500 or less.

The new or expanding firm designation creates savings for a firm in two ways. First, machinery and equipment that would not otherwise qualify under the basic manufacturing criteria receive an exemption. Second, construction materials and labor receive an exemption. Ordinarily, materials would be taxed, as would any labor not associated with the initial construction of a facility.[8]

Iowa

The basic investment exemption in Iowa applies to machinery, equipment, and computers, including replacement parts, that are used directly in processing, R&D, manufacturing, recycling, or data processing by insurance, financial, or commercial firms. In addition, taxes paid on any property except furnishings used by a qualified business in an enterprise zone are refundable. Taxes paid on materials used in the construction of a facility for a qualified business in an enterprise zone are also refundable.

Missouri

Missouri exemptions apply primarily to new and expanding firms. For these firms, machinery and equipment used directly in production is exempt. Replacement equipment also qualifies for exemption if it is necessitated by product or design changes. Both construction labor and materials are taxable.

Illinois

In Illinois, machinery and equipment used primarily in the process of manufacturing or assembling is exempt. Illinois has recently initiated a unique approach that allows firms that have purchased qualified manufacturing machinery and equipment to earn sales tax credits that can be applied to otherwise taxable production-related purchases. Construction materials are generally taxable, but receive a partial exemption within enterprise zones.

[8] Until 1995, labor associated with original construction was taxed at 2.5 percent.

Table 4-2
State Sales Tax Base and Exemptions, 1994

State	Important Items Specifically Included	Important Items Specifically Excluded
Colorado	Selected services in addition to sales at retail–*Consumers*: telephone and telegraph services; restaurant meals; hotel and motel rooms. *Businesses*: gas and electricity sold for commercial (not industrial) consumption.	*Consumers*: sales of prescription drugs; sales of electricity, natural gas, and coal to residences; sales of food. *Businesses*: sales for resale; sales out of state; sales of goods which become ingredients or component parts of manufactured, compounded, or furnished goods; sales of electricity, natural gas, and fuel oil for use in processing, manufacturing, mining, irrigation, construction, communication, and all other industrial uses. All purchases of machinery, machine tools and parts used directly in manufacturing are exempt from sales tax. Exemption from local sales tax is a local option.
Iowa	Selected services in addition to sales at retail–*Consumers*: gas and electricity; communications; water; amusements; repairs; barbers; dry cleaning; maintenance, many other services. *Businesses*: communications, repairs, maintenance.	*Consumers*: food (except for immediate consumption) and drugs. *Businesses*: sales for resale; sales out of state; building materials for resale; industrial machinery and computers; services connected with construction or remodeling; chemicals, fuels, and electricity used in processing; materials used in processing.
Kansas	Selected services in addition to goods at retail–*Consumers*: restaurant meals and drinks; telephone; hotel and motel rooms. *Businesses*: computer software; installations; electricity; gas; water; unless consumed directly in production; repairs; telecom.	*Consumers*: drugs, when prescribed; sales of gas, electricity, and heat to residential customers. *Businesses*: sales for resale; sales of used farm machinery; all sales of tangible personal property or services used in constructing or enlarging a new or expanding qualified business facility; component parts of manufactured or produced goods or services; goods consumed in the production of tangible personal property or services; all sales of machinery and equipment used directly in manufacturing, processing, or storing goods. Gas, electricity, water (when consumed by manufacturing, mining, irrigation, or service producing processes), and construction services taxed at 2.5% (repealed effective 1995).

State	Important Items Specifically Included	Important Items Specifically Excluded
Missouri	Selected services in addition to goods at retail–*Consumers*: basic telephone. *Businesses*: electricity, water, and gas unless otherwise exempted; basic telephone.	*Consumers*: water, natural gas, and electricity for domestic use; prescription drugs. *Businesses*: sales for resale; materials, manufactured goods, machinery and parts, which, when used, become component parts of new goods; machinery and equipment used to establish or expand manufacturing, mining, or fabricating plants, when the machinery is used directly in production; machinery and equipment replacements due to design or product changes; electrical energy used in the actual manufacturing, processing, or mining of a product, if the total cost of electricity so used exceeds 10% of total production costs; farm machinery; natural gas; machinery and equipment used to abate air pollution.
Nebraska	Selected services in addition to goods at retail–*Consumers*: admissions to events; restaurant meals. *Businesses*: computer software.	*Consumers*: prescription drugs; food products for human consumption (excluding prepared meals). *Businesses*: sales for resale; goods shipped out of state; electricity, coal, gas, and other fuels, when more than 50% of the amount purchased is used directly in processing, manufacturing, refining, irrigation, or farming; goods which become an ingredient or component part of manufactured, processed, or fabricated goods; agricultural chemicals. Also, qualified new business facilities with at least $20 million investment or $3 million investment and 30 new employees are entitled to a refund of sales and use taxes paid on the purchase of property for the new investment.
Oklahoma	Selected services in addition to goods at retail–*Consumers*: hotel and motel rooms; telephone and telegraph; restaurant meals; admissions to events. *Businesses*: advertising; sales of services and property used to develop or improve real estate, including materials, supplies, and equipment.	*Consumers*: electricity and natural gas utility bills; sales of farm products directly to consumers; and prescription drugs. *Businesses*: sales for resale; sales out of state; goods which become a recognizable, integral part of manufactured, processed, assembled, or prepared products; goods consumed in the process of manufacturing, processing, assembling, or preparing goods for resale (includes gas and electricity); machinery and equipment purchased to establish manufacturing plants, and for the operation of existing manufacturing plants, provided machinery is used directly in the manufacturing process; property consumed or incorporated into construction of a new or expanded manufacturing plant; farm machinery. Also, new or expanding industries, including service industries, can qualify for a sales tax refund on purchases of $2 million of data processing, computer, telecommunications, and related equipment.

State	Important Items Specifically Included	Important Items Specifically Excluded
California	Selected services in addition to goods at retail–*Consumers:* furnishing, preparing, or serving food, meals or drinks; newspapers and periodicals. *Businesses*: producing, fabricating, processing, printing, or imprinting personalty for customers supplying materials.	*Consumers:* bottled water; electricity; food products for human consumption; prescription drugs; and utility services. *Businesses*: sales for resale; manufacturing equipment and research property purchased during the first three years of business; gas sent by mains, pipes or lines in bulk electricity.
Illinois	Selected services in addition to goods at retail–*Consumers:* food prepared for immediate human consumption. *Businesses*: vehicles, aircraft, and vessels owned when relocation into Illinois occurs; chemicals or fuel used in pollution control equipment.	*Consumers:* reduced tax on medicine and drugs, materials for diabetics. *Businesses*: sales for resale; sales of machinery and equipment used primarily for manufacturing or assembling, for maintenance or repair of exempt machinery and equipment, and for in-house manufacture of exempt machinery and equipment; custom software; the sale or lease of property to interstate carriers for hire for use as rolling stock moving in interstate commerce; the purchase of pollution control facilities.
New Jersey	Selected services in addition to goods at retail–*Consumers:* admissions to events. *Businesses*: advertising services (not in newspapers, magazines); catalogs; sales price lists; point of purchase advertising; sales pamphlets or handbills; commercial advertising, and telecommunication services.	*Consumers:* gasoline; groceries; utilities including gas, electric, etc.; prescription drugs. *Businesses*: sales for resale; research and development materials; all fuels; insurance services; advertising in newspapers or magazines; sales of machinery; apparatus, or equipment for use or consumption directly and primarily in the production of tangible personal property by manufacturing, processing, assembling, or refining; chemicals used in manufacturing; and custom software.

State	Important Items Specifically Included	Important Items Specifically Excluded
New York	Selected services in addition to sales at retail–*Consumers:* rentals; most utilities; restaurant food and drinks; and admission charges to clubs, events. *Businesses*: food and drink served by restaurants and caterers; gas; utilities, telephone and telegraph services; room occupancy and admissions charges; building cleaning; repairs; storage; protective services.	*Consumers:* drugs for humans, electricity for residential use. *Businesses*: machinery and equipment used or consumed directly in producing tangible personal property, gas, electricity, refrigeration or steam; fuel, utilities, and utility service used or consumed directly and exclusively in the production for sale of tangible personal property, gas, electricity, refrigeration or steam; utilities used in R&D; pollution control equipment; and custom software.

NOTE: The basic tax base in these states is sales of tangible personal property at retail plus sales of selected services.

SOURCES: Commerce Clearing House, *State Tax Guide, 1994;* Research Institute of America, *All States Tax Guide, 1994;* Business Information Services, *State Tax and Financial Incentives;* Federation of Tax Administrators, *Sales Taxation of Services: An Update;* and information provided by individual states.

Table 4-3
State Sales Tax Exemptions for Machinery, Equipment, Construction Materials and Services, and Utilities, 1994

State	Machinery and Equipment Exemptions	Construction Exemptions	Utilities Exemptions
Colorado	Machinery or machine tools used directly in manufacturing are exempt. In enterprise zones, goods used to build machinery and machinery used to repair aircraft also qualify.	Construction labor is not taxable. Materials are taxable.	Electricity, gas, and industrial fuels used in manufacturing, mining, irrigation, communications, and transportation are exempt. Water is exempt. Intrastate telephone is taxed, interstate is exempt.
Iowa	Exemptions apply to industrial machinery, equipment, and computers, including replacement parts, when used directly in processing; R&D; manufacturing; data processing by insurance financial, or commercial firms; or in recycling. Design and installation of new ind. machinery or equipment are exempt. Any other sales taxes paid on any tangible property except furnishings for use in an enterprise zone by a qualified business are refundable.	Construction labor is not taxable. Materials are taxable. Taxes paid by a contractor in relation to the construction of a qualified facility in a quality jobs enterprise zone are refundable to the primary or supporting enterprise zone business.	Electricity, gas, fuels, and water used in processing goods are exempt. Intrastate telephone is taxed, interstate is exempt.
Kansas	*New and expanding firms*: New or expanding manufacturing businesses that add at least 2 new jobs qualify for exemptions on all property and services used in constructing, expanding, or remodeling a facility. Nonmanufacturing firms other than retail qualify for the above if they add 5 jobs. Retail firms qualify if they add 2 jobs and locate or expand in a city of population of 2,500 or less. *Other*: Sales of machinery and equipment used directly and primarily for manufacturing, assembling, processing, finishing, warehousing, or distributing goods within a plant are exempt when the final products are intended for resale.	Materials and services used in construction are exempt for qualified new or expanding businesses (see previous column). For other original construction, materials are taxed, and labor is taxed at the rate of 2.5% (tax on construction labor repealed in 1995). Labor taxable for repair or remodeling construction.	Prior to 1995, electricity, gas, fuels, and water were taxed at 2.5%. As of 1995, these are exempt when consumed by manufacturing, mining, irrigation, or service producing processes. Both intrastate and interstate telephone are taxed.

State	Machinery and Equipment Exemptions	Construction Exemptions	Utilities Exemptions
Missouri	*New and expanding firms*: Machinery and equipment used directly in production are exempt when used to establish or expand manufacturing, mining, or fabricating plants. Replacement equipment may qualify if replacement is necessitated by design or product changes rather than by obsolescence. Pollution abatement equipment is exempt.	Construction labor is not taxable. Materials are taxable.	Electricity consumed in the manufacturing process is exempt if it exceeds 10% of production costs. Electricity or gas used in basic steel making is exempt. Water is taxed. Intrastate telephone is taxed, interstate is exempt.
Nebraska	*New and expanding firms*: Qualified business facilities with at least $20 million in new investment or $3 million in new investment and 30 new employees are entitled to a refund of sales and use taxes paid on the purchase of machinery, equipment and other property (except motor vehicles, aircraft, barges, and railroad rolling stock) related to the facility.	Construction labor is not taxable. Materials are taxable. Materials may qualify for a refund if purchased as investment in real estate improvements of a qualified new or expanding firm.	Water used exclusively for manufacturing purposes is exempt. Electricity, gas, and other fuels are exempt provided more than 50% of the energy is used directly in processing, manufacturing, or refining. Intrastate telephone is taxed, interstate is exempt.
Oklahoma	Machinery used directly in the manufacturing process is exempt. A refund is available for taxes paid on computers and telecommunications equipment purchased by computer services firms and research firms. These firms must sell 50% out of state and add at least 10 new workers at wages averaging at least $35,000.	Construction labor is not taxed. Materials are taxable. *New and expanding firms*: Refunds on construction materials are allowed for new or expanded manufacturing facilities. The manufacturer must invest $5 million and add 100 new jobs, or invest $50 million and add 75 new jobs.	Electricity, gas, and other fuel used in manufacturing is exempt. Water is exempt. Both intrastate and interstate telephone are taxed.
California	For the first three years of operation of a new business, tangible personal property used primarily in manufacturing, processing, refining, or research and development is exempt. Property includes machinery and equipment, devices to control machinery, replacement parts, and pollution control equipment.	Construction labor is not taxed. Materials are taxable. For new businesses, materials for manufacturing or research buildings and foundations are exempt.	Electricity, gas, and water are exempt. Other fuels generally taxed. Other fuels consumed in mfg. process are exempt during first 3 years of operation of new firm. 0.5% tax imposed on intrastate telephone; Interstate is exempt.

State	Machinery and Equipment Exemptions	Construction Exemptions	Utilities Exemptions
Illinois	Machinery and equipment used primarily in the process of manufacturing or assembling is exempt. After 1995, manufacturers who make purchases under the above exemption also receive credits that can be applied to sales and use taxes owed on otherwise taxable production-related purchases of tangible personal property.	Construction labor is not taxed. Materials are taxable. Exemption is permitted on building materials used in an enterprise zone.	Separate gross receipts tax on utilities, levied at 5% on electricity and natural gas. Other fuels taxed at 6.25%. Firms that invest at least $5 million and create 200 jobs or that invest $20 million and retain 1000 jobs are exempt from taxes on gas, fuels, and electricity in enterprise zones. Intrastate and interstate telecommunications taxed at 5%.
New Jersey	Machinery and equipment for use directly in manufacturing, processing, assembling, or refining are exempt. Within enterprise zones, qualified businesses are eligible for exemptions on all tangible property and taxable services, with the exception of motor vehicles.	Construction labor is not taxed. Materials are taxable. Within an enterprise zone, materials used to build, repair, or otherwise improve facilities of qualified businesses are exempt.	Electricity, gas, fuels, and water are exempt. Intrastate telephone is taxed, interstate is exempt.
New York	Machinery and equipment used directly to produce for-sale goods and utility services are exempt.	Construction labor is not taxed. Materials are taxable. Materials for constructing, expanding, or rehabilitating industrial or commercial property in an economic development zone are exempt.	Electricity, natural gas, and other fuels are taxable. Water is exempt. Electricity, gas, and fuels used or consumed directly in the production of goods, gas, electricity, or used in R&D, are exempt. Intrastate telephone is taxed. Interstate is exempt.

Note: For more specific definitions of new and expanding firms, and enterprise zone qualifications, see Chapter Three, Table 3-7.

SOURCES: Commerce Clearing House, *State Tax Guide, 1994;* Research Institute of America, *All States Tax Guide, 1994;* Business Information Services, *State Tax and Financial Incentives;* Federation of Tax Administrators, *Sales Taxation of Services: An Update;* and information provided by individual states.

Production

Production, in contrast to consumption or investment, is taxed to the extent that materials, utilities, fuels, business services, and other production-related purchases enter the sales tax base. All states in the study exclude materials which become a component part 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." Illinois generally taxes goods that are consumed during the process of production, but grants partial exemptions for qualified facilities in enterprise zones.

Laws covering taxation of energy also vary across states. All states allow some exemptions for electricity, gas, and other energy. For most of the states in this study, electricity, gas, and other industrial fuels are exempt when used in manufacturing processes (Kansas restored this exemption in 1995). Missouri limits its manufacturing exemption to electricity used in processes where electric uses exceed 10% of total production costs, and to electricity and natural gas used in steel making. Several states extend exemptions beyond the narrow definition of manufacturing. For example, Kansas includes mining, irrigation, and service producing processes; New York includes research and development. Illinois allows exemptions for any qualified firms, regardless of industry, that create at least 200 jobs or retain 1000 jobs within enterprise zones. However, Illinois allows no general manufacturing exemption.

Telecommunications is another business input that is frequently subject to the sales tax. Seven of the ten states in this study tax intrastate telephone services but exempt interstate calls. Kansas and Oklahoma tax both intrastate and interstate calls at the regular state sales tax rate, while Illinois taxes both services at 5 percent rather than the usual 6.25 percent.

Summary

Sales taxes comprise over one-fourth of state and local tax revenue. The impact of the sales tax falls on consumption, investment, and production. States differ greatly in their definitions of the sales tax base and in the exemptions they allow for various goods and services. From the point of view of a state's competitiveness, exemptions on machinery and equipment, construction, and energy stand out as providing significant cost savings to firms.

CHAPTER 5: PROPERTY TAXES

Introduction

Both state and local governments levy property taxes on the value of land, buildings, and equipment 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. Within the region, property tax shares range from 53 percent of local tax revenues in Missouri, to 96 percent in Iowa.[9] Within the large comparison states considered by this study, the property tax share of local tax revenue ranges from 63 percent in New York to 98 percent in New Jersey.

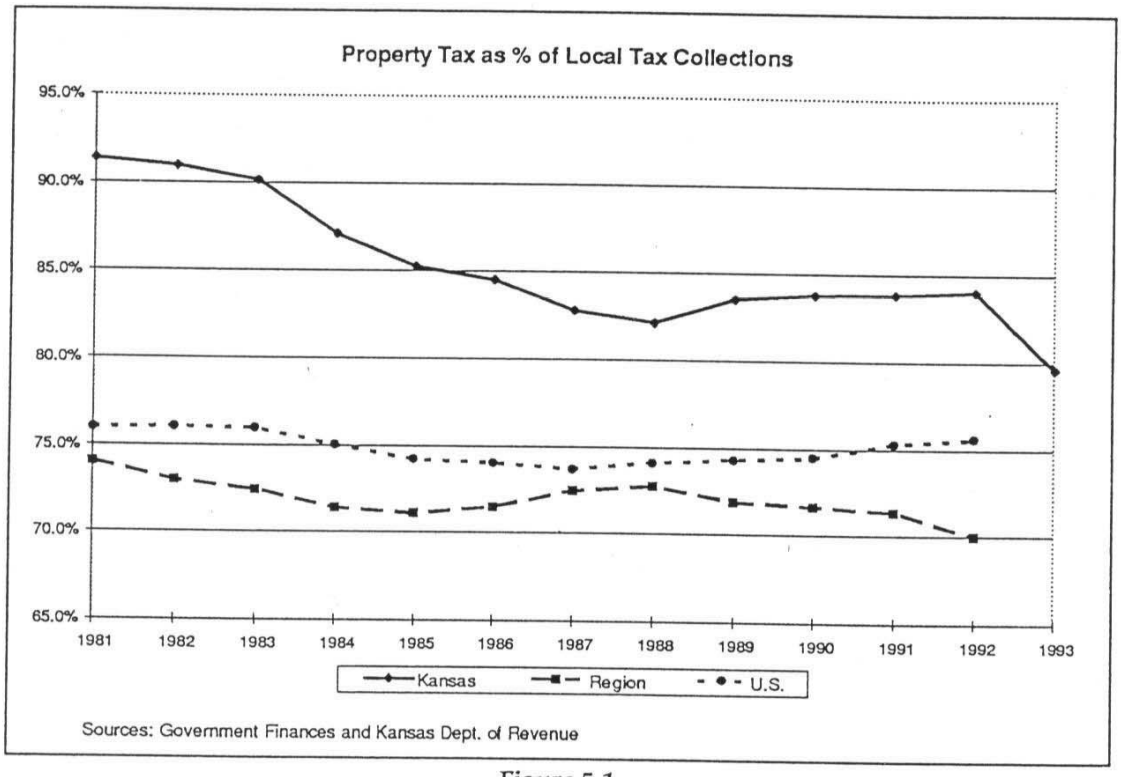


Figure 5-1

For the last decade, Kansas local governments have been more dependent on property taxes than the average for the region or the nation. In 1992, Kansas local governments

[9] Data are taken primarily from *Government Finances*. 1992 was the last year for which a complete set of comparable local tax data were available as of the writing of this report. Kansas specific data on sales and property taxes were also available for 1993 and 1994, and total local revenue was available for 1993. These more recent Kansas data are adjusted to match the definitions used in *Government Finances*.

raised about 84 percent of their revenues from this source, a share that has been quite stable since the mid 1980s. In 1993, preliminary data indicate a drop in this share to about 80 percent. By comparison, property taxes have comprised about 74 to 76 percent of local tax revenue nationally throughout the last decade.

Another approach to comparing property taxes across states is to examine real (inflation adjusted) per capita tax collections. As shown in Figure 5-2, real property taxes showed a steady upward trend in Kansas, the region, and the nation throughout the 1980s. Throughout this time period, Kansas property taxes per capita remained above the national and regional averages. The trend leveled off for Kansas and the region during the early 1990s, but continued upward for the nation as a whole. The restructuring of Kansas taxes during the 1991 legislative session became fully apparent by fiscal year 1993. The level of property taxation fell substantially, by about $100 per capita in real terms. At the same time, income and sales taxes increased by corresponding amounts.

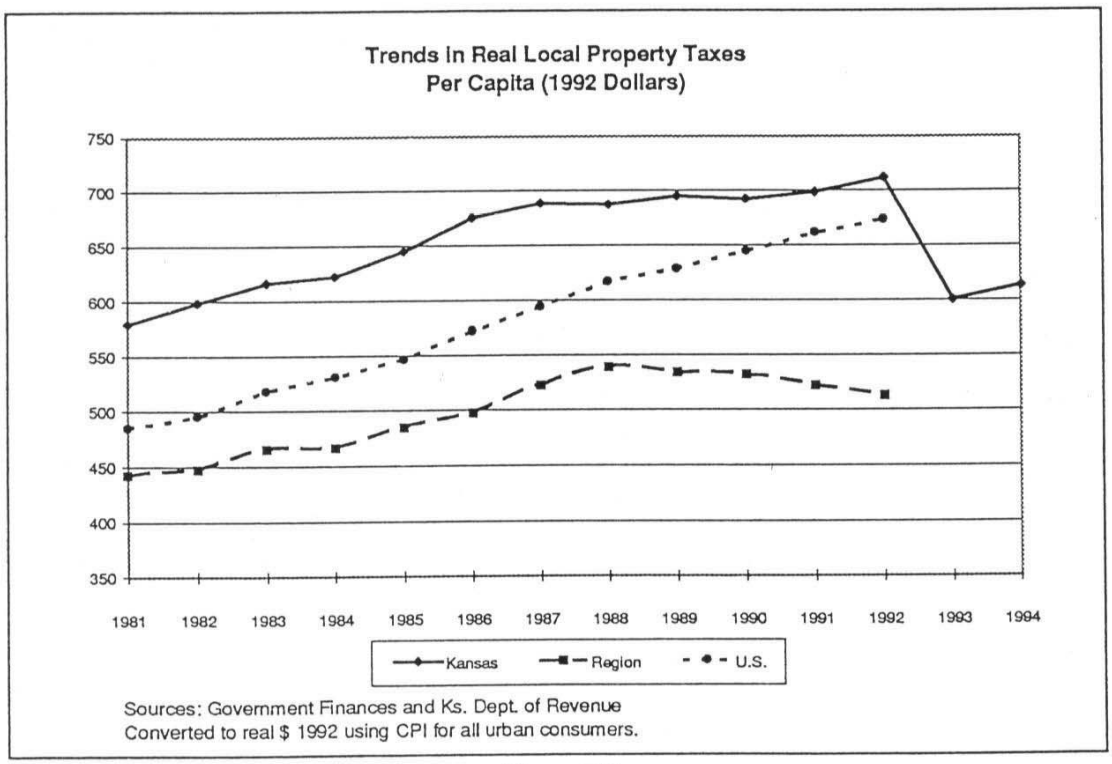


Figure 5-2

Comparing Property Taxes Across States

Per capita or other aggregate measures of property taxation, while interesting in their own right, reveal an incomplete picture of the level of property taxation facing an

individual firm or homeowner. The actual tax paid by a property owner 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 property 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. 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.

Components of the Effective Tax Rate

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.

A mill levy is a tax rate expressed as the dollar tax per $1000 valuation. The total mill levy on a piece of property generally results from a combination of county taxes, city taxes, school district taxes, and taxes for special services such as sewers or fire protection. Within a single state, mill levies vary widely from location to location. Table 5.2 shows state average mill rates, calculated as total tax collections divided by total assessed valuation. However it is important to remember that comparisons of mill rates across states are not meaningful without further information.

Statutory assessment ratios define the percentage of a property's appraised value which is entered on the tax rolls. Three states in the region apply different assessment ratios to different classes of property. In Iowa, industrial equipment is assessed at a much lower percentage than other types of property (30 percent versus 100 percent). Kansas assesses residential property at 11.5 percent, commercial and industrial real estate at 25 percent, and industrial machinery at 25 percent. A 1982 constitutional amendment in Colorado requires that residential property provide no more than 45 percent of the tax base. In order to achieve this goal, assessment ratios of all other property are set at 29 percent and the residential ratio is adjusted by the legislature.

The remaining states in the region–Missouri, Nebraska, and Oklahoma–apply a uniform statutory assessment ratio to all classes of property subject to taxation. The Missouri and Nebraska rates are set at 33.33 percent and 100 percent, respectively. In Oklahoma, a range of permissible rates is chosen by the legislature, and actual rates are chosen locally. Among the large comparison states, California applies a statutory ratio of 100 percent and Illinois a ratio of 33.33 percent. In New Jersey and New York, the assessment ratios vary by taxing district. Significantly, Illinois, New Jersey, and New York exclude machinery and equipment from their tax bases, making the assessment ratios on these properties equal to zero.

Property appraisals often fail to correctly indicate market property values. When this occurs, actual assessment ratios vary from statutory assessment ratios. Eight states covered by this study, including Kansas, publish statistics on discrepancies between appraised and market values. The results of these studies have been included in our calculations of effective rates. The remaining states are Colorado and California. In Colorado, independent auditors examine every class of property each year. They compare sales values with county-appraised values, and also conduct independent appraisals. Counties that are out of compliance must pay back state aid. Both the frequency with which appraisals are made and the sanctions for incorrect appraisals help to ensure that appraisals closely approximate market values. The situation is very different in California, where Proposition 13 limits increases in value to 2 percent annually, provided a property does not change hands or undergo substantial improvements. A recent study of four California counties [O'Sullivan, Sexton, Sheffrin, 1994] indicates that on average, properties are being appraised at only about 55 percent of their actual value.

Effective Tax Rates in the Region

Table 5-2 presents estimates of the effective tax rates in the region surrounding Kansas and in the large comparison states. The effective rate incorporates the state average mill rate, statutory assessment ratios, and an approximate ratio between the true and the appraised value for each class of property. These rates do not account for the possibility that property taxes will be abated for economic development purposes. That issue is analyzed separately in the next chapter of this report.

Within the region surrounding Kansas, the states show a wide range of rates for various classes of property. For residential property, Oklahoma averages the lowest tax rate (0.97 percent) while Nebraska averages the highest (2.20 percent). For commercial real estate, Oklahoma again ranks lowest (0.99 percent) while Iowa ranks highest (2.71 percent). Kansas ranks in the mid-range of the region for residential property, with taxes averaging 1.23 percent. It ranks second highest in the region for commercial and industrial real estate, taxing at an average of 2.69 percent. For machinery and equipment, Kansas posts the highest tax rate in the region, 2.85 percent. Colorado and Nebraska tax an average of 2.44 percent. On the low end, Oklahoma taxes an average of 1.07 percent. Uniquely among the state in the region, Oklahoma includes inventories in its tax base, boosting property tax costs for businesses which find large inventories of raw material and finished goods essential.

Three of the four large comparison states have similar property tax structures. Illinois, New Jersey, and New York all concentrate taxation on real estate and omit machinery and equipment from the property tax base. Estimated average rates on real estate are also similar: 2.70 percent in Illinois, 2.67 percent in New Jersey, and 2.80 percent in New York.

In California, property taxes are limited to one percent of total assessed property values. After adjusting for various types of exemptions, rates on taxable assessed property average 1.06 percent. The effective rate of taxation (taxes/market value) in California is a

function of the length of time the property has been with its current owner; the rate averages .58 percent. Due to the low effective rate, property taxes per capita in California are lower than those in Kansas, despite the much higher property values that prevail in California.

Changes in Kansas Property Taxes

1991 Kansas legislation on school finance that reduced average mill levies, a subsequent constitutional amendment that changed assessment ratios, and changes in sales-to-assessed value ratios are factors that have resulted in substantial changes in Kansas effective property tax rates over the last few years. For residential property, the changes have amounted to about a 17 percent property tax decrease per dollar of market value. For commercial and industrial real estate, the decrease have been even greater, almost 27 percent on average. On the other hand, machinery and equipment has experienced a 14 percent increase in effective taxation.

Table 5-1
Changes in Kansas Levies

Description	1991	1993	% Change
Average Statewide Mill Levy	125.26	114.08	-8.9%
Statutory Assessment Ratio: Residential	0.12	0.115	-4.2%
Statutory Assessment Ratio: Comm./Ind.	0.3	0.25	-16.7%
Statutory Assessment Ratio: Mach./Equip.	0.2	0.25	25.0%
Est. Actual Assessment Ratio: Residential	0.119	0.1075	-9.7%
Est. Actual Assessment Ratio: Comm./Ind.	0.298	0.2358	-20.9%
Est. Actual Assessment Ratio: Mach./Equip.	0.2	0.25	25.0%
Estimated Effective Tax Rate: Residential	1.49	1.23	-17.4%
Estimated Effective Tax Rate: Comm./Ind.	3.73	2.69	-27.9%
Estimated Effective Tax Rate: Mach./Equip.	2.5	2.85	14.0%

Summary

Property taxes comprise an essential source of local revenues for all of the states examined by this study. Historically, Kansas has placed greater reliance on the property tax as a share of local revenue than the average for the U.S. or the region. That reliance on the property tax has declined somewhat due to changes in Kansas school finance initiated in 1991.

Kansas property tax rates per dollar market value of residential property are in the mid-range for the region, and have declined substantially since 1991. Tax rates on commercial and industrial real estate (before abatement) are on the high end for the region, but have also declined since 1991. Tax rates on machinery and equipment remain the highest in the region, and have risen due to changes in the assessment ratio.

Table 5-2
Local Property Tax Rates and Ratios

State	Average Mill Levies		Statutory Assessment Ratios (%) [1]		Estimated Actual Assessment Ratios (%) [2]		Statewide Effective Tax Rates (%) [3]	
Colorado (1993)	Statewide	84.21	Residential	12.86	Residential	12.86	Residential	1.08
	Metro	90.98	Commercial/Ind.	29.00	Commercial/Ind.	29.00	Commercial/Ind.	2.44
	Nonmetro	66.46	Mach./Equip.	29.00	Mach./Equip.	29.00	Mach./Equip.	2.44
			Inventories	0	Inventories	0	Inventories	0
Iowa (1993)	Statewide	30.24	Residential	68.04	Residential	62.54	Residential	1.89
	Metro	34.75	Commercial/Ind.	100.00	Commercial/Ind.	89.72	Commercial/Ind.	2.71
	Nonmetro	27.24	Mach./Equip.[4]	30.00	Mach./Equip.	30.00	Mach./Equip.	0.90
			Inventories	0	Inventories	0	Inventories	0
Kansas (1993)	Statewide	114.08	Residential	11.50	Residential	10.75	Residential	1.23
	Metro	123.78	Commercial/Ind.	25.00	Commercial/Ind.	23.58	Commercial/Ind.	2.69
	Nonmetro	104.91	Mach./Equip.	25.00	Mach./Equip.	25.00	Mach./Equip.	2.85
			Inventories	0	Inventories	0	Inventories	0
Missouri (1993)	Statewide	55.88	Residential	19.00	Residential	20.14	Residential	1.13
	Metro	61.33	Commercial/Ind.	32.00	Commercial/Ind.	33.60	Commercial/Ind.	2.22
	Nonmetro	41.67	Mach./Equip.	33.33	Mach./Equip.	33.33	Mach./Equip.	1.86
	Surtax [5]	10.26	Inventories	0	Inventories	0	Inventories	0
Nebraska (1993)	Statewide	24.44	Residential	100.00	Residential	90.00	Residential	2.20
	Metro	27.87	Commercial/Ind.	100.00	Commercial/Ind.	92.00	Commercial/Ind.	2.25
	Nonmetro	21.96	Mach./Equip.	100.00	Mach./Equip.	100.00	Mach./Equip.	2.44
			Inventories	0	Inventories	0	Inventories	0
Oklahoma (1993)	Statewide	85.25	Residential	11.34	Residential	11.33	Residential	0.97
	Metro	92.25	Commercial/Ind.	11.34	Commercial/Ind.	11.59	Commercial/Ind.	0.99
	Nonmetro	72.34	Mach./Equip.	12.60	Mach./Equip.	12.60	Mach./Equip.	1.07
			Inventories	12.60	Inventories	12.60	Inventories	1.07

State	Average Mill Levies		Statutory Assessment Ratios (%)		Estimated Actual Assessment Ratios (%)		Statewide Effective Tax Rates (%)	
California (1993)	Statewide	106.11	Residential	100.00	Residential-new[6]	100.00	Residential	1.06
	Metro	106.12	Commercial/Ind.	100.00	Com./Ind.-new[6]	100.00	Commercial/Ind.	1.06
	Nonmetro	105.76	Mach./Equip.	100.00	Residential-aver.[6]	55.00	Residential-aver.[6]	0.58
			Inventories	0	Com./Ind.-aver.[6]	55.00	Com./Ind.-aver.[6]	0.58
					Mach./Equip.	100.00	Mach./Equip.	1.06
					Inventories	0	Inventories	0
Illinois (1992)	Statewide	81.82	Residential	33.33	Residential	33.30	Residential	2.70
	Metro	83.05	Commercial/Ind.	33.33	Commercial/Ind.	33.30	Commercial/Ind.	2.70
	Nonmetro	69.92	Mach./Equip.[7]	0	Mach./Equip.	0	Mach./Equip.	0
			Inventories	0	Inventories	0	Inventories	0
New Jersey (1993)	Statewide	203.97	Residential[8]	20 - 100	Residential	76.36	Residential	2.67
	Metro	203.97	Commercial/Ind.	20 - 100	Commercial/Ind.	76.36	Commercial/Ind.	2.67
	Nonmetro	N/A	Mach./Equip.	0	Mach./Equip.	0	Mach./Equip.	0
			Inventories	0	Inventories	0	Inventories	0
New York (1993)	Statewide	110.16	Residential	up to 100	Residential	25.38	Residential	2.80
	Metro	120.08	Commercial/Ind.	up to 100	Commercial/Ind.	25.38	Commercial/Ind.	2.80
	Nonmetro	43.80	Mach./Equip.	0	Mach./Equip.	0	Mach./Equip.	0
			Inventories	0	Inventories	0	Inventories	0

[1] Colorado adjusts the residential assessment ratio so that residential property forms a fixed percentage of the property tax base. Iowa adjusts the residential assessment ratio yearly. Oklahoma assessment ratios are determined locally within the range of 9% to 15% (statewide averages shown).

[2] Actual assessment ratios are based on information from statewide sales/assessed value studies where available (KS, MO, OK, NE, NY, NJ, IL, IA).

[3] The effective property tax rate is defined as the amount of taxes per $100 actual market value of property. In terms of this table, the effective tax rate is estimated by [statewide average mill levy/1000 * estimated actual assessment ratio].

[4] Industrial machinery and equipment are assessed at 30% of acquisition cost. Other personal property exempt.

[5] The surtax applies to commercial and industrial real estate only.

[6] 100% ratio applies to new owners only. California allows property reassessment only when property changes hands or when it is substantially remodeled. On average, properties are appraised at about 55% of market value. The appraisal for any particular property depends on how long it has been held by its current owners [O'Sullivan, Sexton, Sheffrin, 1994].

[7] Illinois businesses are subject to a personal property replacement tax, similar to the Illinois income tax.

[8] Property assessment ratios are locally determined in New Jersey.

SOURCES: Effective rates calculated by IPPBR. Basic data from state departments of revenue.

CHAPTER 6: PROPERTY TAX ABATEMENT

Introduction

State and local governments frequently offer property tax abatements as an incentive to attract new firms and to encourage industry expansions. Arguably, property tax abatements provide the single most important tax incentive at the state and local level. Without abatements, property taxes often exceed state and local income taxes. And when granted, tax abatements frequently amount to more than 50 percent of the tax liability. Thus, property tax abatements provide a substantial reduction in a large tax.

Theoretical Issues

Two theoretical issues arise concerning the use of property tax abatements. The first is whether tax abatements or other incentives actually attract new industry; research on this issue is mixed [Bartik, 1991; Grady, 1987; Pomp, 1986; Steinnes, 1984]. A second issue concerns the use of state and local discretion in granting abatements [Coffman, 1993]. In many states, abatements are not automatic, but are rather the result of local decision-making. On one hand, the use of local discretion potentially avoids abatements that do not yield positive net benefits to a community. On the other hand, discretion may lead to what economists call "rent seeking" behavior. This simply means that firms will spend substantial resources in order to try to secure a favorable decision. From the point of view of the economy as a whole, such activities are an inefficient use of resources.

Comparison of Property Tax Abatements

In spite of issues of effectiveness and efficiency, property tax abatements are common throughout the region surrounding Kansas, and in most of the large comparison states. The percentage of a tax abatement and the requirements for eligibility vary widely from state to state. Some state governments, for example, Missouri and New York, limit abatements to state-designated enterprise and urban redevelopment 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.

Within the region surrounding Kansas, all states except Nebraska offer significant property tax abatements. Under new 1994 legislation, Iowa offers 100 percent abatements for up to 20 years on real estate and manufacturing equipment for firms that meet a strict set of qualifications. Missouri provides tax abatements as high as 100 percent for 25 years within enterprise zones and blighted areas. These abatements are limited to improvements to real estate, and do not include machinery or equipment. Almost any industry qualifies for exemption in Missouri. Oklahoma exempts real estate improvements, machinery, and equipment for manufacturing establishments and selected service establishments.

Oklahoma stands out among the states in this study in that the abatement is an entitlement under state law rather than a local decision.

Kansas allows local governments to abate up to 100 percent of property tax liabilities for 10 years for new and expanding industries. Abatements are limited to property used in manufacturing, research and development, and warehousing. Kansas law also allows most property financed with industrial revenue bonds to be exempt from local property taxes for up to ten years. Taxes may be abated on land, buildings, improvements, machinery, and equipment. Kansas recently passed legislation requiring that communities perform benefit-cost analysis before granting abatements. However, the legislation does not stipulate that abatements be limited to situations for which the benefits exceed the costs.

Comparisons of business property taxation among the states in the region should consider two factors: 1) the effective tax rates on commercial and industrial real estate, machinery and equipment, and inventories; and 2) the probability of property tax abatement. With respect to the first factor alone, Kansas property taxes appear high, particularly for firms with a large percentage of their assets in commercial real estate. However, Kansas property tax abatements for new and expanding firms are among the most generous in the region. Many Kansas communities favor the use of abatements, although not necessarily at the 100 percent level. This allows new or expanding Kansas industries to avoid a large percentage of the property tax burden. The net impact may be to shift property taxes onto mature firms and households.

Summary

Property tax abatements are a frequently used tool for economic development, despite concerns about their effectiveness and efficiency. Kansas tax abatements are very generous: Kansas allows abatements of up to 100 percent for 10 years on most types of business property and for most industries. In Kansas, as in most states, the decision to grant an abatement is made locally. Kansas is currently developing a cost-benefit analysis tool to help local communities make decisions about tax abatements.

Table 6-1
Property Tax Abatements

State	Extent of Tax Abatement	Eligibility Requirements
Colorado	Within enterprise zones, counties and municipalities may make "incentive" payments to firms based on the increase in value of property due on new or expanding business.	Must be a qualified new or expanding business facility located in enterprise zone.
	More generally, counties, municipalities, and school districts may abate up to 50% of taxes on personal property only for up to 4 years.	Must be new or expanding business.
Iowa	Local governments are allowed to abate local property taxes on value added to industrial real estate. Max. abatement: YR 1: 75% YR 2: 60% YR 3: 45% YR 4: 30% YR 5: 15%.	Local option abatement limited to new construction of industrial real estate, research service facilities, warehouses, distribution centers. Also applies to new industrial equipment and machinery (which is considered part of real estate in Iowa).
	For firms that qualify under the 1994 New Jobs and Income Program, a community may choose to exempt 100% of real property associated with new job creation for up to 20 years. Eligible businesses may also claim as exempt machinery, equipment, and computers directly related to new jobs for up to 20 years. Firms that qualify for Quality Jobs Enterprise Zones benefits also qualify for machinery and equipment exemption.	To qualify under New Jobs and Income Program a business 1) must obtain approval from a community for start-up or expansion; 2) must not be an in-state relocation; 3) must pay 80% of health insurance for full-time employees; 4) must agree to pay a median wage of at least $11 per hour; 5) must make an investment of at least $10 mil.; and 6) agree to create at least 50 FTE jobs. In addition, the firm must satisfy 3 of the following 6 requirements: 1) offer a pension plan or profit-sharing; 2) produce high value-added goods or services, or operate in an industry listed by Iowa as high value added; 3) provide day-care; 4) invest at least 1% of pretax profits in R&D; 5) have an active productivity and safety improvement program; or 6) occupy an existing facility with at least 20,000 sq. ft. of vacant space. To qualify under the Quality Jobs Enterprise Zone program, primary businesses must create at least 300 FT jobs paying an average of $15 per hour. Certain supporting businesses that supply necessary property, materials, or services to primary firms also qualify.

State	Extent of Tax Abatement	Eligibility Requirements
Kansas	Local option to exempt all or any portion of buildings, land, added improvements, and machinery and equipment for new or expanding firms. Exemptions last for no more than 10 years after opening of new business or completion of expansion. Property financed with economic development revenue bonds may also be exempted for up to 10 years.	Abatements limited to property of new or expanding businesses used for 1) manufacturing; 2) research and development; or 3) storing goods or commodities which are stored or traded in interstate commerce. Until 1995, all industries were eligible for property tax exemptions on property financed with economic development revenue bonds. Effective January 1, 1995, retail firms are prohibited from receiving property tax exemptions.
Missouri	Under Urban Redevelopment programs: up to 100% of improvements to real property may be tax exempt for up to 25 years. Under Enterprise Zone programs: 50%-100% exemption on improvements to real property for up to 25 years.	Improvements to real property must occur in blighted areas of cities with populations over 4,000 in Jackson and St. Louis counties, 2,500 elsewhere in state. Improvement must be located in enterprise zone. In zone, firm renting or leasing residential property to low or moderate income persons also qualifies. Applied to real estate improvements only.
Nebraska	15 year tax abatement for agricultural processors investing at least $10 million and hiring at least 100 new workers.	Agricultural processing only.
Oklahoma	Qualifying manufacturing facilities are 100% exempt from property tax for 5 years on any new, expanded, or acquired facilities, including facilities engaged in R&D. Included in exemption are land, buildings, improvements, structures, machinery, equipment, and other personal property used directly in the manufacturing process.	Facilities for which the investment cost of the construction, acquisition or expansion of the manufacturing facility is $250,000 or more. Includes firms in SIC 20-39 (manufacturing); firms in SIC 7372, 7373 (software and systems design), provided 50% of sales are to out-of-state customers; firms in SIC 7374 (data processing), provided 80% of sales are to out-of-state customers. The construction, acquisition or expansion must result in a net increase of 15 or more full-time equivalent employees. Employees at the facility must be offered a basic health care plan. Firms that invest at least $75 mil. and retain the employment of 2500 full-time equivalent employees are exempted from the new employment and health care requirements.
California	No property tax abatements.	

State	Extent of Tax Abatement	Eligibility Requirements
Illinois	Any taxing district may vote to abate any portion of its taxes on commercial and industrial property, horse racing property, and auto racing property. Abatements allowed up to 10 years. Dollar limitations on amount of abatement allowed to a single firm. Taxes may also be abated within enterprise zones with fewer restrictions.	Generally limited to new firms, expansions, and relocations from out-of-state. In enterprise zones, abatements may be granted on any new improvements or existing improvements that have been renovated or rehabilitated.
New Jersey	Abatements or exemptions for commercial and industrial properties in areas in need of redevelopment are available under the following 5-year and thirty-year schedules: 5-year: property tax abatements 1st year: no payment required; 2nd year: at least 20% of full property tax; 3rd year: at least 40% of full property tax; 4th year: at least 60% of full property tax; 5th year: at least 80% of full property tax. 30-year: payments in lieu of taxes 2% of total project costs or 15% of gross project income.	Any combination of modernization, rehabilitation, new construction, and/or alteration/repair/enlargement that increases the volume of a structure by more than 30 percent may be eligible for exemption or abatement.
New York	At the option of local taxing authorities, real property owners in rehabilitation areas and certified urban job enterprise zones may receive a 100% exemption on improvements to real property for up to 7 years.	Businesses must be certified to receive enterprise zone benefits. Criteria for certification include 1) whether jobs are expected to be created or retained by the business; 2)whether jobs activity is new employment, or a shift in employment from other locations; 3) whether employees will perform a substantial amount of their activities in the zone.

SOURCES: Business Information Services, *State Tax and Financial Incentives*. Information also provided by individual state departments of revenue and commerce and by individual state statutes.

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CHAPTER 7: UNEMPLOYMENT INSURANCE AND WORKER COMPENSATION

Introduction

Labor costs constitute the single largest factor payment for most firms. Total labor costs include wages, benefits, social security and other federal taxes, and two important state-mandated programs: unemployment insurance and worker compensation. Firms are legally obligated to participate in unemployment insurance and worker compensation; hence this study treats them as taxes. As is shown in this chapter, the costs of these two programs vary substantially across states.

Unemployment Insurance

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 to fund unemployment insurance, but the state tax is by far the larger. Although the federal government establishes broad regulations, the details of the system are state-specific. Federal regulations exist to ensure that reserves are adequate to maintain the solvency of the state programs. The states define the fundamentals such as employee eligibility rules, rates, tax bases, and benefit provisions. In particular, each state has a wage limit, referred to as the taxable wage base, beyond which unemployment taxes are no longer collected.

The unemployment insurance tax rate assigned to an employer depends both on the firm's own unemployment experience record and on state conditions. Each firm accumulates a contribution-benefit balance based on what it has paid into the fund in relation to the benefits its previous employees have drawn. Firms with positive balances are charged relatively low rates in comparison to firms with negative balances. New firms with no experience are charged a "new employers" rate, which, in most states, depends on the industry in which the firm operates.

Three major factors affect the overall level of unemployment insurance rates in a state: first, the average benefits paid to an unemployed worker; second, the duration of the payment; and third, 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. Unemployment insurance rates are quite unstable, changing with employment conditions.

Table 7-1 provides a comparison of state unemployment insurance systems. The most important indicator is the average rate per $100 payroll. This measures the average insurance cost. By this indicator, Kansas ranks as the highest cost state in the region. But in comparison with the large comparison states, or with the national average, Kansas ranks favorably.

Table 7-1
Unemployment Insurance Benefits and Net Worth, 1994

	Average Weekly Benefit [1]	Average Benefit per Covered Emp.[2]	UI Fund Net Worth [3]	Average Rate Per $100 Payroll
Colorado	$196	$111	$267	$ .50
Iowa	178	130	561	.70
Kansas [4]	194	160	670	.80
Missouri	149	134	45	.60
Nebraska	138	56	252	.40
Oklahoma	167	99	398	.40
California	161	288	194	.90
Illinois	192	222	240	1.10
New Jersey	242	378	564	.70
New York	203	296	47	1.00
National Av.	180	204	291	.92

[1] Weekly benefit per covered unemployed person.

[2] (Regular benefits plus .5 times extended benefits) divided by total covered workers. Only 50% of extended benefits are liabilities of the state trust funds.

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

[4] Moratorium on payments for 1995 and 1996.

SOURCES: U.S. Department of Labor, *UI Data Summary*

Three indicators in Table 7-1 provide further information that can be used to help predict the direction of future rate changes in a state. First is the average benefit per unemployed worker. This indicates the level of benefits that an unemployed worker is likely to receive. Kansas benefits are the second highest in the region, and are slightly higher than the national average. Second is the average benefit per covered employee. This 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. By this criterion, all of the states in the region place well below the national average. The contrast between the states in the region and the large comparison states is clear. Third, 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 almost $670 per worker, Kansas well exceeds the national average. The modest average level of withdrawals and the healthy trust fund balance put strong downward pressure on Kansas rates.

In fact, the 1995 Kansas Legislature recently took action to lower unemployment compensation rates for Kansas employers. Approximately 44,000 businesses (those with positive unemployment compensation account balances) will be exempt from paying these taxes in 1995 and 1996. After the moratorium ends, taxes should still be lower than they were in 1994 due to changes in the Kansas tax formula. These changes are expected to result in a $474 million saving for businesses over the next five years [Kansas Department of Human Resources, as reported in Kansas Chamber of Commerce and Industry, May 1995].

Worker Compensation

Worker compensation laws provide benefits to injured workers or to families in the event of a worker's death. States require that firms buy insurance to provide compensation payments. Insurance is supplied by private companies. The National Council on Compensation Insurance, an industry group, performs actuary work and suggests industry specific rates for most states. In some states, these rates are pure premiums (called advisory loss costs) based on expected losses, while in other states the rates negotiated between insurance regulators and NCCI include insurance company administrative expenses.[10]

Several factors determine the worker compensation rate schedule for a state. The amount of benefits paid to injured workers, decided by state law, exerts a primary effect. Other factors include the safety records of various industries and occupations within the state, state regulations that limit rate increases, and, in those states that allow price competition among firms, the ability of the firms to keep administrative costs low. Within a state, the rate paid by an individual firm also depends on firm-specific factors as well as on industry and occupation. A firm's payments are modified depending on its individual safety record and on whether it qualifies for a volume discount.

Table 7-2 makes broad comparisons of worker compensation systems in terms of the average benefit payment per covered worker.[11] This variable provides indirect information on business costs, in that benefits paid to employees are ultimately paid by employers. Kansas ranks in the mid-range for the region and below the national average by this criterion. This variable reflects two underlying factors: the level of benefits for injured workers and the likelihood that a worker will make a claim. The first of these factors is primarily a matter of state policy; states with generous benefits have a higher average payment. The second is primarily a function of the industrial structure of the state; states with employment concentrated in dangerous industries such as construction and mining will exhibit relatively high average rates.

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[10] Of the states in this study, NCCI reports advisory loss costs only for Missouri, Colorado, and (as of 1995) Kansas.

[11] The data in Table 7-2 date from 1991, but are the most recent that were available at the time of writing this report.

Table 7-2
Worker Compensation Benefits, 1991

State	Benefits per Covered Emp.	State	Benefits per Covered Emp.
Colorado	$385	California	$523
Iowa	171	Illinois	311
Kansas	236	New Jersey	243
Missouri	222	New York	253
Nebraska	175		
Oklahoma	306	National Average	$360

SOURCE: Morgan Quitno, *State Rankings, 1994.*

A better method of comparing worker compensation systems is to look at rates for specific industries and occupations (referred to as employment codes). Table 7-3 looks at employment codes representative of selected industries. Two characteristics stand out. First, worker compensation costs are a significant business cost for manufacturing and wholesale trade, averaging from about 3 to 20 percent of payroll depending on state and industry. Second, worker compensation rates vary substantially across states: for most industries, the ratio between the highest and lowest state rates is greater than 2 to 1. The absolute size of worker compensation payments, along with their variability, makes them an important consideration as states compete to expand and to retain jobs and income.

Concern over worker compensation rate increases has been prevalent recently in Kansas and Missouri[3]. Rates in Kansas rose an average of 24 percent in 1991, the largest increase ever. Missouri faced a similar rate hike in 1992. [*Kansas City Business Journal*, 3-6-92]. As a result of these concerns, both states have instituted large-scale reforms.

In Kansas, the legislature passed a comprehensive worker compensation reform act that aimed at eliminating fraud and preventing accidents, and redefined benefit schedules for various types of injuries. In addition, Kansas moved to a "loss cost" method of determining rates (effective June, 1995). Insurance companies will now add their own administrative costs to the pure loss rate in order to determine final rates–previously, administrative costs were built into basic rates. The new approach is intended to stimulate insurance companies to compete for business by lowering their administrative costs [Kansas Chamber of Commerce and Industry, May, 1995]. As a result of these reforms, rates in Kansas dropped 2 percent in 1994 and will drop an additional 7.5 percent in June, 1995 [Sebelius, 1995].

Table 7-3
Worker Compensation Premium Rates, 1994
($ per $100 payroll)

State	Meat Products	Commercial Printing	Electronic Components	Wholesale Trade	Data Processing
Colorado	$18.06	$5.35	$6.23	$8.85	$0.55
Iowa	10.58	3.26	2.76	5.95	0.35
Kansas	8.43	4.44	4.44	6.68	0.40
Missouri	21.77	3.15	5.17	6.97	0.43
Nebraska	7.63	3.65	4.40	8.41	0.36
Oklahoma	18.27	3.79	6.85	11.40	0.59
California	18.90	4.97	3.25	13.93	0.66
Illinois	13.14	5.69	5.53	11.34	0.42
New Jersey	8.03	3.01	3.39	8.68	0.37
New York	19.32	7.00	7.97	12.10	0.57

NOTE: The rates for Colorado and Missouri include advisory loss costs plus 40% (estimated by IPPBR) for administration. All other rates are published manual rates including administrative expenses.

SOURCE: National Council on Compensation Insurance, *Basic Manual for Workers Compensation and Employers Liability Insurance,* updated continuously; Worker Compensation Insurance Review Board, *California Workers' Compensation Review Manual,* updated continuously.

In Missouri, two years of worker compensation reform have also paid off. The insurance industry has been deregulated, so that firms compete in setting rates. In addition, the method of setting rates for firms in the "assigned risk pool" of high-risk firms has been overhauled. Previously, any losses that firms experienced due to insuring these firms were covered by general rate increases. Now assigned risk rates are set by the firm that makes the winning bid to insure these firms. Overall, workers compensation rates in Missouri have fallen about 12 percent on average over the last two years [Menninger, 1995].

Summary

Kansas faces a favorable situation with regard to two labor costs: unemployment insurance and workers compensation. Recent legislation is responsible for a downward trend in Kansas for average rates.

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CHAPTER 8: BASIC BUSINESS COSTS

Introduction

Our previous focus on taxes masks the fact that taxes are only one of a number of costs that can affect a firm's bottom line, and hence its business location decision. In this chapter, we turn the discussion to basic business costs: in particular, costs for labor, energy, land, and construction.

Labor Costs

Labor costs are the most important of the business costs that we consider in this report. They contribute a significant portion of the value of goods and services. In manufacturing wages and salaries account for about 19 percent of the value of goods produced; once social security, benefits, and other labor costs are added, the total comes to about 24 percent.[12] [U.S. Bureau of the Census, *Annual Survey of Manufactures, 1991*] In service industries, the share that labor contributes to total output is even greater: 38 percent, not including benefits. Given their importance in overall costs, it is reasonable to assume that labor costs have a very large influence on business location decisions.

Table 8-1
Average Annual Wages, 1992

Region	High State	Low State	Average	Standard Deviation	Deviation (% of av.)
Region inc. KS	CO ($24,627)	IA ($20,284)	$21,852	$1,533	7.0
Large Comp. States	NY ($31,722)	IL ($27,482)	$29,821	$1,845	6.2
All 10 States	NY ($31,722)	IA ($20,284)	$25,040	$4,244	16.9
Kansas			$21,540		
US Average			$25,407		

SOURCE: Bureau of Economic Analysis, REIS CD ROM, Table CA34.

To get a sense of how labor costs vary across states, we look at data on average wages and salaries per employee (see Table 8-1). We look at individual states, the region, the large comparison states, and the nation as a whole. First, the states as a whole exhibit a great variation in wage costs. $11,438 separates the state with the highest wage costs (New York) from the state with the lowest wage cost (Iowa); this amounts to about 46 percent of the ten-state wage average, the highest labor costs, and 45.7 percent of the average wage

[12] The remainder of the value of output is due to the cost of materials and purchased services, taxes, and profits.

payments in all of the states. On average, the variability of wages (as measured by the standard deviation) across the study states is about 16.9 percent. Even within the region surrounding Kansas, wages show substantial state-to-state variation; about $4,340 or 19.7 percent between the highest and lowest state, with a 7 percent standard deviation. The variability in wages across states is a major contributor to differentials in the total cost of doing business.

A similar picture emerges when we confine the discussion to manufacturing wages. The difference between the high and low states in the region is close to $8,000 annually; the difference over all 10 states is over $16,000. Wages vary by an average of 8 percent of the mean within the region, and by 14 percent across all 10 states. As it turns out, manufacturing wages are closely correlated to nonmanufacturing wages for the states in this study; in other words, those states that have high manufacturing wages also tend to have high wages in other industries, and vice versa. The calculated correlation coefficient is .93 (where 1 indicates perfect correlation).

Table 8-2
Average Manufacturing Wages, 1992

Region	High State	Low State	Average	Standard Deviation	Deviation (% of av.)
Region inc. KS	CO ($36,808)	NE ($28,831)	$33,038	$2,641	8.0
Large Comp. States	NJ ($45,006)	IL ($39,951)	$38,661	$2,210	5.7
All 10 States	NJ ($45,006)	NE ($28,831)	$36,608	$5,170	14.1
Kansas			$33,351		
US Average			$36,923		

SOURCE: Bureau of Economic Analysis, REIS CD ROM, Tables CA5 and CA25.

For Kansas, wage rates offer a competitive advantage. Annual wages for all industries in Kansas average $21,540, significantly below the national average and slightly below the regional average. Kansas wages rank 35th highest out of the 50 states. For manufacturing industries, Kansas wages average $33,351, about $3,500 below the national average and slightly above the regional average.

Energy Costs

Energy is an important business input, particularly in manufacturing industries. According to the most recent data available to us at the time of this study, [U.S. Bureau of the Census, *Annual Survey, 1991*], manufacturers spend $55,342 million on electricity and fuel; this constitutes about 2 percent of the value of output, and about 4 percent of purchased materials. For some industries, the ratios are much higher; the primary metals

industry spends close to 6 percent of the value of output and 9 percent of total materials costs on energy. Energy prices show substantial variation across states. For example, average industrial electricity rates for the states in this study range from $22.46 to $11.30 per btu, a ratio of about 2 to 1. Average industrial gas rates range from $4.60 to $1.67 per btu, a ratio of to 2.75 to 1.

Table 8-3
State Energy Prices, 1991

State	Commercial Natural Gas ($ per BTU)	Commercial Electric ($ per BTU)	Industrial Natural Gas ($ per BTU)	Industrial Electric ($ per BTU)
Colorado	3.92	17.07	2.27	13.38
Iowa	3.96	18.24	2.63	11.76
Kansas	3.28	19.56	2.64	14.51
Missouri	4.46	18.79	4.04	14.37
Nebraska	3.93	16.82	2.80	12.19
Oklahoma	3.86	17.59	1.67	11.30
California	5.36	28.12	3.86	22.22
Illinois	4.47	22.68	3.70	16.09
New Jersey	5.08	27.43	3.56	22.46
New York	5.33	30.32	4.60	18.07
US Average	4.69	21.73	2.80	14.18

SOURCE: U.S. Energy Information Administration, *State Energy Price and Expenditure Report 1991.*

Our discussion focuses on industrial prices, since they will apply to manufacturing, which tends to be more energy-intensive than service industries. Kansas ranks in the mid-range of the region in terms of industrial gas prices, and is the highest state in the region in terms of industrial electric prices. The Kansas price for gas is slightly below the national average; the Kansas price for electricity is somewhat above the national average. In comparison with the large states, Kansas fares well, as do most of the states in the region. It should be pointed out that energy prices vary within a state as well as across states; therefore, comparisons of averages may not accurately reflect the cost differentials between specific locations within the states.

Land

For this study, we make use of data on land prices from a recent survey of business parks [Venable, 1994]. These data are available on a statewide basis, but in most cases there are too few good observations within a state to make the data reliable; we report regional averages instead. The data also distinguish site prices by type of development–science, office, mixed use, or industrial.

Table 8-4
Land Prices in Business Parks, 1994

Prices by Region
($ per acre)

Region	Price
New England	57,500
Mid-Atlantic	59,604
E.N. Central	39.245
W.N. Central	29,907
S. Atlantic	67,384
E.S. Central	33.211
W.S. Central	29,872
Mountain	75,262
Pacific	82,953
U.S. Average	49,996

Prices by Type of Development
($ per acre)

Development Type	Price
Science	$156,309
Office	132,233
Mixed Use	110,978
Industrial	49,665

SOURCE: Venable, *Site Selection and Industrial Development*, 1994, pp. 1092, 1094.

Notice that the West North Central region, which contains Kansas, Nebraska, Iowa, and Missouri, reports some of the lowest land prices in the nation. This should make the entire region attractive to firms that are looking for new business locations. Prices are significantly higher on the costs and in the mountain states. Notice also that prices for land in science or office parks are substantially higher than those in industrial parks.

Construction Costs

The final cost that we investigate is the cost of constructing a new facility. Data from *Means Square Foot Costs* show construction costs indexes for major cities all states. These indexes are based on local materials and construction labor prices. An index of 1 indicates construction costs equal to the national average. All of the states in the region have cost indexes below the national average, while all of the large comparison states have indexes above the national average. Indexes for Kansas cities range .77 to .93, and average .88. Kansas offers construction costs well below the nation average and in the mid-range for the region; Kansas is quite competitive in terms of this production factor.

Table 8-5
Construction Cost Indexes, 1994

State	Cost Index	State	Cost Index
Colorado	.90	California	1.15
Iowa	.88	Illinois	1.02
Kansas	.88	New Jersey	1.05
Missouri	.94	New York	1.22
Nebraska	.83		
Oklahoma	.82	U.S.	1.00

SOURCE: *Means Square Foot Costs 1994*

Summary

In general, Kansas offers a competitive business cost climate. Labor costs, the most important of the costs that we consider, are near the regional average and are well below costs in the comparison states or in the nation on average. Gas costs are close to the national and regional averages, and are again below those in the comparison states. Land costs in the region as a whole (we determined that the state-specific data were not accurate) are among the lowest in the nation. And construction costs fall 12 percent below the national average. Only electricity prices raise some concern about Kansas basic business costs. Kansas industrial electricity prices somewhat exceed the national average and are the highest in the region.

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CHAPTER 9: SUMMARY OF STATE AND LOCAL TAXES AND COSTS

Conclusions on the Kansas Tax and Cost Structure

The first part of this report (Chapters 1-8) examines the basic structure of taxes and other business costs within the region, the large comparison states, and the nation. Several conclusions emerge from this examination. We list these conclusions below:

1. The Kansas tax load appears to be in the average range for the nation. Kansas ranks as the 28th highest state when comparing state and local taxes per capita ($1,958 in 1992). It ranks 32nd highest looking at state and local taxes as a percent of income (10.1 percent in 1992).
2. Kansas state government is more dependent on general sales taxes than is the nation on average. Kansas collects 35.8 percent of total revenue from this source versus the national average of 32.5 percent.
3. The share of revenue collected from personal income taxes in Kansas approximates the national average. The same is true for the corporate income tax.
4. Kansas is significantly less dependent on miscellaneous other taxes and fees than is the nation as a whole.
5. For a representative household with income of $45,000 and with two children, the effective personal income tax rate in Kansas is about 2.7 percent. This places the Kansas income tax rate in the middle of the states included in this study.
6. Of taxes paid by firms to state and local governments, the corporate income tax generally ranks second in dollar amount after the property tax. Combined state and local income tax rates in the U.S. typically range between 5 and 10 percent of taxable income. In Kansas, the rate is 7.35 percent on income $50,000 and 4.0 percent on income below $50,000.
7. The state corporate income tax that will actually be paid by a firm depends not just on the tax rate, but upon the method that the state uses to allocate income and on the types and amounts of credits for which the firm may qualify.
8. Economic development tax credits are abundant in all of the states examined in this study. Most important among these credits are those aimed at stimulating jobs and investment. States are beginning to experiment with incentives targeted at stimulating the growth of high-quality jobs. Examples of this approach include Kansas and Iowa.
9. States differ greatly in their definitions of the sales tax base and in the exemptions they allow for various goods and services: From the point of view of a state's business competitiveness, exemptions on machinery and equipment, construction, and energy stand out as providing significant cost savings to firms.

10. Kansas provides a general exemption for manufacturing machinery and equipment, and extends more generous exemptions to new and expanding firms. Kansas recently eliminated sales taxes on energy and new construction.

11. Kansas property tax rates on commercial and industrial real estate (before abatement) are on the high end for the region, but have also declined since 1991. Property tax rates on machinery and equipment remain the highest in the region, and have risen since 1991 due to changes in the assessment ratio.

12. Property tax abatements are a frequently used tool for economic development, despite concerns about their effectiveness and efficiency. Kansas tax abatements are very generous: Kansas allows abatements of up to 100 percent for 10 years on most types of business property.

13. Kansas faces a favorable situation with regard to two labor costs: unemployment insurance and workers compensation. Recent legislation is responsible for a downward trend in Kansas for average rates.

14. In general, Kansas offers a competitive business cost climate. Labor costs, the most important of the costs that we consider, are near the regional average and are well below costs in the comparison states or in the nation on average. Only electricity prices raise some concern about Kansas basic business costs. Kansas industrial electricity prices somewhat exceed the national average and are the highest in the region.

Implications for Businesses

Our descriptive work in Chapters 1-8 shows Kansas to provide an average or above-average business climate with regard to the most of the factors we have examined. But a strong negative emerges concerning property taxes: effective Kansas property tax rates are the highest in the region for machinery and equipment, and are close to the highest for commercial and industrial property. For new and expanding firms, the impact of high property taxes is mitigated by property tax abatements; mature firms, on the other hand, are subject to the full tax rate.

The overall situation facing a firm results from the complex interaction of several factors: a state's basic tax structure, its economic development incentives, and the costs for important business inputs such as labor and energy that prevail in the state. Chapters 10 and 11 report on a model of taxes and costs that is designed to simultaneously evaluate all of these factors that affect business climate.

CHAPTER 10: THE COST AND TAX SIMULATION MODEL

Introduction

Since 1987, IPPBR has worked with Kansas, Inc. to develop and apply a cost and tax simulation model. This model provides a flexible method for comparing costs of doing business across states. It produces estimates of key variables that might affect a firm's location decision: the cost of inputs such as labor and energy, the cost of assets such as land and buildings, and the amount of a firm's federal, state, and local taxes.

It is important for Kansas to be able to track costs and taxes within the region and nation, particularly in view of the recently formulated state economic development plan that includes the following goal:

> Kansas has a supportive, positive business climate and provides access to resources essential to economic growth. [Kansas, Inc. p.58]

Research on the relative costs of doing business in Kansas, and on taxation in particular, provides a way for the state to assess its progress towards this goal and to identify areas in which policy adjustments could improve the business environment.

Taxes and Business Climate

Descriptions of state tax structures generally focus on variables such as per capita tax collections, and income and sales tax rates. The first part of this report (Chapters 1-9) examined state tax structures and found Kansas to be an average state in most respects. This still leaves open the key question, however, of whether Kansas actually does provide a supportive business climate, either to new and expanding firms, or to those "mature" Kansas firms that have been located in the state for several years. The multi-faceted concept of business climate includes factors such as the quality of human and natural resources, resource prices, regulation, and availability of transportation as well as tax considerations.

The narrower concept of a "tax climate" is only one of several factors which enter into a firm's decision on whether to locate or remain within the state. Of course, the tax climate itself is multidimensional: firms are subject to a large number of state and local taxes, most of which may be lowered if a firm meets special criteria for tax exemptions or credits. Business taxes are sufficiently complex that it is misleading to use any single tax indicator (such as the corporate tax rate) as evidence that a state's tax climate is favorable or unfavorable for business.

One approach to measuring and comparing business and tax climates is to take the point of view of a profit-maximizing firm owner. External factors that improve the long-run bottom line of the firm indicate a positive business climate. A recent article published by the Federal Reserve Bank of Boston [Tannenwald, 1994, commenting on S.H.Brooks]

advocates the use of such a "representative firm" approach for evaluating a state's tax competitiveness. In particular, the article comments on a recent study of the Massachusetts tax structure employing the representative approach:

> The measures generated by this approach meet most of the criteria of a good indicator of tax competitiveness. They take into account most business taxes and how they affect a firm's rate of return over a project's entire lifetime. They also capture how taxes at all levels of government interact to affect a firm's bottom line. Finally, the approach permits comparisons of tax competitiveness across cities and towns, not just states. (p. 42)

This is exactly the approach that has been incorporated into the IPPBR model.

Capacities of the IPPBR Model

The IPPBR model goes beyond the Massachusetts model's narrow focus on taxes, and includes a larger range of variables affecting a firm's location decision. In addition to estimating the amount of a firm's federal, state, and local taxes, the model also provides cost estimates for a firm's inputs and assets such as labor, land, and buildings. The general approach is to simulate the cost and tax climate that faces a firm in each of several industries. The focus of the model is on a firm's overall after-tax profitability. In its current state, the model has the following capacities:

1. estimation of the business costs and taxes of a representative firm in each of 15 industries;
2. estimation of statewide average taxes and costs for ten states;
3. estimation of costs and taxes for specific metropolitan locations (nine metro areas are currently included);
4. analysis of the impact of tax changes on Kansas businesses;
5 estimation of the impact of economic development tax incentives on the overall profitability of a firm by industry and by location;
6. comparison of Kansas taxes and costs (by industry) with those in other states.

Industries Examined by the IPPBR Model

The model currently includes 15 industries, selected to be representative of current and prospective economic activity in Kansas. The list in Table 10-1 includes agricultural- 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 research and development and data processing). A key difference among industries is their capital intensity; more specifically, the value of structures and machinery available per employee. As seen in Table 10-1, a wide range of capital intensities is seen within both the manufacturing and the service categories.

Table 10-1
Industries and Capital Intensity

Industry	SIC Code	Capital Intensity ($ per Employee)
Manufacturing		
Meat Products	201	$ 67,000
Grain Mill Products	204	64,000
Misc. Converted Paper Products	267	73,000
Commercial Printing	275	108,000
Pharmaceutical and Biological Products	283	159,000
Misc. Plastic Products	307	59,000
Fabricated Structural Metal Products	344	111,000
Construction and Related Mach. Mfg.	353	102,000
Electronic Components and Accessories	367	139,000
Motor Vehicles and Equipment Mfg.	371	247,000
Non-Manufacturing		
Telecommunications Office Facility	488	60,000
Wholesale Trade: Durable Goods	508	61,000
Computer and Data Processing Services	737	25,000
Research, Development, and Testing	873	165,000
Headquarters Establishment	—	38,500

Note: Industries selected jointly by Kansas, Inc. and IPPBR.

Representative Firm Profiles

The basic structure of the IPPBR tax model is fairly simple. The model begins with the concept of a representative firm in each of a number of industries. A profile is developed for each firm, which lists sales, costs, and assets. The profile is developed from published data taken from a variety of data sources, as discussed below. The asset and cost data are benchmarked to a base year of 1992, the most recent year for which key data sources were available. Once the firm profile is in place, the model proceeds to calculate the federal, state, and local taxes that the typical firm would incur.

Table 10-2 shows an example of a profile, constructed for a printing and publishing firm with 100 employees. Costs are in annual terms, and both costs and assets are adjusted to 1992 base year prices. The costs in the sample profile reflect U.S. average prices for labor, land, and other purchases. However, the actual simulation model incorporates local

cost adjustment factors for cities and states. The adjustments for local costs assume that the firms use the same quantity of each input (labor, energy, etc.) regardless of price.[13]

Table 10-2
Firm Profile: Printing and Publishing

NUMBER OF EMPLOYEES	100
AVERAGE ANNUAL SALES	$ 9,343,183
AVERAGE ANNUAL COSTS	$ 7,077,170
Payroll	2,542,338
Production	1,595,324
Other	947,014
Employer's Soc. Sec. Payments	194,489
Employee Benefits	266,115
Intermediate Goods and Services	4,827,780
Materials	3,388,073
Transportation	228,344
Utilities	188,477
Electricity	109,609
Gas	36,408
Water	2,594
Communications	36,216
Other	3,650
Business Services inc. Advertising	225,558
Other	797,329
Depreciation (annual average)	699,550
Repair and Rental Payments	131,890
Interest Payments	422,974
Other Costs or Revenue (-)	-2,007,968
ASSET COSTS (excluding sales taxes)	
Land	$ 439,989
Buildings	4,154,549
Machinery	6,246,363
Inventory	657,068
Debt/Equity Ratio	0.9
Interest Rate	8.0%

Source: IPPBR Cost and Tax Simulation Model.

[13] This assumption is known as "Leontief technology." An alternative assumption, known as "Cobb-Douglas" allows for substitution in the input mix as prices vary.

Data Sources for Profiles

Many data sources were used to construct the cost and asset profiles. As a starting point, important ratios such as sales per employee, payroll per employee, cost of materials per employee, inventories per employee, and energy use per employee were derived from the U.S. Bureau of the Census, *Annual Survey of Manufactures, 1991; County Business Patterns, 1992;* and *Census of Service Industries, 1987.* Data on investment per employee and square footage per employee were compiled from a listing of new corporate investments by industry published in *Site Selection and Industrial Development (1991).* Building costs were estimated by multiplying square footage by square foot costs, the latter derived from *Means Square Foot Costs: Residential, Commercial, Industrial, Institutional (1994).*

State and Local Business Cost Adjustments

Four types of state and local cost data are incorporated into the model. First, and most important, are wage adjustments based on 1992 county wage and salary data from the Bureau of Economic Analysis. Second are 1992 data on gas and electric costs provided on a state-by-state basis by the Department of Energy. Third are data on construction costs by city provided by *Means Square Foot Costs.* Fourth are data on land costs provided by a 1994 survey of business parks reported in *Site Selection.*

One factor **not** taken into account in the model is labor productivity. Educational attainment is frequently used as a proxy (however imperfect) for productivity. In terms of education, Kansas ranks tenth best nationally in terms of the percent of adults who have graduated from high school, and 18th best in terms of those with a bachelor's degree or higher. [U.S. Bureau of the Census, *Statistical Abstract,* p. xv] Although we have not explicitly analyzed productivity, we expect that Kansas would rank well, given the education level of its work force.

Business Taxes and Costs

The Tax Simulation Model uses information from the cost and asset profiles to calculate the taxes that would be paid by typical firms in each state. The model relies on a database of state and local tax rates and a complete description of the base to which each tax applies. The model is based on the most up-to-date information available about state tax rates and incentives. All sales tax and corporate tax rates are for 1994. Property tax rates for metropolitan areas are also for 1994. In the event that property tax rates vary within a metropolitan area, an average 1994 rate is used. For the most part, statewide estimates of property tax rates are based on 1993 data.

In essence, the model fills out federal, state, and local tax forms for each representative firm and calculates the firm's liability for each type of business tax. The model is careful to account for the feedback effects among taxes. For example, the model incorporates the "federal offset" which occurs when state and local taxes are deducted from federal taxable

income. Similarly, there is a state offset for local taxes. All calculations are carried out for a 20 year period, and then converted to annualized averages.

Alternative Simulations

The Cost and Tax Simulation Model is designed to allow the user to make alternative assumptions about the situations of the representative firms. Major assumptions are of two types, concerning:

1. the degree to which the firm receives tax credits and abatements; and
2. the importance of cost differentials other than those related to taxes

Whether a firm receives tax incentives can make a large difference in its bottom-line tax bill. The tax situation faced by a new firm in a particular state may share little with the situation of a mature firm. Furthermore, the situation of the new firm may bear little relation to the underlying tax rates that prevail in a state. Hence the results presented in this report contrast two alternative sets of assumptions.

In one scenario (the "new firm" scenario), a firm is assumed to qualify for all incentives allowed for new firms in their respective industries. The firm is assumed to locate in an enterprise zone in the states where enterprise zone credits exist. In states which allow 100 percent property tax abatements, the firm is assumed to receive the full tax break. The first scenario approximates the situation of a "footloose" firm which can shop for the best incentive package available in the region. In the alternative scenario (the "mature firm" scenario), the firm is offered no special tax credits or abatements. This scenario is intended to represent the situation of a mature, established firm which is currently neither expanding nor changing locations. The mature firm pays taxes in line with the basic tax structure of the state in which it is located. A mature firm may be discouraged from making additional investments in a state by high costs due to taxes and other factors.

The second set of assumptions concerns the extent to which differences 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 (see Tables 11-1 and 11-2). On the other hand, if the user is interested in broader issues of cost competitiveness, an extended model which builds in local cost adjustment factors for labor, utilities, and other key inputs is more valid (see Tables 11-3 and 11-4). Results from both approaches are presented in this report. It should be noted that the second approach reflects feedback effects between costs and taxes. For example, suppose that a firm locates in an area where land is expensive in comparison to other states. Then the full version of the model will indicate high property taxes for the firm. The property tax level reflects not only the tax rate, but also the land value. Similarly, income taxes in the full model reflect the impact of costs on the taxable income base.

Detailed Model Assumptions

The situations of representative new and mature firms are defined by a detailed set of assumptions. Some assumptions are shared in common, while others distinguish the two alternative firm types.

Assumptions Applying to All Firms

1. Firms in each industry are assumed to hire competitively 100 full-time employees.
2. Firms are export-oriented, selling 90 percent of their product outside the state.
3. Prices of the firm's output are determined in national markets, so that the firm cannot pass increases in state and local taxes along to its customers.
4. On average, firms earn a before-tax rate of return of 20 percent on their investment. State-to-state variations in taxes and costs affect the actual after-tax return on investment.
5. All simulations are calculated as annual averages over a 20- year period. During that time period, the firm's initial investment is assumed to depreciate and replacement investment is assumed to take place.
6. The model incorporates what is known as the *federal offset*. Reductions in state and local taxes generally increase federal taxable income, and hence the federal income tax liability.
7. No adjustments are made for differences across locations in labor productivity.
8. Materials prices are assumed to be the same in all locations.

Assumptions Applying to New Firms Only

1. Firms purchase a new structure and new machinery and equipment.
2. In states which allow property tax abatements, firms receive the maximum property tax abatement allowed by state law.
3. Firms qualify for job and investment tax credits in states where these are applicable. In states that enhance benefits in enterprise zones, the enhanced credit level is incorporated into the model.
4. Firms qualify for enterprise zone reductions in sales taxes where applicable.

Assumptions Applying to Mature Firms Only

1. Firms receive no property tax abatement.
2. Firms operate from buildings that were purchased previous to the period under analysis. They replace some of their machinery and equipment each year.
3. Firms do not qualify for job and investment tax credits or for special enterprise zone benefits.

Summary

The IPPBR Cost and Tax Simulation Model provides a flexible method for comparing costs of doing business across states. This model is based on a number of reasonable assumptions about the nature of firms and their location decisions. The model explicitly distinguishes the situation of a new firm that typically receives job and investment credits, property tax abatements, and other incentives, from that of a mature firm that typically receives no incentives unless it undertakes a significant expansion. In essence, the tax structure facing the new firm is very different from that facing the mature firm.

CHAPTER 11: SIMULATION MODEL RESULTS

Introduction

The IPPBR model currently compares business costs and taxes in Kansas with those in nine other states: Colorado, Iowa, Missouri, Nebraska, Oklahoma, California, Illinois, New Jersey, and New York. Simulations are performed for statewide average taxes and costs, and for a selection of metropolitan areas.

The model is first run under the assumption that non-tax costs, with the exception of some minor variations in interest payments, are constant throughout the region. Although this assumption runs contrary to fact, it serves to isolate the impact of taxes alone. This simulation is appropriate if we are trying to answer the limited question of how the Kansas tax structure compares with that in other states.

The model is then run under the assumption of varying non-tax costs. It is this type of simulation that can be used to determine whether Kansas business locations are "competitive"–in other words, whether Kansas has a favorable business climate overall.

The results of the model are summarized for capital-intensive manufacturing firms (those with capital per employee greater than $80,000) and for less capital-intensive manufacturers. In addition, we include a capital-intensive service firm (research and development) and a less capital-intensive service industry (data processing).

Results of Simulation 1 (Table 11-1)

Assumptions: new firms, firms receive all available tax incentives, costs are standardized across locations.

From the point of view of a new firm which receives all available tax credits and abatements, the tax structure of Kansas appears moderately attractive. Kansas statewide average taxes per employee are below the regional average for most industries. This translates into greater than average profits per employee. Depending on the industry, Kansas generally ranks as the second or third lowest taxed state in the region. The Kansas side of the Kansas City metropolitan area fares well in comparison with its counterpart in Missouri, particularly for capital intensive industries. This is largely due to the ability of Kansas communities to abate property taxes on both machinery and real estate.

Given the availability of tax incentives in Kansas, including substantial property tax abatements, the state is well positioned to compete for new businesses within the region on the basis of its tax structure.

Surprisingly, the large comparison states (California, Illinois, New York, and New Jersey) appear to fare quite well in terms of tax structure. That is, taxes in these states appear no higher than in the region surrounding Kansas. This is primarily due to

assumptions related to the property tax. In general, the ratio of business property taxes to total business property is low in the comparison states. Illinois, New Jersey, and New York largely exclude machinery and equipment from the property tax base. In California, property taxes are limited to about one percent of value by Proposition 13. The simulation assumes that the firm's property value is the same regardless of state. Of course in actuality, property values are higher in the large states, offsetting the effect of low rates (see Tables 11-3 and 11-4). While the simulation accurately reflects property taxes per dollar of property value, it fails to account for differences in the total value of a firm's real estate in different regions of the county.

Results of Simulation 2 (Table 11-2)
Assumptions: mature firms, firms receive NO tax incentives, costs are standardized across locations.

For mature firms that receive no tax credits or abatements, the tax structure in Kansas is higher than that in any other state in the region, and in fact generally exceeds those in the four large comparison states. The difference between Kansas and the average for the region is exacerbated for capital intensive firms such as research and development. The primary explanation for these results is the relatively high Kansas property tax, particularly on business machinery and equipment. The results shown in Table 11-2 compare the basic business tax structures of the states, accounting for interactions among taxes.

Results of Simulation 3 (Table 11-3)
Assumptions: new firms, firms receive all available tax incentives, costs vary by location.

An accurate picture of the competitiveness of the Kansas business climate is revealed only when we look at all business costs, not just taxes. For new firms receiving credits and abatements, Kansas on average appears to be neutral to moderately attractive as a business location. Kansas profits per employee exceed the regional average for all industries in Table 11-3. Projections of profits per employee are substantially higher in Kansas than in Colorado or Missouri. Within the Kansas City metro area, locations on the Kansas side of the border are projected to produce higher profits than those on the Missouri side.

Of particular note in this simulation is the situation of the large comparison states All of these states have basic business costs far above those found in the region surrounding Kansas As a consequence, profits per employee, as measured by the model, are much smaller than in Kansas or the rest of the surrounding region. In some cases, profits are actually negative.

Results of Simulation 4 (Table 11-4)
Assumptions: mature firms, firms receive NO tax incentives, costs vary by location.

When all costs are taken into account, the model estimates that for most industries, profits per employee at Kansas locations still fall below the regional average, as they did

in Simulation 2. Under the assumptions of Simulation 2, Kansas no longer stands out as the lowest-profit state in the region. Average statewide Kansas profits per employee exceed those in Missouri or Colorado for all of the industries listed. The Johnson County locations in Kansas appear to compete successfully with locations in Kansas City, Missouri. For mature firms, Kansas' moderate basic business costs in part offset the effects of an unfavorable tax structure.

Not surprisingly, all of the locations in the region surrounding Kansas show higher profits and lower costs per employee than in the large comparison states. This is explained by the relatively low wage and utility costs found throughout the region. New York stands out as the highest cost location among those examined by the model.

Sources of Errors in the Model

As is the case with any economic model, the IPPBR Cost and Tax Model contains a number of sources of potential error. It should be emphasized that "error" and "mistake" are not synonymous in this context. By "error," we simply mean that there is unavoidable variability in the model, or that the model is not a perfect replica of the real world. Model errors stem from three possible sources:

1. imperfect state-level data sources. State-level data sources are responsible for the interstate variations in total costs reported by the model. As an example of error, it is likely that the data used to create state-specific measures of wages may not exactly represent the occupation mix employed by a specific industry.
2. imperfect national-level data sources. National-level data are used to construct the firm profiles. The data are taken from a variety of sources, and inconsistencies across the data sources can be observed. We employ standard methods to resolve these inconsistencies, but errors due to the data remain.
3. missing data. This is probably the most important source of error in the model. Some data are unavailable at the state or local level. Included in our list of missing data are state-specific measures of materials costs, state-specific measures of transportation costs, and, most critically, state-specific adjustments of labor productivity.

Because of the potential for error in the model, the interstate total cost differences reported in Tables 11-3 and 11-4 should be interpreted with caution. Although we have not completed a quantitative analysis of errors, our preliminary work indicates that interstate cost differentials on the order of $1,500-$2,000 may not be significant.[14]

[14] The magnitude of errors in the model is a critical topic for future research. A key component of this research should be the study of productivity differences by state.

Table 11-1
Taxes and Profits per Employee: Partial Model
New Firms Receiving Tax Credits and Abatements

Location	Capital Intensive Mfg.		Other Mfg.		Data Processing		Research and Development	
	Taxes per Emp.	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*
State Averages								
Colorado	$14,473	$17,028	$8,352	$8,737	$3,401	$3,774	$16,237	$17,794
Iowa	12,341	19,119	7,399	9,683	3,070	4,126	13,129	21,152
Kansas	13,144	18,424	7,496	9,656	3,133	4,091	14,335	20,058
Missouri	13,885	17,575	7,773	9,309	3,152	4,026	15,398	18,656
Nebraska	14,186	17,382	7,722	9,430	3,226	3,998	15,568	18,825
Oklahoma	13,152	18,416	7,754	9,398	2,927	4,238	14,218	20,105
California	13,385	18,101	7,861	9,213	3,373	3,791	13,992	20,328
Illinois	12,958	18,610	7,545	9,607	3,286	3,907	14,577	19,407
New Jersey	13,517	18,051	8,004	9,148	3,343	3,881	14,025	20,368
New York	13,828	17,683	8,162	8,976	3,763	3,433	14,534	19,492
Reg. Av. (Co, Ia, Mo, Ne, Ok)	13,607	17,904	7,800	9,311	3,155	4,032	14,910	19,306
Kansas as % of Reg. Av.	96.59%	102.90%	96.11%	103.70%	99.30%	101.45%	96.15%	103.89%
Metropolitan Areas								
Denver, Colorado	$14,440	$17,056	$8,343	$8,742	$3,407	$3,765	$16,271	$17,737
Des Moines, Iowa	12,446	19,029	7,525	9,566	3,099	4,100	13,246	21,049
Overland Park, Kansas	13,339	18,229	7,584	9,568	3,172	4,052	14,580	19,813
Olathe, Kansas	13,194	18,373	7,520	9,632	3,144	4,080	14,406	19,987
Wichita, Kansas	13,125	18,443	7,482	9,670	3,123	4,101	14,261	20,132
Kansas City, Kansas	13,629	17,939	7,735	9,417	3,241	3,983	14,963	19,430
Kansas City, Missouri	14,490	16,957	7,969	9,104	3,248	3,924	16,279	17,731
Omaha, Nebraska	14,566	17,002	7,890	9,262	3,306	3,918	16,051	18,342
Oklahoma City, Oklahoma	13,201	18,366	7,797	9,355	2,979	4,178	14,406	19,906
Kansas Metro Av.	13,322	18,246	7,580	9,572	3,170	4,054	14,552	19,841
Regional Av.	13,828	17,682	7,905	9,206	3,208	3,977	15,251	18,953
Kansas as % Reg. Av.	96.34%	103.19%	95.90%	103.97%	98.83%	101.93%	95.42%	104.68%

NOTE: Under the assumptions of the partial model, taxes vary by location, other costs are standardized.
SOURCE: Calculated by IPPBR.

Table 11-2

Taxes and Profits per Employee: Partial Model
Mature Firms Receiving NO Tax Credits or Abatements

Location	Capital Intensive Mfg.		Other Mfg.		Data Processing		Research and Development	
	Taxes per Emp.	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*	*Taxes per Emp.*	*Profits per Emp.*
State Averages								
Colorado	$15,175	$16,278	$8,540	$8,537	$3,435	$3,740	$16,279	$17,752
Iowa	13,232	18,228	7,763	9,318	3,291	3,905	14,084	20,196
Kansas	15,607	15,826	8,597	8,463	3,613	3,554	17,335	16,666
Missouri	14,784	16,500	8,473	8,565	3,447	3,731	15,934	18,120
Nebraska	14,370	16,900	7,799	9,233	3,258	3,918	15,809	18,229
Oklahoma	14,083	17,348	8,186	8,877	3,333	3,833	15,176	18,784
California	14,429	17,056	8,245	8,829	3,463	3,700	15,574	18,747
Illinois	13,733	17,744	8,217	8,849	3,500	3,658	14,775	19,130
New Jersey	13,735	17,720	8,161	8,918	3,475	3,701	14,303	19,973
New York	14,453	16,977	8,816	8,245	3,967	3,197	14,435	19,520
Reg. Av. (Co, Ia, Mo, Ne, Ok)	14,329	17,051	8,152	8,906	3,353	3,825	15,457	18,616
Kansas as % of Reg. Av.	108.92%	92.82%	105.45%	95.03%	107.76%	92.91%	112.15%	89.53%
Metropolitan Areas								
Denver, Colorado	$15,149	$16,297	$8,524	$8,549	$3,434	$3,738	$16,269	$17,739
Des Moines, Iowa	13,634	17,840	8,029	9,062	3,397	3,802	14,516	19,780
Overland Park, Kansas	16,226	15,205	8,873	8,185	3,735	3,431	18,118	15,877
Olathe, Kansas	15,757	15,674	8,662	8,396	3,643	3,524	17,535	16,460
Wichita, Kansas	15,611	15,834	8,610	8,458	3,615	3,557	17,275	16,758
Kansas City, Kansas	17,118	14,304	9,323	7,729	3,939	3,224	19,256	14,714
Kansas City, Missouri	15,525	15,722	8,793	8,230	3,588	3,585	16,860	17,150
Omaha, Nebraska	14,773	16,473	7,975	9,047	3,341	3,831	16,320	17,688
Oklahoma City, Oklahoma	14,136	17,276	8,231	8,818	3,374	3,783	15,356	18,541
Kansas Metro Av.	16,178	15,254	8,867	8,192	3,733	3,434	18,046	15,952
Regional Av.	14,643	16,721	8,310	8,741	3,427	3,747	15,864	18,179
Kansas as % Reg. Av.	110.48%	91.23%	106.70%	93.72%	108.93%	91.63%	113.75%	87.75%

NOTE: Under the assumptions of the partial model, taxes vary by location, other costs are standardized.
SOURCE: Calculated by IPPBR.

Table 11-3

Costs, Taxes, and Profits per Employee: Full Model
New Firms Receiving Tax Credits and Abatements

Location	Capital Intensive Mfg.		Other Mfg.		Data Processing		Research and Development	
	Cost+Tax per Emp.	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*
State Averages								
Colorado	$169,046	$18,110	$241,715	$9,740	$93,566	$4,625	$55,359	$18,561
Iowa	163,040	24,117	237,985	13,470	88,522	9,669	48,002	25,917
Kansas	165,097	22,059	239,110	12,345	90,150	8,041	50,417	23,502
Missouri	167,565	19,591	240,896	10,559	91,715	6,476	53,128	20,792
Nebraska	164,455	22,701	237,938	13,517	88,585	9,606	50,181	23,739
Oklahoma	164,371	22,785	238,829	12,626	89,469	8,722	49,702	24,217
California	173,229	13,927	246,210	5,245	97,975	216	56,882	17,037
Illinois	170,718	16,438	243,713	7,742	96,392	1,799	56,306	17,613
New Jersey	175,226	11,930	247,418	4,037	101,990	(3,799)	58,699	15,220
New York	176,524	10,632	248,201	3,254	103,367	(5,176)	60,415	13,504
Reg. Av. (Co, Ia, Mo, Ne, Ok)	165,695	21,461	239,473	11,982	90,371	7,820	51,274	22,645
Kansas as % of Reg. Av.	99.64%	102.79%	99.85%	103.03%	99.76%	102.83%	98.33%	103.79%
Metropolitan Areas								
Denver, Colorado	$172,712	$14,445	$244,418	$7,037	$97,664	$527	$58,823	$15,096
Des Moines, Iowa	166,364	20,792	240,320	11,135	92,525	5,666	51,315	22,604
Overland Park, Kansas	168,481	18,675	241,492	9,963	93,774	4,417	53,621	20,298
Olathe, Kansas	168,341	18,815	241,431	10,024	93,748	4,443	53,453	20,467
Wichita, Kansas	168,067	19,089	241,193	10,262	93,650	4,541	53,130	20,789
Kansas City, Kansas	169,193	17,963	241,944	9,511	94,343	3,848	54,410	19,509
Kansas City, Missouri	170,612	16,544	242,853	8,602	94,668	3,523	56,320	17,599
Omaha, Nebraska	167,698	19,458	240,191	11,264	91,899	6,292	53,341	20,578
Oklahoma City, Oklahoma	166,018	21,138	239,614	11,841	91,717	6,474	51,720	22,199
Kansas Metro Av.	168,520	18,636	241,515	9,940	93,879	4,312	53,654	20,266
Regional Av.	168,681	18,475	241,479	9,976	93,695	4,496	54,304	19,615
Kansas as % Reg. Av.	99.90%	100.87%	100.01%	99.64%	100.20%	95.90%	98.80%	103.32%

NOTE: Under the assumptions of the full model, taxes and other costs (labor, land, energy, etc.) vary by location.
SOURCE: Calculated by IPPBR.

Table 11-4
Costs, Taxes, and Profits per Employee: Full Model
Mature Firms Receiving NO Tax Credits or Abatements

Location	Capital Intensive Mfg.		Other Mfg.		Data Processing		Research and Development	
	Cost+Tax per Emp.	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*	*Cost+Tax per Emp.*	*Profits per Emp.*
State Averages								
Colorado	$169,798	$17,358	$241,918	$9,537	$93,604	$4,587	$55,402	$18,517
Iowa	163,715	23,441	238,074	13,381	88,746	9,445	48,940	24,979
Kansas	167,623	19,533	240,229	11,226	90,665	7,526	53,754	20,166
Missouri	168,661	18,495	241,643	9,812	92,059	6,132	53,691	20,228
Nebraska	164,964	22,192	238,154	13,301	88,701	9,490	50,802	23,117
Oklahoma	165,491	21,665	239,338	12,117	89,802	8,389	51,120	22,800
California	174,115	13,041	246,391	5,064	97,864	327	58,383	15,537
Illinois	171,593	15,563	244,480	6,975	96,611	1,580	56,591	17,328
New Jersey	175,566	11,590	247,652	3,803	102,235	-4,044	59,102	14,817
New York	177,189	9,967	248,867	2,588	103,699	-5,508	60,488	13,431
Reg. Av. (Co, Ia, Mo, Ne, Ok)	166,526	20,630	239,825	11,630	90,582	7,609	51,991	21,928
Kansas as % of Reg. Av.	100.66%	94.68%	100.17%	96.53%	100.09%	98.92%	103.39%	91.96%
Metropolitan Areas								
Denver, Colorado	$173,464	$13,692	$244,606	$6,849	$97,661	$530	$58,815	$15,104
Des Moines, Iowa	167,503	19,654	240,787	10,668	92,806	5,385	52,540	21,379
Overland Park, Kansas	171,420	15,736	242,805	8,650	94,355	3,836	57,486	16,433
Olathe, Kansas	170,965	16,191	242,607	8,848	94,270	3,921	56,920	16,999
Wichita, Kansas	170,544	16,612	242,298	9,157	94,136	4,056	56,393	17,526
Kansas City, Kansas	172,723	14,433	243,541	7,914	95,046	3,145	59,012	14,908
Kansas City, Missouri	171,795	15,361	243,675	7,780	94,982	3,209	56,861	17,058
Omaha, Nebraska	168,236	18,920	240,412	11,043	92,000	6,191	54,004	19,915
Oklahoma City, Oklahoma	167,141	20,015	240,134	11,321	92,078	6,113	53,139	20,780
Kansas Metro Av.	171,413	15,743	242,813	8,642	94,452	3,739	57,453	16,466
Regional Av.	169,628	17,528	241,923	9,532	93,906	4,285	55,072	18,847
Kansas as % Reg. Av.	101.05%	89.81%	100.37%	90.66%	100.58%	87.26%	104.32%	87.37%

NOTE: Under the assumptions of the full model, taxes and other costs (labor ,land, energy, etc.) vary by location.
SOURCE: Calculated by IPPBR.

Detailed Breakdown of Taxes

Table 11-5 distinguishes the particular taxes responsible for the high overall level of taxation for mature Kansas firms. Most important among these are the property tax and the sales tax. Kansas property taxes exceed the regional average by about 47 percent for an established capital intensive manufacturing firm, and by about 35 percent for a less capital intensive manufacturer. The current Kansas tax structure creates a large differential between residential and business property (real estate and machinery), and taxes business property at relatively high rates.

Table 11-5
Taxes per Employee for a Mature Firm: Kansas and Region
(holding other costs constant)

Type of Tax	Kansas		Regional Average		Kansas as % of Reg.	
	Capital Intensive Mfg.	*Other Mfg.*	*Capital Intensive Mfg.*	*Other Mfg.*	*Capital Intensive Mfg.*	*Other Mfg.*
Federal Taxable Income	$24,163	$12,920	$25,940	$13,552	93.15	95.33
Federal Income Tax	8,215	4,393	8,820	4,608	93.15	95.33
State Income Tax	1,286	680	662	339	194.27	200.78
Unemploy. and Workers Comp.	1,328	1,154	1,263	1,412	105.17	81.71
Property Tax	4,201	1,897	2,846	1,407	147.62	134.85
Franchise Tax	25	25	48	25	51.55	100.81
Sales Tax	551	449	690	363	79.89	123.70
On Machinery and Structures	143	25	455	80	31.32	31.32
TOTAL	$15,607	$8,597	$14,329	$8,152	108.92	105.45

Source: Calculated by IPPBR.

State income taxes exceed the regional average by an even greater percentage, 94 percent. It is not that Kansas corporate tax rates are extraordinarily high, but that under the assumptions of the model, a greater portion of a firm's overall income becomes subject to the Kansas income tax. Recall the assumption that the firms are assumed to be export-oriented. Kansas typically bases the income tax for multi-state firms on in-state percentages of three factors: payroll, property, and sales.[15] By contrast, several other states in the region base their income tax allocations on sales only, or on a combination of sales and property.

[15] In Kansas, firms with a payroll factor exceeding 200% of the average of the property and sales factors may elect to use a two-factor formula. The alternative formula is based 50% on sales and 50% on 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.[16]

Kansas Tax Changes: 1991-1994

Over the last few years, Kansas has passed several pieces of legislation that affect business taxes. In particular, Kansas has:

1. introduced a state-mandated property tax as a substitute for much of the school portion of local property taxes. Local property taxes were reduced in most areas, and the overall Kansas average levy fell from 125 mills in 1991 to 114 mills in 1993.
2. increased the state sales tax from 4.25 percent to 4.9 percent.
3. increased the corporate income tax from 6.75 percent to 7.35 percent for incomes over $50,000, and decreased the rate on incomes below $50,000.
4. removed a sales tax exemption on interstate telecommunications (with exceptions for telemarketing firms).
5. imposed a 2.5 percent sales tax on previously exempt items, namely electricity, gas and water used in production, and original construction services (removed in 1995).
6. completely restructured the enterprise zone program, extending benefits to the entire state and changing the size and timing of job and investment credits.
7. reduced the assessment ratio of commercial real estate from 30 percent to 25 percent, while increasing the assessment ratio on business personal property.
8. initiated investment credits for high performance firms.

Some changes have been favorable to business, while others have had a negative impact. In order to assess the overall impact on the Kansas business climate, we ran our current model with the tax rates and tax base definitions that prevailed in 1991 and compared the results to those based on the 1994 tax structure. We obtained our results before the Kansas Legislature had eliminated the sales tax on utilities and construction, so this change is not incorporated in the model results. The outcomes of the simulations are summarized in Table 11-6.

Overall, the numerous Kansas tax changes have had little impact on the tax level of mature firms in most industries. The small changes in taxation reported by the model are probably within the model's margin of error, and should not be considered significant. An exception may be research and development, which may be experiencing higher taxes due to the increase in the assessment ratio for machinery and equipment.

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[16] Suppose that a firm has 90% of its property, 90% of its payroll, and 15% of its sales in a single state. Then 65% of its income will be taxable in that state under a 3-factor formula (90/3+ 90/3+ 15/3). But only 15% of its income will be taxable in that same state under a sales only formula. The firm may be liable for income taxes in other states on the basis of the remaining 85% of its sales.

Table 11-6
Impact on Representative Firms Due to Tax Law Changes, 1991-1994

Estimated Taxes for Kansas Mature Firm	Capital Intensive Mfg.	Other Mfg.	Data Process.	Research and Devel.
Total taxes under 1991 tax laws and rates	$17,307	$9,943	$5,942	$18,897
Total taxes under actual 1994 laws and rates	17,477	9,935	5,883	19,205
Difference ($ per employee)	169	(8)	(59)	308
Percent difference	0.98%	-0.08%	-0.99%	1.63%

NOTE: The model was run using actual Kansas costs for land, labor, energy, etc.

Conclusions

Is Kansas a high-cost state for doing business? That depends on one's perspective: whether one is concerned with new firms or mature firms, and whether one is making regional or national comparisons.

From the point of view of a firm seeking to make a new investment, the overall Kansas cost and tax climate appears neutral to moderately favorable in comparison with other states in the region. Estimated profits per employee exceed the regional average.

But from the point of view of a mature firm, Kansas property taxes make it the highest taxed state in the region. To some degree, moderate costs for labor and utilities mitigate the impact of high taxes, placing Kansas in the mid-range of the region in terms of overall costs. Still, overall profits per employee fall short of the regional average by one to eight percent, depending on the industry.

Kansas and the entire surrounding region fare well (in terms of estimated profits per employee) with comparison to the large states considered by the model (California, Illinois, New Jersey, and New York). Basic business costs for labor, land, and energy are far higher in the comparison states than in the region surrounding Kansas.

Interstate cost comparisons in the model should be viewed with caution because of potential model errors. In fact, the states in the region, with the possible exceptions of Colorado at the high end and Iowa at the low end, show very similar total business costs, including taxes. But while some of the reported differences among the middle group of states may not be significant, the differences between these states and the large comparison states are highly significant.

State tax structures change rapidly as states balance the need to generate revenue with political demands for business incentives, personal tax "fairness," and local property tax relief. Kansas has legislated numerous tax changes since 1991. Overall, these changes have had a neutral overall impact on mature Kansas firms (although the changes may have had positive or negative impacts on particular industries). On average, the benefits of lower property taxes have been canceled out by reductions in sales tax exemptions and by higher income tax rates. It is unlikely that tax law changes of the early 1990s have done much to either drive business from the state or to encourage it to stay.

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