

A COMPREHENSIVE RETAIL SALES TAX AS A SINGLE TAX FOR THE STATE OF KANSAS

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A well-crafted retail sales tax on all goods and services could replace all 36 other state-level taxes in Kansas—including the personal and corporate income taxes. The tax rate could be eight percent (8%) or less, after the state government makes budget adjustments related to the recent recession-driven revenue shortfalls. Such a bold move holds the promise of making Kansas one of the most growth-oriented state tax environments in the nation (without compromising retail competitiveness along the state's borders). A change of this magnitude would require substantial behavioral and administrative adjustments for everyone, but the technical aspects of such a transition are readily managed if Kansans chose to commit to the goal.

Tax Policy and Economic Growth

Tax policy debates can benefit from an understanding of economic fundamentals. The accumulated complexity of modern tax laws can camouflage a basic principle: Taxation represents a claim the government makes on the monetary value of either current or future production. The only way citizens can pay a tax is to divert current income from some other use or draw down current savings. Current income measures the value of current production. Savings (usually in the form of personal or business investments) measures the value of resources dedicated to future production.

Taxation of the resources used for future production may well lead to less future production—less economic

growth. Policy makers should keep two fundamental elements of taxation separate when evaluating tax policy: (1) the dollar amount of taxes collected and (2) the economic efficiency with which each dollar is collected. Each component matters for different economic reasons. The dollar amount of taxes collected relates to the deployment of resources in the public sector versus the private sector, and the relative value added by each sector. The economic efficiency of tax collections is a tax policy design issue independent of how much tax money the public sector claims from the production stream. Some methods of taxation have better efficiency properties than others with regard to the private sector's incentive to produce.

A well-crafted retail sales tax has positive attributes from the perspective of economic growth. It represents one form of a consumption tax, a form familiar to most people. Generally, consumption taxes represent a class of taxes that do not tax money used for saving and investment, regardless of the source of that money. This feature of consumption taxation differs from traditional types of income taxation. Income taxes effectively double tax the money used for saving and investment (but tax only once the money used for consumption), thereby producing a tax bias against saving and investment, which generates a disincentive to dedicate money toward future production.¹ Because saving and investment are key elements of the growth process, consumption taxes can better promote economic growth, all else equal.

A well-crafted retail sales tax would also tax all goods and services uniformly. Such uniformity can also assist the process of economic growth. When certain types of economic activity are taxed differently, it can lead to a misallocation of resources or malinvestments. Minimizing such tax-driven misallocations can improve the overall efficiency and effectiveness of the economic growth process. (HB 2348, 2009 Session, represents an example of model legislation to achieve greater uniformity in the application of the Kansas sales tax, a model that can help inform the legal details of a comprehensive retail sales tax.)

Basic Design of a Comprehensive Retail Sales Tax

The policy goal of a comprehensive retail sales tax—one that replaces all other state-level taxes—is to tax all items of “end use” consumption in the state of Kansas. The “end use” criterion would exclude from sales tax any business inputs used to produce other goods and services. The economic efficiency aspects of a comprehensive retail sales tax would dissolve if inputs (intermediate goods and services) incur taxation, because of a phenomenon called “tax pyramiding,” the payment of tax on tax.

What would be taxed?

The purchase of all end use goods and services. An unconventional, but logical, element of a comprehensive retail sales tax base would include rented and owner-occupied housing.

What would not be taxed?

- The purchases of inputs by businesses (i.e., intermediate sales)—including purchases related to research and development. Farms, properly defined, would classify as businesses.
- Goods or services purchased on behalf of an insured person (policyholder). Such purchases would count as a business purchase. (A retail sales tax would be levied on insurance premiums.)
- Money used for saving or investment. (However, a retail sales tax would be levied on financial services.)

The term “investment” means property purchased exclusively for purposes of appreciation of income or the production of income.

- Tuition expenses for education. Education is a form of investment. (Job training would count as a business input.)
- Tithes, dues, contributions, and similar payments to qualified not-for-profit organizations.
- Services provided pro bono by churches or not-for-profit organizations.

Select Policy Issues

No tax regime is as simple as people hope. Matters related to social policy will always interface with tax policy. Illegal tax evasion and legal tax avoidance create economic dynamics that require thoughtful administrative procedures that may increase administrative complexity. Simplicity is one among many policy goals that must be balanced against one another. (Kansas, among many other states, participates as a full member in the Streamlined Sales and Use Tax Agreement, a cooperative agreement among states with a stated mission of simplifying sales and use tax administration, especially as the administration relates to interstate transactions.² This agreement could factor into the particular details of implementing a comprehensive retail sales tax.)

Applying the Sales Tax to Rented or Owner-Occupied Housing

A comprehensive retail sales tax need not tax the consumption of housing services, but doing so follows logically from the economic principles associated with such a tax regime. First, uniformity in the taxation of all end use goods and services helps promote better resource allocation and tax equity. Second, and related, housing services represent a large component of consumption. Exempting this consumption from taxation requires a higher tax rate on other forms of consumption; the tax rate differential among different forms of consumption works against the economic goal of preventing tax-driven resource misallocation.

Transition issues always loom large in fundamental tax reform. The most straight forward transition related to the sales taxation of housing services may be to specify a date certain after which all rental payments and all owner-occupied home sales would be subject to the new tax system. Tax uniformity recommends against distinguishing between existing and newly-constructed housing units. An unavoidable transition issue related to housing is the price effect created by the imposition of sales tax on rental payments and future home sales. From a taxpayer perspective, this effect is part of the price of eliminating other forms of taxation.

The consumption taxation of owner-occupied housing creates much greater policy challenges than does the consumption taxation of rental housing. If the goal of the new tax policy is to make no distinction between existing and newly-constructed housing units, policy makers must craft some type of method to include existing owner-occupied housing into the comprehensive sales tax base. Some measure of complexity is unavoidable in this process. Two procedural options suggest themselves: (1) include newly-built and existing houses in the tax base as they change owners or (2) include all existing houses at once and newly-built houses when Kansans buy them. Under either option, two policy questions arise: (1) should the full amount of the tax be due all at once (much like the sales tax on a car purchase) or should payment of the tax be spread out over time? and (2) should the comprehensive sales tax apply to every sale (turnover) of an owner-occupied housing unit or should every unit bear tax only once?

Arguably, the approach least disruptive to the Kansas housing market would include all existing owner-occupied housing units into the tax base at once and spread the payment of the tax liability out over time (for both existing and newly-built housing units). Here is one possible approach: As of date certain, all existing owner-occupied housing units would adopt as their “sales price” the appraised value they hold for property tax purposes. The legislated comprehensive sales tax rate would apply to that value to determine the tax amount. The taxpayer would pay the tax in equal increments over a 15-year period. The 15-year period is arbitrary; it derives from

the convention of 30-year mortgages and offers an administratively simple method for splitting the time value of money between the taxpayer and the state government. A longer time period would make the transition more financially manageable and disrupt the market for housing less; but it would make the revenue-neutral tax rate higher. Buyers of newly-built houses would pay tax on the sales price and also pay the tax in equal installments over 15 years. Assuming an eight percent tax rate, an owner or buyer of a \$200,000 house would owe \$1,066 per year (but would owe no state-level income tax or car tax and, as explained below, might have some of the tax rebated). For comparison, that amount would be consistent with a renter that paid tax on rental payments of \$1,110 per month.

The question of whether to tax every house sale is a matter of balancing policy trade-offs. There is a logical appeal to imposing a tax on each housing unit only once: the initial price is a measure of the consumption value of the house. Taxing each new house sale is a tax on mobility, which has undesirable attributes from an economic policy perspective. The state government will collect much more revenue over time if a tax is imposed on each new house sale (with a new 15-year payment period). Consequently, the taxation of each house sale could allow for a lower tax rate or a longer time period over which to pay the tax. (A procedure will be required to handle owner-occupied homes that become rentals.)

Taxes as a Share of Income

Critics of retail sales taxation often cite the “regressivity” of the tax burden, meaning that the tax burden as a share of income tends to be higher for citizens with lower income levels. Such critics may argue in favor of income taxation instead because they favor “progressivity” of the tax burden. Under an income tax regime, the tax authorities can more easily apply higher tax rates to higher levels of income—as they do under current U.S. and Kansas law—than they can under a sales tax. However, as illustrated in Table 1, the generation of tax progressivity does not require a structure of graduated tax rates.

Contrary to the critics’ claims, a well-crafted comprehensive retail sales tax generates a proportional tax

burden, as illustrated in Table 1. Proportionality provides a clear principle for the conduct of tax policy. Each citizen contributes the same proportion of their income to the funding of publicly provided goods and services, based on the amount that each citizen consumes. (Of course, those citizens with more income to spend on consumption pay a larger dollar amount.) Those citizens that save or invest more—meaning those citizens that contribute a larger share of their current income to the promotion of greater future production—defer a portion of their current tax burden into the future when they consume that portion of increased production they helped create.

If Kansans insist on establishing a progressive tax burden (how much progressivity is the “correct” amount?), a tax rebate approach offers a sound method from the perspective of controlling compliance costs and maintaining the integrity of the tax system. The alternative, practiced in many tax jurisdictions in the U.S., is to exempt certain goods and services from tax—typically those defined as “necessities,” like food, clothing, and medicine. Exemptions ruin the uniformity feature of a well-crafted comprehensive retail sales tax and require increased recordkeeping and monitoring costs on the part of both the tax authority and sellers of exempt goods and services.

Current Kansas law offers a refund through the income tax code for lower-income citizens that pay sales tax on food. The refund procedure has several restrictions on who can qualify and, in the 2008 tax year, had a tax-filer income limit of \$30,300. This approach imposes an

administrative cost on the tax authority and those that qualify for a rebate, but not the seller of food.

A more comprehensive rebate program could follow the spirit of current Kansas law related to food sales, but have broader applicability. Assuming that the comprehensive retail sales tax replaced the Kansas income tax, an alternative—but similar—administrative procedure would allow citizens to seek a rebate.

A retail sales tax devised for use by the federal government as a replacement for all other federal taxes (HR 25, 111th Congress, 1st Session) bases its rebate plan on the federal poverty level. As devised in the legislation, all citizens would automatically receive a rebate based on a formula. In brief, the formula multiplies the sales tax rate by the federal poverty level designated for a specified family size. The details of this rebate are discussed below in connection with the derivation of tax rates for a comprehensive retail sales tax.

Table 1 shows the impact a rebate has on taxes paid as a share of income. The rebate generates a progressive tax burden. The rebate has a greater financial impact on the taxes paid by lower-income groups. Consequently, the tax burden as a share of income increases as income increases (assuming the income purchases the end use consumption of goods and service.)

The Economic Importance of Exempting Business-to-Business Transactions

Sound economic policy seeks to minimize the influence of policy on the relative level of prices. Prices that accu-

Table 1
Examples of Tax Burden as a Share of Income

	Taxpayer 1	Taxpayer 2	Taxpayer 3	Taxpayer 4
Gross Income	20,000	100,000	500,000	1,000,000
Income spent on consumption (assume 20% goes toward saving)	16,000	80,000	400,000	800,000
Tax paid with an 8% tax rate	1,280	6,400	32,000	64,000
Taxes as share of Gross Income	6.40%	6.40%	6.40%	6.40%
Hypothetical Rebate on Taxes Paid	1,000	1,000	1,000	1,000
Taxes as a share of Gross Income after rebate	1.40%	5.40%	6.20%	6.30%

rately reflect the market value of goods and services help to direct resource use in a manner consistent with the value consumers place on the goods and services.

A sales tax imposed on intermediate goods and services—the goods and services that work as inputs to the production of end use goods and services—would create false price signals. This outcome would result from the payment of tax upon tax—a process called “tax pyramiding” or “tax cascading.”

A growing body of empirical research indicates that the retail sales tax has a strong negative impact on relative economic growth rates among the states.³ The basic explanation for this finding is that current practices related to the retail sales tax in many states creates a significant amount of distortion in market prices. This distortion can be significantly magnified in the case of business-to-business transactions because of tax pyramiding, and the magnification can take place in unpredictable ways, depending on the details of particular production processes and their interaction with the retail sales tax.

Table 2 offers a hypothetical example of tax pyramiding. The key assumption in the table, which is uncertain in practice, is that the seller has the ability to fully pass on the amount of the sales tax to its customer. The line item labeled “Sales Tax on Sales Tax” demonstrates the tax-pyramiding phenomenon. The greater the number of business-to-business transactions in the production process that must pay the retail sales tax, the more the tax will generate relative-price distortions that negatively influence the growth and efficiency of the economy.

From the end-consumers’ perspective, tax pyramiding increases the effective sales tax rate. The assumed statutory tax rate of 8.0 percent results only when the system taxes the economic value added: “Sales Tax on Real Value” divided by the sum of “Value Added” ($\$104/\$1,300$). The example of tax pyramiding illustrated in Table 2 results in an effective sales tax rate of 8.64 percent ($(\$104 + \$8.28)/\$1,300$). If the production process had more stages, the effective sales tax rate would increase further, as the tax pyramid grew.

From a business perspective, tax pyramiding can alter business-structure decisions. The above example uses small dollar values. However, given a large enough dollar volume of taxed business-to-business sales, the retail sales (and use) tax system can artificially motivate a firm to vertically integrate in order to minimize its tax exposure; business “transactions” *within* a firm would not be viewed as taxable transactions. Such an outcome would represent a vivid example of a business decision being made solely because of tax policy—a violation of sound economic policy.

Kansas exempts from retail sales tax many business-to-business transactions but not nearly all transactions. The Kansas Department of Revenue, in its 2008 *Annual Report*, provides retail sales tax collections from 98 different industry sectors. Only 12 of the reported sectors—representing about 58 percent of total collections—have a retail designation. It is difficult to know what share of total sales tax collections in Kansas, even from the 12 retail sectors reported, represent business-to-business

Table 2
An Illustration of Tax Pyramiding Using a Tax Rate of 8.0 Percent

Item of Analysis	Industry Sector				
	Forestry & Logging	Wood Product Manufacturing	Furniture Manufacturing	Home Furnishings Stores	End Consumer
Purchase Price		\$1,000.00	\$1,180.00	\$1,374.40	\$1,577.95
Sales Tax on Real Value		80	88	96	104
Sales Tax on Sales Tax		0	6.4	7.55	8.28
Value Added	1,000.00	100	100	100	
Final Sale Price	\$1,000.00	\$1,180.00	\$1,374.40	\$1,577.95	\$1,690.24

transactions (e.g., building contractors buy building materials from hardware stores). Calculations by the Center for Applied Economics estimate the Kansas business-to-business share of retail sales tax at about 27 percent (the share of the compensating use tax is closer to 80 percent). Other multi-state studies have placed the business-to-business share of the retail sales tax in Kansas at 33 percent and 44 percent.⁴

Kansas policy can resolve the tax pyramiding problem in two ways: (1) exempt certain transactions from sales tax at the point of purchase or (2) rebate the tax paid on certain purchases. Current law relies on the exemption-on-sale approach. Qualified purchasers present an exemption certificate to sellers. For a comprehensive

retail sales tax, the rebate approach may represent a better overall method. All transactions would pay tax but qualifying purchases would receive a rebate upon proper application.

The rebate approach to the tax pyramiding problem relieves sellers of goods and services from the costs associated with tracking exempt sales from non-exempt sales (and policing illegal behavior related to tax evasion). True, collecting tax to rebate it seems like wasteful activity. However, the rebate approach puts the tax authority in charge of policing tax compliance. To claim a rebate, businesses would need to authenticate their legal status and, upon audit, present invoices for rebates claimed. With today's technology, the system could be

Table 3

**Estimated Tax Base and Tax Rates for a Comprehensive Retail Sales Tax
(Dollars in Billions)**

Year	2000	2004	2008
Revenue to Replace (from Table 4)	\$4.9	\$5.5	\$7.2
Estimated Revenue-Neutral Tax Rate	8.05%	8.43%	8.69%
Derivation of Tax Base (a)			
Wages and Salaries	\$41.3	\$45.8	\$57.5
Estimated Taxable Employment Benefits (b)	2.7	4.1	4.9
Farm Proprietors' Income	0.3	0.5	0.4
Nonfarm Proprietors' Income	5.7	7.6	9.9
Dividend Income	3.5	4.7	6.5
Interest Income	5.7	4.3	6.5
Capital Gains (c)	3.4	2.3	3.1
Government Transfer Payments	9.6	12.0	15.5
Total Spendable Income	72.2	81.4	104.3
Less: Estimated Saving or Untaxed Spending (d)	16.7	23.1	29.6
Plus: Estimated Taxable Rent (e)	1.5	1.7	2.0
Plus: Appraised Value of Owner-Occupied Homes ÷ 15 (f)	5.1	6.6	8.4
Estimated Gross Tax Base	62.1	66.7	85.1
Less: Estimated Automatic Family Rebate	1.6	1.8	2.3
Estimated Net Tax Base	60.6	64.8	82.8

(a) Unless otherwise specified, data comes from the U.S. Bureau of Economic Analysis.

(b) Primarily insurance premiums.

(c) U.S. Internal Revenue Service capital gains figure for 2008 equals the average from 2004 through 2007.

(d) Estimates derive from (1) Consumer Expenditure Survey ratio of total consumption expenditures (less tuition and rent) divided by before-tax income and (2) Kansas-specific Internal Revenue Service data for charitable contributions as a share of income. To create conservative estimates, no attempt is made to estimate the share of charitable contributions that will re-enter into the Kansas taxable spending stream. Tuition and charitable contributions are not taxed. Saving and investment is not taxed.

(e) U.S. Census Bureau—American Community Survey.

(f) Data source: Kansas Department of Revenue. Using the 30-year mortgage convention, the tax is assumed to spread over 15 years in equal payments as a simple way to split the time value of money between the taxpayer and the state government.

Table 4

Sources of Kansas Tax Revenue
(Dollars in Millions)

Year	2000	2004	2008
Property Taxes (excluding K-12 education funding)			
Educational Building	19.8	24.1	30.2
Institutional Building	9.9	12.0	15.1
State General	0.0	13.7	0.0
Mortgage Registration	0.8	1.1	1.1
Motor Carrier	16.1	19.5	29.0
Various Vehicle	3.8	4.4	4.8
Income and Privilege Taxes			
Individual	1861.6	1899.3	2944.9
Corporation	250.1	141.2	432.1
Financial Institutions	22.3	25.4	33.2
Inheritance/Estate Tax	62.9	48.1	44.2
Sales, Use, Excise Taxes			
Retail Sales	1520.4	1706.7	1983.6
Compensating Use	223.4	225.2	281.2
Motor Fuels	358.6	423.9	431.3
Vehicle Registration	138.7	157.3	168.8
Cereal Malt Beverage	2.4	2.2	2.2
Liquor Gallonage	15.1	16.6	18.5
Liquor Enforcement	33.3	40.3	50.0
Liquor Drink	22.6	28.5	35.7
Cigarette	49.1	119.8	112.7
Tobacco Products	3.8	4.8	5.5
Corporate Franchise	16.8	36.8	46.7
Boat registration	0.6	0.8	1.0
Severance	57.0	91.0	159.3
New Tires	1.4	0.7	0.7
Motor Vehicle Rental	2.5	2.6	3.4
Dry Cleaning & Laundry	1.2	1.3	1.2
Clean Water	0.0	2.7	3.2
Insurance Premium Taxes			
Foreign Companies	49.9	89.5	102.8
Domestic Companies	8.9	18.5	15.8
Firefighter Relief	5.2	8.4	9.4
Fire Marshall	3.6	5.5	5.9
Other Taxes			
Private Car Companies	0.9	0.7	0.9
Music Dramatic Tax	0.0	0.0	0.0
Bingo Enforcement	0.9	0.7	0.5
Transient Guest	0.3	0.4	0.6
Parimutual	4.2	3.5	1.9
Illegal Drugs	1.5	0.7	1.2
Combative Arts	0.0	0.0	0.1
Unemployment Compensation Taxes	107.7	282.6	223.3
TOTAL	4877.5	5460.4	7201.9

Source: Kansas Tax Facts, Kansas Legislative Research Department

Web-based and rely on electronic fund transfers. Properly designed, the rebate procedure could become a relatively simple routine for small business owners and business accountants.

Charitable and Nonprofit Activity

Kansas hosts approximately 11,000 public charities receiving revenues totaling almost \$10 billion.⁵ Approximately 90 percent of the revenue is paid out as expenses.

The bulk of the expenses probably represent wages and salaries and pro bono service activities, although exact details are unavailable. The wages and salaries paid by public charities would be subject to tax through a comprehensive retail sales tax as the employees spent their pay on goods and services.

Other expenses incurred by the expenditures of public charities may well represent end use consumption. In concept, such consumption should share in the Kansas tax burden. South Dakota, a state with one of the most comprehensive retail sales tax regimes, does not exempt purchases made by churches, membership organizations (like YMCAs, Boy Scouts, Jaycees, or Rotary Clubs), and civic and nonprofit organizations.

The basic tax design rules listed above place no sales tax on contributions made to nonprofit organizations or goods and services delivered at a zero price. In this con-

text, a membership organization—like a YMCA—may operate like a business in that it uses business-like inputs to produce a valuable service, but it does not charge a price in the conventional sense of a retail transaction. By not exempting (rebating) the tax paid on the purchase of inputs used by charitable, membership, or nonprofit organizations, the end use consumption of the service also shares in the consumption tax burden.

Naturally, Kansans may prefer to exempt charitable organizations from tax despite the logic to include them suggested by a comprehensive retail sales tax regime. The cost of this preference would be a higher tax rate. From an administrative perspective, to the extent that Kansas policy exempts from tax the purchases made by charitable organizations, the most cost-effective approach would follow the same procedures used to rebate the tax paid on business inputs, as outlined above.

Derivation of Tax Rates

Table 3 uses historical data for three different years to estimate the size of the tax base for a comprehensive retail sales tax and the revenue-neutral tax rates needed to meet all actual state-level tax revenue collections in the select years. Table 4 provides the list of tax revenues to replace. Note that the list excludes the state-level property tax dedicated to public school funding. The tax rates for the years 2000, 2004, and 2008 are, respectively: 8.05 percent, 8.43 percent, and 8.69 percent.

Table 5
Alternative Tax Rate Scenarios

Alternative Scenario	Alternative Tax Rates			Alternative Tax Rates less 5.3%		
	2000	2004	2008	2000	2004	2008
Revenue-Neutral Rates from Table 3	8.05%	8.43%	8.69%	2.75%	3.13%	3.39%
No Automatic Family Rebate	7.85%	8.19%	8.46%	2.55%	2.89%	3.16%
Automatic Family Rebated Limited to Incomes of \$50,000 or Less	7.97%	8.33%	8.59%	2.67%	3.03%	3.29%
Replace Income Tax & Current Sales/Use Tax Only (full rebate)	6.33%	6.08%	6.77%	1.03%	0.78%	1.47%
Replace Income Tax & Current Sales/Use Tax Only; but No Tax on Rent or Housing (full rebate)	7.12%	7.00%	7.76%	1.82%	1.70%	2.46%
No Tax on Rent or Housing (full rebate)	9.07%	9.73%	9.99%	3.77%	4.43%	4.69%
Tax on Rent and only Newly Sold Houses ÷ 15 (full rebate)*	8.76%	9.31%	9.63%	3.46%	4.01%	4.33%

* National Association of Realtors (existing home sales); U.S. Census Bureau (estimated new home sales, using national ratio of: new sales to existing sales). Average state home price data comes from ratio study of Kansas Department of Revenue, based on a population-weighted average of county-level sales price samples.

The variation in Kansas income tax collections primarily drives the variation in the revenue-neutral tax rates. In the year 2004, inflation-adjusted income tax collections—especially corporate income tax collections—per Kansas job were meaningfully lower than the other two years. Sales tax collections on a per-job basis were higher in 2004. Twenty-seven other taxes were also higher on a per-job basis in 2004, but these smaller taxes amounted to about 21 percent of state revenue collections.

Each element in Table 3 has a straightforward interpretation except the “Automatic Family Rebate.” The policy intent of this rebate is to assure that no family (or household) pays comprehensive retail sales tax on “essential” goods and services.

The mechanics of the rebate follow the one devised for a federal plan for a comprehensive sales tax (HR 25, 111th Congress, 1st Session), since the details are readily avail-

able. As used in the calculations for Table 3, every Kansas family (one or more family members sharing a common residence) would receive a rebate of the sales tax on consumption spending equal to the federal poverty level. The family would need to register with the tax authority to receive allowable rebates.

Each year, the U.S. Department of Health and Human Services designates the official poverty level for families of different sizes. HR 25 designed the rebate procedure to eliminate any penalty for marriage related to the official designation. To do that, it treats each spouse as a household of one and then subtracts from that poverty-level designation the poverty-level designation for a family of two. For example, if the annual poverty level for a family of one equaled \$10,000 and the annual poverty level for a family of two equaled \$13,000, the annual “marriage penalty elimination amount” would equal:

Table 6

Simulations of Growth of Select Economic Variables from Replacing All State-Level Taxes with a Comprehensive Retail Sales Tax

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Immediate Replacement:						
Private-Sector Employment	8.85%	8.80%	8.74%	8.68%	8.63%	8.57%
Private-Sector Investment	3.37	3.72	3.72	3.71	3.71	3.70
Take-Home Pay per Capita	2.94	2.92	2.90	2.88	2.87	2.85
Four-Year Phase-in:						
Private-Sector Employment	2.16	4.33	6.50	8.69	8.64	8.58
Private-Sector Investment	0.88	1.78	2.73	3.73	3.72	3.72
Take-Home Pay per Capita	0.78	1.53	2.25	2.92	2.90	2.89

Table 7

Simulations of the Growth of Select Economic Variables from Replacing Personal and Corporate Income Taxes with a Comprehensive Retail Sales Tax

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Immediate Replacement:						
Private-Sector Employment	6.93%	6.91%	6.88%	6.85%	6.81%	6.79%
Private-Sector Investment	3.10	3.11	3.13	3.14	3.15	3.16
Take-Home Pay per Capita	0.71	0.72	0.73	0.74	0.75	0.77
Four-Year Phase-in:						
Private-Sector Employment	1.72	3.43	5.14	6.84	6.81	6.78
Private-Sector Investment	0.78	1.55	2.34	3.13	3.14	3.15
Take-Home Pay per Capita	0.23	0.43	0.60	0.73	0.75	0.76

$\$20,000 - \$13,000 = \$7,000$. The “marriage penalty elimination amount” of \$7,000 is added to the published poverty level amount for a family of a specified size. Consequently, if the federal poverty level for a family of four equaled \$22,000 and the Kansas comprehensive retail sales tax rate equaled eight percent (8%), the annual automatic family rebate (for a married couple) would equal: $\$22,000 + \$7,000 = \$29,000 \times 0.08 = \$2,320$.

Table 5 provides a comparison of comprehensive retail sales tax rates under alternative design scenarios. For convenience, the table also provides the difference from the current Kansas retail sales and use tax rate of 5.3 percent.

Table 5 illustrates three noteworthy points. First, providing the automatic family rebate to all families instead of a smaller group of families with lower income does not alter the tax rate substantially. If the administrative costs of the rebate system increase from both the taxpayer and tax authority perspective by limiting the rebate to select families, it may make sense to provide it to all families. Second, the taxation of rented and owner-occupied housing substantially reduces the level of the tax rate. The novelty (and probable unpopularity) of applying the retail sales tax to rented and owner-occupied housing must be traded off against the higher rates and the elimination of all other state-level taxes. Third, if Kansans want to replace just the Kansas income tax system and the current sales tax with a comprehensive retail sales tax, the rate change is relatively small, with the taxation of rented and owner-occupied housing once again making a substantial difference in the level of the tax rate.

Economic Growth Dynamics

Tax reform of the magnitude defined by moving to a comprehensive retail sales tax as the single state tax will involve substantial political commitment and costly economic adjustments for the entire population of Kansas. One compelling reason for undertaking such a commitment is to reap the benefits of superior long-run economic performance of the Kansas economy, and the positive impact that will have on the citizens of Kansas.

Economic simulation of the growth dynamics suggest that the major tax reform described by a comprehensive retail sales tax can help deliver superior economic performance. Table 6 and Table 7 illustrate the simulated economic performance results of two scenarios—a scenario in which a comprehensive retail sales/use tax replaces all taxes shown in Table 4 and a scenario in which a retail sales/use (using the comprehensive tax base) replaces the personal and corporate income tax and the current sales/use tax. Each scenario, in turn, shows an immediate switch and a four-year phase-in executed in equal parts for each of the four years (25 percent per year).

Simulations offer mere representations of reality used to acquire intuition about the effects of numerous and complicated interactive forces. One should not interpret simulations as forecasts. The computer model used to generate the simulations for Kansas in Table 6 and Table 7 attempts to provide intuition about how select economic variables will change when the impact of taxation on those variables changes.⁶ A properly-implemented comprehensive retail sales tax would (1) eliminate all business-level tax payments, (2) eliminate the need for businesses to compensate individuals for the income tax on wages, and (3) remove the income tax bias against saving and investment. The result of this change in the structure of taxation, according to the simulation, would be a permanent increase in the growth path of private-sector employment and investment, as well as take home pay for Kansans.

Table 6 shows that an immediate shift to a comprehensive retail sales tax as a single tax has the potential to increase (above the level under the current tax structure) private-sector employment by almost nine percent, private investment by almost four percent, and take-home pay by almost three percent. The best way to think about this change is as a shift upward in the growth path of these three economic variables. The change in tax structure makes a larger amount of economic activity viable. Because economic growth works in a manner similar to the mechanics of compound interest, the larger base of economic activity made possible by the new tax structure will help accelerate the growth of the overall size of

the Kansas economy. A phase-in on the new tax structure will have the same results once fully phased-in. The fully phased-in, revenue-neutral sales tax rate for the simulations in Table 6 is 8.35 percent (excluding the family rebate), quite close to the 2008 estimate of 8.69 percent reported in Table 5, which does not stimulate economic growth effects.

The simulation data in Table 7 has the same interpretations as those in Table 6. The effects are somewhat smaller because the simulation assumes that only personal and corporate income taxes (and the current sales/use tax) are replaced by the comprehensive retail sales/use tax. The fully phased-in, revenue-neutral sales tax rate for the simulations in Table 7 is 5.60 percent (excluding the family rebate). The 2008 rate of 6.77 percent reported in Table 5 includes the family rebate.

An important part of the simulation exercise not reported here relates to the tax revenues of local government in Kansas. The state-level tax change creates a substantial (simulated) increase in local government tax revenues. Changes in property taxes and other miscellaneous taxes and fees result indirectly from the surge in economic activity created by the change in state policy. But local sales tax collections change as a direct result of the change in state policy. Local governments piggyback on the state-defined sales tax base. Since the comprehensive retail sales tax substantially broadens the state sales tax base, local governments come along for the ride. For reasons related to cross-border shopping, Kansans may want to assure that local government sales tax rates adjust downward to be revenue neutral with regard to the expanded sales tax base.

A Comprehensive Retail Sales Tax and Cross-Border Shopping

A comprehensive retail sales (and use) tax in Kansas will work only if the combined state and local tax rates remain low enough to prevent a “substantial” amount of Kansans from having an incentive to cross the state line to shop for goods and services. About 40 percent of the Kansas population lives in counties that border a neighboring state. Counties on the border with Missouri

account for about 32 percent of the state population—with counties considered to be part of the Kansas City metropolitan area accounting for 28.5 percent of the population. The eastern half of the border with Oklahoma (from Sumner County eastward) accounts for almost 5 percent of the Kansas population.

Implementation of a comprehensive retail sales tax as a single tax (using the state rates offered in this report) would keep Kansas competitive at the borders, especially since Kansas would impose no other taxes. Along most regions of the Missouri border and the eastern half of the Oklahoma border, combined state and local sales tax rates in Kansas are generally lower by a quarter to a full percentage point. (The border with southern Missouri is the most common exception, where rates are more equal.) A comprehensive retail sales tax—with local rates adjusted downward by about 45 to 50 percent to accommodate the broader tax base—would reverse the current situation, all else equal.

However, all else will not be equal. Kansas residents will no longer pay any other tax and businesses will operate tax-free. The key to Kansas competitiveness in the context of cross-border shopping is not the level of sales tax rates per se, but the final sales price of goods and services. Without any other taxes to pay (either directly or indirectly), the tax-related cost structure of Kansas businesses should allow for vigorous cross-border competition while maintaining profitability.

Endnotes

- 1 For a more in-depth discussion of this point, see Arthur P. Hall, “Competing Concepts of Income and the Double Taxation of Saving,” Technical Report 05-0926, Center for Applied Economics, University of Kansas School of Business, September 2005.
- 2 For more information, see: <http://www.streamlinedsalestax.org/>
- 3 See, for example, W. Mark Crain, *Volatiles States: Institutions, Policy, and the Performance of the American States* (Ann Arbor: The University of Michigan Press, 2003), Chapters 4 and 5, and the citations therein.

- 4 Respectively, Raymond J. Ring, Jr., "Consumers' Share and Producers' Share of the General Sales Tax," *National Tax Journal*, Vol. 52 (1), March 1999, pp. 79-90 and Robert Cline, et al., "Sales Taxation of Business Inputs: Existing Tax Distortions and the Consequences of Extending the Sales Tax to Business Services," Council on State Taxation, January 25, 2005.
- 5 National Center for Charitable Statistics. <http://nccs.urban.org/statistics/profiles.cfm>
- 6 The model used is a so called computable general equilibrium model developed for the state of Kansas by the Beacon Hill Institute at Suffolk University in Boston, Massachusetts. For more information, see: http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_IntroductionMS.html



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