

***Economic Trends Along the
Kansas-Colorado Border, 1969-2003***

August 2005

Arthur P. Hall, Ph.D.
Executive Director
Center for Applied Economics
University of Kansas School of Business
arthall@ku.edu

Peter F. Orazem, Ph.D.
Koch Visiting Professor of Business Economics
University of Kansas School of Business
pfo@iastate.edu

Prepared for:



Key Findings

- Thirty years ago, Colorado's border "region" had a population about 60 percent greater than Kansas' border region. Colorado has managed to retain that population, and grow it slightly. Kansas' border region, on the other hand, has experienced an average annual decline of -0.55 percent.
- Over the past 30 years, the number of wage and salary workers in Colorado's border region have grown at an average annual rate of 1.13 percent compared with a rate of 0.47 percent in Kansas' border region. Those growth rates increased during the 1990s, with Kansas demonstrating proportionately faster growth.
- Thirty years ago, per-worker wage compensation levels in Kansas exceeded those in Colorado. That situation has reversed, largely as a result of superior productivity growth in Colorado, particularly over the past decade.
- Overall, people on the Kansas side of the border seem relatively more likely to start a business. Over the past 30 years, relative to alternative employment opportunities, Kansas generated non-farm proprietors at a rate of 2.6-to-1 versus the Colorado rate of 0.99-to-1. However, over the past decade, the rate at which Colorado's border region generated non-farm proprietorships accelerated relative to the rate in Kansas.
- Colorado's faster growth of non-farm proprietorships during the 1990s was accompanied by superior per-proprietor income growth on the Colorado side of the border. Kansas experienced declining per-proprietor incomes throughout the 1990s.
- Consistent with national and regional trends, the number of farm proprietorships has steadily declined along both side of Kansas' Colorado border over the past three decades. However, Colorado has demonstrated an upward trend in the past decade.

Report Overview

This report documents and analyzes select economic trends along the Kansas-Colorado border. It is one of a set of seven companion reports that look at long-term economic trends in Kansas from different perspectives.¹ The focus here aggregates into “regions” the counties along the Kansas-Colorado border and compares population, proprietorship, and income growth in each state, as illustrated in the charts and tables that comprise the report. The evaluation of border regions helps provide insight into a state’s relative attractiveness as a place to live, work, and invest, because it helps isolate the policy environment from other important choice-influencing economic factors associated with geography.

One organizing principle for each of the companion reports is to create metrics that will help evaluate productivity growth in Kansas. The Center for Applied Economics at the University of Kansas School of Business published a report in November 2004 titled “The Kansas Productivity Puzzle.”² The report found that Kansas has systematically lagged behind the nation and the Plains region in terms of productivity growth from 1977 to 2001, the years of availability for the necessary data. Furthermore, the productivity lag exists in all industry sectors (except durable goods manufacturing).

Productivity is defined as output per worker over a specific unit of time. Productivity was measured in “The Kansas Productivity Puzzle” by dividing Kansas gross state product (the state equivalent of gross domestic product) by the number of workers in Kansas. This metric effectively defines the market value of Kansas’ annual output of goods and services on a per-worker basis. However, no sub-state equivalent to gross state product exists. Fortunately, wage data may offer a suitable approximation to worker productivity.

Economists have long noted a close relationship between labor productivity and wages, both in theory and in economic data. Firms cannot pay workers more than the value of what they produce, and so compensation levels should closely track increases in average output per worker. Indeed, for the state of Kansas, over the period 1977-2001, the relationship between output per worker and compensation per worker is nearly exact, having a statistical correlation of 98 percent. (See footnote 2.)

¹ The companion reports are: “Long-Term Economic Trends in the Regions of Kansas, 1969-2003,” “Long-Term Industry Trends in the Regions of Kansas, 1969-2000: Part I—An Industry Focus,” “Long-Term Industry Trends in the Regions of Kansas, 1969-2000: Part II—A Regional Focus,” “Economic Trends Along the Kansas-Nebraska Border, 1969-2003,” “Economic Trends Along the Kansas-Oklahoma Border, 1969-2003,” “Economic Trends Along the Kansas-Missouri Border, 1969-2003.”

² This report is available on-line at: <http://www.cae.business.ku.edu>. For a more academic treatment of the same topic, see: Peter F. Orazem, “Slow Growth and the Kansas Productivity Puzzle,” *Kansas Policy Review*, Vol. 26, No. 2 (Fall 2004), published by the Policy Research Institute of the University of Kansas, and available on-line at: <http://www.ku.edu/pri/publicat/kpr/archive.shtml>.

Data and Methods

This report relies on the close correlation in Kansas between per-worker compensation and productivity in order to use the trends in per-worker compensation as a proxy for relative productivity trends among the border regions of Kansas and Colorado. The focus on the border region requires the use of county-level data.

The primary data for all of the tables and charts contained in this report come from the U.S. Bureau of Economic Analysis (BEA), Regional Economic Accounts, Local Area Annual Estimates (<http://www.bea.gov/bea/regional/data.htm>). The authors aggregated county-level data reported by the BEA into a border region for each state. The sample period ends in 2003 because that is the latest year of data published by BEA.

The most appropriate BEA data to use for measuring productivity is gross state product (GSP), because that metric strives to allocate corporate profits, and other measures of value-added, to their proper geographic location. The BEA currently does not have a similar procedure for allocating corporate profits to counties. Instead it measures county-level income by wages and salary disbursements and proprietors' income. For purposes of measuring productivity, using wage and salary disbursements offers the next best metric to GSP. Proprietors' income should be used only when it is unavoidable. Wage and salary disbursements (including employer-paid benefits and social insurance taxes) are reported separately in this report.

Proprietors' income is not a stable proxy for productivity. First, BEA relies on Internal Revenue Service taxpayer data to estimate proprietorships and proprietor income. This method makes proprietor data more linked to a proprietors' residence than place of business operation. Second, proprietor income is related to the many intricacies associated with income tax law, and may therefore not reflect good measures of value-added per proprietor input.

A Snapshot of the Kansas-Colorado Border

Figure 1 illustrates the approximate alignment of the counties along the Kansas-Colorado border. It reports for each county the 2003 population and average wage compensation level, along with each measure's 1993-2003 and 1973-2003 average annual growth rate. The wage and salary data relate to people's place of work not to their place of residence.

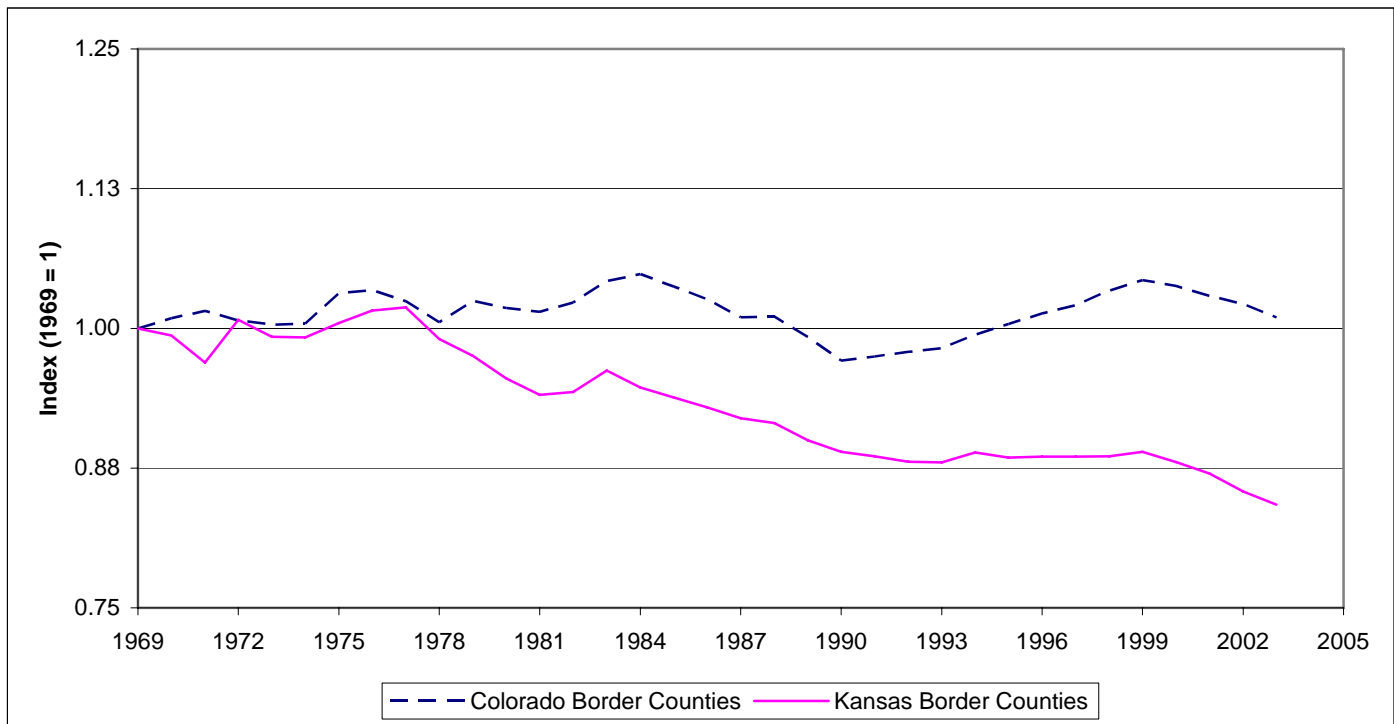
If one views the growth of population and wage compensation as an economic competition, then the Kansas Counties north of Stanton tend to under perform their Colorado neighbors. However, Kansas' Wallace and Greeley Counties posted relatively good per-worker wage growth over the past decade. Prowers County, Colorado also outperforms Stanton County, Kansas. However, Kansas' Stanton and Morton Counties outperform Baca County, Colorado.

Figure 1: A Snapshot of the Kansas-Colorado Border Counties: 2003 Population and Real Wages and Salaries Per Worker Figures, and 1993-2003 and 1973-2003 Average Annual Growth Rates.

(Note: W&S includes employer-paid benefits and social insurance taxes.)

Colorado			Kansas		
Yuma	<i>Population</i>	<i>W&S</i>	<i>Nebraska</i>		
2003 Level	9,833	\$ 30,202			
93-03 Growth (%)	0.75	2.67			
73-03 Growth (%)	0.55	1.63			
<hr/>			<hr/>		
			Cheyenne	<i>Population</i>	<i>W&S</i>
			2003 Level	2,991	\$24,751
			93-03 Growth (%)	-0.61	1.61
			73-03 Growth (%)	-1.02	0.58
<hr/>			<hr/>		
Kit Carson	<i>Population</i>	<i>W&S</i>	Sherman	<i>Population</i>	<i>W&S</i>
2003 Level	7,846	\$ 27,326	2003 Level	6,324	\$23,695
93-03 Growth (%)	0.61	2.07	93-03 Growth (%)	-0.89	0.14
73-03 Growth (%)	0.18	1.17	73-03 Growth (%)	-0.75	0.26
<hr/>			<hr/>		
Cheyenne	<i>Population</i>	<i>W&S</i>	Wallace	<i>Population</i>	<i>W&S</i>
2003 Level	2,058	\$ 31,563	2003 Level	1,616	\$23,734
93-03 Growth (%)	-1.31	1.89	93-03 Growth (%)	-1.21	2.43
73-03 Growth (%)	-0.37	1.38	73-03 Growth (%)	-0.93	0.29
<hr/>			<hr/>		
Kiowa	<i>Population</i>	<i>W&S</i>	Greeley	<i>Population</i>	<i>W&S</i>
2003 Level	1,463	\$ 29,381	2003 Level	1,417	\$27,404
93-03 Growth (%)	-1.49	1.53	93-03 Growth (%)	-1.62	1.64
73-03 Growth (%)	-1.09	1.36	73-03 Growth (%)	-0.97	1.10
<hr/>			<hr/>		
Prowers	<i>Population</i>	<i>W&S</i>	Hamilton	<i>Population</i>	<i>W&S</i>
2003 Level	14,137	\$ 30,890	2003 Level	2,690	\$27,105
93-03 Growth (%)	0.50	2.46	93-03 Growth (%)	1.15	2.38
73-03 Growth (%)	0.16	1.33	73-03 Growth (%)	-0.08	1.06
<hr/>			<hr/>		
			Stanton	<i>Population</i>	<i>W&S</i>
			2003 Level	2,387	\$29,718
			93-03 Growth (%)	0.38	2.00
			73-03 Growth (%)	0.11	1.27
<hr/>			<hr/>		
Baca	<i>Population</i>	<i>W&S</i>	Morton	<i>Population</i>	<i>W&S</i>
2003 Level	4,164	\$ 23,194	2003 Level	3,346	\$34,812
93-03 Growth (%)	-0.60	1.60	93-03 Growth (%)	-0.22	1.89
73-03 Growth (%)	-1.01	0.63	73-03 Growth (%)	-0.03	1.35

Chart 1: Trends in Population—Kansas and Colorado Border Counties, 1969-2003



Comments on Charts 1, 2, and 3:

- About 30 years ago, Colorado’s border region had a population of 39,257, which was 60 percent greater than the Kansas border region’s population of 24,476. Colorado has managed to retain that population, and grow it slightly. Kansas’ border region, on the other hand, has lost about 3,700 people, an average annual decline of –0.55 percent.
- Despite the flat population growth in Colorado and the negative population growth in Kansas, Chart 2 shows that both border regions have experienced growth in the number of wage and salary workers. The two trends combined indicate a greater labor force participation rate in the two regions’ populations, a trend consistent with that of the United States.
- Table 1 of the report provides decade-by-decade details on the number (and growth rate) of population and wage and salary workers. Over the past 30 years, the number of wage and salary workers in Colorado’s border region has grown at an average annual rate of 1.13 percent, compared with a rate of 0.47 percent in Kansas’ border region. That growth rate increased during the 1990s, with Kansas demonstrating proportionately faster growth.
- As discussed in Overview, this report uses aggregate wage and salary data as a proxy for the aggregate output measure needed to determine how much of the regions’ economic growth is due to productivity growth as opposed to employment growth. A comparison of Charts 2 and 3 reveals that the decline in wage and salary employment that began in 1999 corresponded to a decline in aggregate wages and salaries in Kansas but not in Colorado. This outcome indicates that Colorado workers began to earn more on a per-worker basis, a fact confirmed by Chart 4 and Table 2.

Chart 2: Trends in the Number of Wage and Salary Workers—Kansas and Colorado Border Counties, 1969-2003

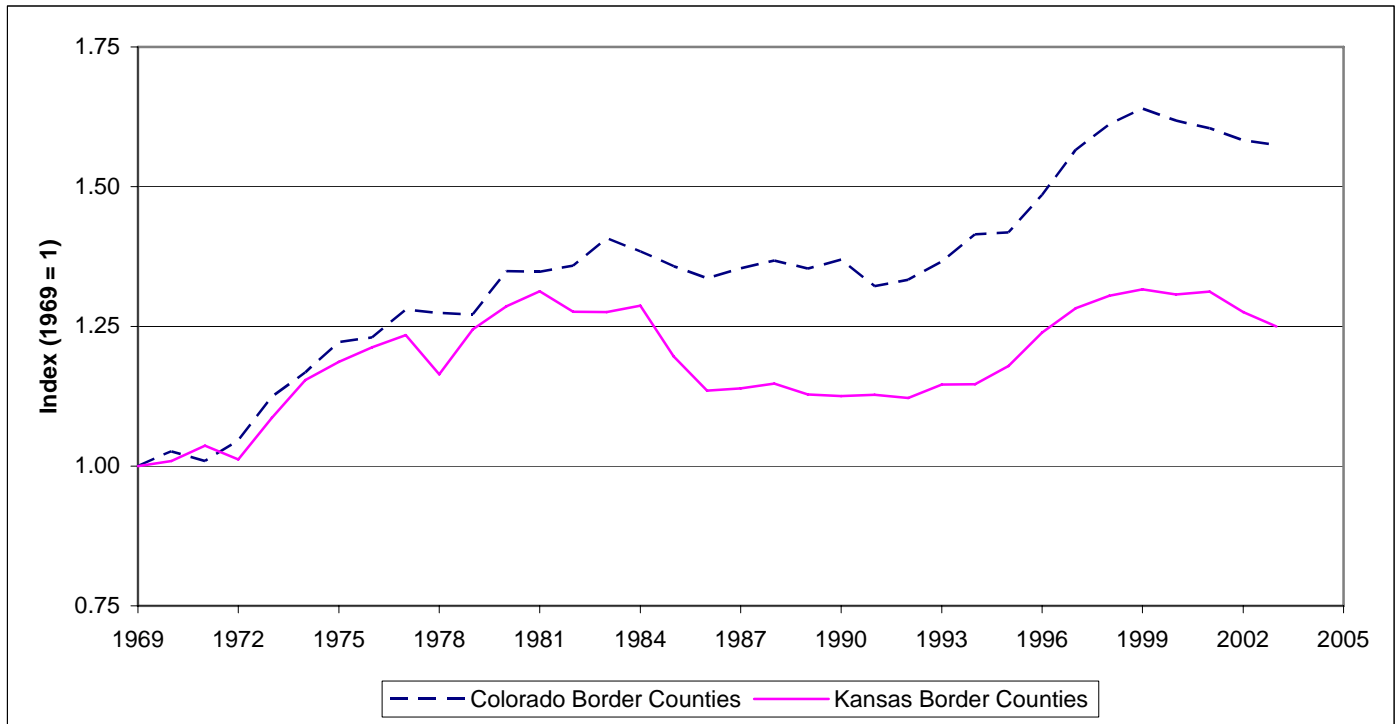


Chart 3: Trends in Inflation-Adjusted Aggregate Wage and Salary Disbursements (including Employer-Paid Benefits and Social Insurance Taxes)—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars

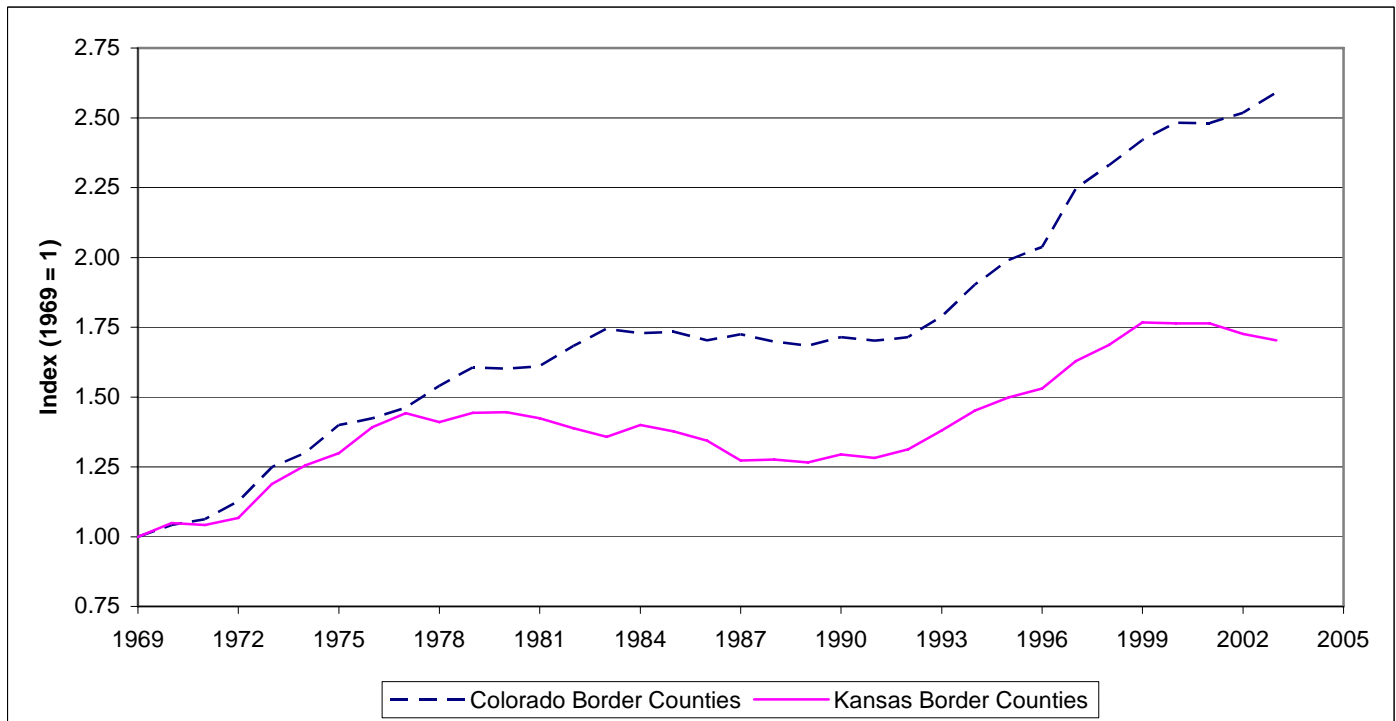
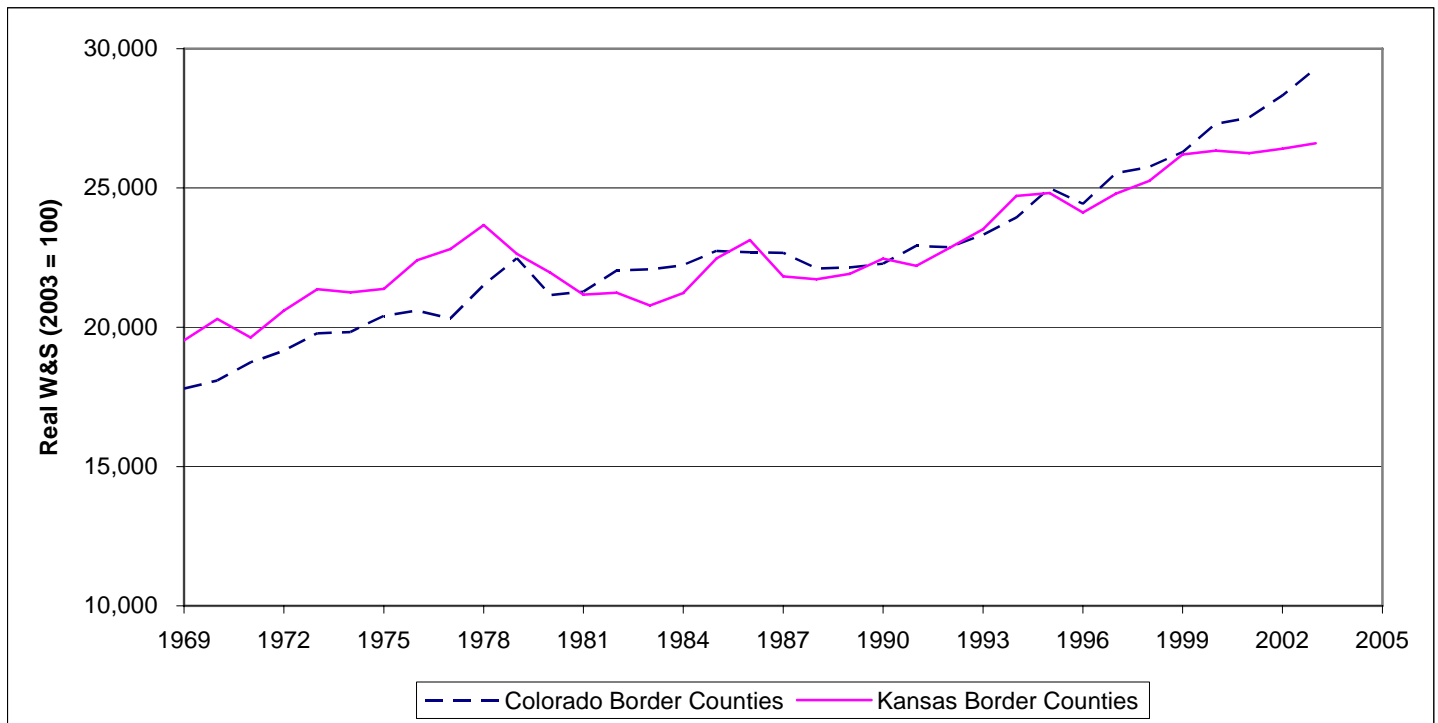


Chart 4: Inflation-Adjusted Wage and Salary Disbursements Per Wage and Salary Worker (including Employer-Paid Benefits and Social Insurance Taxes)—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars



Comments on Chart 4:

- A business cannot sustain an operation if it pays a worker more than the market value of what the worker produces, so the relative level of wage compensation per worker provides insight into the efficiency with which a worker produces goods and services and the relative market-value of those goods and services. The growth rate of wages per worker provides insight into the speed at which workers’ efficiency is improving, given the market-value of the goods and services being produced.
- Chart 4 shows that over a 30-year period per-worker wage compensation levels in Colorado started below the levels in Kansas and accelerated past them. This outcome is an indication that Colorado’s border region has experienced superior productivity growth. The exhibits below, which split our proxy for the regional output growth into its labor and productivity components, support this conclusion. From 1969 to 2003, although Colorado grew more overall, Kansas had a slightly higher share of growth related to productivity, 58 percent versus 52 percent. However, in the past decade, Colorado’s share of growth related to productivity grew to 62 percent while Kansas’ shrank to 41 percent.

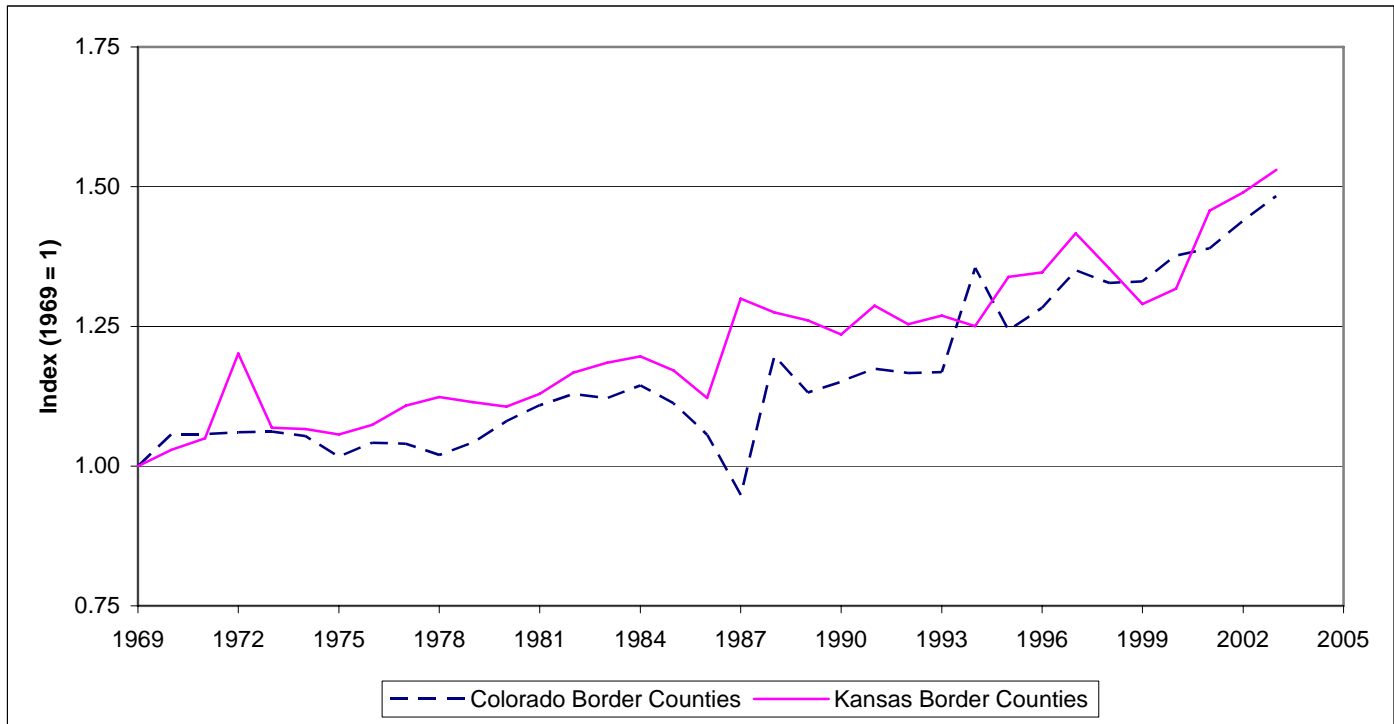
Exhibit A: Components of Regional Growth, 1969-2003

Region	Production Growth (%)	Employment Growth (%)	Productivity Growth (%)
Colorado Border	159	76	83
Kansas Border	70	29	41

Exhibit B: Components of Regional Growth, 1993-2003

Region	Production Growth (%)	Employment Growth (%)	Productivity Growth (%)
Colorado Border	45	17	28
Kansas Border	24	14	10

Chart 5: Trends in the Number of Non-Farm Proprietors—Kansas and Colorado Border Counties, 1969-2003



Comments on Chart 5, 6, and 7:

- Non-Farm Proprietorships offers a good regional proxy for what is popularly referred to as “entrepreneurial activity.” The federal Tax Reform Act of 1986 offers the most likely explanation for the spikes in 1987 and 1988.
- As Chart 5 suggests, Kansas has experienced a slightly faster average annual growth rate in the number of non-farm proprietorships. To help place that fact in perspective, one method for evaluating relative “entrepreneurial activity” is to measure the relative growth of non-farm proprietorships against the growth of population and alternative employment opportunities. The table below compares the 1973-2003 average annual growth rates (%) by region. (See Tables 1 for greater detail.)

Region	Non-Farm Proprietors	Population	Wage & Salary Employment
Colorado Border	1.12	0.20	1.13
Kansas Border	1.20	-0.55	0.47

- Overall, people on the Kansas side of the border seem relatively more likely to start a business. Kansas generated non-farm proprietors more rapidly than Colorado relative to employment (2.6-to-1 versus 0.99-to-1). Relative to population, the start rate of non-farm proprietorships in Kansas is mathematically undefined because of the negative population growth rate. Qualitatively, however, one can see that Kansas had relatively more starts.
- Despite Kansas’ long-run propensity to generate non-farm proprietors at a faster rate than Colorado, Table 1 shows that Colorado experienced a much faster average annual growth rate over the past decade (2.41 versus 1.89 percent). Colorado’s faster growth of proprietors explains, in part, the faster 1990s growth in aggregate income shown in Chart 6 (until the recession of 2001, which reduced non-farm proprietorship incomes nationwide). However, Chart 7 also shows that another part of the explanation was superior per-proprietor income growth on the Colorado side of the border. Kansas’ declining incomes throughout the 1990s has no ready explanation.

Chart 6: Trends in Inflation-Adjusted Aggregate Non-Farm Proprietors' Income—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars

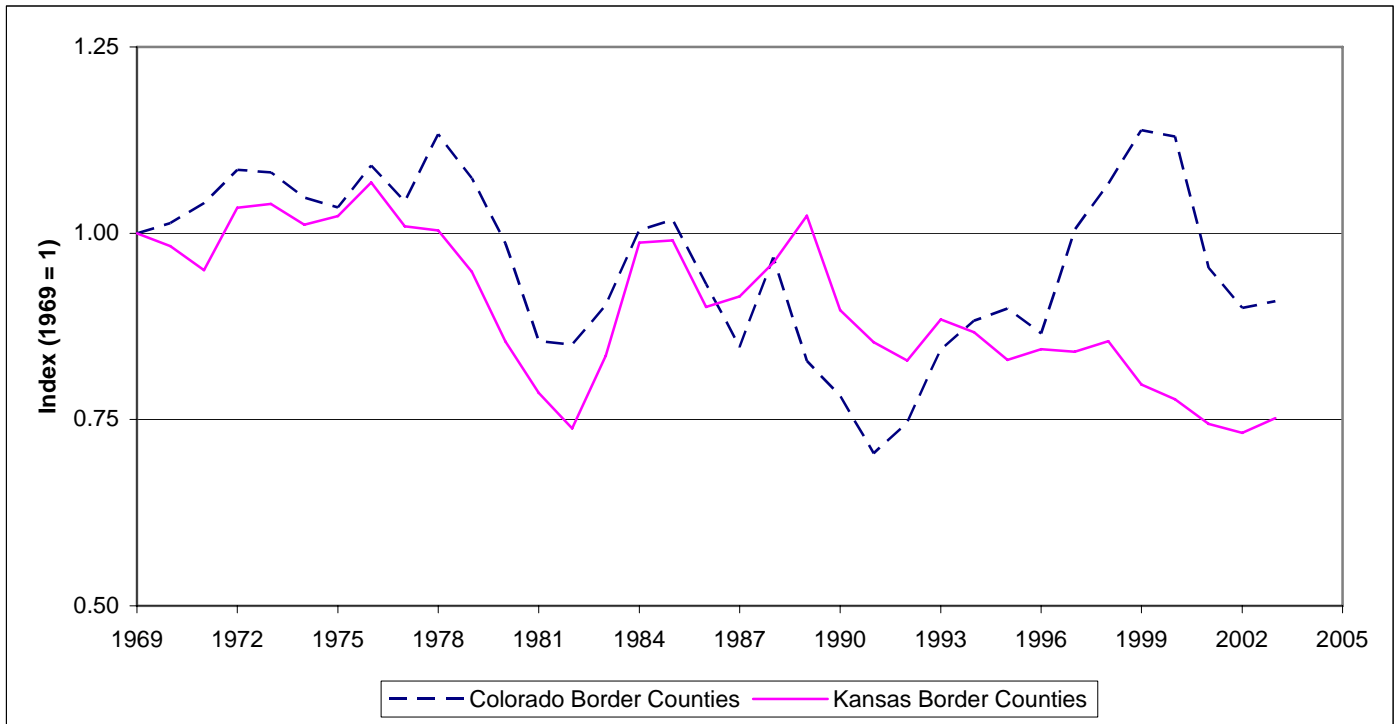


Chart 7: Inflation-Adjusted Non-Farm Proprietors' Income Per Non-Farm Proprietor—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars

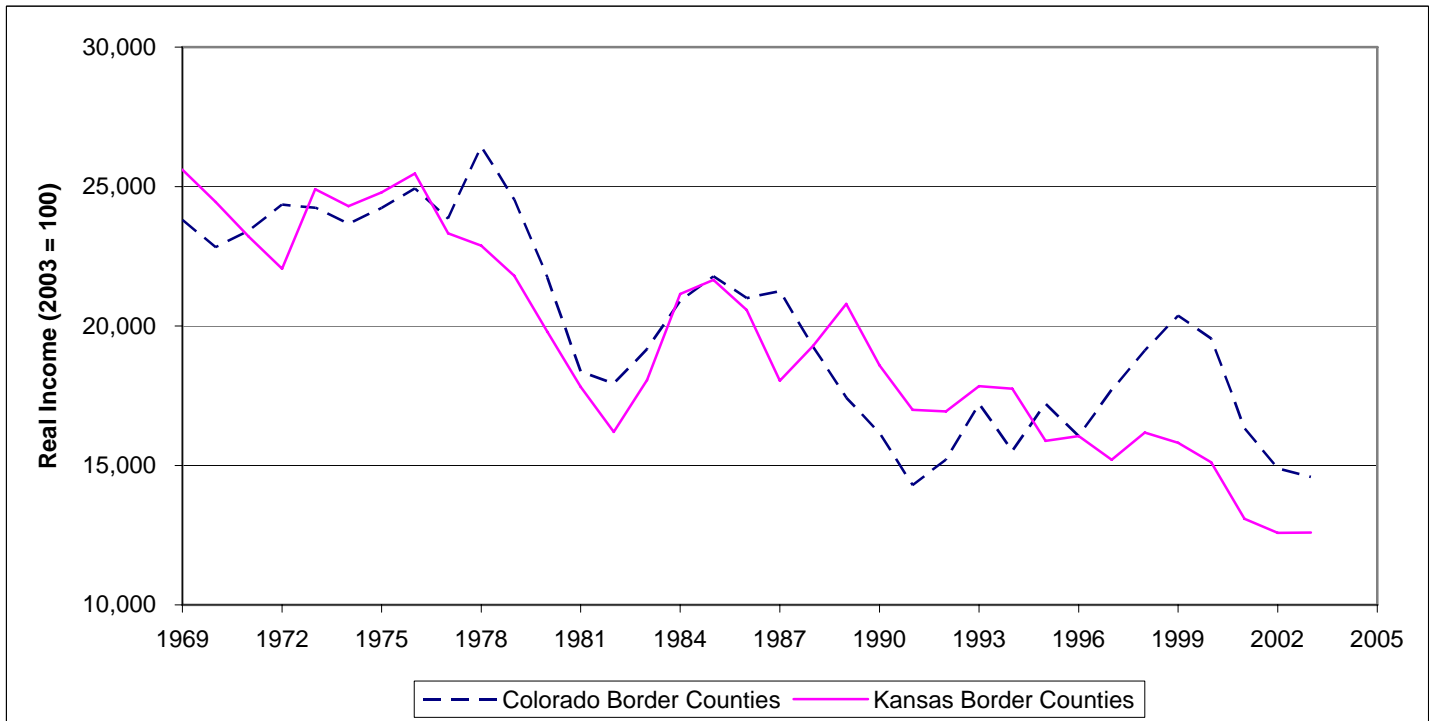
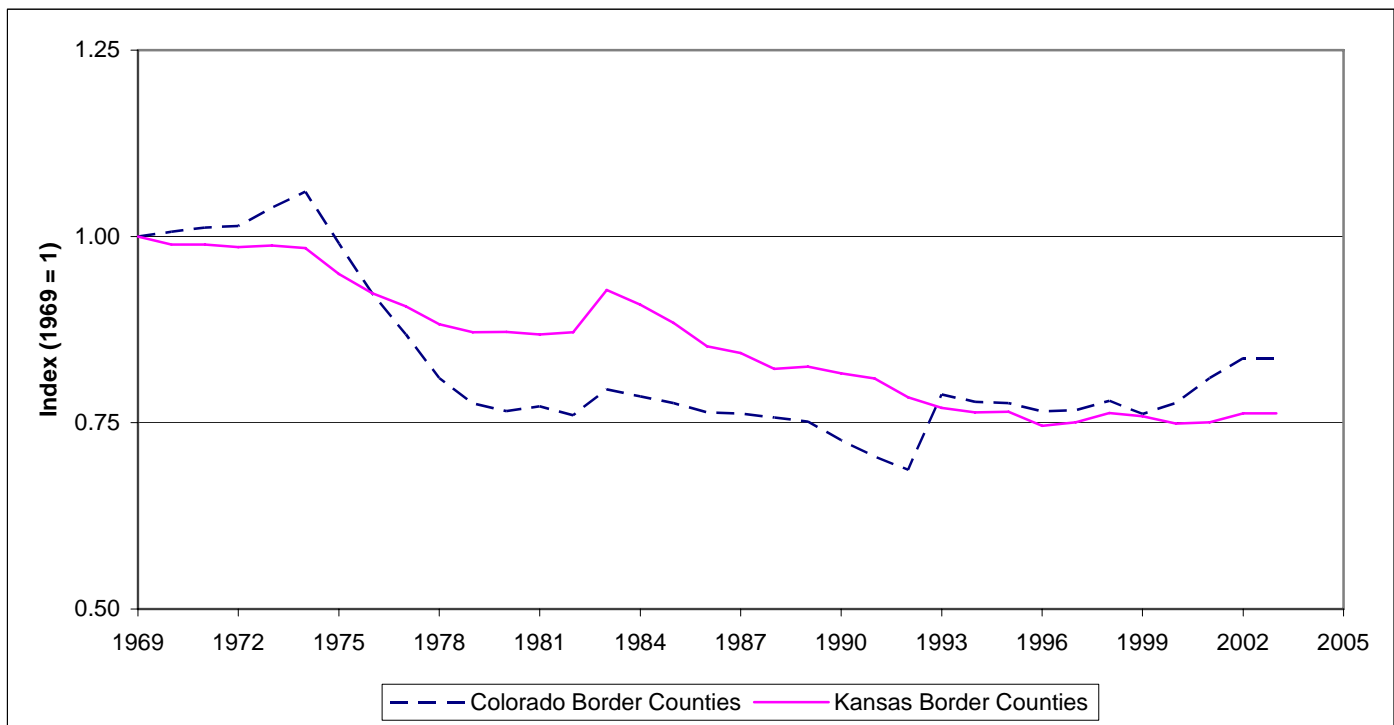


Chart 8: Trends in the Number of Farm Proprietors—Kansas and Colorado Border Counties, 1969-2003



Comments on Charts 8, 9, and 10:

- Consistent with national and regional trends, the number of far proprietorships has steadily declined along both side of Kansas’ Colorado border. However, Colorado has demonstrated an upward trend in the past decade. Further research is required to determine if this is a reaction to specific policies or a favorable outlook with regard to entrepreneurial opportunity.
- The volatility of farm-proprietorship income makes it difficult to make meaningful statements about the trends shown in Chart 9. However, despite the volatility, Chart 10 shows that on a per-proprietor basis farmers on the Colorado side of the border tend to systematically outperform those on the Kansas side. This finding suggests superior productivity on the Colorado side of the border. An important qualification to this finding concerns the distinction between Northwestern and Southwestern Kansas. On a per-proprietor basis, farmers in southwest Kansas have performed significantly better over the past 30 years than those in northwest Kansas, so the relatively poor performance in Northwestern Kansas may drive the results of the aggregated border region.
- The 1973 spike in farm income, especially in Kansas, is related to unique market factors associated with a surge in wheat sales to Russia.

Chart 9: Trends in Inflation-Adjusted Aggregate Farm Proprietors' Income—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars

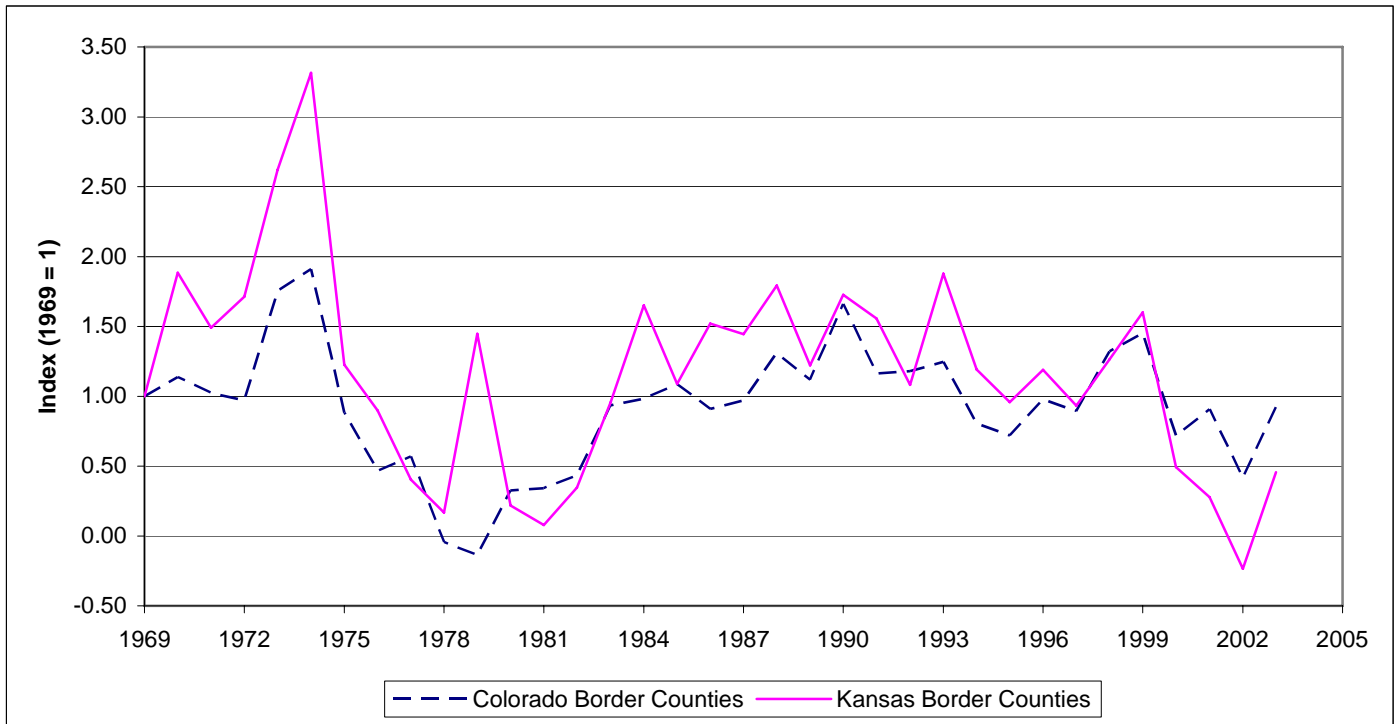


Chart 10: Inflation-Adjusted Farm Proprietors' Income Per Farm Proprietor—Kansas and Colorado Border Counties, 1969-2003, Constant 2003 Dollars

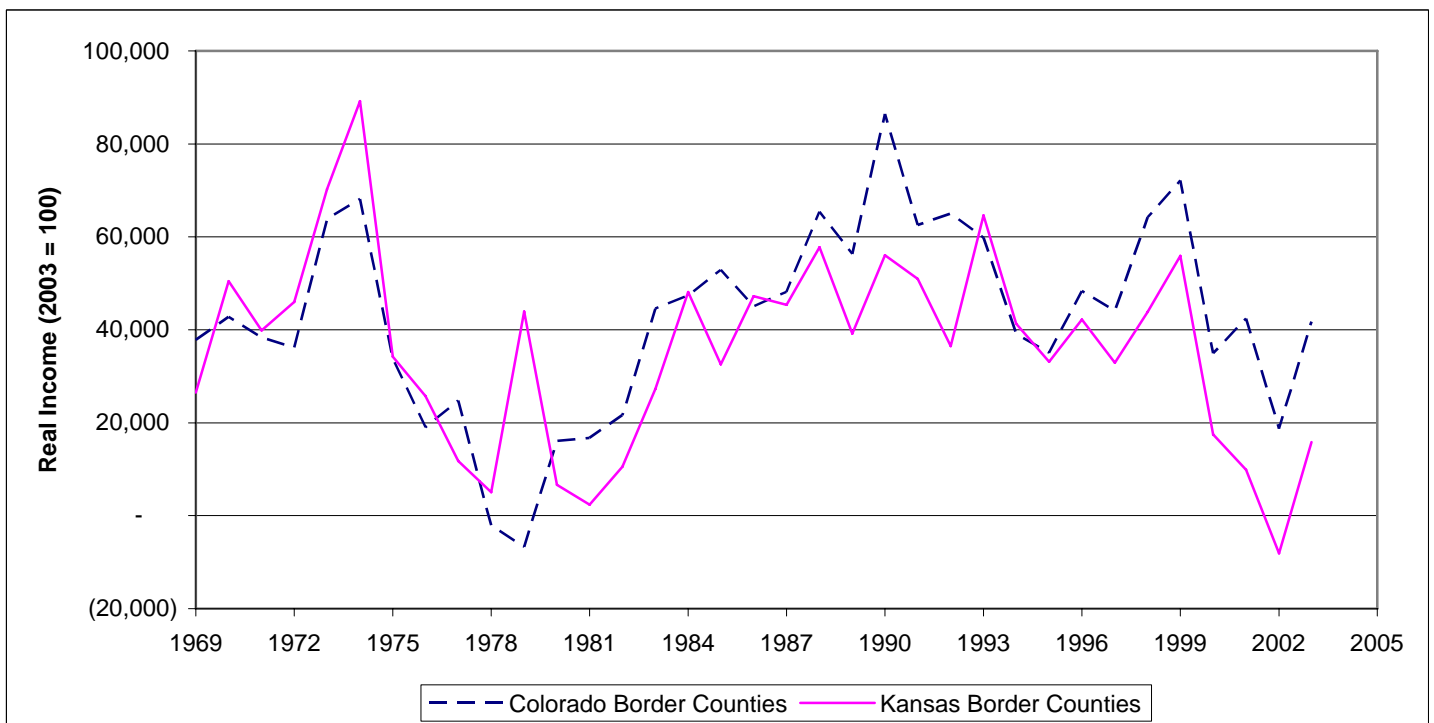


Table 1: Population, Number of Proprietors, and Number of Workers Figures and Growth Rates, Selected Years

Colorado Border Counties	1973	1983	1993	2003	Average Annual Growth Rate (%)				
					1973	1983	1993	2003	1973-2003
Population	39,257	40,777	38,427	39,501	*	0.38	-0.59	0.28	0.02
Full & Part-Time Employment*	20,260	22,237	21,953	25,448	*	0.94	-0.13	1.49	0.76
Farm Proprietors	4,905	3,756	3,724	3,953	*	-2.63	-0.09	0.60	-0.72
Non-Farm Proprietors	3,783	3,994	4,161	5,281	*	0.54	0.41	2.41	1.12
Wage & Salary Workers	11,572	14,487	14,068	16,214	*	2.27	-0.29	1.43	1.13
Kansas Border Counties	1973	1983	1993	2003	1973	1983	1993	2003	1973-2003
Population	24,476	23,731	21,705	20,771	*	-0.31	-0.89	-0.44	-0.55
Full & Part-Time Employment*	13,238	14,734	13,453	14,737	*	1.08	-0.91	0.92	0.36
Farm Proprietors	2,874	2,700	2,240	2,218	*	-0.62	-1.85	-0.10	-0.86
Non-Farm Proprietors	2,115	2,345	2,512	3,028	*	1.04	0.69	1.89	1.20
Wage & Salary Workers	8,249	9,689	8,701	9,491	*	1.62	-1.07	0.87	0.47

* Includes wage and salary workers and proprietors.

Table 2: Aggregate and Per-Worker Income and Earnings Figures and Growth Rates, Selected Years

	Actual Dollars				Inflation-Adjusted Dollars (2003 = 100)				Real Average Annual Growth Rate (%)				
	1973	1983	1993	2003	1973	1983	1993	2003	1973	1983	1993	2003	1973-2003
Colorado Border Counties													
Earnings by Place of Work (\$000s)*	190,542	346,723	518,795	716,704	634,151	563,620	622,206	716,704	*	-1.17	0.99	1.42	0.41
Farm Proprietors' Income (\$000s)	94,181	102,911	185,677	164,899	313,448	167,288	222,688	164,899	*	-6.09	2.90	-2.96	-2.12
Non-Farm Proprietors' Income (\$000s)	27,560	47,111	59,681	77,057	91,724	76,582	71,577	77,057	*	-1.79	-0.67	0.74	-0.58
Wage & Salary Disbursements (\$000s)**	68,801	196,701	273,437	474,748	228,980	319,750	327,941	474,748	*	3.40	0.25	3.77	2.46
Earnings Per Worker*	9,405	15,592	23,632	28,163	31,301	25,346	28,343	28,163	*	-2.09	1.12	-0.06	-0.35
Farm Income Per Proprietor	19,201	27,399	49,860	41,715	63,904	44,539	59,798	41,715	*	-3.55	2.99	-3.54	-1.41
Non-Farm Income Per Proprietor	7,285	11,795	14,343	14,591	24,246	19,174	17,202	14,591	*	-2.32	-1.08	-1.63	-1.68
Wage & Salary Disbursements Per WS Worker**	5,945	13,578	19,437	29,280	19,787	22,071	23,311	29,280	*	1.10	0.55	2.31	1.31
Kansas Border Counties													
Earnings by Place of Work (\$000s)*	129,466	195,195	328,648	325,782	430,881	317,302	394,157	325,782	*	-3.01	2.19	-1.89	-0.93
Farm Proprietors' Income (\$000s)	60,697	45,295	120,658	35,132	202,008	73,630	144,709	35,132	*	-9.60	6.99	-13.20	-5.66
Non-Farm Proprietors' Income (\$000s)	15,826	26,052	37,370	38,117	52,671	42,349	44,819	38,117	*	-2.16	0.57	-1.61	-1.07
Wage & Salary Disbursements (\$000s)**	52,943	123,848	170,620	252,533	176,202	201,323	204,630	252,533	*	1.34	0.16	2.13	1.21
Earnings Per Worker*	9,780	13,248	24,429	22,106	32,549	21,535	29,299	22,106	*	-4.05	3.13	-2.78	-1.28
Farm Income Per Proprietor	21,119	16,776	53,865	15,839	70,288	27,270	64,602	15,839	*	-9.03	9.01	-13.11	-4.85
Non-Farm Income Per Proprietor	7,483	11,110	14,877	12,588	24,904	18,059	17,842	12,588	*	-3.16	-0.12	-3.43	-2.25
Wage & Salary Disbursements Per WS Worker**	6,418	12,782	19,609	26,608	21,360	20,778	23,518	26,608	*	-0.28	1.25	1.24	0.73

* Includes wage and salary workers and proprietors.

** Includes employer-paid benefits and social insurance taxes.

Definitions Related to the Data Used in this Report (Provided by U.S. Bureau of Economic Analysis)

Total Full-Time and Part-Time Employment

The BEA employment series for states and local areas comprises estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.

Proprietors employment consists of the number of sole proprietorships and the number of partners in partnerships. The description "by place of work" applies to the wage and salary portion of the series and, with relatively little error, to the entire series. The proprietors employment portion of the series, however, is more nearly by place of residence because, for non-farm sole proprietorships, the estimates are based on IRS tax data that reflect the address from which the proprietor's individual tax return is filed, which is usually the proprietor's residence. The non-farm partnership portion of the proprietors employment series reflects the tax-filing address of the partnership, which may be either the residence of one of the partners or the business address of the partnership.

The employment estimates are designed to be consistent with the estimates of wage and salary disbursements and proprietors' income that are part of the personal income series. The employment estimates are based on the same sets of source data as the corresponding earnings estimates and are prepared with parallel methodologies. Two forms of proprietors' income—the income of limited partnerships and the income of tax-exempt cooperatives—have no corresponding employment estimates.

Wage and Salary Workers

Wage and salary jobs, also referred to as wage and salary employment, measures the average annual number of full-time and part-time jobs in each area by place-of-work. All jobs for which wages and salaries are paid are counted. Full-time and part-time jobs are counted with equal weight.

Jury and witness service, as well as paid employment of prisoners, are not counted as wage and salary employment; the payments for these activities are classified as "other labor income" in the personal income measure. Corporate directorships are counted as self-employment.

Wage and Salary Disbursements

Wage and salary disbursements consists of the monetary remuneration of employees, including corporate officers salaries and bonuses, commissions, pay-in-kind, incentive

payments, and tips. It reflects the amount of payments disbursed, but not necessarily earned during the year.

Wage and salary disbursements is measured before deductions, such as social security contributions and union dues.

In recent years, stock options have become a point of discussion. Wage and salary disbursements includes stock options of nonqualified plans at the time that they have been exercised by the individual. Stock options are reported in wage and salary disbursements. The value that is included in wages is the difference between the exercise price and the price that the stock options were granted.

Number of Farm Proprietors

Farm self-employment is defined as the number of non-corporate farm operators, consisting of sole proprietors and partners. A farm is defined as an establishment that produces, or normally would be expected to produce, at least \$1,000 worth of farm products--crops and livestock--in a typical year. Because of the low cutoff point for this definition, the farm self-employment estimates are effectively on a full-time and part-time basis. The estimates are consistent with the job-count basis of the estimates of wage and salary employment because farm proprietors are counted without regard to any other employment. Also referred to as farm self-employment.

Farm Proprietors' Income

Farm proprietors' income consists of the income that is received by the sole proprietorships and the partnerships that operate farms. It excludes the income that is received by corporate farms.

Number of Non-Farm Proprietors

The BEA local area estimates of non-farm self-employment consist of the number of sole proprietorships and the number of individual business partners not assumed to be limited partners. The non-farm self-employment estimates resemble the wage and salary employment estimates in that both series measure jobs—as opposed to workers—on a full-time and part-time basis. However, because of limitations in source data, two important measurement differences exist between the two sets of estimates. First, the self-employment estimates are largely on a place-of-residence basis rather than on the preferred place-of-work basis. Second, the self-employment estimates reflect the total number of sole proprietorships or partnerships active at any time during the year—as opposed to the annual average measure used for wage and salary employment.

Non-Farm Proprietors' Income

Non-farm Proprietors' Income consists of the income that is received by non-farm sole proprietorships and partnerships and the income that is received by tax-exempt cooperatives.

The national estimates of non-farm proprietors' income are primarily derived from income tax data. Because these data do not always reflect current production and because they are incomplete, the estimates also include four major adjustments--the inventory valuation adjustment, the capital consumption adjustment, the "misreporting" adjustment, and the adjustment for the net margins on owner-built housing.

The inventory valuation adjustment offsets the effects of the gains and the losses that result from changes in the prices of products withdrawn from inventories; this adjustment for recent years has been small, but it is important to the definition of proprietors' income.

The capital consumption adjustment changes the value of the consumption, or depreciation, of fixed capital from the historical-cost basis used in the source data to a replacement-cost basis.

The "misreporting" adjustment adds an estimate of the income of sole proprietors and partnerships that is not reported on tax returns.

The adjustment for the net margins on owner-built housing is an addition to the estimate for the construction industry. It is the imputed net income of individuals from the construction or renovation of their own dwellings.

The source data necessary to prepare these adjustments are available only at the national level. Therefore, the national estimates of non-farm proprietors' income that include the adjustments are allocated to states, and these state estimates are allocated to the counties, in proportion to tax return data that do not reflect the adjustments.

In addition, the national estimates include adjustments made to reflect decreases in monetary and imputed income that result from damage to fixed capital and to inventories that is caused by disasters, such as hurricanes, floods, and earthquakes. These adjustments are attributed to states and counties on the basis of information from the Federal Emergency Management Agency.

KANSAS, INC.

Created by the 1986 Legislature, Kansas, Inc. is an independent, objective, and non-partisan agency designed to conduct economic development research and analysis with a goal of crafting policies and recommendations to insure the state's ongoing competitiveness for economic growth. This is achieved through these primary activities: 1) developing and implementing a proactive and aggressive research agenda; 2) identifying and promoting strategies and policies from the research; 3) conducting evaluation reviews and oversight of programs; and, 4) collaboration with economic development entities and outreach to potential partners. Kansas, Inc. is designed to be a public private partnership with expectations that state investments are leveraged with other funds to maintain a strong research portfolio.

A 17-member Board of Directors co-chaired by the Governor and a private sector representative governs Kansas, Inc. Nine Board members are representatives from identified industries in the private sector and other members are: the Secretary of Commerce, Legislative leadership, the Kansas Board of Regents, and a representative from labor.

BOARD OF DIRECTORS CO-CHAIRS

Governor Kathleen Sebelius
Topeka

Patti Bossert
Key Staffing, Topeka

MEMBERS

Stan R. Ahlerich
Ahlerich Farms, Winfield

Gene Argo
American Rodeo Company, Hays

Rep. Tom Burroughs
State Representative, Kansas City

Secretary Howard Fricke
Kansas Department of Commerce, Topeka

Rep. Lana Gordon
State Representative, Topeka

Donna Johnson
Pinnacle Technology, Lawrence

Sen. Laura Kelly
State Senator, Topeka

Wil Leiker
AFL- CIO, Topeka

Lawrence L. McCants
First National Bank, Goodland

Sen. Stephen Morris
Senate President, Hugoton

Reginald Robinson
Kansas Board of Regents, Topeka

Donald P. Schnacke
Donald P. Schnacke, P.A., Topeka

Paul Stephenson
PDS Company, Wichita

Stephen L. Waite
Kansas Calvary, El Dorado

KANSAS, INC. STAFF

Stan R. Ahlerich
Interim President

Debby Fitzhugh
Director of Operations

Dan Korber
Senior Research Analyst



632 SW Van Buren, Suite 100
Topeka, KS 66603
(785) 296-1460
(785) 296-1463 (fax)
www.kansasinc.org
ksinc@ink.org



University of Kansas School of Business
Summerfield Hall, 1300 Sunnyside Avenue
Lawrence, KS 66045-7585
www.cae.business.ku.edu
(785) 864-5134