

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

August 2005

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Key Findings

- The Kansas-Nebraska border regions have steadily depopulated for the past three decades—Kansas' at a faster rate than Nebraska's. Despite this depopulation, both regions have steadily grown their number of wage and salary workers—Kansas' at a faster rate than Nebraska's. 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 and the Plains region.
- Over the past 30 years and over the past decade, Kansas' border region has outperformed Nebraska's border region in terms of the growth of aggregate wage compensation.
- Despite the superior growth of aggregate wage compensation in Kansas' border region, Nebraska has experienced slightly faster growth in per-worker wage compensation over the past 30 years, because of superior productivity growth. However, Kansas' border region experienced slightly better per-worker wage growth in the 1990s as its productivity growth improved relative to Nebraska's.
- Over the past 30 years, relative to alternative employment opportunities, people in Nebraska's border region have been about five times more likely to start a business. However, this trend does not necessarily carry a negative interpretation, given that both aggregate and per-proprietor incomes have steadily declined over the past 30 years (except for a brief period in the late 1990s).
- Consistent with national and regional trends, the number of farm proprietorships has steadily declined along both side of the Kansas-Nebraska border. Kansas has experienced a faster decline, with a 30-year average annual growth rate of -1.54 percent versus Nebraska's rate of -1.36 percent.
- On a per-proprietor basis, farmers on the Nebraska side of the border tend to systematically outperform those on the Kansas side. This finding suggests superior productivity on the Nebraska side of the border.

Report Overview

This report documents and analyzes select economic trends along the Kansas-Nebraska 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-Nebraska 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 Nebraska. 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 comes 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-Nebraska Border

Figure 1 illustrates the approximate alignment of the counties along the Kansas-Nebraska 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.

Urban areas tend to generate higher productivity than rural areas. As a result, it is common to see wage gradients emanating out of urban areas, with higher wages in the urban center declining as one moves to more distant rural areas around the urban center. One can discern hints of such patterns along the Kansas-Nebraska border, although they are weakly defined because of the relatively rural nature of the border counties. Furthermore, economic research shows that counties have complementary growth patterns.³ These complementary patterns can encompass a two-county radius, so the wage gradients and population patterns along the Kansas-Nebraska border likely reflect such economic influences.

Examples of what may constitute wage gradients on the Kansas side of the border are reflected in Norton, Phillips, Marshall and Brown Counties. Norton County holds the city of Norton (2,900) and Phillips County holds Phillipsburg (2,500); these cities are relatively close to each other. Marshall County is relatively close to Manhattan, Kansas (44,700) and Beatrice, Nebraska (13,000). Brown County is relatively close to St. Joseph, Missouri (73,000).

Examples of wage gradients on the Nebraska side of the border are reflected in Red Willow, Webster, Gage, and Pawnee Counties. Red Willow County holds the city of McCook (7,850) and is about 50 miles from North Platte (24,000). Webster County is close to the city of Hastings (24,000) and less than 50 miles from Grand Island (44,000). Gage County holds the city of Beatrice (12,000) and is about 50 miles from Lincoln (240,000). Pawnee County is close to Beatrice and Lincoln. If, in fact, Brown County, Kansas wage levels are influenced by proximity to St. Joseph, Missouri, and open question is why Richardson County, Nebraska does not also show evidence of such influence.

If one chooses to evaluate the county-by-county match-ups along the border as an economic competition, then Nebraska emerges as a systematic winner in terms of 30-year average annual population and wage growth rates. Exceptions to the rule on the Kansas side are Rawlins, Jewell, Nemaha, and Brown Counties. Nebraska also performs relatively better over the past decade. Kansas exceptions with regard to the growth of wage compensation are Rawlins, Smith, Jewell, Marshall, and Brown Counties.

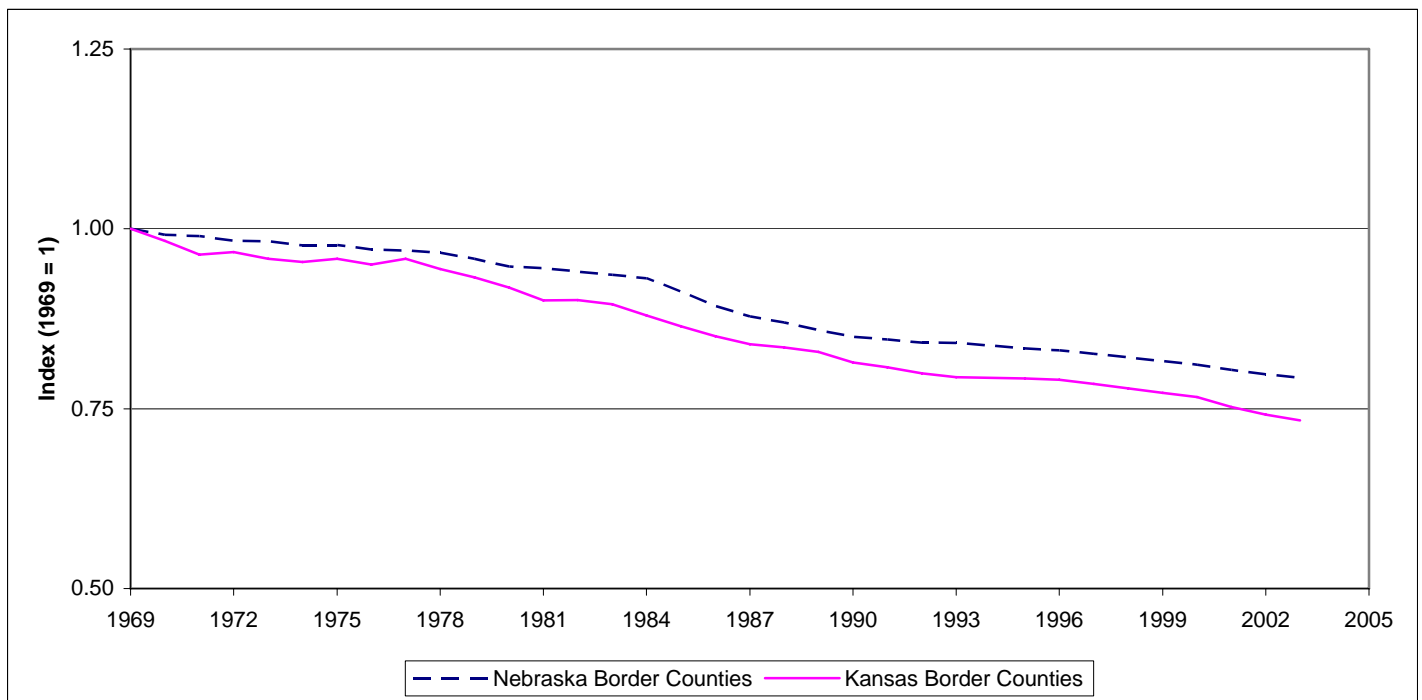
³ See, for example, Peter F. Orazem, "The Growth of Cities and Rural Economic Development," Center for Applied Economics, University of Kansas School of Business, Technical Brief 04-1119, November, 2004. Available on-line at <http://www.cae.business.ku.edu>.

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

(Notes: Top to bottom equals West to East, W&S includes employer-paid benefits and social insurance taxes.)

Kansas			Nebraska		
Cheyenne	<i>Population</i>	<i>W&S</i>	Dundy	<i>Population</i>	<i>W&S</i>
2003 Level	2,991	\$ 24,751	2003 Level	2,213	\$ 28,738
93-03 Growth (%)	-0.61	1.61	93-03 Growth (%)	-1.24	2.00
73-03 Growth (%)	-1.02	0.58	73-03 Growth (%)	-0.92	1.51
Rawlins	<i>Population</i>	<i>W&S</i>	Hitchcock	<i>Population</i>	<i>W&S</i>
2003 Level	2,833	\$ 25,713	2003 Level	3,038	\$ 27,558
93-03 Growth (%)	-1.52	2.41	93-03 Growth (%)	-1.33	1.11
73-03 Growth (%)	-1.22	0.89	73-03 Growth (%)	-0.86	0.80
Decatur	<i>Population</i>	<i>W&S</i>	Red Willow	<i>Population</i>	<i>W&S</i>
2003 Level	3,312	\$ 21,580	2003 Level	11,221	\$ 28,927
93-03 Growth (%)	-1.21	0.97	93-03 Growth (%)	-0.22	1.49
73-03 Growth (%)	-1.19	0.23	73-03 Growth (%)	-0.31	0.81
Norton	<i>Population</i>	<i>W&S</i>	Furnas	<i>Population</i>	<i>W&S</i>
2003 Level	5,837	\$ 27,985	2003 Level	5,203	\$ 26,813
93-03 Growth (%)	-0.05	1.33	93-03 Growth (%)	-0.87	2.08
73-03 Growth (%)	-0.65	0.73	73-03 Growth (%)	-0.91	1.35
Phillips	<i>Population</i>	<i>W&S</i>	Harlan	<i>Population</i>	<i>W&S</i>
2003 Level	5,662	\$ 30,510	2003 Level	3,677	\$ 24,820
93-03 Growth (%)	-1.15	1.87	93-03 Growth (%)	-0.38	1.96
73-03 Growth (%)	-1.11	0.76	73-03 Growth (%)	-0.51	1.27
Smith	<i>Population</i>	<i>W&S</i>	Franklin	<i>Population</i>	<i>W&S</i>
2003 Level	4,245	\$ 25,533	2003 Level	3,462	\$ 24,422
93-03 Growth (%)	-1.34	2.96	93-03 Growth (%)	-1.05	1.59
73-03 Growth (%)	-1.41	0.86	73-03 Growth (%)	-0.87	0.99
Jewell	<i>Population</i>	<i>W&S</i>	Webster	<i>Population</i>	<i>W&S</i>
2003 Level	3,448	\$ 23,766	2003 Level	3,887	\$ 26,279
93-03 Growth (%)	-1.48	1.47	93-03 Growth (%)	-0.85	2.27
73-03 Growth (%)	-1.58	0.48	73-03 Growth (%)	-0.98	1.42
Republic	<i>Population</i>	<i>W&S</i>	Nuckolls	<i>Population</i>	<i>W&S</i>
2003 Level	5,322	\$ 23,495	2003 Level	4,858	\$ 24,197
93-03 Growth (%)	-1.49	1.14	93-03 Growth (%)	-1.40	1.33
73-03 Growth (%)	-1.44	0.20	73-03 Growth (%)	-1.36	0.47
Washington	<i>Population</i>	<i>W&S</i>	Thayer	<i>Population</i>	<i>W&S</i>
2003 Level	6,173	\$ 22,732	2003 Level	5,627	\$ 28,118
93-03 Growth (%)	-0.97	2.14	93-03 Growth (%)	-1.48	2.28
73-03 Growth (%)	-1.20	0.62	73-03 Growth (%)	-0.97	1.32
Marshall	<i>Population</i>	<i>W&S</i>	Jefferson	<i>Population</i>	<i>W&S</i>
2003 Level	10,518	\$ 32,773	2003 Level	8,108	\$ 29,812
93-03 Growth (%)	-0.74	2.13	93-03 Growth (%)	-0.65	2.67
73-03 Growth (%)	-0.72	1.26	73-03 Growth (%)	-0.83	1.31
Nemaha	<i>Population</i>	<i>W&S</i>	Gage	<i>Population</i>	<i>W&S</i>
2003 Level	10,504	\$ 27,597	2003 Level	23,379	\$ 29,434
93-03 Growth (%)	-0.07	1.80	93-03 Growth (%)	0.21	2.01
73-03 Growth (%)	-0.26	1.01	73-03 Growth (%)	-0.25	1.02
Brown	<i>Population</i>	<i>W&S</i>	Pawnee	<i>Population</i>	<i>W&S</i>
2003 Level	10,448	\$ 29,289	2003 Level	2,889	\$ 28,120
93-03 Growth (%)	-0.45	2.15	93-03 Growth (%)	-1.32	2.79
73-03 Growth (%)	-0.34	0.99	73-03 Growth (%)	-1.35	1.49
			Richardson	<i>Population</i>	<i>W&S</i>
			2003 Level	8,956	\$ 26,239
			93-03 Growth (%)	-0.91	1.50
			73-03 Growth (%)	-1.08	0.82

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



Comments on Charts 1, 2, and 3:

- The Kansas-Nebraska border regions have steadily depopulated for the past three decades—Kansas’ at a faster rate than Nebraska’s. Despite this depopulation, Chart 2 shows that both regions have steadily grown their number of wage and salary workers—Kansas’ at a faster rate than Nebraska’s. 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 and the Plains region.
- 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, population in Kansas’ border region has declined at an average annual rate of -0.89 percent; the rate for Nebraska is -0.71 percent. The number of wage and salary workers in Kansas’ border region has grown 0.85 percent, compared with a rate of 0.31 percent in Nebraska’s border region. That growth rate increased during the 1990s, with Kansas demonstrating a growth rate almost twice as fast as Nebraska’s.
- As discussed in the 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. Evaluating Chart 3 and Table 2 together shows that Kansas has had a superior growth rate of aggregate wage compensation over the past 30 years and the past decade.
- A comparison of Charts 2 and 3 reveals that the decline in wage and salary employment that began in 2000 in Kansas and 2001 in Nebraska did not corresponded to a similar decline in aggregate wage compensation. This outcome indicates that workers in both Kansas’ and Nebraska’s border region 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 Nebraska Border Counties, 1969-2003

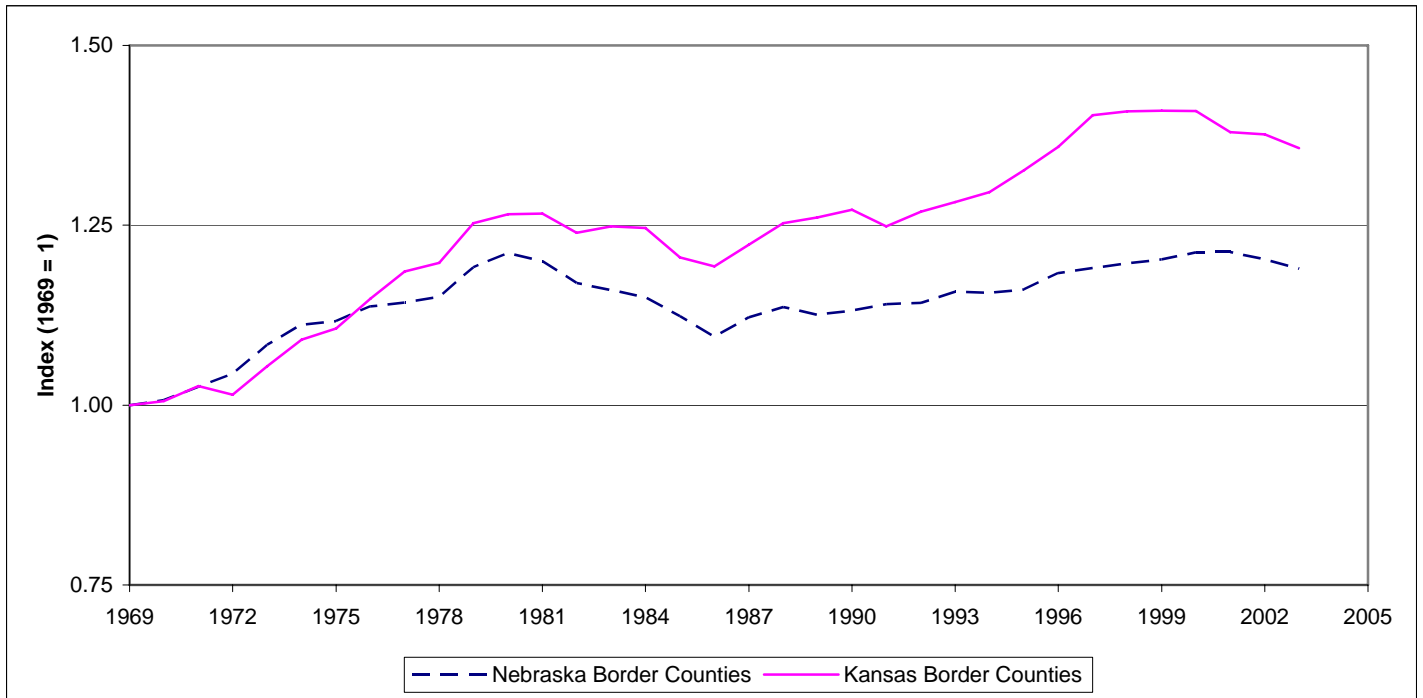


Chart 3: Trends in Inflation-Adjusted Aggregate Wage and Salary Disbursements (including Employer-Paid Benefits and Social Insurance Taxes)—Kansas and Nebraska Border Counties, 1969-2003, Constant 2003 Dollars

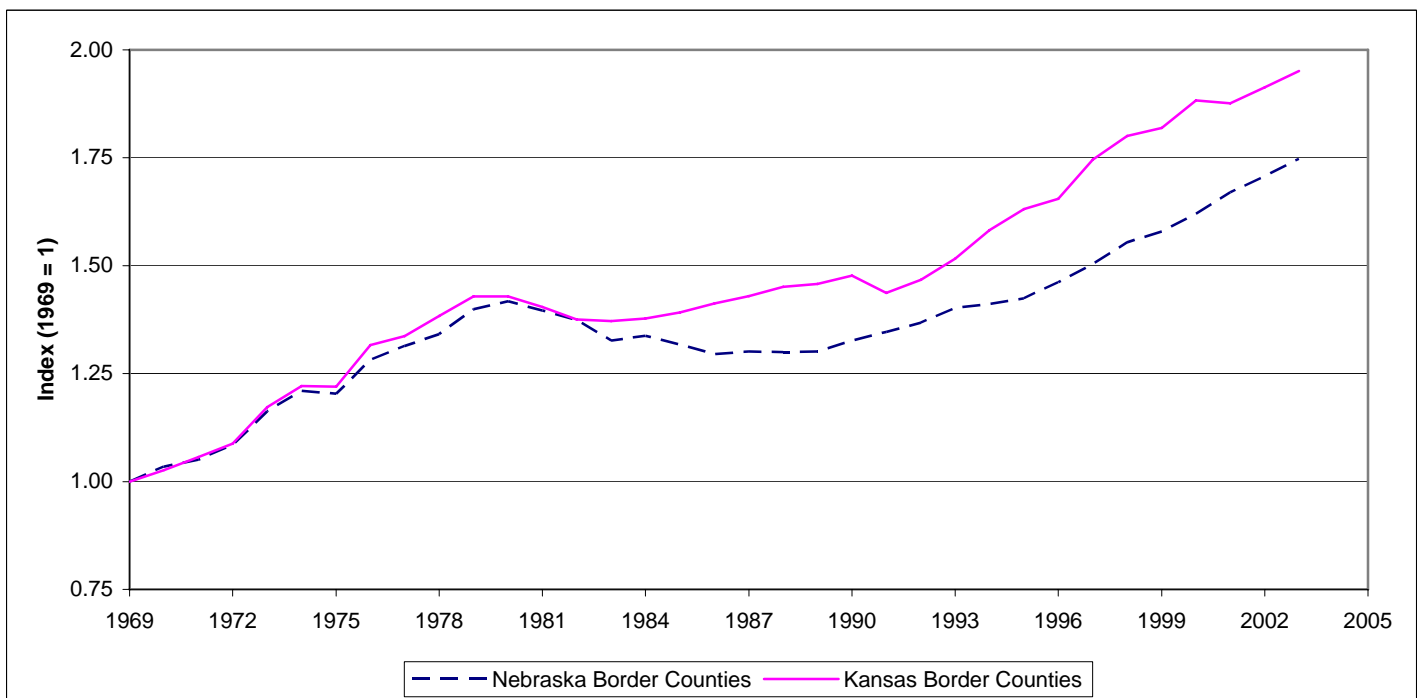
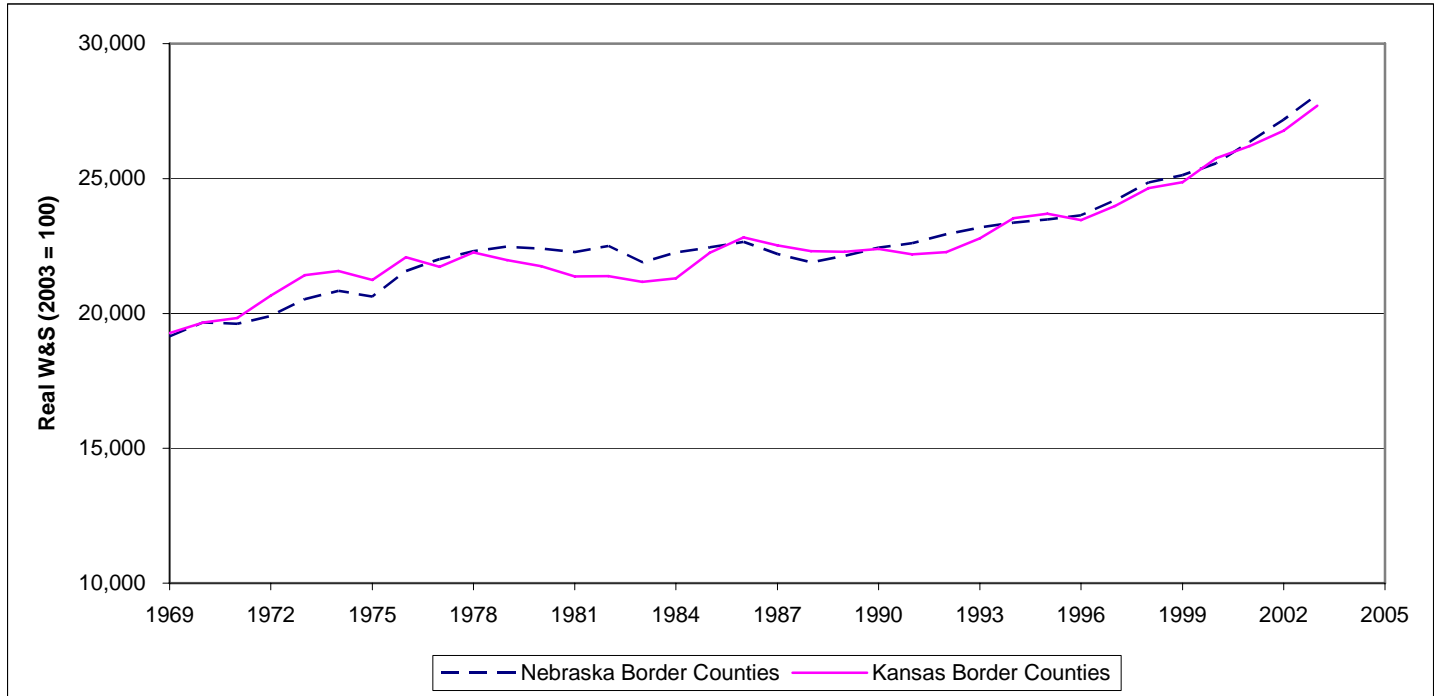


Chart 4: Inflation-Adjusted Wage and Salary Disbursements Per Wage and Salary Worker (including Employer-Paid Benefits and Social Insurance Taxes)—Kansas and Nebraska Border Counties, 1969-2003, Constant 2003 Dollars



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.
- Despite the superior growth of wage compensation in Kansas’ border region, Chart 4 shows that over a 30-year period per-worker wage compensation in Nebraska started below the levels in Kansas and accelerated past them. This outcome is an indication Nebraska’s border region has experienced superior productivity growth. Exhibit A, which splits our proxy for the regional output growth into its labor and productivity components, supports this conclusion. From 1969 to 2003, productivity growth accounted for 69 percent of Nebraska’s aggregate growth and 55 percent of Kansas’ aggregate growth. However, Kansas caught up in the 1990s. Table 2 reveals that the Kansas side of the border had a higher average annual growth rate of per-worker wage compensation, which corresponded to relatively faster productivity growth. Exhibit B indicates that Nebraska increased to 88 percent its share of aggregate growth related to productivity; Kansas increased its share to 76 percent. Despite Nebraska’s higher overall share, Nebraska’s share grew in the 1990s by 27.5 percent. Kansas’ share grew in the 1990s by 38 percent.

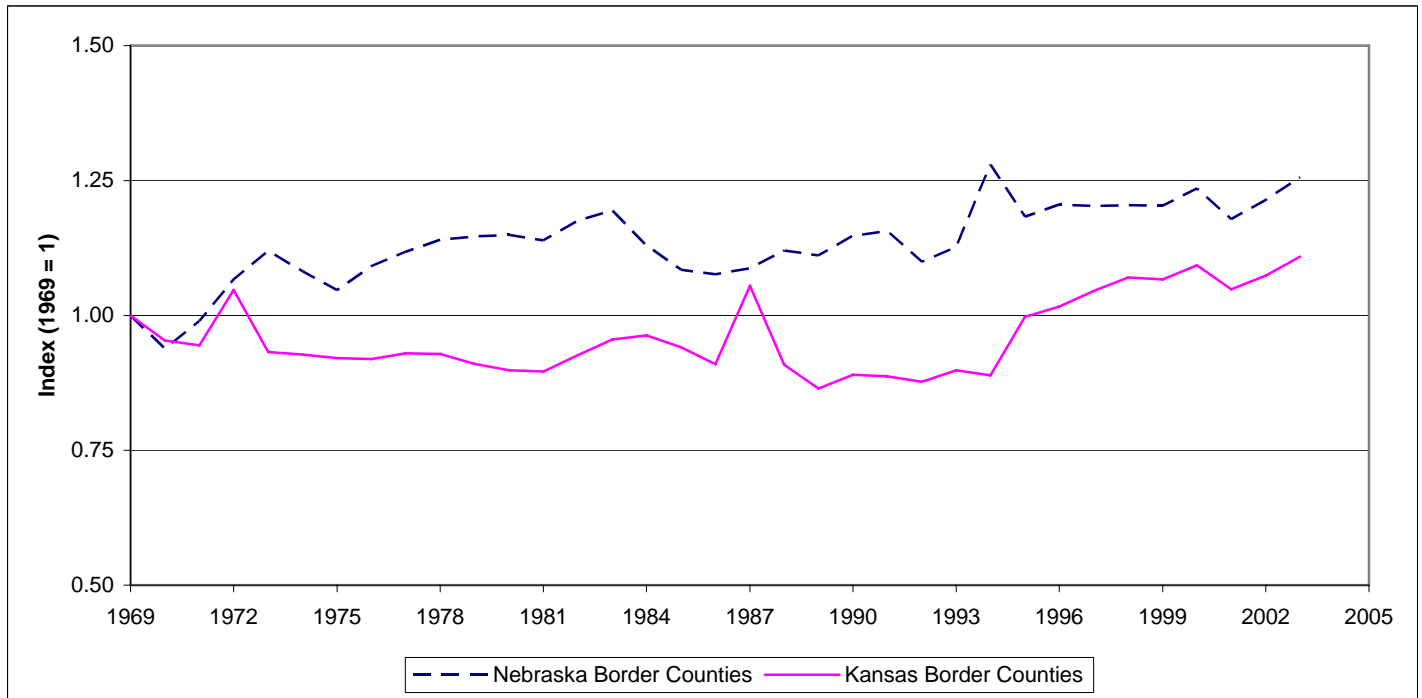
Exhibit A: Components of Regional Growth, 1969-2003

Region	Production Growth (%)	Employment Growth (%)	Productivity Growth (%)
Nebraska Border	74	23	51
Kansas Border	95	43	52

Exhibit B: Components of Regional Growth, 1993-2003

Region	Production Growth (%)	Employment Growth (%)	Productivity Growth (%)
Nebraska Border	25	3	22
Kansas Border	29	7	22

Chart 5: Trends in the Number of Non-Farm Proprietors—Kansas and Nebraska 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 a likely explanation for the spike in non-farm proprietorships in 1987. More research is required to understand (1) why the Act had no impact on Nebraska and (2) what caused the 1972 spike in Kansas and the 1994 spike in Nebraska.
- 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 exhibit 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
Nebraska Border	0.60	-0.71	0.31
Kansas Border	0.32	-0.89	0.85

- Over the past 30 years, relative to alternative employment opportunities, people in Nebraska’s border region have been about five times more likely to start a business (1.95-to-1 versus 0.37-to-1). However, Chart 5 and the data shown in Table 1 reveal that Kansas improved its non-farm proprietorship creation rate in the 1990s. From 1993 to 2003, relative to employment, Kansas had a start rate of 3.72-to-1 versus Nebraska’s start rate of 4.10-to-1. Relative to population, the start rate of non-farm proprietorships in both Kansas and Nebraska is mathematically undefined because of the negative population growth rates.
- A review of Charts 6 and 7 reveal why Kansans may have been reluctant to start a business—incomes have steadily fallen for the past three decades. Conditions improved somewhat in the mid-1990s, which may explain the increased start rate. Given the regions’ population declines and moderate growth of wage employment, non-farm business starts may be more of a necessity than an entrepreneurial choice.

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

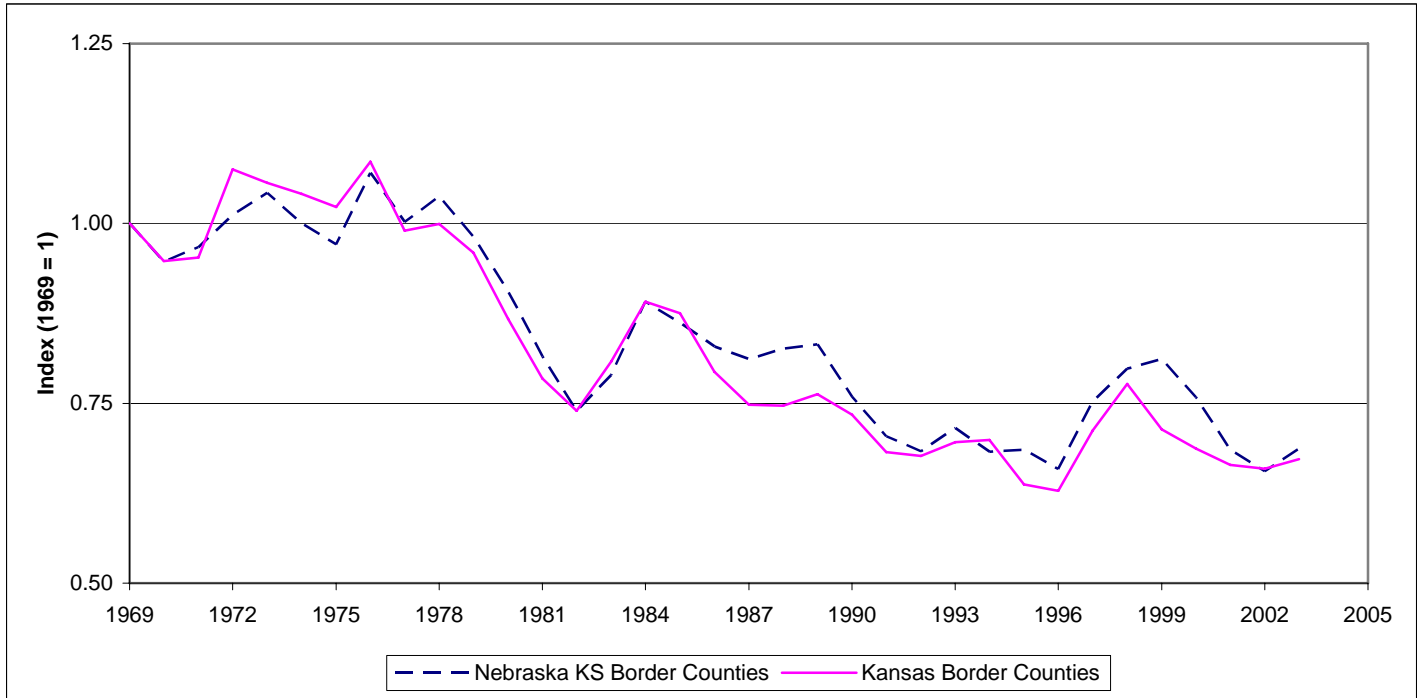


Chart 7: Inflation-Adjusted Non-Farm Proprietors' Income Per Non-Farm Proprietor—Kansas and Nebraska Border Counties, 1969-2003, Constant 2003 Dollars

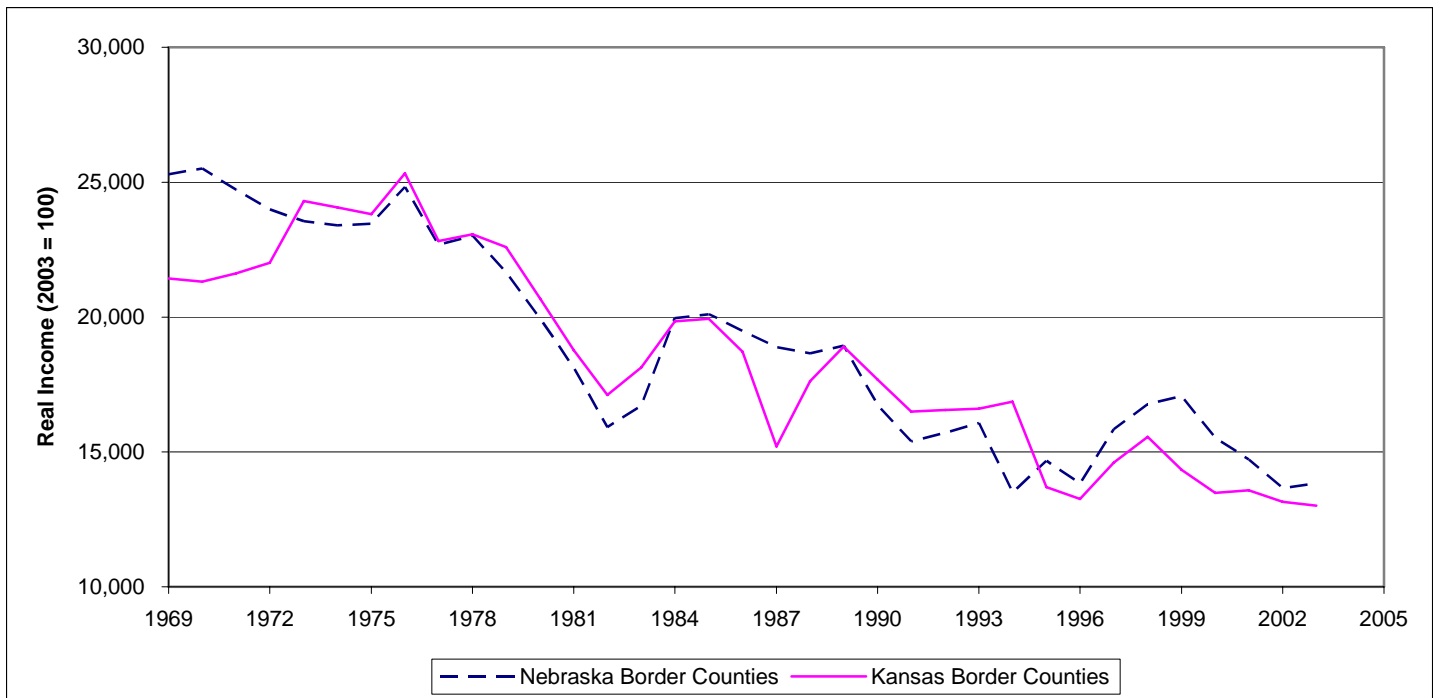
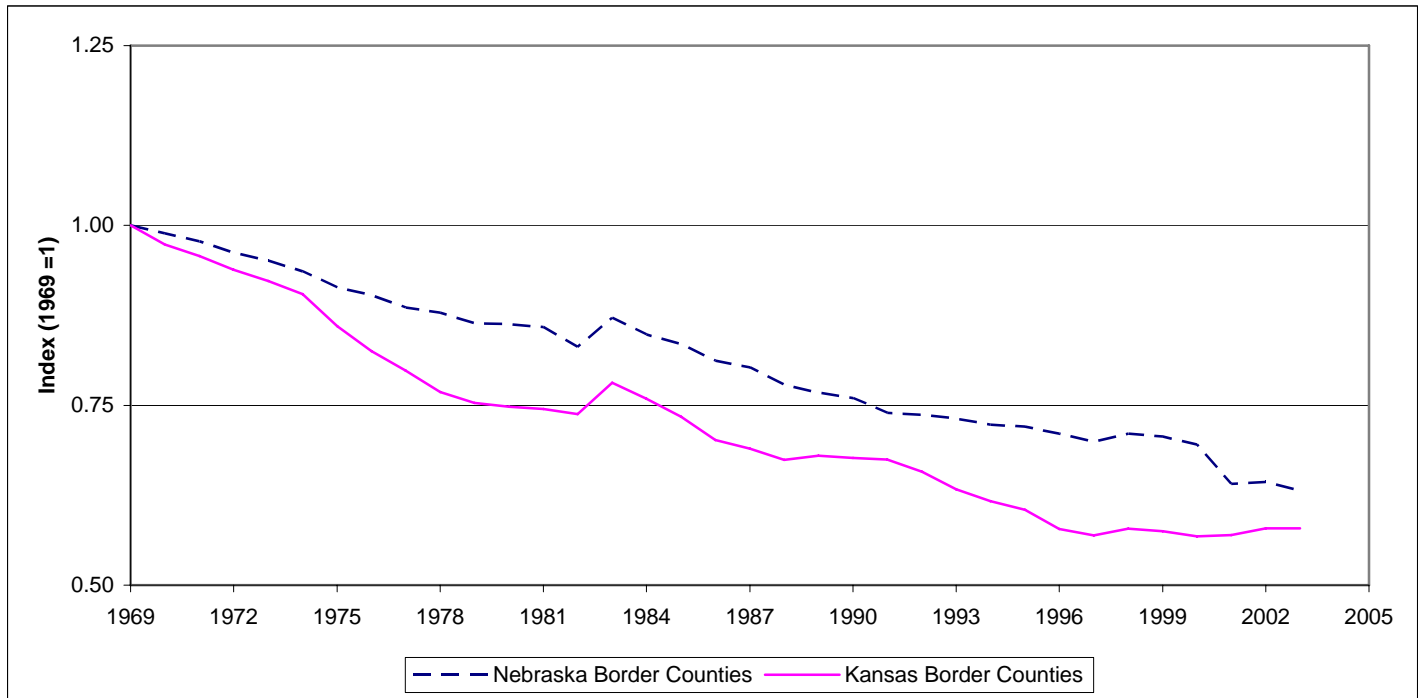


Chart 8: Trends in the Number of Farm Proprietors—Kansas and Nebraska Border Counties, 1969-2003



Comments on Charts 8, 9, and 10:

- Consistent with national and regional trends, the number of farm proprietorships has steadily declined along both side of Kansas’ Nebraska border. Kansas has experienced a faster decline, with a 30-year average annual growth rate of -1.54 percent versus Nebraska’s rate of -1.36 percent.
- The volatility of farm-proprietorship income makes it difficult to make meaningful statements about the trends shown in Chart 9—other than the fact that aggregate incomes have generally declined. However, despite the volatility, Chart 10 shows that on a per-proprietor basis farmers on the Nebraska side of the border tend to systematically outperform those on the Kansas side. This finding suggests superior productivity on the Nebraska side of the border.
- 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 Nebraska Border Counties, 1969-2003, Constant 2003 Dollars

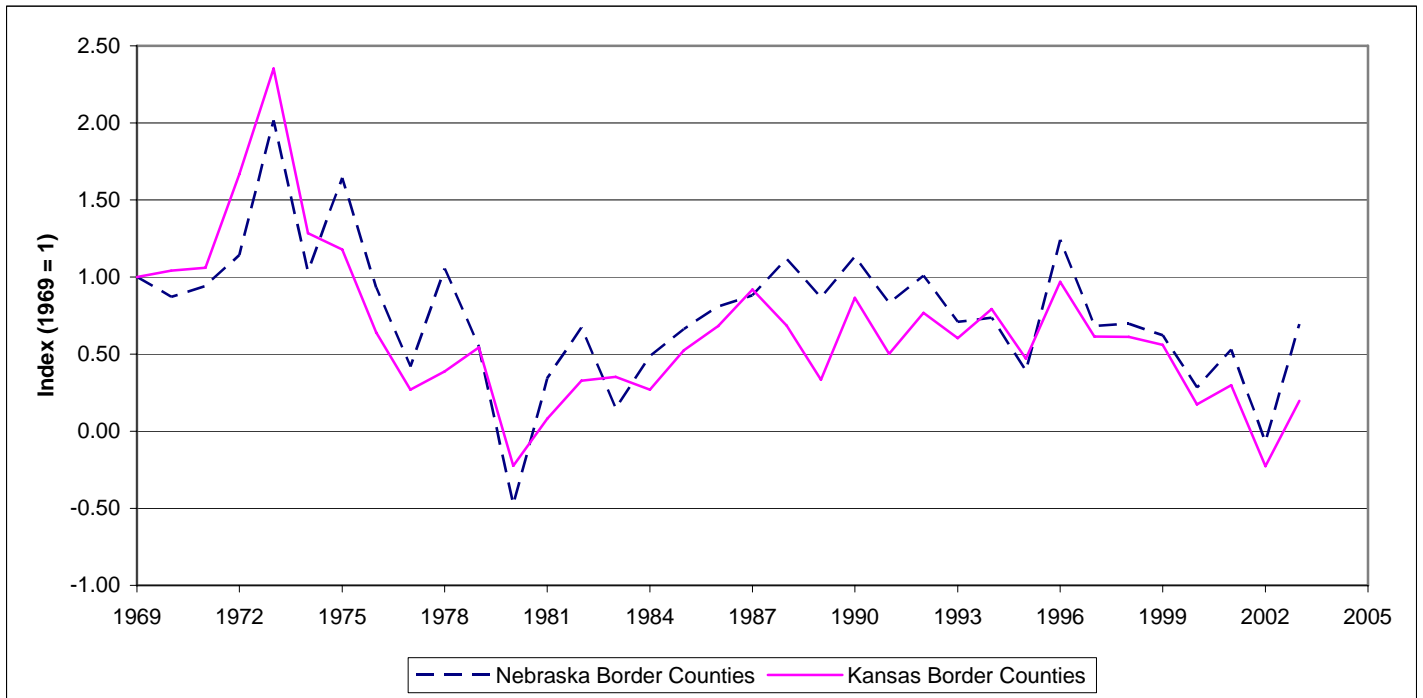


Chart 10: Inflation-Adjusted Farm Proprietors' Income Per Farm Proprietor—Kansas and Nebraska Border Counties, 1969-2003, Constant 2003 Dollars

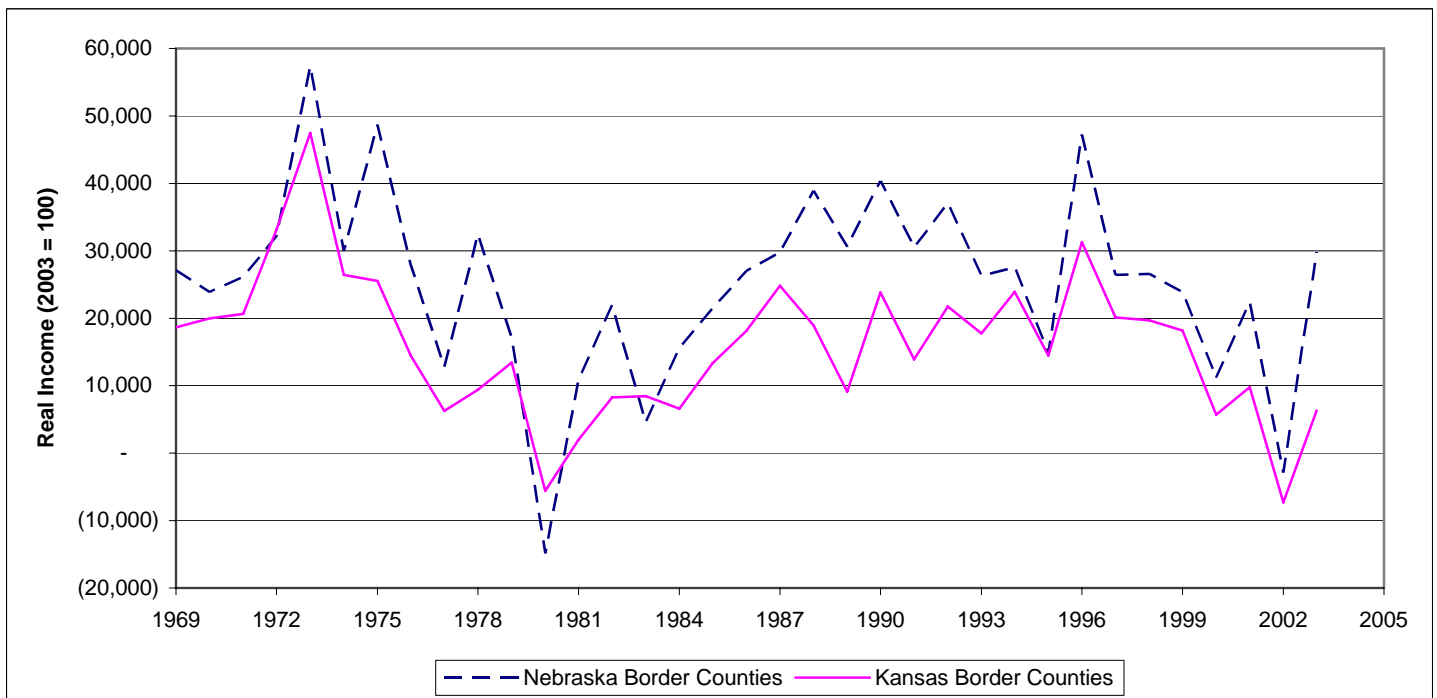


Table 1: Population, Number of Proprietors, and Number of Workers Figures and Growth Rates, Selected Years

Nebraska's Kansas Border Counties	1973	1983	1993	2003	Average Annual Growth Rate (%)				
					1973	1983	1993	2003	1973-2003
Population	107,236	102,155	91,810	86,518	*	-0.48	-1.06	-0.59	-0.71
Full & Part-Time Employment*	50,698	52,733	50,664	51,661	*	0.39	-0.40	0.20	0.06
Farm Proprietors	9,713	8,897	7,469	6,450	*	-0.87	-1.73	-1.46	-1.36
Non-Farm Proprietors	9,398	10,030	9,453	10,541	*	0.65	-0.59	1.10	0.60
Wage & Salary Workers	31,587	33,806	33,742	34,670	*	0.68	-0.02	0.27	0.31
Kansas' Nebraska Border Counties	1973	1983	1993	2003	1973	1983	1993	2003	1973-2003
Population	93,100	86,955	77,143	71,293	*	-0.68	-1.19	-0.79	-0.89
Full & Part-Time Employment*	44,867	47,702	46,035	48,856	*	0.61	-0.36	0.60	0.28
Farm Proprietors	12,313	10,428	8,454	7,726	*	-1.65	-2.08	-0.90	-1.54
Non-Farm Proprietors	7,965	8,159	7,676	9,470	*	0.24	-0.61	2.12	0.32
Wage & Salary Workers	24,589	29,115	29,905	31,660	*	1.70	0.27	0.57	0.85

* Includes Wage and Salary Emploeyss and Proprietorships

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
Nebraska's Kansas Border Counties													
Earnings by Place of Work (\$000s)*	428,813	583,204	942,361	1,312,763	1,427,151	948,034	1,130,202	1,312,763	*	-4.01	1.77	1.51	-0.28
Farm Proprietors' Income (\$000s)	167,477	24,911	163,542	192,096	557,387	40,494	196,141	192,096	*	-23.07	17.09	-0.21	-3.49
Non-Farm Proprietors' Income (\$000s)	66,514	103,111	126,694	145,955	221,368	167,613	151,948	145,955	*	-2.74	-0.98	-0.40	-1.38
Wage & Salary Disbursements (\$000s)	194,822	455,182	652,125	974,712	648,395	739,926	782,113	974,712	*	1.33	0.56	2.23	1.37
Earnings Per Worker*	8,458	11,060	18,600	25,411	28,150	17,978	22,308	25,411	*	-4.38	2.18	1.31	-0.34
Farm Income Per Proprietor	17,243	2,800	21,896	29,782	57,386	4,551	26,261	29,782	*	-22.39	19.16	1.27	-2.16
Non-Farm Income Per Proprietor	7,077	10,280	13,403	13,846	23,555	16,711	16,074	13,846	*	-3.37	-0.39	-1.48	-1.76
Wage & Salary Disbursements Per WS Worker	6,168	13,465	19,327	28,114	20,527	21,887	23,179	28,114	*	0.64	0.58	1.95	1.05
Kansas' Nebraska Border Counties													
Earnings by Place of Work (\$000s)*	392,135	524,315	799,391	1,048,987	1,305,081	852,306	958,734	1,048,987	*	-4.17	1.18	0.90	-0.73
Farm Proprietors' Income (\$000s)	175,731	54,099	124,985	48,939	584,858	87,941	149,898	48,939	*	-17.26	5.48	-10.59	-7.94
Non-Farm Proprietors' Income (\$000s)	58,136	91,018	106,294	123,183	193,485	147,955	127,482	123,183	*	-2.65	-1.48	-0.34	-1.49
Wage & Salary Disbursements (\$000s)	158,268	379,198	568,112	876,865	526,738	616,410	681,354	876,865	*	1.58	1.01	2.55	1.71
Earnings Per Worker*	8,740	10,991	17,365	21,471	29,088	17,867	20,826	21,471	*	-4.76	1.54	0.31	-1.01
Farm Income Per Proprietor	14,272	5,188	14,784	6,334	47,499	8,433	17,731	6,334	*	-15.87	7.71	-9.78	-6.50
Non-Farm Income Per Proprietor	7,299	11,156	13,848	13,008	24,292	18,134	16,608	13,008	*	-2.88	-0.88	-2.41	-2.06
Wage & Salary Disbursements Per WS Worker	6,437	13,024	18,997	27,696	21,422	21,172	22,784	27,696	*	-0.12	0.74	1.97	0.86

* Includes wage and salary employees and proprietorships

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.

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