

## STATE OF THE KANSAS SWINE INDUSTRY

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### Summary

The Kansas hog industry represented 3.8% of U.S. hog production in 1977 and had peak production of nearly 3.4 million head in 1971. Since that time, the industry has declined significantly, representing only 2.5% of U.S. hog production with 2.5 million head produced in 1992. Kansas hog production has declined, while neighboring Nebraska has enjoyed increased production and share of U.S. production. Kansas hog production is also highly concentrated, with the largest 3.5% of producers owning 45.5% of the state's hog inventory. Efforts to identify specific causes and to change the economic environment will be required to reverse the decline in the Kansas swine industry.

(Key Words: Swine Industry Trends, Hog Marketings, Swine Industry Structure.)

### Introduction

The size of the Kansas swine industry has declined considerably over the last 15 years. During this time, the share of U.S. hog production represented by Kansas producers dropped from 3.7% in 1978 to 2.5% in 1992. The number of hogs produced in the state has declined by more than 30% since 1980. As a result of this rapid decline in the state's swine industry, increased debate has surfaced regarding why this has occurred and how it might be reversed. This debate has led to policy proposals such as the recent corporate

farming bill that attempts to entice more swine production, slaughtering, and processing to the state. This policy controversy has been emotion laden, with producers and various associations taking strong stances. The purpose of this report is to document some of the important economic trends that have occurred in the Kansas swine industry.

### Procedures

Several key trends clearly illustrate the changing size, status, and structure of the Kansas swine industry. Factors selected for summary in this report include number of operations, hogs marketed, marketings per operation, and inventory value of hogs in Kansas. Trends in these data are examined during 1980-92 to determine how operation numbers and value of hogs produced in the state have changed.

Data were also collected on marketings and share of U.S. marketings in Kansas, Nebraska, and North Carolina. Kansas data are compared with Nebraska data because of their proximity and similar type of production environment. Kansas trends are also compared with those of North Carolina, the state with the fastest growing hog production in the U.S.

Finally, the current structure of the Kansas swine industry is examined to show the concentration of hog production in the state. All data summarized in this report

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were collected from U.S. Department of Agriculture publications.

## Results and Discussion

Trends in number of hog operations, marketings, and inventory value of hogs in Kansas over 1980-92 are reported in Table 1. The number of operations in the state declined by nearly 60% over the 13-year period from 14,000 to less than 6,000. Nationally, the number of producers declined by 63% over the same time period. The average-sized hog operation in Kansas almost doubled from 1980 to 1992 in terms of number of hogs marketed annually. Hogs marketed annually in Kansas declined from 3.3 million head in 1980 to 2.5 million head in 1992. Total U.S. hog production was about 1.5 million head less in 1992 than 1980. The decline in hog production in Kansas was also associated with a decline in value of hog inventory on farms. In 1980, the total value of inventory on December 1 in Kansas was \$123.5 million. This declined to \$95.0 million by December 1992.

The majority of the hogs produced annually are raised in north-central and northeastern Kansas. Figure 1 illustrates the location of the 1992 pig crop by county. Of the eight counties with a pig crop larger than 50,000 head in 1992 (in order from largest Washington, Nemaha, Marshall, Clay, Jewell, Pottawatomie, Brown, and Butler), only Butler County is not located near the Kansas-Nebraska border. The northeast and north central regions represented 42% of the state's total pig crop. The important point to learn from this is that the largest portion of hog production in Kansas is in a relatively small geographic region. Because of this geographic concentration, hog production is an important component of local economic prosperity.

Figure 2 illustrates how the number of hogs produced and share of hog

production in Kansas has declined relative to Nebraska and North Carolina. While Kansas hog marketings dwindled during the last 10 years, Nebraska and North Carolina both enjoyed dramatic increases in hog production. North Carolina almost doubled hog production from 1980 to 1992. Similarly, Nebraska increased production by 16% during this same period, while Kansas production declined by 24%. Individual state shares of U.S. production show similar trends to production numbers. Kansas has dropped from ranking as the seventh largest hog producing state in the late 1970s to the tenth largest currently.

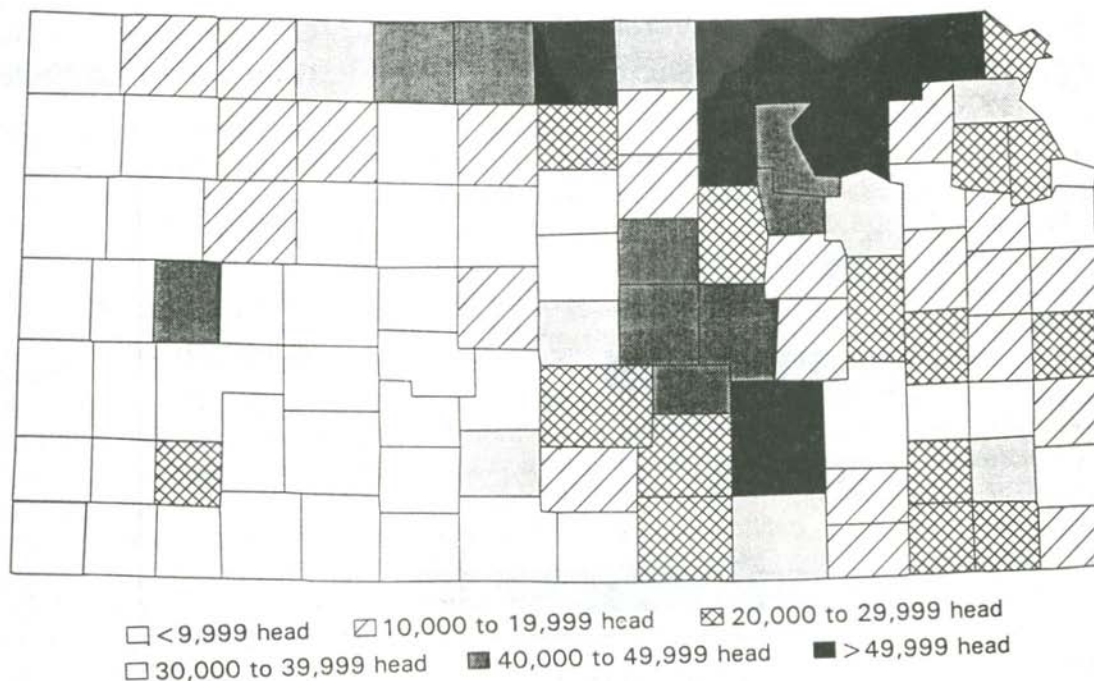
Part of the discussion surrounding the debate regarding corporate ownership of swine production facilities and hogs in Kansas relates to industry structure. Figure 3 illustrates the current structure of Kansas hog producers. The group of producers with the smallest hog farms (inventory of 1 to 99 head) represents 57% of the hog farms in Kansas. However, this group marketed only 8.5% of the hogs produced in the state in 1992. In contrast, 3.5% of the producers having the largest operations (1,000 head and above) represented 45.5% of 1992 hog production in Kansas. Although some states have much higher levels of producer concentration (e.g., 9.3% of North Carolina producers owned 90% of the inventory in the state in 1992), the concentration in Kansas is similar to that present in the U.S. as a whole.

The trends that have been witnessed recently in Kansas swine production indicate a shrinking absolute and relative industry. The number of producers, hogs marketed, and inventory value have all declined in absolute terms over the last decade. In relative terms, Kansas share of U.S. production has also declined. For the Kansas swine industry to survive, continued debate is needed regarding alternative actions to enhance the economic environment.

**Table 1. Number of Hog Operations, Marketings, and Inventory Value of Hogs in Kansas, 1980-92<sup>a</sup>**

Year	Number of Operations	Hogs Marketed (1,000 Head)	Marketings per Operation (Head)	Inventory Value of Hogs December 1 (\$1,000)
1980	14,000	3,300	236	123,500
1981	13,000	3,069	236	111,510
1982	11,200	2,754	246	141,115
1983	9,400	2,758	293	88,275
1984	8,400	2,612	311	110,400
1985	8,300	2,636	318	99,560
1986	7,000	2,470	353	121,410
1987	6,900	2,289	332	102,225
1988	6,500	2,493	384	93,000
1989	6,800	2,598	382	109,475
1990	6,000	2,467	411	121,500
1991	5,600	2,469	441	92,950
1992	5,700	2,514	441	95,040

<sup>a</sup>Source: U.S. Department of Agriculture.



**Figure 1. Location of Pig Crop in Kansas by County, 1992. Source: Kansas Agricultural Statistics**

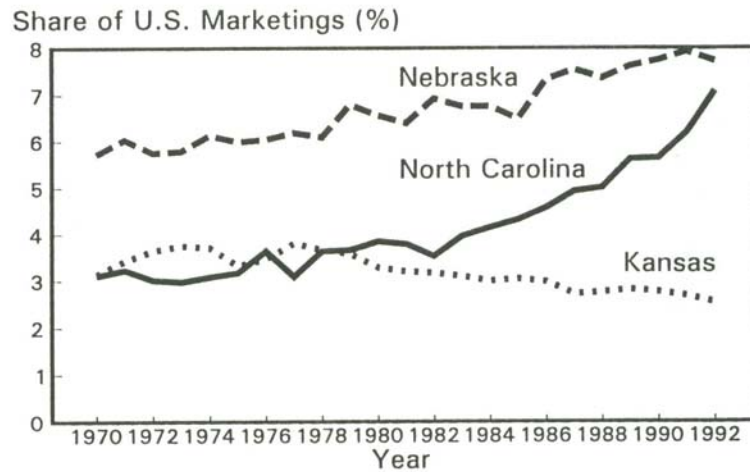
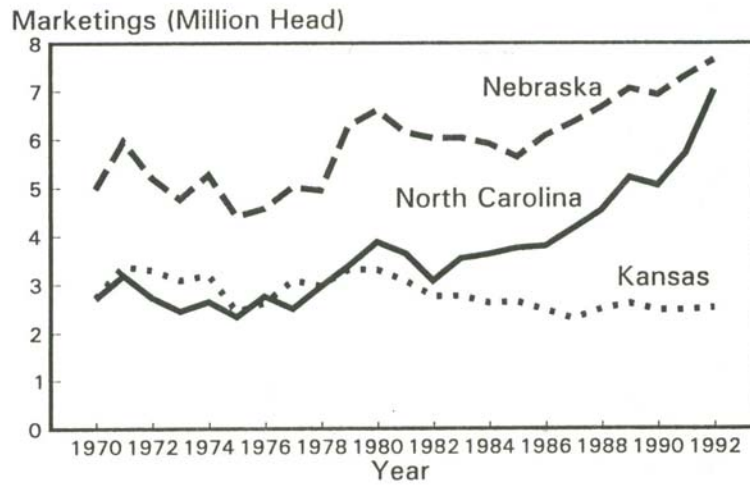


Figure 2. Hog Marketings and Share of U.S. Hog Marketing, Selected States, 1970-92

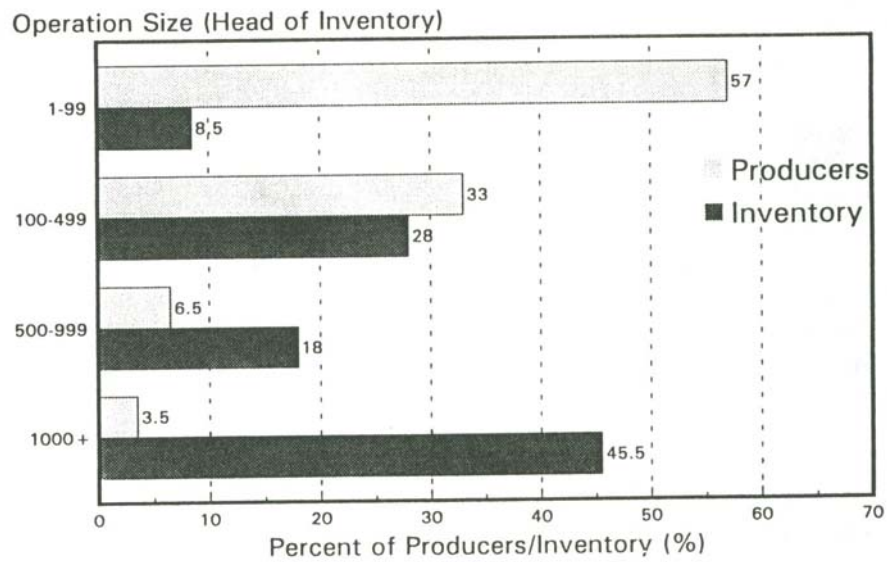


Figure 3. Number of Hog Operations and Percentage of Inventory by Size in Kansas, 1992