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The economic contribution of farmer cooperatives for the state of Kansas

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Amanda Clymer


Graduate Research Assistant

Brian C. Briggeman, Ph.D.

Professor and Director, Arthur Capper
Cooperative Center (ACCC)

John Leatherman, Ph.D.

Professor and Director,
Office of Local Government



Value of Cooperatives

- Yardstick position for the sake of the farmer
- Provide Services
- Rural employer and tax payer
- Support of education and community

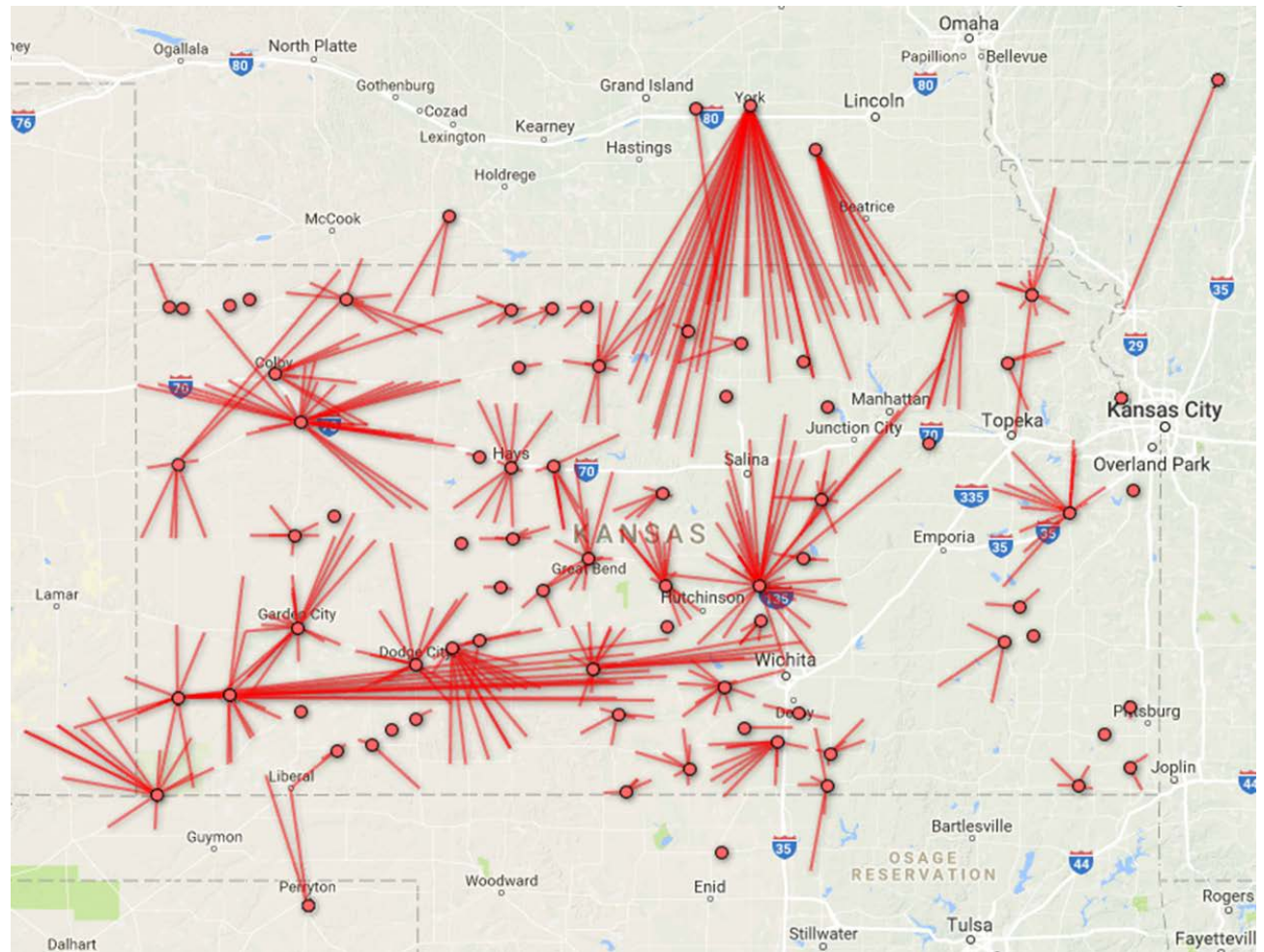


Value of Cooperatives

- **Yardstick position for the sake of the farmer**
- **Provide Services**
- **Rural employer and tax payer**
- Support of education and community

MAPPING KANSAS FARMER COOPERATIVES

77 farmer
cooperatives
operating in Kansas



September 2017



What is the economic contribution of grain marketing and farm supply cooperatives operating in Kansas?



Data Sources

- ACCC database of 77 farmer cooperatives
- Survey of farmer cooperatives with upright grain storage locations in Kansas
- 2017 CoBank Risk Analyst Data
 - 60 KS headquartered cooperatives
- Kansas Department of Labor Quarterly Census of Employment and Wages



Data Summary

- Approximately \$9.87 billion in grain, feed, fuel, fertilizer, chemical and other sales
- \$277.12 million in net profit
- \$71.1 million in cash patronage payout

Methodology

- **Input-Output (I-O) Model**
 - A system of linear equations representing the level of interdependence among industries in an economy
- **Social Accounting Matrix (SAM)**
 - SAM maps monetary flow between industries and institutions within a region and external to a region
- **IMPLAN (IMpact for PLANning)**
 - A software deploying I-O and SAM for economic analysis

IMPLAN Model

- Attempts to create an abstraction of the world where supply equals demand
- New Industry sectors for Co-op Grain Storage and Co-op Wholesale
 - Deduct value from Warehousing/Storage and General Wholesale
- Associated production functions based on operating expenses

Direct Effects

Specific actions of the industry

- 4,622 jobs
- \$380.17 million in Labor Income
- \$678.93 million in Value Added



Indirect Effects

Purchase of inputs, goods or services from other industries

- 2,380 jobs
- \$131.75 million in Labor Income
- \$210.97 million in Value Added

Induced Effects

Spending by households due to direct and indirect effects

- 2,947 jobs
- \$119.86 million in Labor Income
- \$227.27 million in Value Added



Total Effects

- 9,948 jobs
- \$631.78 million in Labor Income
- \$1.12 billion in Value Added

Multiplier Results

- Employment: Each cooperative job generates 1.15 additional jobs from business activity.
- Labor Income: \$1 in direct labor income generates an additional \$0.62 due to activity.
- Value Added: \$1 in value added, generates an additional \$0.65 in Kansas.



Total Effects

*Limiting Localized Spending**


- 8,602 jobs
- \$490.46 million in Labor Income
- \$990.4 million in Value Added
- Multipliers smaller

** Treating patronage like a dividend payment assumes greater monetary leakage or spending outside the KS economy.*



Conclusion

- Documented the relative economic importance of farmer cooperatives in Kansas
- Localized ownership and localized patronage spending increases value of the sector
- Additional value of cooperatives not represented in the model



Thank You
Questions?

Input Data

- Model Inputs: Output (gross margin), Employment, Employee Compensation, Value Added
- Production Function: Lease/Rent Expense, Utilities, Repairs and Maintenance, Insurance Expense, Trucking Expense



IMPLAN Model

- New Industry sectors for Co-op Grain Storage and Co-op Wholesale
 - 86 percent of output was from wholesale
 - Deduct value from Warehousing/Storage and General Wholesale
- Associated production functions based on operating expenses
 - Begin with Warehousing/Storage and General Wholesale spending pattern
 - Input known operating expenses, let balance to find the rest



Results

- **Direct effects**
 - Revenue gained from the actions of the industry including selling goods or services, income paid to workers or owners and the number of jobs.
- **Indirect effects**
 - Revenue generated in the economy due to the purchase of inputs, other goods or services from other industries.
- **Induced effects**
 - Spending by households due to the associated activities that resulted from the direct and indirect effects