

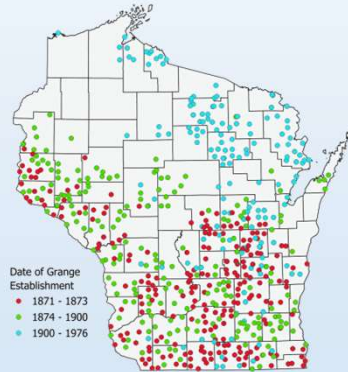


# Wisconsin Granges and Agricultural Production

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## Introduction

- The **National Grange** of the Order of Patrons of Husbandry:
  - Founded in 1867
  - Agricultural organization** with the purpose of improving the **social, economic, and educational** situations of rural America.
  - First Wisconsin Grange appeared in 1873
- Did the presence of a **Grange** in a Wisconsin county increase the **agricultural production** of that county between 1860 and 1920?
- Can the effectiveness of a Grange give us insight into broader collective action efforts?
- Did Granges contribute to US agricultural boom in the 20<sup>th</sup> century?



## Results

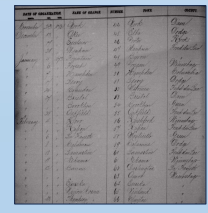
- Establishment of a Grange resulted in a 24% increase in output per farm and a 17% increase in farm value per improved acre
- Event studies showed no clear signs of a pre-trend different from the trend after treatment
- Visualizations of difference-in-differences appear to show a **smaller decline** in the **agricultural production** of treatment counties

## Conclusions

- We can be **moderately confident** that Granges **increased the output per farm** as well as the **value of improved acres** in Wisconsin counties between 1860 and 1920
- Investigation into years after 1920 may be worthwhile
  - Many Granges were chartered in the 1930s
- Study of a Southern state would likely yield different results
- Nationwide sample may also prove useful to determine the true effectiveness of the Grange

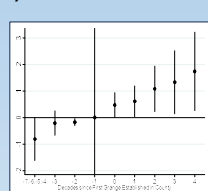
## Methods

### 1) Transcription

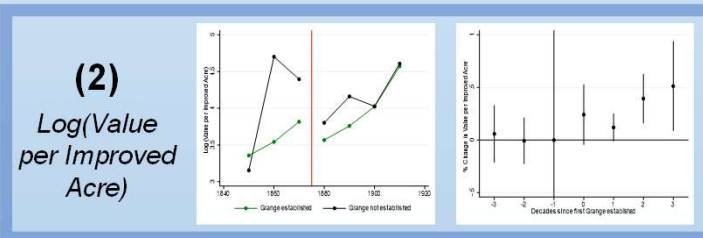
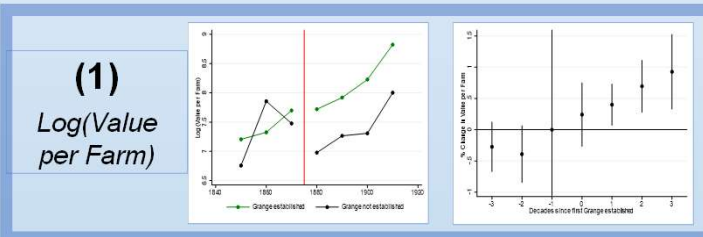
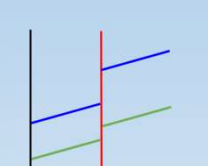


### 2) Clean and Format

### 4) Event Studies



### 3) Difference-in-Differences



	(1)	(2)	(3)	(4)
	<i>Log(Value per Farm)</i>	<i>Log(Value per Improved Acre)</i>	<i>Log(Output per Farm)</i>	<i>Log(Output per Improved Acre)</i>
% Change after Grange Establishment	0.268 (0.181)	0.167* (0.098)	0.241* (0.129)	0.140 (0.140)
Observations	412	412	412	412
R-squared	0.914	0.914	0.893	0.866

Standard errors are clustered at the county level and shown in parentheses  
All regressions include county and year fixed effects  
\* p<0.1

## Acknowledgements

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