

## N15: Business Location and Public Policy

### Policy Decisions that Affect Business Location

- Taxes
  - Property
  - Income
  - Sales taxes
- Workers compensation policy
- Labor market policies (e.g. union)
- Quality of infrastructure
- Quality of workforce education

Does a “pro-business” policy make a difference?

### Look at one pro-business policy: Right-to-Work Law

- Anti union measure is pro-business in itself
- Adoption of this policy is highly correlated with other pro-business policies

#### Facts:

- Right-to-work states. Manufacturing employment has increased 148% over past 50 years.
- Union-shop states. Manufacturing employment growth is virtually zero

### Right-To-Work Map (before 2001 change discussed later)

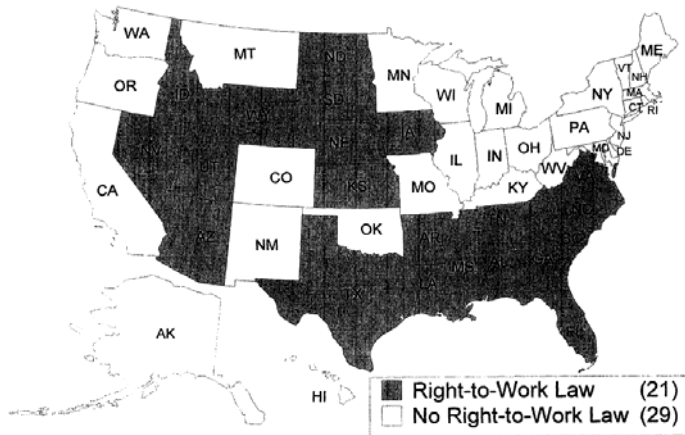


FIG. 1.—Geography of right-to-work laws

### Close connection between region and adoption of the policy

#### Other explanations for manufacturing growth facts:

- Growth in population in the sun-belt. (Advent of airconditioning)
- Agricultural revolution
- Revolution in transportation diminished agglomerating forces.

Hard to control for these other factors

Research strategy: look at near border where factors unrelated to policies are approximately the same.

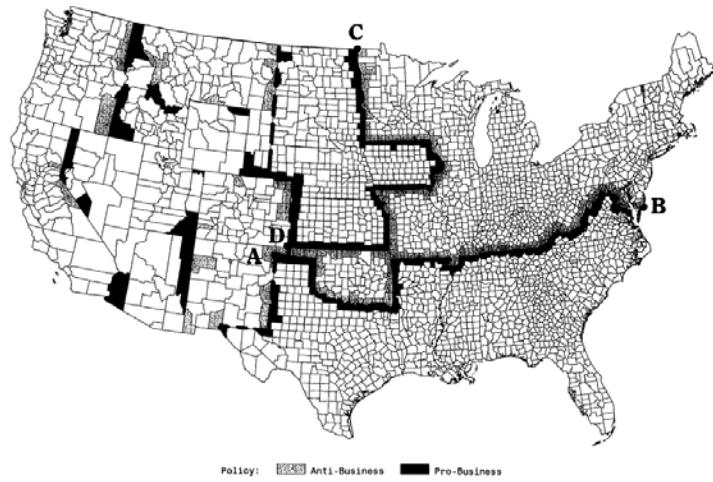


FIG. 3.—Counties within 25 miles of the policy change border

TABLE 2  
TESTS OF EQUALITY OF MEANS OF ADJACENT LAYERS  
(Coal Region Excluded)

| ADJACENT COUNTY LAYERS   | SHARE              |  | GROWTH RATE        |  |
|--------------------------|--------------------|--|--------------------|--|
|                          | Change in Mean (1) | <i>p</i> -Value for Test of Equality (2) | Change in Mean (3) | <i>p</i> -Value for Test of Equality (4) |
| Anti:50-75 → anti:75-100 | .0                 | .975                                     | 12.7               | .259                                     |
| Anti:25-50 → anti:50-75  | .3                 | .880                                     | -7.9               | .463                                     |
| Anti:0-25 → anti:25-50   | 2.6                | .185                                     | 11.6               | .283                                     |
| Pro:0-25 → anti:0-25     | -5.8               | .003                                     | -27.0              | .008                                     |
| Pro:25-50 → pro:0-25     | 2.4                | .217                                     | 15.9               | .104                                     |
| Pro:50-75 → pro:25-50    | 1.0                | .620                                     | -1.8               | .863                                     |
| Pro:75-100 → pro:50-75   | 1.4                | .517                                     | -3.4               | .742                                     |

TABLE 1  
MANUFACTURING EMPLOYMENT SHARES AND GROWTH RATES: CROSS-COUNTY AVERAGES BY DISTANCE FROM BORDER AND SIDE OF BORDER

| MILES FROM BORDER              | COAL REGION INCLUDED    |                          | COAL REGION EXCLUDED    |                          |
|--------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
|                                | Share of 1992 Total (1) | Growth Rate, 1947-92 (2) | Share of 1992 Total (3) | Growth Rate, 1947-92 (4) |
| A. Antibusiness Side of Border |                         |                          |                         |                          |
| 75-100                         | 25.9                    | 67.5                     | 25.0                    | 68.2                     |
| 50-75                          | 23.1                    | 62.7                     | 25.0                    | 80.9                     |
| 25-50                          | 23.2                    | 82.0                     | 24.7                    | 88.8                     |
| 0-25                           | 21.0                    | 62.4                     | 22.1                    | 77.2                     |
| B. Probusiness Side of Border  |                         |                          |                         |                          |
| 0-25                           | 28.6                    | 100.7                    | 27.9                    | 104.2                    |
| 25-50                          | 26.7                    | 89.1                     | 25.5                    | 88.3                     |
| 50-75                          | 26.7                    | 92.9                     | 24.5                    | 90.1                     |
| 75-100                         | 25.4                    | 91.8                     | 23.1                    | 93.5                     |

TABLE 4  
MANUFACTURING EMPLOYMENT SHARES AND GROWTH RATES BY INDIVIDUAL BORDERS

| BORDER STATES |               | 1992 SHARE      |                  | GROWTH RATE, 1947-92 |                  |
|---------------|---------------|-----------------|------------------|----------------------|------------------|
| Probusiness   | Antibusiness  | Probusiness (1) | Antibusiness (2) | Probusiness (3)      | Antibusiness (4) |
| Texas         | Oklahoma      | 17.3            | 16.1             | 29                   | 54               |
| Arkansas      | Oklahoma      | 43.5            | 27.6             | 132                  | 144              |
| Arkansas      | Missouri      | 40.7            | 30.1             | 158                  | 125              |
| Tennessee     | Missouri      | 47.8            | 39.3             | 100                  | 78               |
| Tennessee     | Kentucky      | 48.4            | 38.7             | 142                  | 122              |
| Virginia      | West Virginia | 17.7            | 3.4              | 143                  | -55              |
| Virginia      | Maryland      | 31.7            | 20.1             | 59                   | 5                |
| North Dakota  | Minnesota     | 16.3            | 8.5              | 89                   | 84               |
| South Dakota  | Minnesota     | 16.2            | 6.3              | 137                  | 20               |
| Iowa          | Minnesota     | 16.2            | 11.1             | 138                  | 27               |
| Iowa          | Wisconsin     | 28.5            | 25.1             | 130                  | 85               |
| Iowa          | Wisconsin     | 29.9            | 30.2             | 109                  | 103              |
| Iowa          | Illinois      | 33.6            | 23.1             | 73                   | 13               |
| Nebraska      | Missouri      | 25.2            | 16.7             | 121                  | 122              |
| Kansas        | Missouri      | 13.8            | 10.0             | 69                   | 167              |
| Kansas        | Missouri      | 21.1            | 22.6             | 78                   | 96               |
| Kansas        | Oklahoma      | 19.5            | 11.2             | 80                   | -12              |

STATISTICAL MODEL

| Parameter                                 | Specification 1:<br>No Trend,<br>$\beta(x) = 0$<br>(1) | Specification 2:<br>Constant<br>Trend,<br>$\beta(x) = \beta_0$<br>(2) | Specification 3:<br>Different<br>Constant for<br>Each Segment,<br>$\beta(x) \in \{\beta_1, \beta_2\}$<br>(3) | Specification 4:<br>Trend $\beta(x)$<br>a General<br>Function of $x$<br>(4) |
|---|--|---|--|---|
| A. County Manufacturing Shares* (N = 951) |  |   |  |   |
| $\theta$                                  | 3.4<br>(.9)  | 6.4<br>(1.6)  | 6.5<br>(1.6)   | 6.6<br>(1.6)  |
| $\beta_0$                                 | ...  | .03<br>(.01)  | ...  | ...   |
| $\beta_1$                                 | ...  | ...   | -.01<br>(.02)  | ...   |
| $\beta_2$                                 | ...  | ...   | .08<br>(.02)   | ...   |
| $R^2$                                     | .306   | .310  | .330   | .350  |
| B. County Growth Rates* (N = 892)         |  |   |  |   |
| $\theta$                                  | 19.1<br>(5.0)  | 21.2<br>(9.4)   | 21.2<br>(9.4)  | 23.1<br>(9.2)   |
| $\beta_0$                                 | ...  | .02<br>(.09)  | ...  | ...   |
| $\beta_1$                                 | ...  | ...   | .08<br>(.10)   | ...   |
| $\beta_2$                                 | ...  | ...   | -.04<br>(.10)  | ...   |
| $R^2$                                     | .118   | .118  | .120   | .161  |

\* Excludes coal region

Extensions:

- Other policy measures
- Focus on location of large plants

Epilogue

- Oklahoma

