

# The Effects of Job Creation Tax Credits on Local Labor Demand

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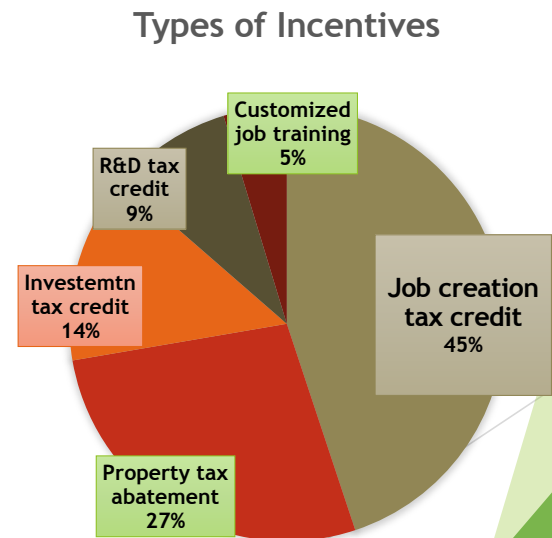
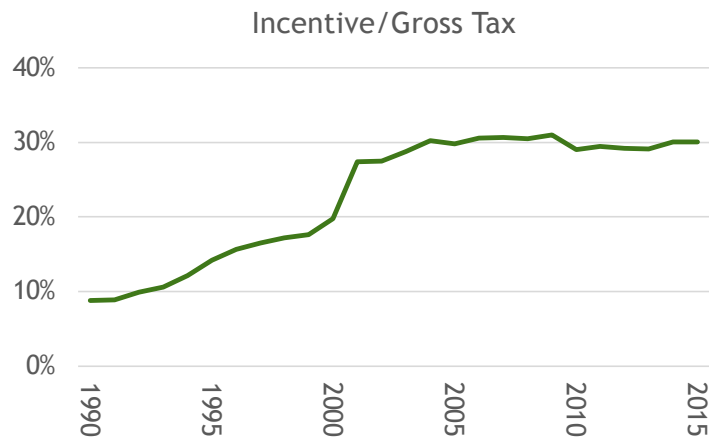
# Job Creation Tax Credits (JCTC) and Credited Jobs

- ▶ Creating jobs is one of the most important goals among state and local policymakers
- ▶ JCTC is a popular tool
- ▶ A business that creates new jobs (Credited Jobs) gets tax credits
  
- ▶ Economics of JCTCs
  - ▶ Incentives work
  - ▶ Creating a job brings long-run effects

# Proliferation of Business Tax Incentives

(Source: Bartik 2017)

- ▶ Since the 1990s, many states have provided business tax incentives
- ▶ Between 1990 and 2015, state business incentives have tripled
- ▶ State and local governments spent about \$45 billion on tax incentives in 2015
- ▶ JCTC takes 45 percent of all business tax incentives



# Previous Studies

- ▶ Many previous studies have documented ineffectiveness of JCTCs
- ▶ Critiques include:
  - ▶ Windfall : Employment activity that would have taken place absent the credit program
  - ▶ Churning : a firm may lay off some workers in an existing project while also hiring workers for the new project for tax credits
- ▶ Recent studies show robust positive effects of place-based fiscal policies on local economies
  - ▶ Suárez Serrato and Zidar (2018)
  - ▶ Slattery (2019)
  - ▶ Garrett, Ohn, and Suarez Serrato (2020)
  - ▶ Mask (2020)

# Goals

To examine the effects of credited jobs on local employment

Characterized by

- Local labor market

- Credited jobs

- Long-run effects

- Hand-collected county data

# Nebraska Tax Incentive Programs

- ▶ Nebraska had comprehensive incentive programs since 1988
  - ▶ Employment and Investment Growth Act (1988 - 2005)
  - ▶ Nebraska Advantage Act (2006 - 2020)
  - ▶ ImagiNE Nebraska Act (2021 - present)
  
- ▶ Selected industry
- ▶ Requires new jobs and capital investment
- ▶ Several tiers by investment scale ( 30/3 mil., 30/0, and 100/10 mil., etc.)
- ▶ Maintenance period (6 to 7 years)
- ▶ Types of credits provided
  - ▶ JCTCs ( 3 - 6% of wage)
  - ▶ Investment credits ( 10% of capital investment)
  - ▶ Sales tax refunds and property tax exemptions

# DATA

## Nebraska Tax incentive data

- Credited Jobs
- Hand collected dataset
- 1990 - 2019
- 48 out of 93 Nebraska counties
- 864 projects and 145,962 credited jobs
- \$985 million job credits and \$6,750 credit per job

## Dependent variables

- County employee and wages
  - From BLS QCEW

# Finite Distributed-lag Model

$$\ln(EMP)_{ct} = \gamma + \sum_{s=0}^8 \beta_s \ln(Credited\ Jobs)_{t+s} + X'_c \gamma_t + \alpha_c + \epsilon_{ct},$$

- ▶  $c$  for a county, and  $t$  for time
- ▶  $\alpha_c$  is a county fixed effect
- ▶  $X'_c$  is a vector of control variables: County Income and Population
- ▶ 8 years distributed lags



# Results : Effects of credited jobs

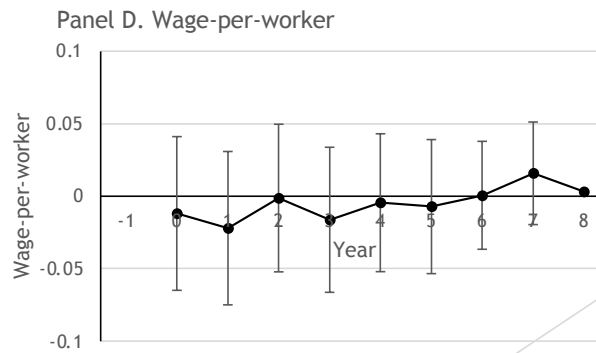
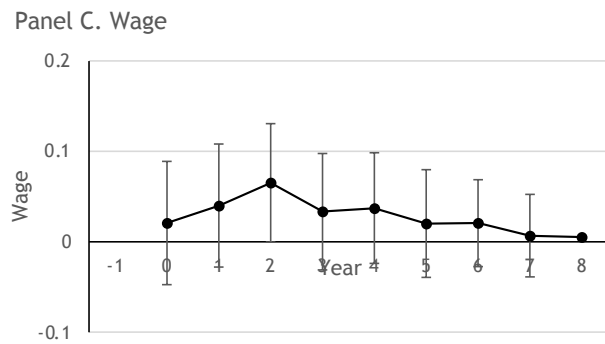
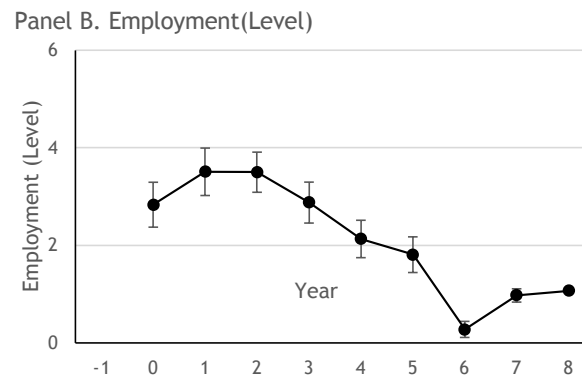
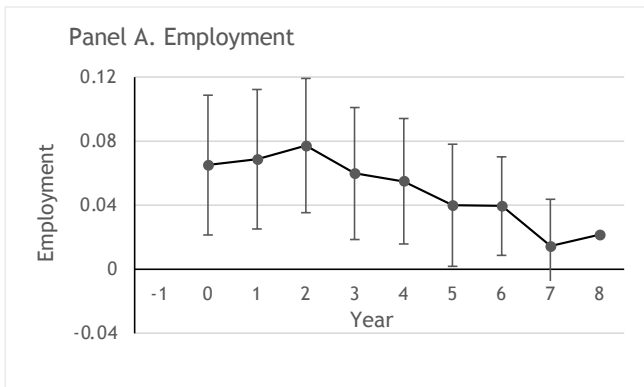
A cumulative elasticity is 0.405 in (4)

	(1)	(2)	(3)	(4)
Credited jobs	0.069*** (0.018)	0.047** (0.022)	0.032 (0.026)	0.065*** (0.023)
Credited jobs (-1)		0.061*** (0.018)	0.056** (0.025)	0.068*** (0.022)
Credited jobs (-2)		0.065*** (0.018)	0.053** (0.025)	0.077*** (0.022)
Credited jobs (-3)		0.053*** (0.018)	0.038 (0.024)	0.060*** (0.021)
Credited jobs (-4)		0.065*** (0.017)	0.032 (0.024)	0.055*** (0.021)
Credited jobs (-5)			0.017 (0.023)	0.040* (0.020)
Credited jobs (-6)			0.012 (0.022)	0.039* (0.020)
Credited jobs (-7)			-0.024 (0.017)	0.015 (0.006)
Credited jobs (-8)			-0.007 (0.016)	0.021 (0.006)
Adjusted R <sup>2</sup>	0.941	0.996	0.997	0.998
County Fixed effects	Yes	Yes	Yes	Yes
County Characteristics	Yes	Yes		Yes
N	1410	1222	940	940

# Manufacturing vs Non-Manufacturing

	Manufacturing	Non-manufacturing
Credited jobs	0.018** (0.009)	0.013 (0.008)
Credited jobs (-1)	0.021*** (0.008)	0.012* (0.007)
Credited jobs (-2)	0.023*** (0.008)	0.015** (0.007)
Credited jobs (-3)	0.024*** (0.008)	0.017*** (0.007)
Credited jobs (-4)	0.023*** (0.008)	0.016** (0.007)
Credited jobs (-5)	0.020*** (0.008)	0.013* (0.007)
Credited jobs (-6)	0.018** (0.007)	0.011* (0.006)
Credited jobs (-7)	0.015** (0.007)	0.013* (0.006)
Credited jobs (-8)	0.016** (0.007)	0.016*** (0.006)
Adjusted R <sup>2</sup>	0.997	0.995
County Fixed effects	Yes	Yes
County Characteristics	Yes	Yes
N	940	940

# More Results: Effects of Credited jobs to Local Labor Market: The Case of Nebraska Business Tax Incentives



# Other states Incentives : Wisconsin, Colorado, and Louisiana

### Comparison of State Incentive Programs

	Nebraska	Wisconsin	Louisiana	Colorado
Program Type	Comprehensive		JTC	
Investment Credit	Yes	Yes	No	No
Min Number of Job	10 - 100	N/A	5	20
Recapture	Yes	Yes	No	No
Refundable	No	Yes		No
Maintenance Period	6 to 7 year	5 Year	1 to 5 year	1 Year
Credit per Job (\$)	9,085	11,422	2,468	2,765

### Effects of Credited Jobs

	Wisconsin	Louisiana	Colorado
<b>Credited Jobs</b>	0.002	0.022***	-0.001
	(0.003)	(0.007)	(0.003)
<b>Credited Jobs(-1)</b>	0.009***	0.018***	0.000
	(0.003)	(0.006)	(0.003)
<b>Credited Jobs(-2)</b>	0.012***	0.007	0.008**
	(0.003)	(0.006)	(0.002)
<b>Credited Jobs(-3)</b>	0.016***	0.009	0.006*
	(0.003)	(0.006)	(0.003)
<b>Credited Jobs(-4)</b>	0.017***	0.014**	0.006
	(0.003)	(0.006)	(0.003)
<b>Fixed effects</b>	Yes	Yes	Yes
<b>County Characteristics</b>	Yes	Yes	Yes
<b>Sample size</b>	513	354	54

# Placebo Test

	Alabama	Nebraska
New Jobs	0.004*** (0.001)	0.047** (0.022)
New Jobs(-1)	0.003*** (0.001)	0.061*** (0.018)
New Jobs(-2)	0.003*** (0.001)	0.065*** (0.018)
New Jobs(-3)	0.003*** (0.001)	0.053*** (0.018)
New Jobs(-4)	0.005*** (0.001)	0.065*** (0.017)
Fixed effects	Yes	Yes
County characteristics	Yes	Yes
Sample size	594	1222

- ▶ Alabama reports new jobs created regardless of incentives
- ▶ It mirrors new employment activities that would have taken place absent the credit program

# Conclusions

- ▶ Positive long-run effects of credited jobs on local employment
- ▶ The magnitude of effects depends on the program
- ▶ Comprehensive incentive programs show larger effects
- ▶ The Incentives may not have positive effects on earnings
- ▶ It is an on-going study

**Any questions or suggestions?  
Please e-mail us, Thank you!**

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