

The Kansas Tax Experiment: Impacts on Employment and Output

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Background

Kansas enacted major tax reform in 2012. The Governor described it as a "real live experiment," and predicted it would be "like a shot of adrenaline into the heart of the Kansas economy." Major components: (1) cut individual income rates (from 3.5, 6.25, and 6.45% to 3, and 4.9%), and (2) exclude amounts on federal 1040 lines 12, 17, and 18 from state income tax (pass-through income exclusion). Included limited revenue increasing measures.

Estimated Impact on State General Fund Receipts (millions)			
2013	\$231.2	2016	\$854.3
2014	\$802.8	2017	\$892.9
2015	\$824.3	2018	\$933.7
Six Year Total		\$4,539.1	

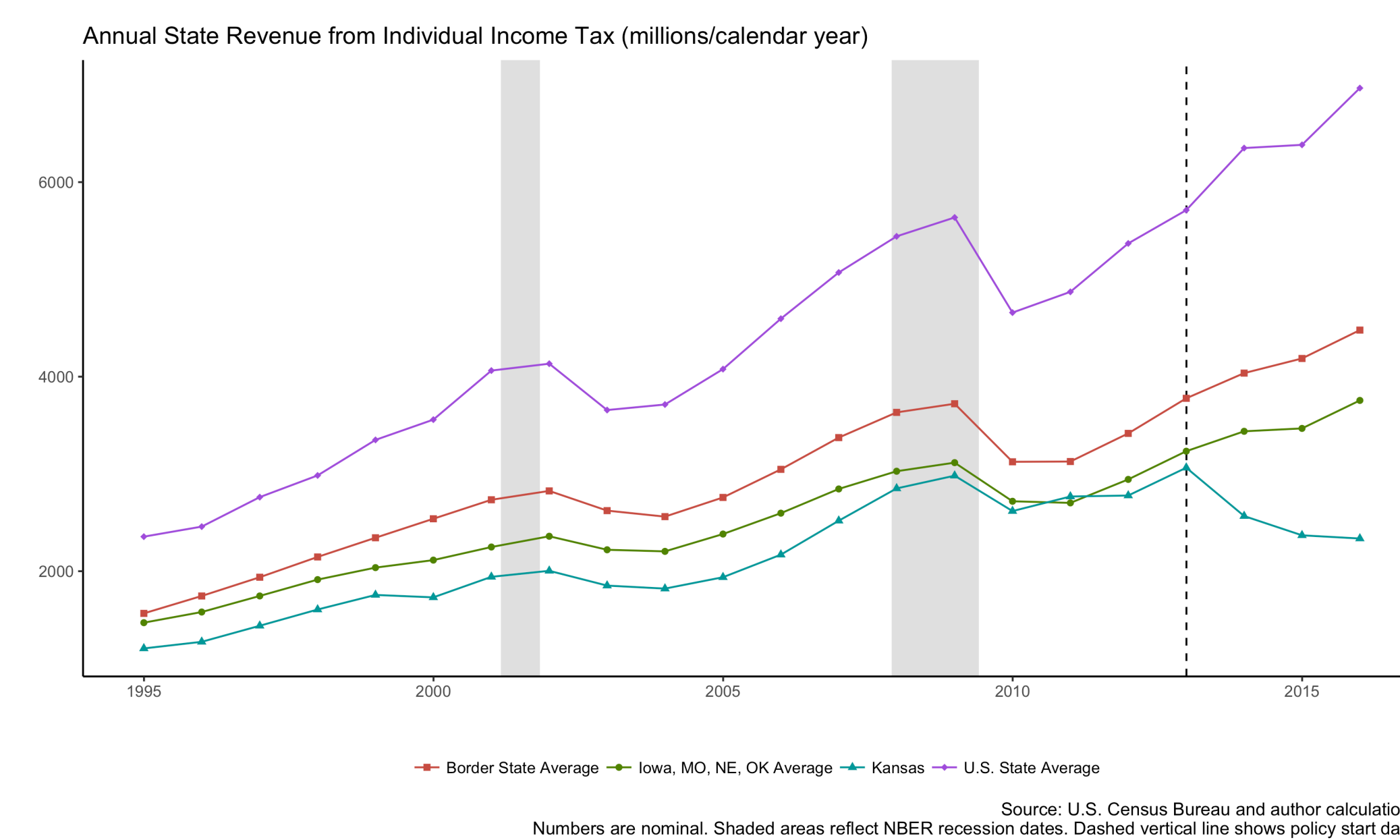
Source: Kansas Legislative Research Department, Tax Reduction and Reform, Senate Sub for HB 2117.

Policy Motivations

"Today's legislation will create tens of thousands of new jobs and help make Kansas the best place in America to start and grow a small business." -- State Governor

"Kansas is embarking on and setting the threshold for the nation with a pro-growth, pro-jobs tax reform policy. Lowering taxes on individuals and small businesses will jump start the private sector growth in Kansas, allowing Kansans to grow Kansas." -- State Representative

Sharp Revenue Impact



Related Work

- Turner & Blagg (2017) find no statistically significant impacts from the reform on employment at the county level as compared to border states.
- DeBacker et al. (2016, 2017) find evidence of income shifting in response to the reform.

Research Question & Methodology

- Question: Did the 2012 tax reform have any impact on employment or on output?
- Approach: I use the synthetic control method to estimate counterfactual comparisons for Kansas following the tax reform.

The synthetic control method (SCM) was pioneered by Abadie and Gardeazabal (2003), and Abadie, Diamond, and Hainmueller (2010). It can be particularly well suited for aggregate state level outcomes in the single intervention context. Policy evaluation framework requires a credible source of comparison. But selecting a single state or group of states can be difficult and sometimes arbitrary. And different states may be more or less similar in different respects.

The SCM uses a weighted average of observations from other states as the comparison. Weights are assigned to each state in a pool of available states. Applying those weights to the data yields a synthetic comparison state comprised of shares from the other states, where the shares are based on the weights. The weights are assigned so that the resulting synthetic comparison state resembles the policy change state as closely as possible over the specified pre policy intervention period.

Data

Outcome Variables:

- GDP by state (BEA)
- Employment by state (Census, CBP)
- Nonemployer establishments by state (Census, NES)

Weights are optimized over 2001 to 2011. States without an individual or corporate income tax, or with top marginal individual or corporate income rate changes greater than or equal to one percentage point during that period or after were not included among the pool of states from which weights were constructed.

Predictor variables included: population growth, population density, population share prime age male, 8 sector shares (based on output), share of population with highest level of education high school or lower, share of population with highest level of education bachelor degree or higher, share of employment in middle skill occupations, and labor force participation rate. Data sources: Census, Current Population Survey, BEA.

Results

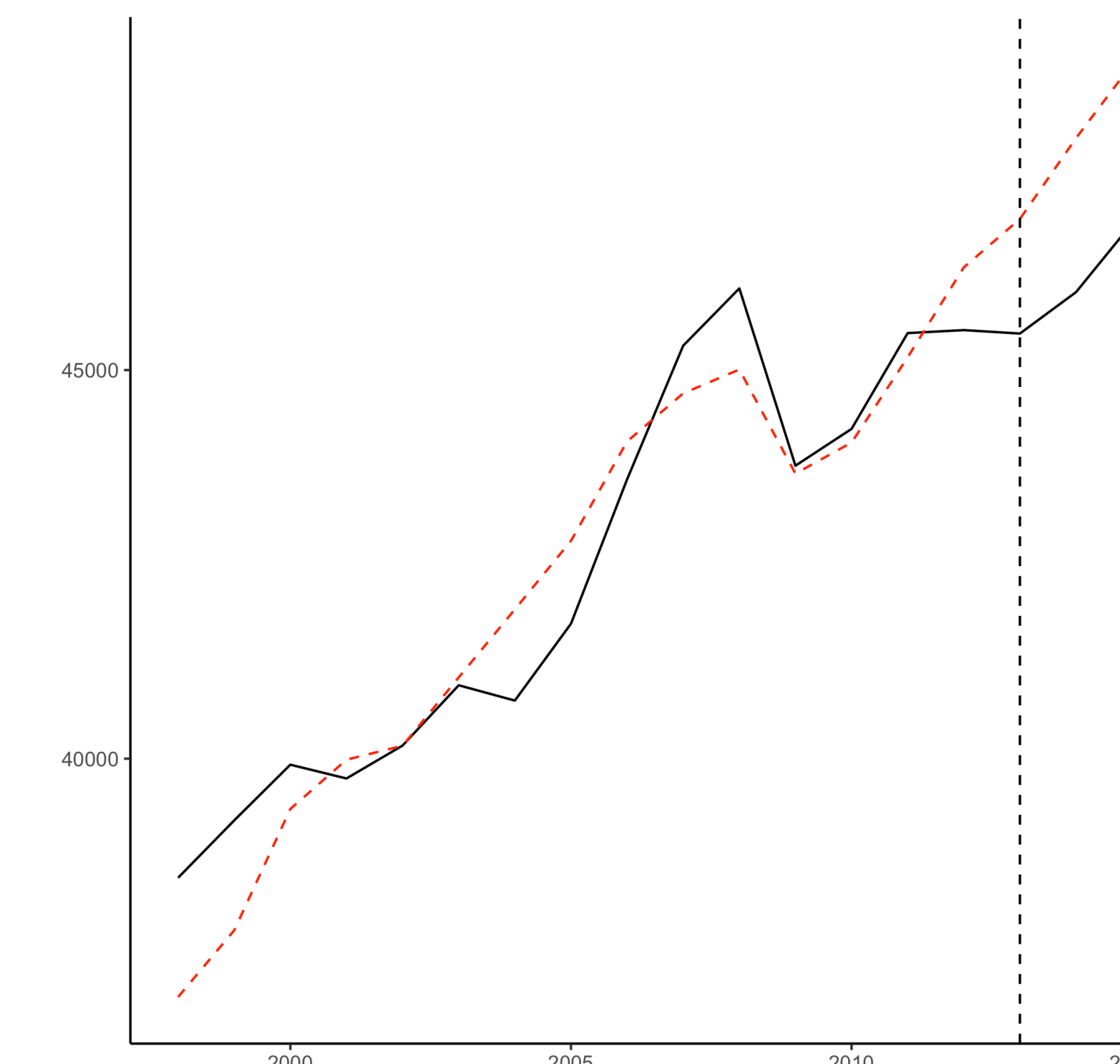
Results are sensitive to variations. Generally negative for RGSP and employment per capita. Often positive for nonemployers per capita.

Weights:

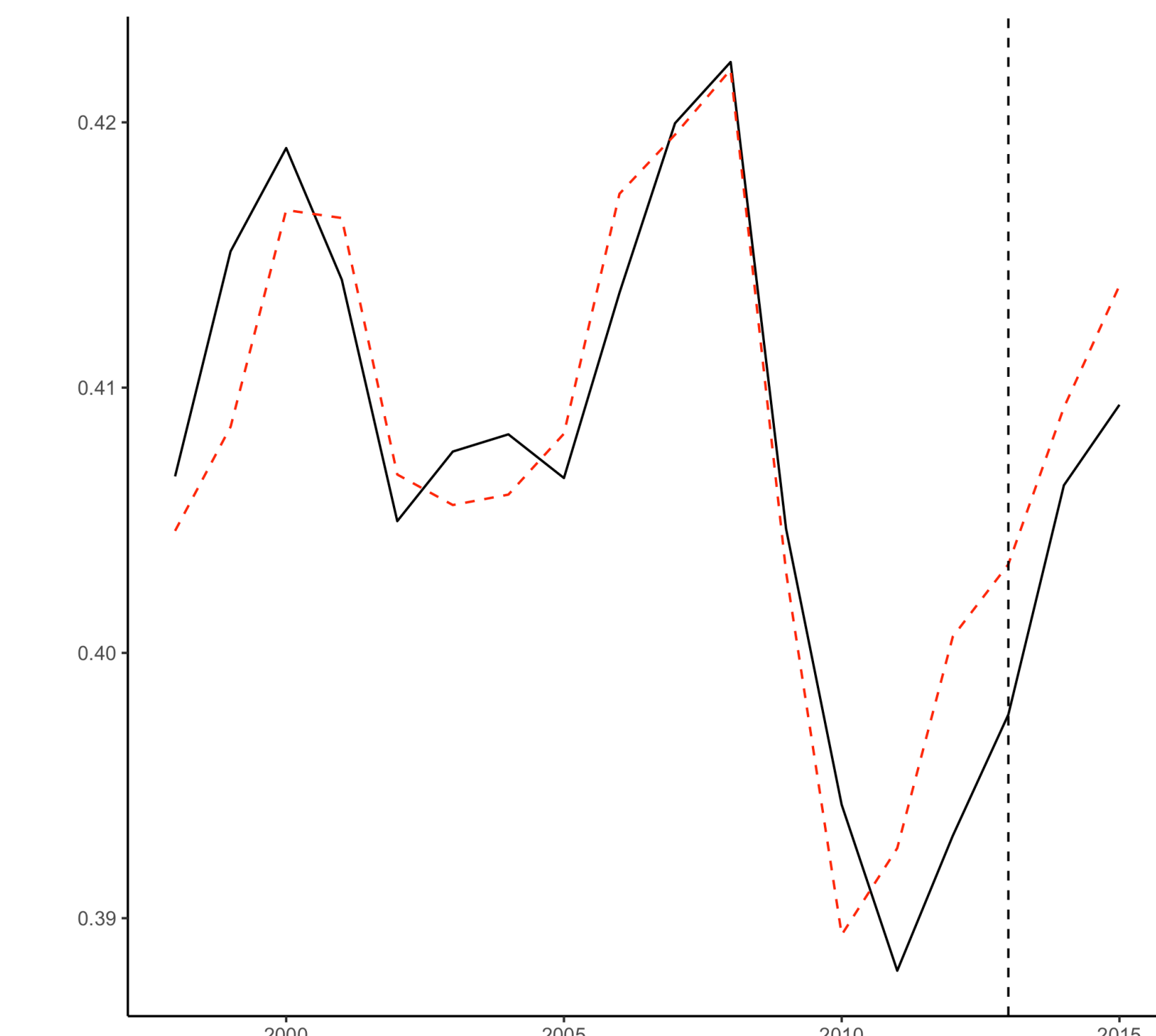
- RGSP: CO .001, ME .271, MS .175, NE .073, OK .481
- Employment: AR .001, CO .208, IA .341, ME .016, MO .009, NE .193, OK .23, and PA .001
- Nonemployer Establishments: AR .118, CO .012, IA .172, ME .051, MO .128, NE .397, OK .004, SC .001, WV .117

Synthetic Control Estimates

Real GSP Per Capita



Employment Per Capita

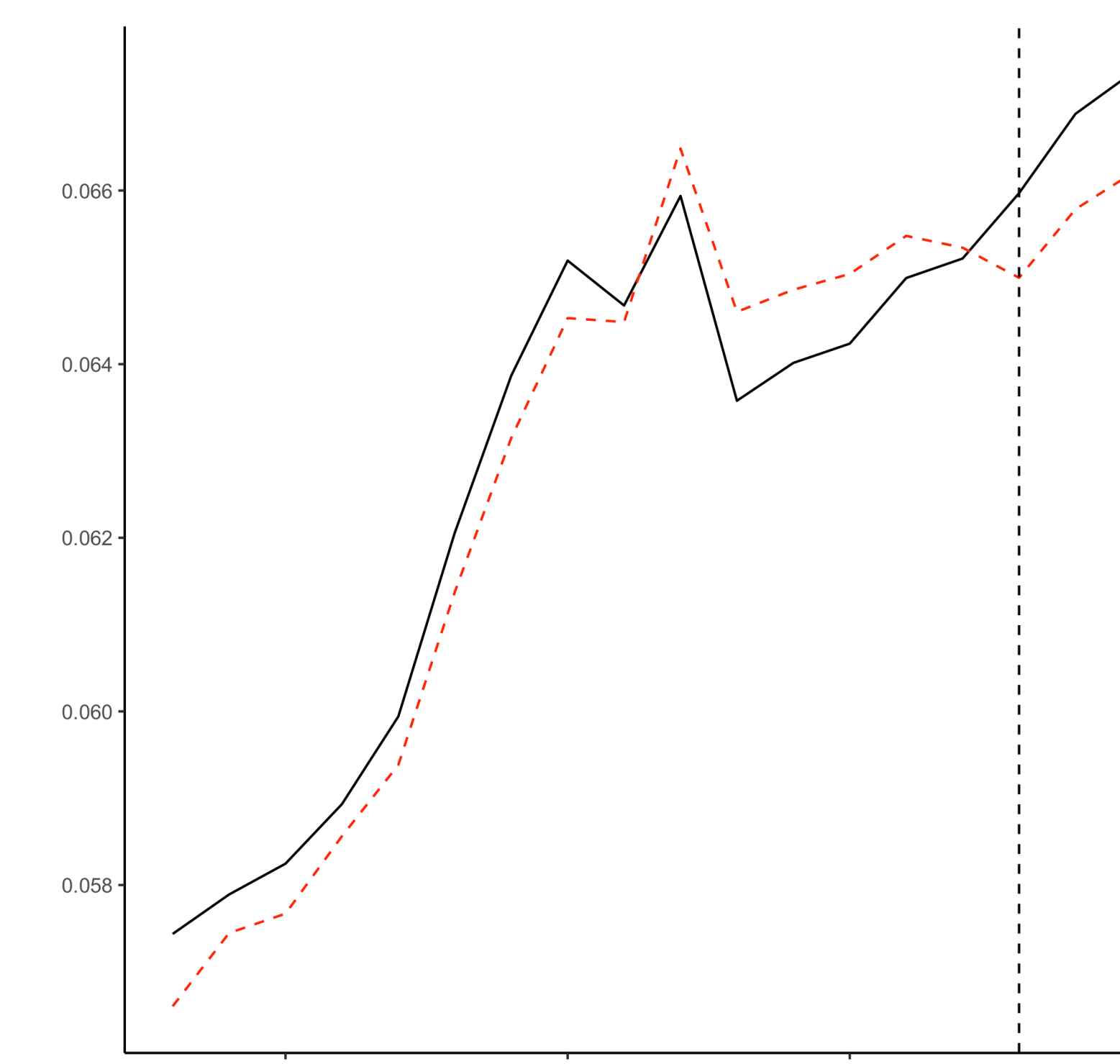


Red dashed line = Synthetic Kansas

Black line = Actual Kansas

Vertical dashed black line = 2013

Nonemployer Establishments Per Capita



Conclusions and Additional Work

Based on estimates using SCM and other DID estimates the 2012 Kansas tax reform did not have a significant positive impact on either employment or output, although it may have had a positive impact on self-employment.

Additional work looks at heterogeneity based on industry, and, in the case of employment, on organizational form. Also look at DID estimates of other variables such as migration, and consumption.

Contact Information

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References

- Abadie, Alberto, and Javier Gardeazabal. 2003. "The Economic Costs of Conflict: A Case Study of the Basque Country." *American Economic Review*, 93(1): 113-132.
- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. 2010. "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program." *Journal of the American Statistical Association*, 105(490): 493-505.
- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. 2015. "Comparative Politics and the Synthetic Control Method." *American Journal of Political Science*, 59(2): 495-510.
- DeBacker, Jason, Bradley T. Heim, Shanthy P. Ramnath, and Justin M. Ross. 2016, 2017. "The Impact of State Taxes on Pass-Through Businesses: Evidence from the 2012 Kansas Income Tax Reform." Working Paper.
- Dickinson, Martin B., Stephen W. Mazza, and Michael R. Keenan. 2012. "The Revolutionary 2012 Kansas Tax Act." *Kansas Law Review* 61: 295-340.
- Turner, Tracy M., and Brandon Blagg. 2017. "The Short-Term Effects of the Kansas Income Tax Cuts on Employment Growth." *Public Finance Review* XX(X): 1-20.