



O'NEILL SCHOOL OF PUBLIC & ENVIRONMENTAL AFFAIRS

After Wayfair: What Are State Use Taxes Worth?

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In this Presentation

1. Background on Use Tax
2. *South Dakota vs. Wayfair*
3. Early evidence of *Wayfair* impact on Indiana tax collections



Use Tax Confusion

- Often Conflated with the Sales Tax
- Levied when a buyer purchases a good/service outside of a state but...
 - Does not pay sales tax in origin state and
 - Purchase would be taxable if purchased in destination state
- To legally avoid interference with interstate commerce, it is levied by destination state on the “first use” of the good after acquisition.

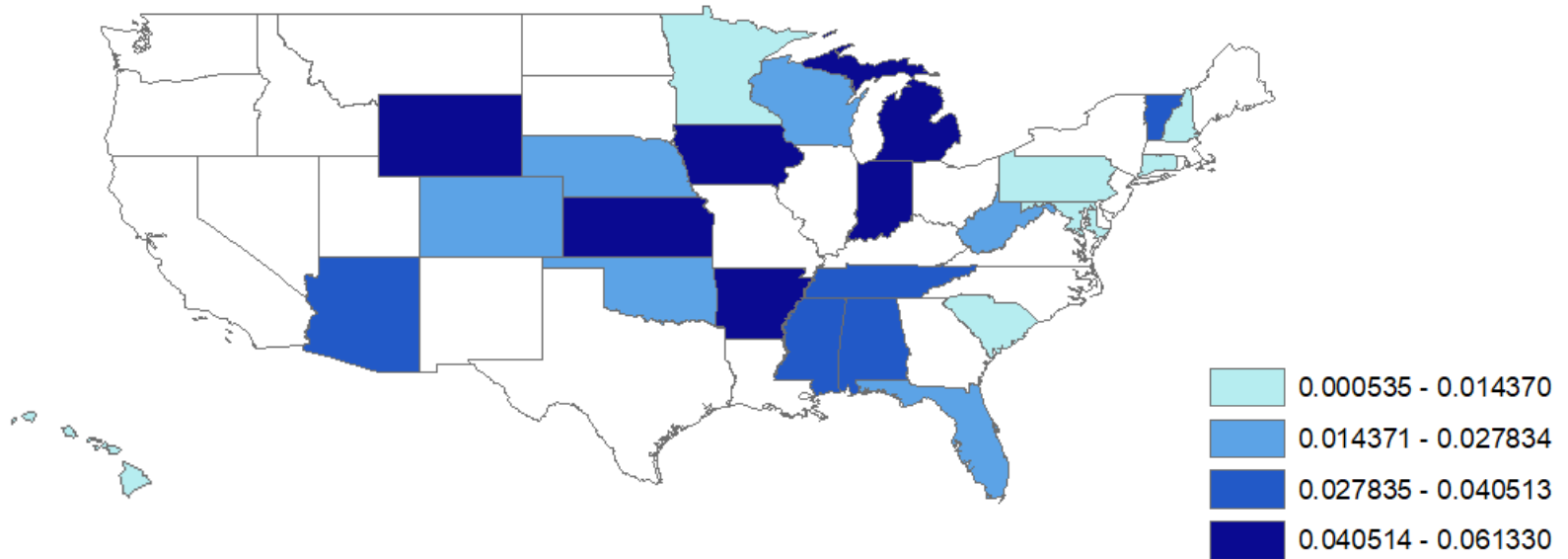


Use Tax History

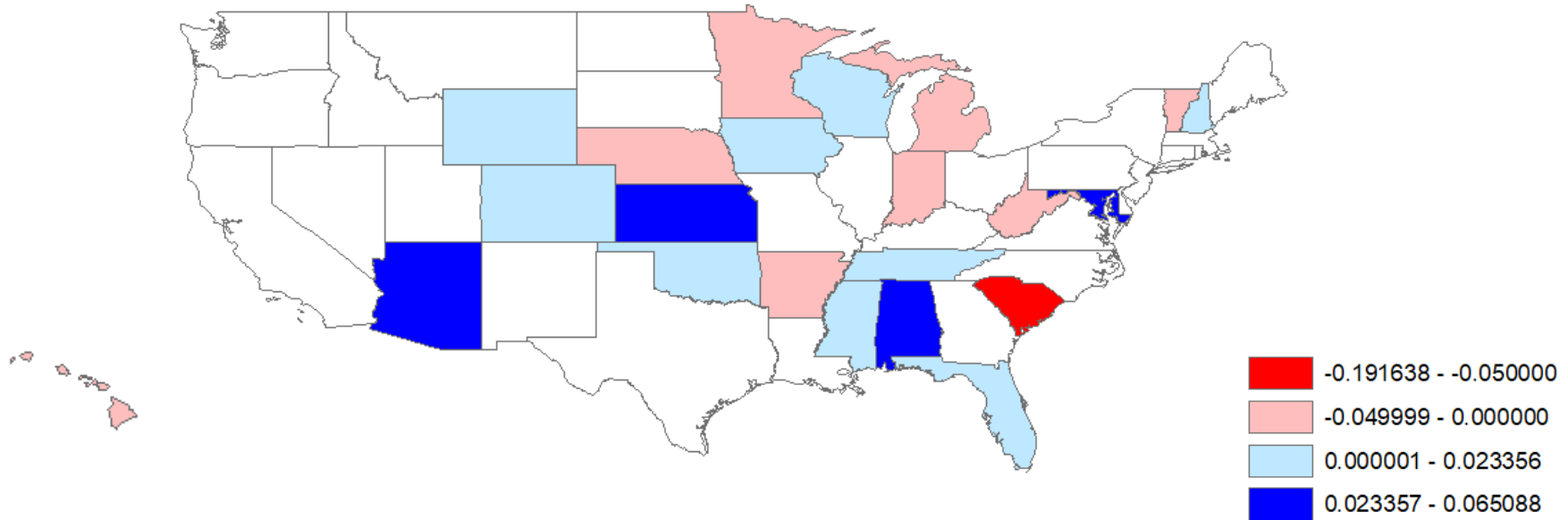
- Depression: Retail sales tax becomes popular among the states, but tax competition and cross-border shopping an immediate concern.
- 1935: California & Washington first adopters of tax “on the first use of the product purchased in the state.”
 - Criz (1941: 1): “The function of the use tax is to eliminate avoidance of the sales tax.”
- Supreme Court accepted the tax not as applying to transactions in interstate commerce, but to the privilege of use after the interstate commerce was over.
- Vendor collection limited to cases with physical nexus, resulting in low-compliance.



Use Tax Share of Total Tax Revenue, 2017



Growth of Use Tax Share of S&U, 2017-2010



South Dakota v. Wayfair

- *Quill v. North Dakota* (1992): Out-of-State vendors must register for use tax collection if they have a physical presence in the state.
- *South Dakota v. Wayfair* (2018): Overturns *Quill* and accepts an “economic nexus” provided it does not create undue burden on interstate commerce or vendors with limited contact.

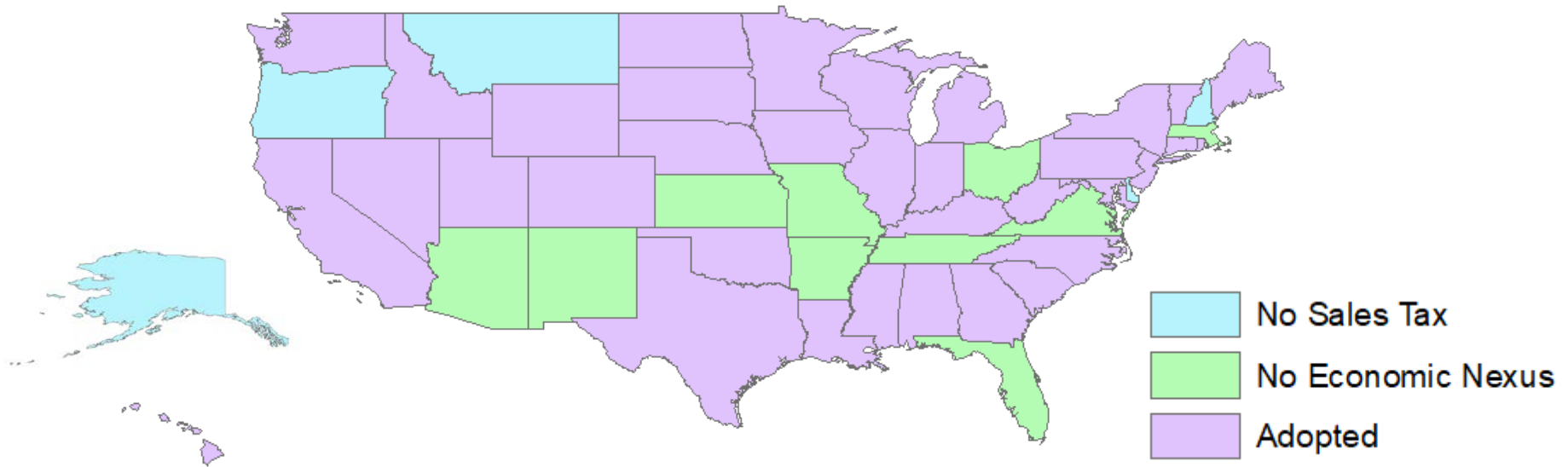


Nexus: Selected Threshold & Requirements

State	Economic Presence Date	Threshold	Requirement
Alabama	10/1/2018	\$250,000 and solicit orders	Vendors: remote vendors who can demonstrate that marketplace facilitator is collecting and remitting will be relieved of requirement, otherwise register and collect; Marketplace facilitators: collect or notify and report.
Indiana	10/1/2018	\$100,000 or 200 transactions	Vendors: register and collect
Oklahoma	7/1/2018	\$10,000 sales	Vendor, Marketplace, Referrer: collect or notify and report.



Economic Nexus Adoption (as of 12/2018)



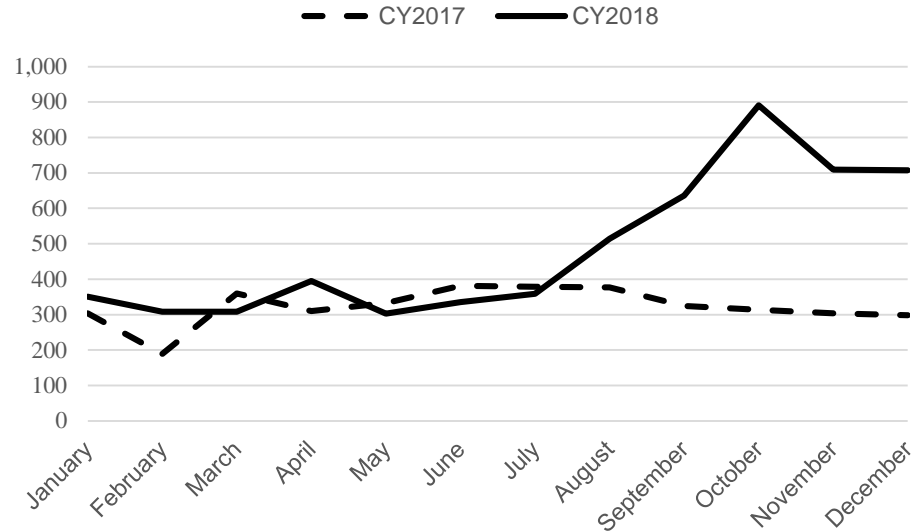
Early Evidence on Wayfair Impact from Indiana

Case Study: Indiana

- Use tax in 2017 was 13% of all S&U tax revenue; already collecting from Amazon since 2014
- July 1, 2017: Statutorily (HEA 1129) adopted economic nexus, held in abeyance during *Wayfair*
 - *Vendors must register and collect if gross sales exceed \$100,000 or represent more than 200 separate transactions*
- June 22, 2018: Wayfair Decision
- October 1, 2018: Indiana Department of Revenue begins enforcement



Indiana Out-of-State Vendor Registrations

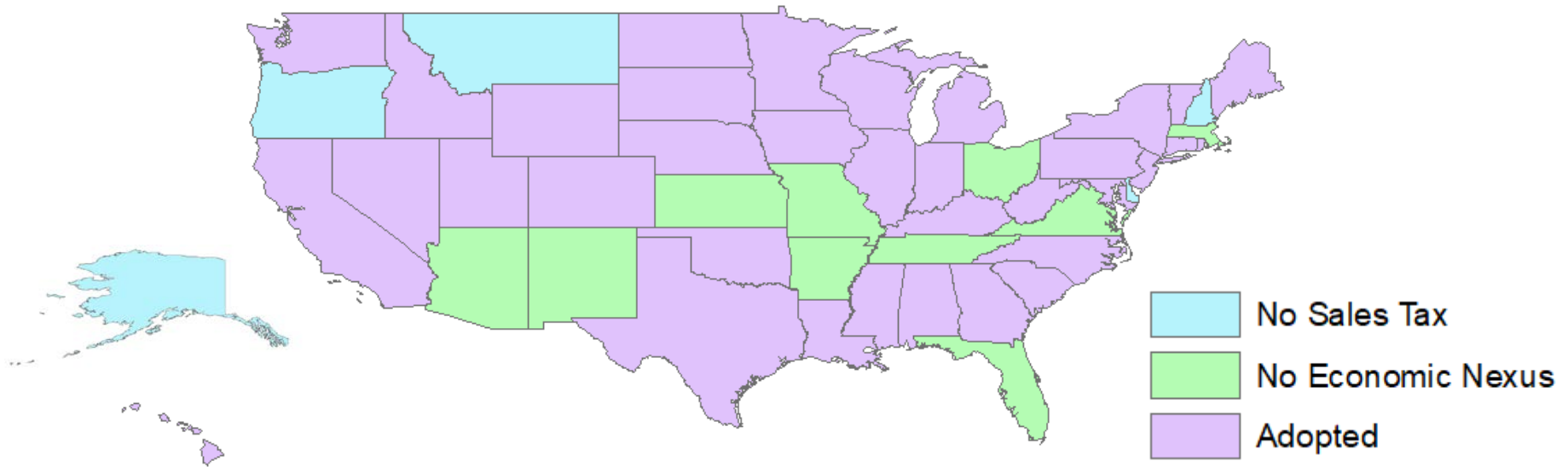


Synthetic Control Method

- Data mining case study technique for causal investigation
 - Synthetic Control Using Lasso Regression: Hollingsworth & Wing (2018)
- Outcome: Indiana's total monthly sales and use taxes due (source: IDOR)
 - January 2017 to December 2018
- Potential Control Group Predictors:
 - 1200+ Monthly economic indicators (source: BLS) from non-adopting states as of 12/2018



Economic Nexus Adoption (as of 12/2018)

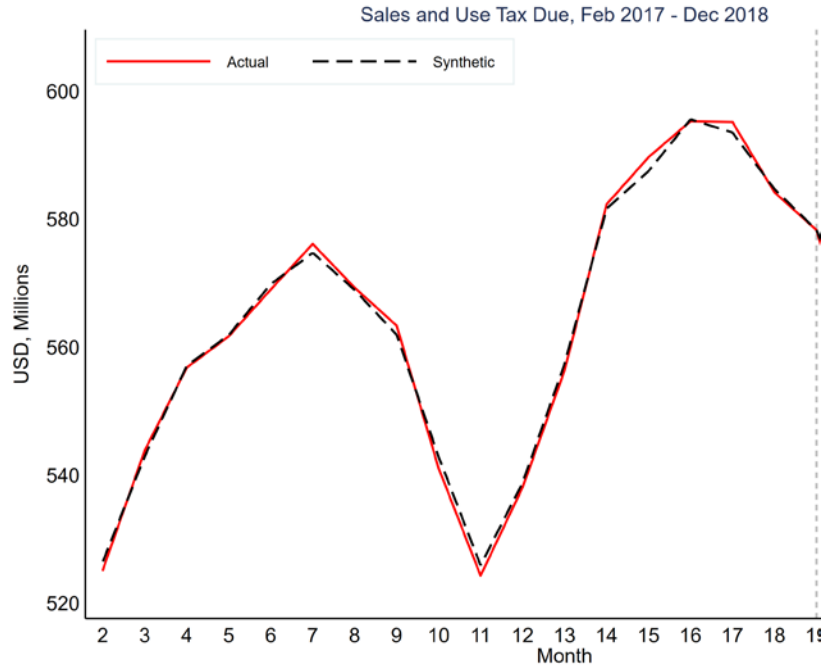


Top 10 Synthetic Indiana Contributors

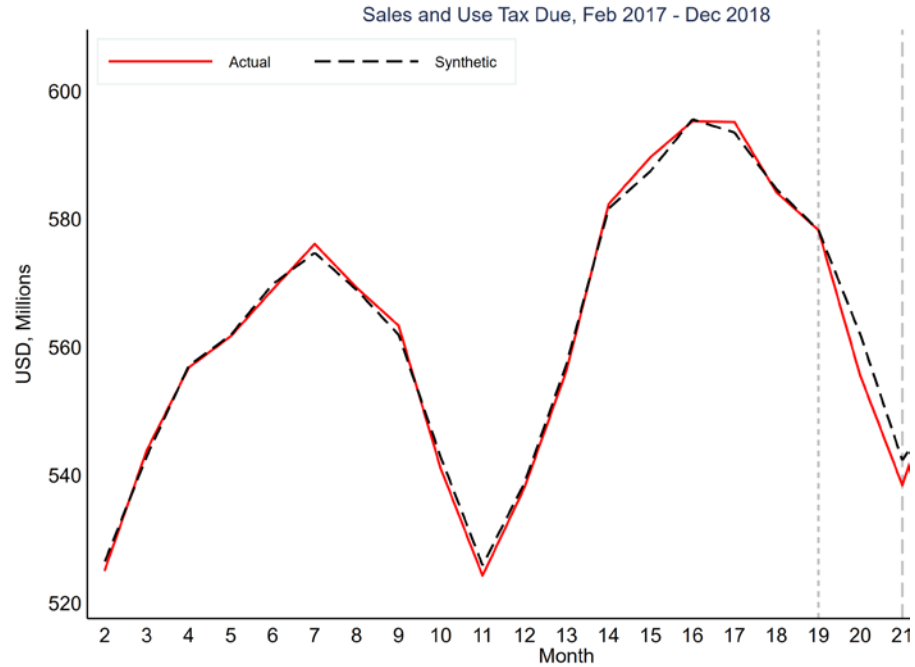
Share	Predictor
73.5%	Intercept
0.1%	Arizona Retail Trade, Total Average Weekly Hours of Production Employees
0.8%	Arkansas Leisure and Hospitality, Total All Employees, In Thousands
7.0%	Florida Retail Trade, Department Stores All Employees, In Thousands
0.1%	Massachusetts Leisure and Hospitality, Total Average Weekly Hours of All Employees
3.5%	Montana Wholesale Trade, Total All Employees, In Thousands
3.5%	Ohio Retail Trade, Total Average Weekly Earnings of Production Employees, In Dollars
0.3%	Ohio Retail Trade, Building Material and Supplies Dealers All Employees, In Thousands
5.3%	Tennessee Leisure and Hospitality, Total All Employees, In Thousands
4.6%	Virginia Leisure and Hospitality, Total All Employees, In Thousands
1.2%	Virginia Leisure and Hospitality, Accommodation and Food Services All Employees, In Thousands



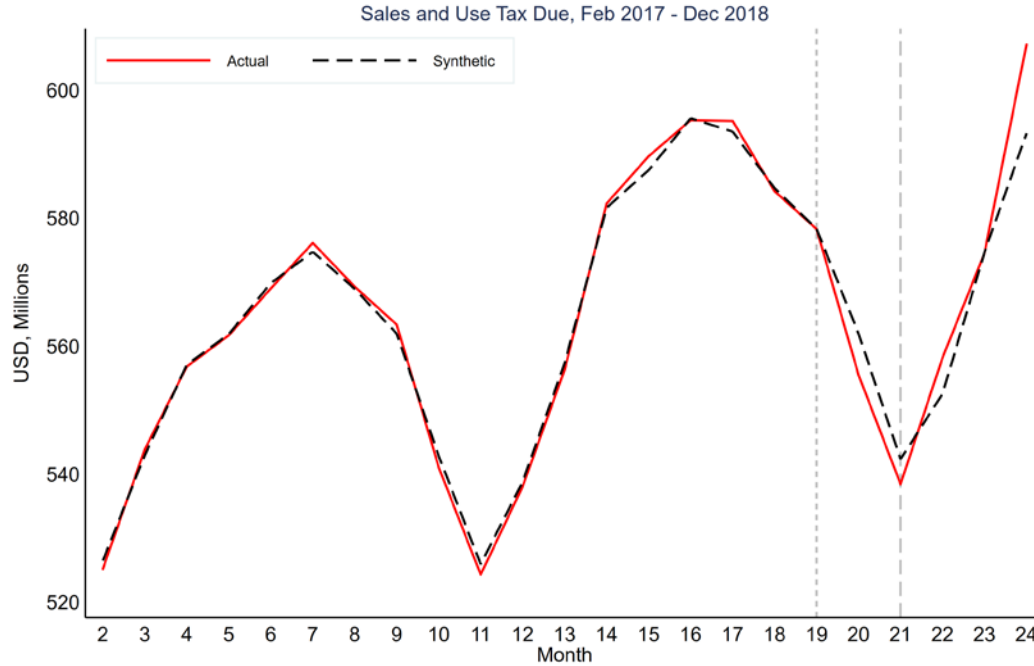
Indiana (Red) vs Synthetic Indiana (black dash)



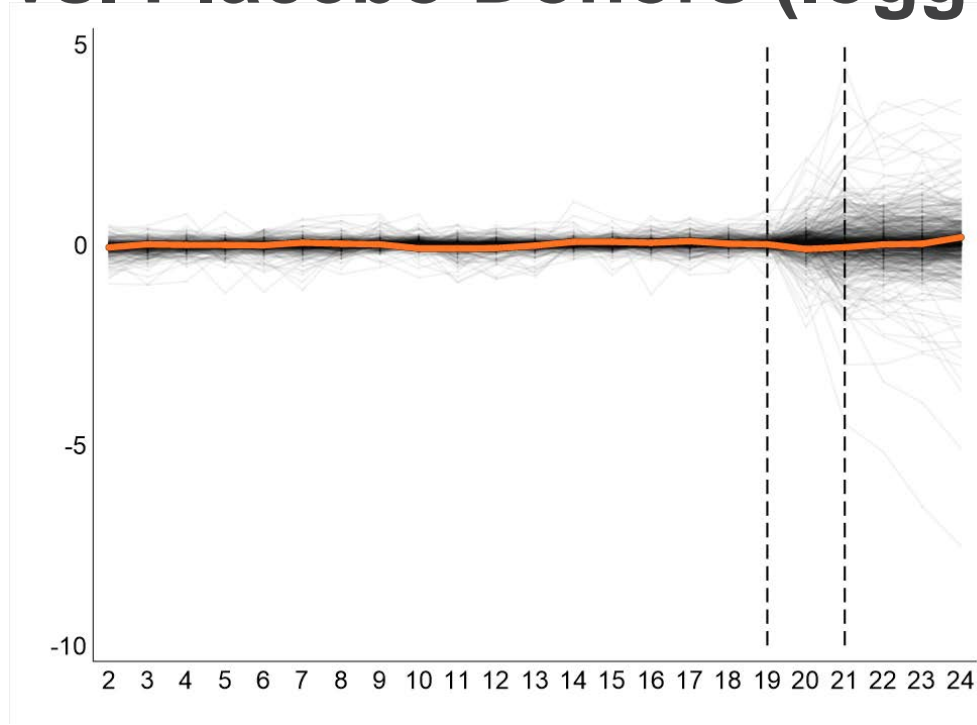
Indiana (Red) vs Synthetic Indiana (black dash)



Indiana (Red) vs Synthetic Indiana (black dash)



Indiana vs. Placebo Donors (logged % diff)



	Levels	
Month	Treatment Effect (%)	p-value
October, 2018	1.0	0.349
November, 2018	0.0	0.949
December, 2018	2.3	0.164



	Levels		Logged Values	
Month	Treatment Effect (%)	p-value	Treatment Effect (%)	p-value
October, 2018	1.0	0.349	0.1	0.828
November, 2018	0.0	0.949	0.4	0.571
December, 2018	2.3	0.164	3.7	0.072



Conclusion

- Novel data on use tax shows...
 - Small share of total tax revenues (average 3%)
 - Varies substantially across states as share of all sales and use tax revenue (1%-20%).
- Preliminary evidence from Indiana monthly collections
 - Most optimistic estimate is a 3.7% percent boost to use tax revenue



Thank you!

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