Discussion of Papers on Labor Market Effects (Atkins et al; Neumark et al; Arefeva et al)

Brookings Conference: Opportunity Zones: the early evidence

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The views expressed are mine and not necessarily those of the Federal Reserve Bank of St. Louis or the Federal Reserve System.

Roadmap

1. Background
2. "What is the impact of Opportunity Zones on employment?"
3. "The impacts of Opportunity Zones on zone residents"
4. "Job growth from Opportunity Zones"
5. Conclusions

Background

OZ Selection: Designated vs. Eligible

- In each of the 50 States and in DC, median household income in OZs was lower than in eligible-but-not-selected tracts.

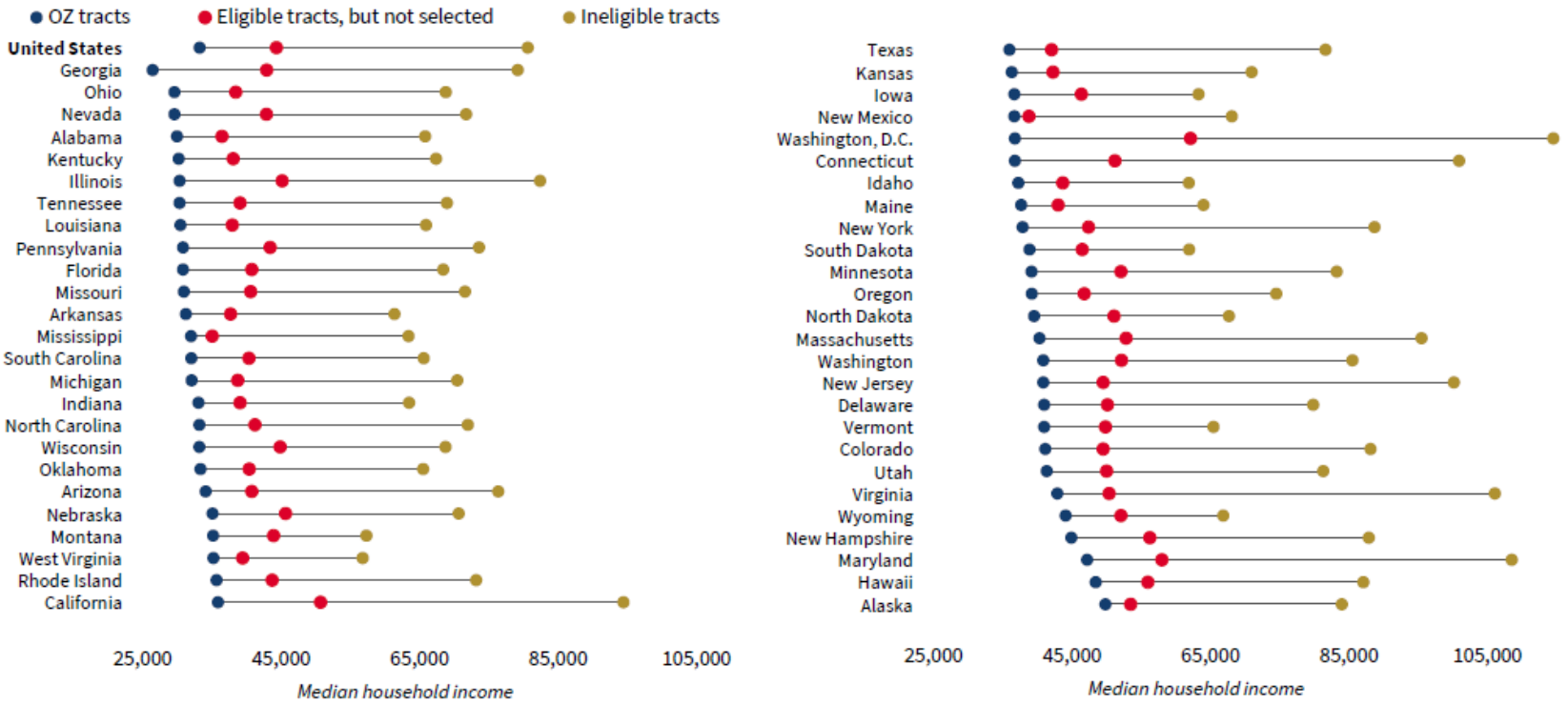
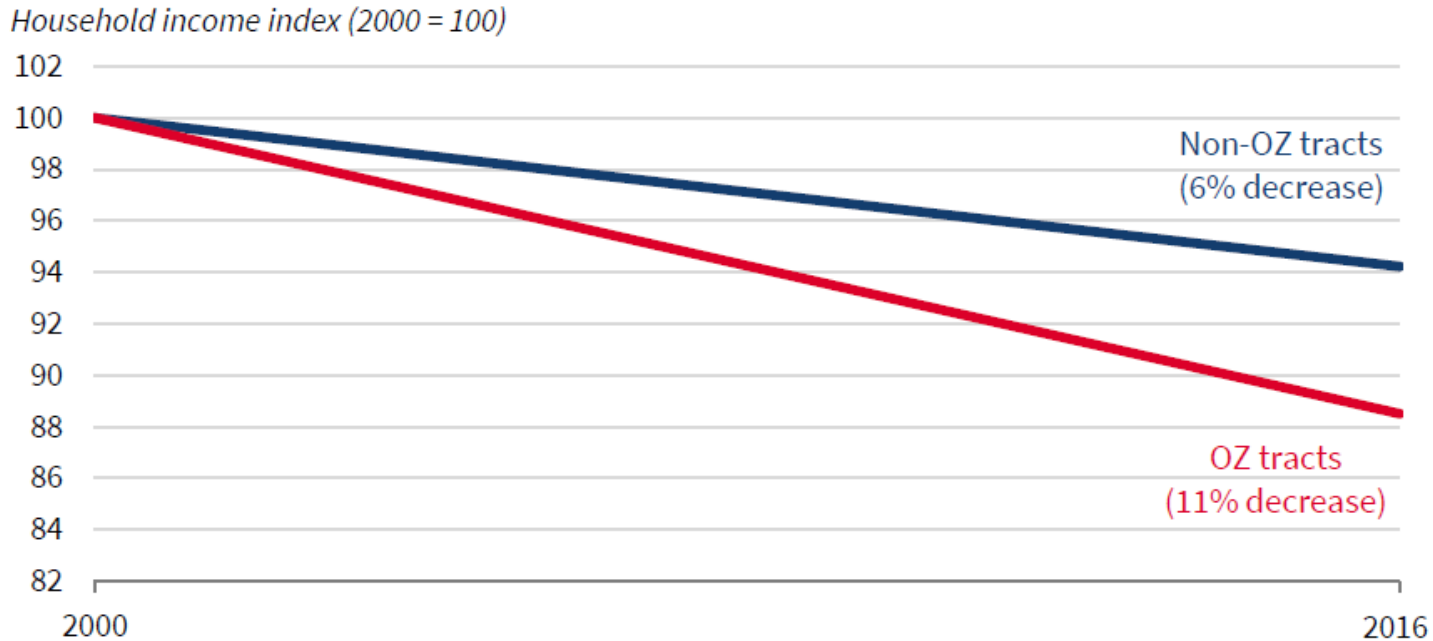


Figure 1: Average Median Household Income by Tract Designation and State, 2012-16

OZ Selection: Pre-Designation Trajectory

- OZs are poorer than non-OZs: in 2000, Census tracts that would later become OZs had 57% the median income of non-OZs.
- OZs have also been on a worse trajectory than non-OZs.

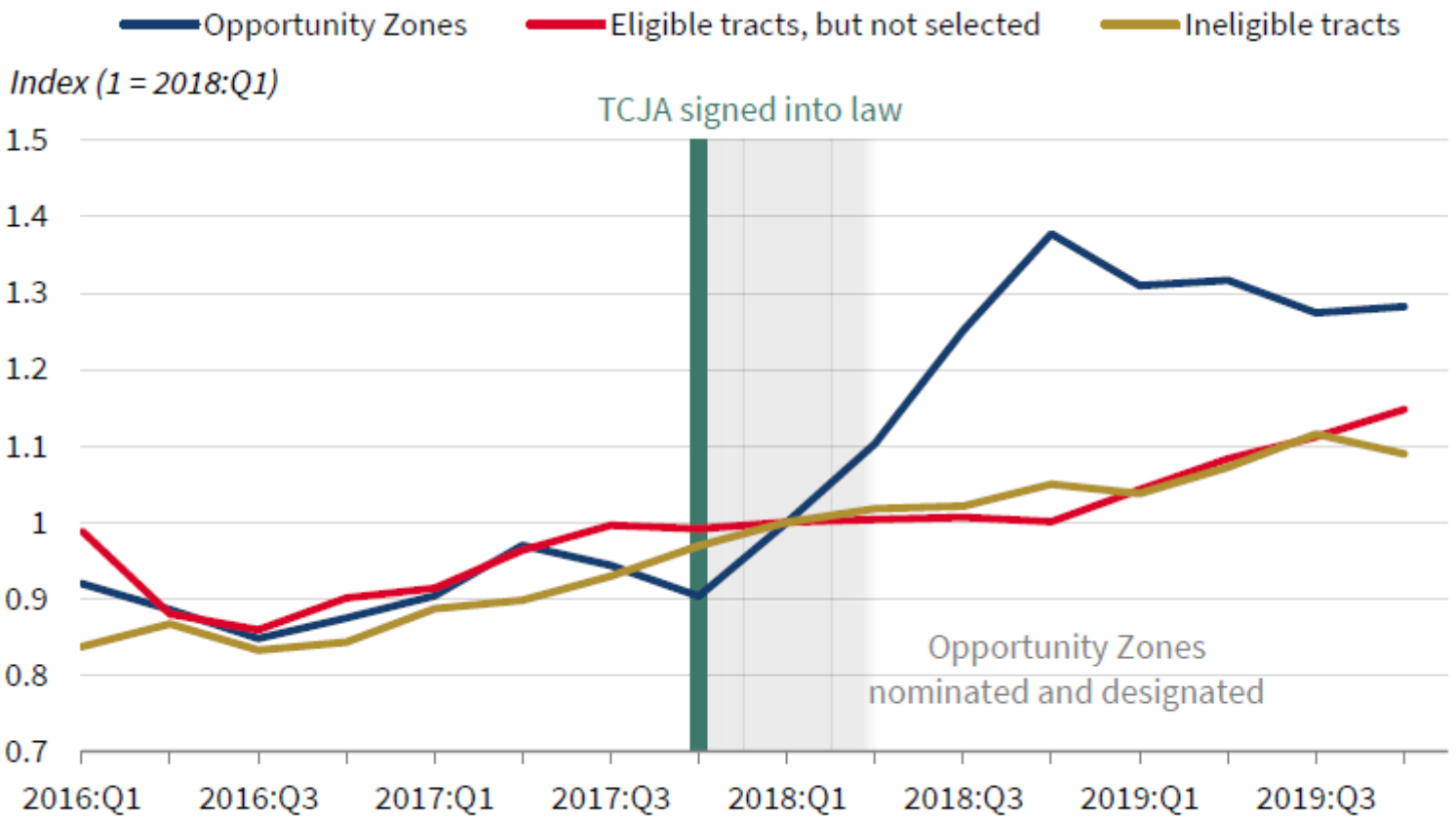


Sources: 2000 Decennial Census; 2016 American Community Survey five-year estimates; U.S. Department of the Treasury; CEA calculations.
Note: This analysis excludes census tracts in Puerto Rico, American Samoa, the U.S. Virgin Islands, Guam, and the Northern Mariana Islands. The 2016 ACS is based on a five-year estimate from 2012 to 2016.

Figure 2: Average Median Household Income by Census Tract Designation, 2000-16

How Much Capital Was Raised?

- The CEA estimated that QOFs *raised* $75B in capital ($52B of which induced by the OZ incentive) by the end of 2019.
- Delays between raising and *deploying* capital. Forward-looking variables likely to respond faster as an early gauge of OZ impact.



Sources: SEC; U.S. Department of the Treasury; CEA calculations.
Notes: TCJA=the Tax Cuts and Jobs Act

“What is the impact of Opportunity Zones on employment?”

Summary: Atkins et al (2021)

- **Objective:** Study the impact of Opportunity Zones on job vacancies and posted salaries between January 2019 and March 2020.
- **Data:** Burning Glass.
- **Method:** Propensity score matching and DiD.
- **Main Findings:** "No evidence" of an increase in job vacancies. Posted salaries increase but not robust. OZ designation may have helped during COVID.

Comments: Atkins et al (2021)

- **How best to interpret the results, even if taken at face value?**
- *"Small in magnitude"*
  - Statistically significant wage estimates range from 0.0145 (table 1) to 0.0442 (table A-6).
  - Implies back-of-the-envelope earnings increase of $8.4B – 25.7B in low-income OZs using 2015 base ACS earnings.
  - Not a bad ROI off of $52B in estimated new capital entering OZs, with likely only a modest fraction actually being deployed by 2019!
- *"No evidence"*
  - Abadie et al (2017): "...clustering at too aggregate a level is not innocuous, and can lead to SEs that are unnecessarily conservative."
  - This paper: must cluster at state level because designation done at that level. Did assignment mechanism vary by state in degree of centralization (e.g. rubber stamping of mayoral recommendations)?
  - Positive post-COVID effects: something special about COVID, or would they have shown up anyway because more time was needed?

Comments: Atkins et al (2021)

- **Additional dimensions of heterogeneity:**
  - Rural vs. urban?
  - Areas with larger vs. smaller COVID shock. Time frame likely matters. Criteria could be epidemiological or economic.
- Why not use continuous treatment?
- Pre-treatment OZ vs. eligible: higher income growth here vs. lower employment growth in Arefeva et al (2021). What's going on?
- Quality of Burning Glass data? Very noisy (see next slide)! Also, how representative are online job postings in poor areas?
- What happens if you regress job postings against *changes* in QCEW employment (i.e. flows against flows instead of flows against stocks)?

Comments: Atkins et al (2021)

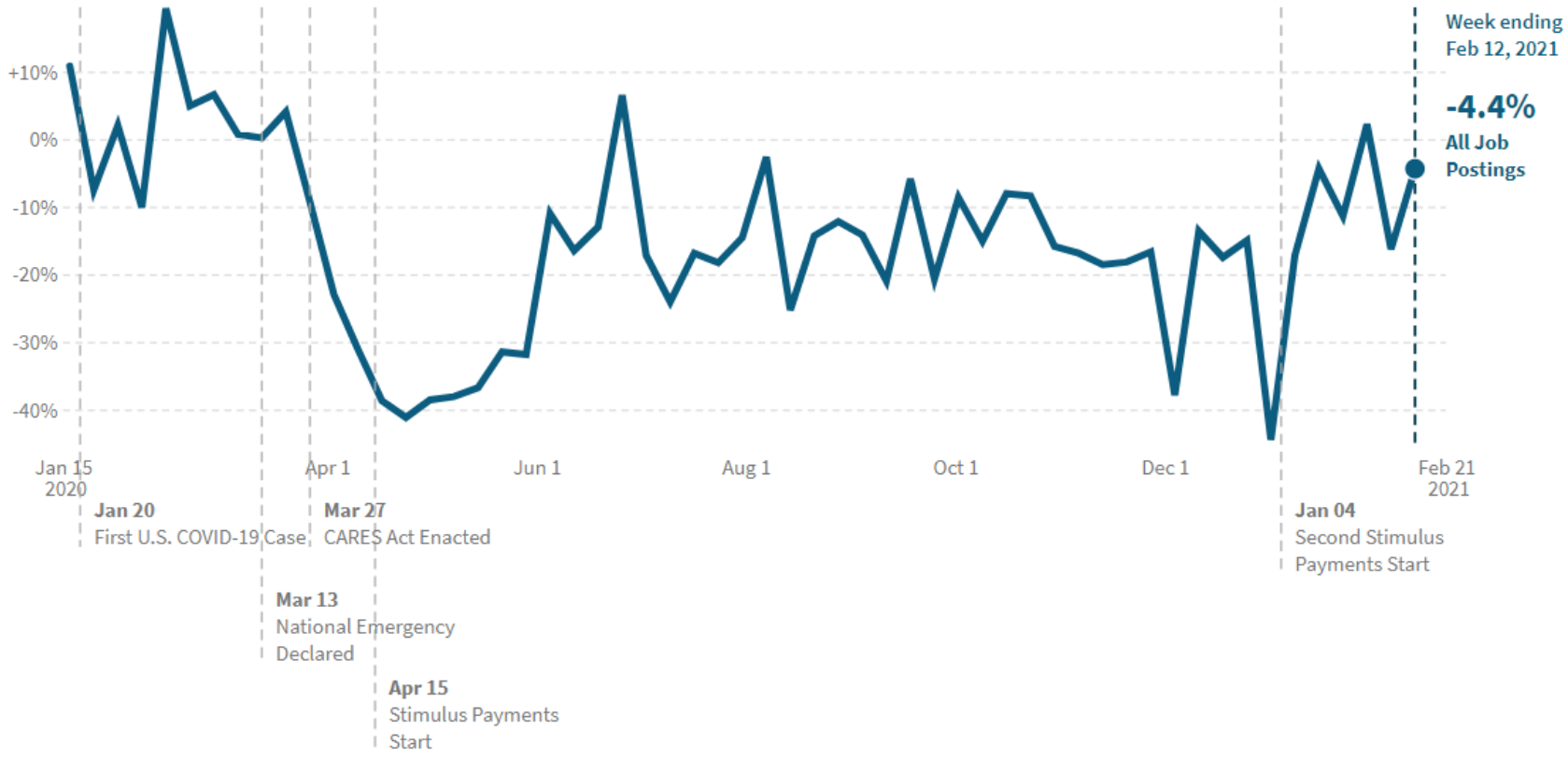


Figure 4: Burning Glass National Job Postings. Source: Opportunity Insights Economic Tracker

“The impacts of Opportunity Zones on zone residents”

Summary: Freedman et al (2021)

- **Objective:** Assess the impact of OZs on *resident* outcomes: employment, earnings, and poverty.
- **Data:** ACS 2013-19 restricted-use data.
- **Method:** DiD; event study; propensity score matching.
- **Main Findings:** "Modest, if any, positive effects of the OZ program on the employment, earnings, or poverty of zone residents."

Comments: Freedman et al (2021)

- **Same interpretation question I raised for Atkins et al (2021)!**
- What qualifies as "modest"?
  - 1–1.5% employment increase in 2019 $\Rightarrow$ approximately \$4.6B – 7.2B higher annual earnings. Given that only a fraction of capital raised could have been deployed by 2019, is this all that "modest"?
  - A 4% reduction in poverty so early on also doesn't seem trivial. Earnings results weakest, but up to another \$3B in aggregate earnings if use \$227 estimate from column 8 of table 4.
  - Upper bound of \$11.25B tax revenue foregone based off of CEA estimates of (15 cents foregone revenue per \$1)$\times$ \$75B capital. The ROI becomes much higher as more of the capital gets deployed.
  - Larger effects with more detailed geographic controls: reduce bias by accounting for differential geographic trends vs. magnify bias due to business-stealing? Arefeva et al (2021) find *positive* spillovers.

Comments: Freedman et al (2021)

- Useful to see breakdown by rural vs. urban and extend to 2020.
- Consider weighting rate variables (employment rate, poverty rate) by the number of observations to give more weight to tracts where they are more precisely measured.
- From p. 14: "...the employment rate in designated areas was trending upward prior to 2017...This seeming violation of the parallel trends assumption calls into question...the DiD estimates..." Figure 1 in Arefeva shows worse employment growth for designated vs. eligible. Would be useful to open discussion on the broader point.
- Broader conceptual question: better to look at location of jobs or location of people who work at the jobs? Still valuable if low-income person commutes from nearby non-OZ to an OZ. Perhaps extra relevant in light of positive spillover effects in Arefeva et al (2021).

“Job growth from Opportunity Zones”

Summary: Arefeva et al (2021)

- **Objective:** Quantify the impact of Opportunity Zone designation on employment growth.
- **Data:** Proprietary Infogroup Your-economy Time Series (YTS) establishment data.
- **Method:** DiD.
- **Main Findings:** OZ designation increased employment growth from 2017 to 2019 by 3.0 – 4.5pp in metro areas but not in rural areas. Evidence that gains are broad-based; positive geographic spillovers.

Comments: Arefeva et al (2021)

- **Trajectories vs. levels:** include growth measures in the controls? (Placebo test in table 5 and DRDiD in table 6 seem useful.)
- **Role of outliers:** large impact of Winsorization on employment growth dynamics (figure 1). OLS vs. LAV. What's driving tails?
- **LICs vs. non-LICs:** are much larger coefficients for non-LICs in table 5 evidence of larger OZ impact or evidence that the analysis may not be properly accounting for pre-trends?
- **Role of politics in selection:** how confounded by rural vs. urban?
- **ROI discussion:** must invest through QOF to get tax benefits.

Conclusions

Taking Stock

- Three very interesting papers using frontier methods/data on an important topic!
- **Policy evaluation criteria:** what constitutes "small" effects? What is the proper way to think about good vs. bad ROI?
  - Measure outputs relative to inputs, taking into account "time to build" delays! Two stages: 1) How much investment induced by OZ incentive? 2) Impact of investment on desired outcomes?
- **Reconciling/robustness:** differences across the papers in data, outcomes of interest, comparison groups, time horizon, methods, etc. What is driving the results? Data vs. methods.
  - As Freedman et al (2021) point out, sometimes conflicting results across papers aren't *actually* conflicting, but important to find out!