

## Measuring the Impact of Opportunity Zones

By David Wessel & Alex Conner

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Opportunity Zones, created by the Tax Cuts and Jobs Act of 2017, offer investors capital gains tax incentives to invest in any of the 8,764 eligible Census tracts (12% of all Census tracts in the U.S.). The [Hutchins Center on Fiscal and Monetary Policy](#) at the Brookings Institution convened an invitation-only, on-the-record conference on Opportunity Zones on November 18, 2022, including presentations of four empirical papers and two roundtables. One roundtable asked: What data are needed to fully evaluate Opportunity Zones? The other asked: What does success for Opportunity Zones look like?

The agenda and a list of participants, not all of whom participated in the entire event, are at the end of this summary. The conference was supported by [Arnold Ventures](#). The Hutchins Center was solely responsible for its content.

Among the highlights:

- The best data to measure the impact of OZs is collected by the IRS, but it is available only to Treasury and certain Congressional researchers, limiting the ability of outside, independent researchers to evaluate OZs.
- Researchers are, however, using commercially available real estate data to try to gauge the impact of OZs, but are constrained by the absence of information about whether particular investments are taking advantage of the tax incentive.
- Researchers need more extensive public reporting, like that required for SBA loans or the New Markets Tax Credit, to fully analyze OZs. Legislative changes are needed to require such reporting.
- Scholars disagree on how best to measure the success of OZs. Some focus on the flow of investment to a tract and the impact on real estate prices, arguing that will eventually benefit many zone residents. Others focus more on what happens to people who live in the OZs, including what happens to employment and incomes.

### **Recent research**

Authors of four empirical papers on OZs presented their work, focusing on data they used as well as their conclusions. Two of the papers rely on IRS data not available to outside researchers; the other two use commercially collected data. (*\* indicates presenting authors*)

#### **[Use of the Opportunity Zone Tax Incentive: What the Tax Data Tell Us](#)**

Authors: David Coyne\* & Craig Johnson\* (U.S. Treasury)

Coyne and Johnson use information reported on IRS [Form 8996](#) (Qualified Opportunity Fund) for tax years 2018 through 2020 and [Form 8997](#) (Initial and Annual Statement of Qualified Opportunity Fund Investments) for tax years 2019 and 2020 to provide an early look at how

much the OZ tax incentive attracted investment to designated areas. The authors supplemented electronically filed returns with paper returns from 2018 and 2019 which they transcribed. Based on Form 8996, the authors estimate that \$47 billion flowed into OZ funds from 2018 through 2020, though totals from Form 8997 are slightly different. The bulk of the money went into real estate. “Real estate investment is relatively easy to guarantee compliance with the statutory and regulatory rules and also is an asset with a good probability of nominal appreciation where the capital gains break would be beneficial,” the authors say. Across the country, about 48% of OZs had received some OZ investment by the end of 2020. The states with the largest share of OZs that received OZ money include Arizona, Colorado, Oregon, and Utah, plus the District of Columbia; states with the smaller share of zones receiving OZ money include Delaware, Illinois, Iowa, Oklahoma, and West Virginia. OZs that received qualified investment generally were better off (in educational attainment, median house price, and median income) than those that didn’t. Homeownership rates in tracts that received OZ investments were lower than in eligible tracts that didn’t. Trends prior to OZ designation were important indicators: tracts that experienced growth in median household income, population, and housing values and reduction in the poverty rate and unemployment rate were more likely to receive qualified investment.

In discussion, Coyne said that the Treasury could share data on some individual OZs—those that have attracted enough investment so that confidentiality rules wouldn’t be breached. Brett Theodos (Urban Institute) suggested that the authors include data on investment flows to see whether OZ money is flowing to tracts that previously were attracting private money. Tim Bartik (Upjohn Institute) suggested that the authors adjust for local prices. Johnson acknowledged that the paper is largely descriptive and said the authors plan on something more analytical, doing comparisons to distinguish between urban and rural zones and between those with high costs of living and low. Tracy Hadden Loh (Brookings), noting that different states used different strategies to pick their zones from the list of eligible tracts provided by the Treasury, suggested comparing outcomes among different states. Bartik emphasized the value of looking at what happens to individuals who live in OZs, which he sees as the clearest test of the program. Jeff Hoopes (University of North Carolina at Chapel Hill) suggested looking at the origin of OZ investments to see if investors tend to invest in the states in which they live; the authors said it may be difficult to identify the home state of OZ investors. Kenan Fikri (Economic Innovation Group) suggested reporting how many OZ investments each Census tract received, as well as vacancy rates, to provide context.

### [Neighborhood-Level Investment from the U.S. Opportunity Zone Program: Early Evidence](#)

Authors: Patrick Kennedy\* & Harrison Wheeler (Joint Tax Committee & University of California, Berkeley)

Kennedy and Wheeler use data from electronically-filed Forms 8996 for 2019 and 2020 which report a total of \$41.5 billion in OZ investments over those two years. They estimate this

accounts for 70% to 80% of the money flowing to OZ funds. Their main findings: first, OZ capital is highly spatially concentrated. In their data, 63% of tracts receive zero OZ money. On a per capita basis, the zones that attracted the most OZ investment include Huntsville (Alabama), Salt Lake City, Nashville, and Denver. Second, among OZ-designated neighborhoods, investors reported greater equity and property investments in neighborhoods with higher incomes, home values, and educational attainment, as well as pre-existing income and population growth. These patterns were strongest for neighborhoods with pre-existing upward trends in population, income, and home values, and declining shares of elderly and non-white residents. On the firm side, reported OZ investment was overwhelmingly concentrated in real estate, construction, and finance. Third, OZ investors had extremely high incomes relative to the US population—their median and average 2019 household income was greater than \$741,000 and \$4.9 million, respectively—implying that the direct distributional incidence of the tax subsidy benefits was to households in the 99th percentile of the national income distribution.

In discussion, Donald Marples (Congressional Research Service) suggested examining whether OZ investment is concentrated at the boundaries of a zone, next to a more prosperous tract, e.g. in Brooklyn. And he wondered if the authors could tell if OZ incentives increase investors' overall willingness to make investments or just shifts investment from non-OZ tracts. Kennedy said the authors are interested in pursuing both questions.

### **The Impact of the Opportunity Zone Program on Residential Real Estate**

Authors: Ron Bekkerman (Cherre Inc.), Maxime Cohen (McGill University), Amber Xiaoyan Liu\* (Santa Clara University), John Maiden (Cherre Inc.), and Dmitry Mitrofanov (Boston College)

The authors use information from Cherre, a major data provider that consolidates real estate transactions from across the U.S., including data on more than 85% of OZs (but not, for instance, in Texas, which does not make relevant data public). In addition to examining the selection of OZs by governors from a list of eligible tracts provided by the U.S. Treasury, they compare OZs with tracts that were eligible but not designated. They find that the OZ program increased real estate prices by between 4% and 6% but do not observe a significant effect on the transaction volume, and suggest that OZs spurred demand but reduced supply, perhaps because owners held onto property anticipating the OZ designation would lead to higher prices in the future. They also find that investors targeted the high-end real estate market. “This investors’ cherry-picking behavior leads to fairness concerns and provides evidence that the current government OZ assignment may have not achieved the full potential of the program,” they conclude. The authors offered an alternative model that incorporates what they call “fairness concerns” to designate OZs.

In discussion, several participants questioned the use of the term “fairness.” Some suggested that “better targeting” or “targeting effectiveness” would be more appropriate. Liu responded, “We

do believe the way we look at it is if we are trying to serve really the most distressed communities, if that is one of our goals, I think it is related to fairness.” Bartik argued that “fairness” depends on what happens to the residents of the neighborhood; if their rents go up, that is not necessarily a good thing. Fikri noted that the papers show that the most economically attractive OZs attract a disproportionate share of investment, which points to the desirability of improving the targeting of zone designation, perhaps by requiring a tract to qualify on both the poverty rate and the median income (instead of one or the other, as in existing law). Also, given that most OZ residential investment is multi-family, Fikri asked when one would expect single-family home prices to respond. Liu responded that they did see some early signs of a response.

### **The Impact of Opportunity Zones on Commercial Investment and Economic Activity**

Authors: Kevin Corinth\* (University of Chicago) and Naomi Feldman (Hebrew University)

Corinth and Feldman use data for 2019 and 2020 on all significant commercial real estate investments in the U.S. from Real Capital Analytics and tract-level credit card and point-of-interest data from MasterCard that reflects business activity and consumer spending. Unlike other papers that compare OZ-designated tracts with tracts that were eligible but not designated, they compare tracts that were just above the poverty or income thresholds for designation with designated tracts that were just below the thresholds. They find that at least through 2020, there’s no evidence that OZ tax incentives have significantly increased commercial investment in OZs, nor have such outcomes as new business formation, new business loans, commercial diversity, or consumer spending substantially changed in OZs.

In discussion, Corinth noted that the authors had to buy data from a commercial provider to do the analysis. Bartik suggested the authors use their data for the same approach that other researchers use—comparing designated tracts and eligible but undesignated tracts—to compare results. He said that for both political and policy reasons, we’re never going to get random assignment in any place-based policy. But we might be able to do a quantitative scoring or rating system. Fikri noted that narrowing the list of tracts a governor could designate as OZs might be a good idea, but we’d end up with more randomness than we observe now if it was done by a computer. He cited California’s initial computer-generated OZ list as an example—the Stanford campus made the initial cut, but was knocked off after public comment. That experience, Fikri said, illustrated why public input is important. Corinth said the first two papers provided important descriptive information and the second two papers made a start at evaluating the causal impact of the OZ incentive. To get thorough analysis, researchers need both Treasury data and other data on investment flows. Participants also discussed the pros and cons of regression-discontinuity and difference-in-difference methods.

### **What data is needed to evaluate Opportunity Zones?**

Becky Lester (Stanford Business School) was among several participants who deemed IRS filings the best data to analyze OZs because of their detail and universality. Even so, she

recognized that the IRS is reluctant to provide independent researchers with data because of confidentiality restrictions. David Coyne and Adam Looney (University of Utah & Brookings) pointed out that the Joint Statistical Research Program might provide outside researchers a way to work with IRS data, but the program's scope has narrowed in recent years to focus on tax administration, possibly limiting access for outside researchers. Census has data-sharing agreements with the IRS, but they would need to be expanded before Census researchers could use IRS OZ data, added Kate Pennington (Census Bureau). Looney pointed out that the data-sharing agreements allow Census to structure surveys with tax data. Therefore, Census could conduct an analysis with questions added to an existing survey. Pennington suggested that Research Data Centers could allow outside researchers to join the analysis if Census did conduct its own OZ survey.

Lester observed that some states collect data on OZs as a requirement for getting state tax benefits—Ohio, for one. State administrative data might be a useful source for researchers, although she reported difficulty in obtaining access. OZ funds themselves, and firms that service them, also have data. But both these sources suffer from selection bias, unlike the IRS data.

Reid Thomas (JCT Americas) discussed the extensive administrative data his firm collects and described the government formulas to calculate the employment and output effects in near real time. But he echoed Lester's concerns, saying his firm was bound by confidentiality rules that would likely prevent turning the data over to researchers. He also doubted whether data from a single firm would be instructive because of strong selection bias. Naomi Feldman suggested that researchers work with commercial data providers to collect more detailed information about OZ investments—supplementing available data on the flow of money to commercial real estate with data on whether individual projects are taking advantage of the OZ tax incentive. Brett Theodos found this unlikely because commercial providers get their data from public filings which don't reveal who is taking advantage of OZ tax breaks, not from their own survey instruments.

Participants were generally dissatisfied with existing OZ reporting. Kenan Fikri argued that the lack of good data is partially self-defeating for OZs. For example, should states need to choose new OZs, they lack the data to make informed choices. Theodos went further, saying, "At the most basic level, this is taxpayer money that we deserve to understand how it's being spent." He continued, "We can look up every SBA guaranteed loan by name in the country, every new market tax credit project. And so I don't ... see why the standards would be different for OZs." The participants agreed that access to federal tax data was a crucial next step in analyzing OZs, but getting it will likely require political will for OZ analysis. Aaron Seybert (Kresge Foundation) said he is less concerned about identifying the most useful data than in making data publicly available. "I don't think the [OZ] incentive should exist unless that data is publicly available because I have been in large institutions who use community development finance incentive and I know how to manipulate data to give it the best possible light," he said.

The pending [Opportunity Zones Transparency, Extension, and Improvement Act](#) would greatly expand reporting by OZ funds to include the names, addresses, and TINs of the fund, its investors, and any corporations in which the fund is invested. The bill would require funds to

report to the IRS the dates and quantities of investments, the total value of the fund’s tangible and intangible property, and residential characteristics (like square footage and the number of units) of properties. OZ businesses must report their NAICS codes and average monthly employment as well. The bill does not require that data be available to outside researchers, which would likely remain subject to existing IRS confidentiality restrictions. It does require that the Treasury and the Census Bureau publish reports on OZs in the 6<sup>th</sup> and 11<sup>th</sup> year following passage of the bill.

### **What would constitute success for Opportunity Zones?**

Ed Glaeser (Harvard) said that canonical economics suggests that any impact of an OZ-like incentive should show up in land values—approximated by real estate values—and that’s a good start, but not sufficient. For instance, the impact of OZs could be overstated if land values go up in OZs and down elsewhere, a zero-sum effect. Tim Bartik said that property value effects, even measured correctly, may not be a good measure of success. Many in OZ communities don’t own their homes, so higher property values could mean displacements and higher rents, making the welfare effects highly unclear. For this reason, Aaron Seybert emphasized that capital flows are “probably the worst” benchmark for OZ success; higher property values may put OZ investors and residents directly at odds. Theodos added: “Is it [OZ] really doing work to spur new investment, or is it just adding a federal tax incentive to investment that already was going to happen?” He argued that the high uptake of the OZ incentive might be because of large substitutions into OZs, rather than new investment.

Another approach is to track a panel of people who lived in an OZ before and after designation, Glaeser and others said. That requires access to IRS data. “If we’re going to justify a place-based policy, ultimately, we’re not doing so on the basis of having prettier buildings and prettier sidewalks,” Theodos said. “In some way we need to improve the lives of low and moderate-income people.” Even with such data, Bartik and Theodos warned that the analysis could still be challenging. Neighborhoods are not static, nor do they define labor markets. Over the full period the benefits materialize, residents will come and go, bringing and taking wealth with them. And many people, especially those on the borders of OZs, will commute outside the OZ for work, disrupting the labor market channel through which OZ benefits might reach residents. Bartik added that if OZs create more jobs, original residents may or may not be the ones to get them. Simply put, tracking individual outcomes may not be reflective of the effects on the community. Glaeser proposed using a spatial structural model to untangle the welfare effects of OZs. These models, which incorporate frictions, spatial relationships, and heterogeneous agents, allow researchers to estimate the welfare effects implied by aggregate data on individuals. But Glaeser wondered about the soundness of OZs as a development program. “The hallmark of America’s declining cities and towns is they have an abundance of structures relative to the level of demand for those structures. And so giving people tax incentives to build more structures doesn’t seem like a particularly sensible thing to me,” he said.

Discussing the cost-benefit assessment of OZs, panelists agreed that lost tax revenue is almost surely the largest cost of OZs but differed on how to measure benefits. Adam Looney argued that

commercial investment and residential activity are key benefit metrics. Bartik responded that OZs should be judged by how they improve residents' outcomes, not the amount of investment they drive. Bartik added that states may have coordinated other development programs with the OZ tracts, further confounding analysis and driving the need for high-quality data.

Some participants said it will take time to fully evaluate OZs. Fikri commented that regulatory hurdles, the OZ incentive's design, and the naturally long timeline of construction mean we are only beginning to see the benefits of OZs. Reid Thomas (JTC) added that, because of the long timeline, many OZ projects were planned before the incentive, then transitioned into the program, making it even more difficult to isolate the effects of OZs. Fikri said that estimating the benefits to households is tricky because effects from business investment are necessarily indirect and may only materialize over a long horizon.

## Hutchins Center Opportunity Zones Conference Agenda

Friday, November 18, 2022

10:30 a.m. – 4:00 p.m. ET

### **10:30 a.m. Welcome**

### **10:45 a.m. Presentations**

*Authors of the following papers will give a 15min presentation of their recent work on Opportunity Zones focusing on: (a) the data they used and the advantages and limitations of that data; and (b) their bottom-line conclusions, followed by a 15min Q&A after each presentation.*

### **10:45 a.m. Use of the Opportunity Zone Tax Incentive: What the Tax Data Tell Us**

*Authors: David Coyne and Craig Johnson (Treasury)*

### **11:15 a.m. Neighborhood-Level Investment from the U.S. Opportunity Zone Program: Early Evidence**

*Authors: Patrick Kennedy (University of California, Berkeley & Joint Committee on Taxation) and Harrison Wheeler (University of California, Berkeley)*

### **11:45 a.m. The Impact of the Opportunity Zone Program on Residential Real Estate**

*Authors: Ron Bekkerman (Cherre), Maxime Cohen (McGill University), Xiaoyan Liu (Santa Clara University), John Maiden (Cherre) and Dmitry Mitrofanov (Boston College)*

### **12:15 p.m. The Impact of Opportunity Zones on Commercial Investment and Economic Activity**

*Authors: Kevin Corinth (Joint Economic Committee) and Naomi Feldman (Hebrew University of Jerusalem)*

### **12:45 p.m. Break**

### **1:15 p.m. Roundtable I: Data Needs and Obstacles**

*Discussion will be open to all participants after brief remarks by firestarters.*

- What specific data do we need to have more confidence in our conclusions, and how should it be gathered so researchers both inside and outside government can use it (i.e. are there ways to gather data that don't run into IRS privacy obstacles)?
- What could Treasury/IRS ask for that they don't now?
- What should Congress require if it reopens the OZ law?
- What can Treasury do with the data it already has?
- What private data would be useful and how can researchers get access to it?

*Firestarters: Rebecca Lester (Stanford Graduate School of Business), Naomi Feldman (Hebrew University of Jerusalem), and Adam Looney (University of Utah)*



**2:30 p.m. Break**

**2:45 p.m. Roundtable II: What Does Success Look Like?**

*Discussion will be open to all participants after brief remarks by firestarters.*

- What are the appropriate metrics for judging OZs over time? Jobs? Crime? Property values? Poverty? Inflows of private investment? New business start-ups?
- How long before we really know?

*Firestarters:* Tim Bartik (Upjohn Institute), Kenan Fikri (Economic Innovation Group), Ed Glaeser (Harvard University), Brett Theodos (Urban Institute), Reid Thomas (JTC Americas) and Aaron Seybert (Kresge Foundation)

**3:45 p.m. Closing Comments and Next Steps**

**4:00 p.m. Adjourn**

## Hutchins Center Opportunity Zones Conference Participant List

Robert Andres *Senate Finance Committee*

John Arnold *Arnold Ventures*

Jimmy Atkinson *OpportunityDb*

Tim Bartik *Upjohn Institute*

George Callas *Arnold Ventures*

Chia Chang *Joint Committee on Taxation*

Kevin Corinth *Joint Economic Committee*

David Coyne *Treasury Department*

Elena Derby *Joint Committee on Taxation*

Grace Enda *Senate Finance Committee*

Naomi Feldman *Hebrew University of Jerusalem*

Kenan Fikri *Economic Innovation Group*

Ed Glaeser *Harvard University*

Tracy Gordon *Urban Institute*

Adam Gropper *Joint Committee on Taxation*

Christopher Hadad *Office of Congressman Bill Pascrell, Jr.*

Aaron Hedlund *Purdue University*

Leah Hill *Office of Senator Cory Booker*

Michelle Holder *City University of New York*

Jill Homan *Javelin 19 Investments*

Jeff Hoopes *University of North Carolina*

Craig Johnson *Treasury Department*

Patrick Kennedy *University of California, Berkeley & Joint Committee on Taxation*

Rebecca Lester *Stanford Graduate School of Business*

Xiaoyan Liu *Santa Clara University*

Tracy Hadden Loh *Brookings Metropolitan Policy Program*

Adam Looney *University of Utah*  
Donald Marples *Congressional Research Service*  
Peter Merrill *PwC*  
Andrew Moylan *Arnold Ventures*  
David Neumark *University of California, Irvine*  
Kate Pennington *Census Bureau*  
Ben Rich *Office of Congressman Bill Pascrell, Jr.*  
Richard Rubin *Wall Street Journal*  
Nora Ryan *Office of Senator Cory Booker*  
Melissa Sanchez *Office of Senator Cory Booker*  
Aaron Seybert *Kresge Foundation*  
Mark Steinmeyer *Smith Richardson Foundation*  
Jonathan Tebes *University of Notre Dame*  
Brett Theodos *Urban Institute*  
Reid Thomas *JTC Americas*  
Ryder Tobin *Senate Finance Committee*  
Jonathan Tower *Arctaris Impact Investors*  
Anna Tyger *Arnold Ventures*  
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Harrison Wheeler *University of California, Berkeley*  
Jiajie Xu *University of Iowa*