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Are Opportunity Zones an Effective Place-Based Policy?

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When Congress passed and President Trump signed into law the Tax Cuts and Jobs Act at the end of 2017, most attention centered on the reduction in the corporate tax rate and overhaul of the individual tax code. Few noticed a provision added at the last minute establishing a new place-based policy in the United States called Opportunity Zones.

The basic idea for Opportunity Zones was hatched several years earlier by tech entrepreneur Sean Parker (a Napster cofounder and early Facebook stakeholder). He provided startup funds for a small think tank called the Economic Innovation Group to develop the idea into a policy. The think tank in turn enlisted a bipartisan and influential group of academic economists for partnership and oversight. Although Opportunity Zones were introduced on a bipartisan basis as a bill in the US House and Senate in 2016, they flew largely under the radar. Most of the key Congressional and White House players in the debate over what became the Tax Cuts and Jobs Act of 2017 had little awareness of Opportunity Zones when the other provisions of the bill were being drafted and debated. It was only when Senator Tim Scott (R-South Carolina) pushed for their inclusion, along with Congressional

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leaders and later President Trump, that Opportunity Zones were added to the larger tax bill late in 2017.

Place-based policies are motivated by the desire to address disparities and stimulate economic development in specific geographic areas that suffer from disadvantage and underinvestment, which, at least in theory, could bolster economic growth of the nation as a whole and reduce strain on public benefit programs. The breadth and size of the problems facing distressed areas—the disconnection of nondisabled men from the labor force, a swelling drug epidemic, and persistent stagnation—have disrupted the long-held view among many economists that policies should seek to help people, not places. But while economists increasingly discussed what government could or should do to help left-behind areas and their residents, there was no consensus on what policies would work. A checkered history of place-based policies, suggesting at best mixed evidence on positive outcomes, warranted skepticism of simply expanding existing policies (Bernstein and Hassett 2015).

Opportunity Zones broke from previous place-based tax policies, many of which allocated investment incentives through government-approved entities on the basis of intentionally chosen characteristics.[1] Instead, Opportunity Zones sought to relax tight government control over the place and form of investment. They offered uncapped tax incentives for individual investors to reinvest unrealized capital gains in a large swath of areas across the country. Whether a more flexible, market-driven approach could improve on the previous track record of place-based tax policies was put to the test. Now, seven years after the inconspicuous beginning of Opportunity Zones, a growing body of evidence has emerged, offering lessons for future place-based policies. Overall, a substantial amount of investment has flowed to the designated areas under the policy; however, aside from potentially important effects on residential real estate, it is unclear whether this represents additional investment that would not otherwise have occurred, and the evidence on benefits to residents of these areas is limited.

Previous Place-Based Policies

From an economic perspective, several rationales might justify place-based government intervention, as opposed to policies that aim more directly at supporting people. First, the workers or firms that locate in a specific area can create externalities for others nearby. For example, positive externalities ("agglomeration economies") arise from workers sharing information and from firms colocating to create a thick market of potential workers, while negative externalities can arise due to congestion (Glaeser 2010). For this reason, subsidizing location in areas with greater net positive externalities could produce efficiency

[1] For a detailed history of the development of the Opportunity Zone policy, see Wessel (2021).

gains, boosting productivity in targeted regions and the nation as a whole. Second, place-based policies can serve as insurance to protect residents against local shocks that make living in a given area less desirable over time, especially if moving costs are substantial (Gaubert, Kline, and Yagan 2021). Third, policies that seek to address externalities resulting from nonwork—such as greater reliance on transfer programs—may have more impact in areas where employment levels are currently lower, and could ultimately reduce strain on federal assistance programs. Austin, Glaeser, and Summers (2018) argue that this final motivation for place-based policies is the most compelling, given the inability to identify which places have higher net externalities due to agglomeration, and because insuring places is less efficient than insuring the income of individuals.[2]

An alternative approach to improving the outcomes of residents in distressed areas is to facilitate their movement to other areas, which can expand employment opportunities for adults and improve the long-run outcomes of children (Chetty, Hendren, and Katz 2016). Such a policy could act as a form of insurance by offsetting the moving costs of escaping an area suffering from negative local shocks, and in addition, address externalities from nonwork. But scaling up such a policy could be problematic, due to the potentially large monetary and nonmonetary costs of moving, and housing supply constraints in many high opportunity areas that cause greater in-migration to make housing less affordable. Thus, place-based policies may still be warranted.

In addition to rationales for place-based policies in general, there may be rationales for such policies that encourage private investment in particular, as Opportunity Zones seek to do. While subsidizing private investment in places with irreparably weak institutions and other "fundamentals" is unlikely to spur broader economic development, it is possible that a surge in private investment could move some distressed areas out of a "bad equilibrium" in which a lack of private investment reduces the local tax base and reduces the likelihood of both public and private investment in the future (Bernstein and Hassett 2015). Increased investment at scale could move these distressed areas into a new equilibrium characterized by greater private investment, greater tax revenue, and better public infrastructure. A different type of place-based policy focuses on allocating federal investments (as opposed to encouraging private investment) to specific entities in specific places. For example, the National Science Foundation seeks to create "regional innovation centers" that will foster technological innovation in left-out areas. While policies that direct public investment in specific areas can address some of the same rationales, in this section we focus on place-based policies that encourage private investment.

US policymakers have enacted a series of place-based tax policies in recent decades, as listed in Table 1. Notable earlier programs include Empowerment Zones and Enterprise Communities, both established in 1993, and the New Markets Tax

[2] In this journal, see Bartik (2020) for a review of place-based policies focused on job creation specifically. For a review in the same issue of place-based policy efforts in Europe, see Ehrlich and Overman (2020).

Table 1
Major Federal Place-Based Policies

Program	Year established/ expired	Tax incentives
Empowerment Zones	1993/2025	Federal income tax credit, accelerated depreciation, bond financing, capital gains deferral
Enterprise Communities	1993/2009	Job creation credits, property tax abatements, sales tax reductions, investment credits
Renewal communities program	2000/2009	Job creation credits, augmented Section 179 deduction, reduced capital gains on qualified assets, bond financing tax credits
New markets tax credit	2000/—	Investors in qualified Community Development Entities receive a tax credit totaling 39 percent of the total investment spread over seven years.
Opportunity Zones	2017/—	Temporary deferral of capital gains from rolled-over assets and reinvested in a Qualified Opportunity Fund, partial reduction of deferred gains due to partial step-up in basis and a tax exclusion for new capital gains from the investment.

Source: Authors' creation.

Credit, established in 2000. These programs vary in their approach, coverage, and regulatory framework, though all broadly aim to promote economic growth and employment in distressed areas. Estimates of the effects of these earlier programs are mixed. Neumark and Simpson (2015) present a comprehensive summary of place-based policies and what we have learned from earlier programs. As the authors note, going forward, it is essential to gain a deeper understanding of the features that make these policies more or less effective and to reconcile the existing research findings. For example, some evidence suggests positive outcomes associated with infrastructure expenditure, as well as investments in higher education and university research, likely due to the public-goods nature of these policies.

Despite having similar end goals of improving the economic outcomes of distressed areas, there are significant differences in implementation and incentive structure among the various programs. For example, the Opportunity Zone policy aims to harness the unrealized capital gains of the private sector by offering deferrals and exclusions for capital gains taxation when gains are reinvested in so-called Qualified Opportunity Funds, which is an investment vehicle organized as a corporation or partnership to facilitate investment in Opportunity Zones. This structure stands in contrast to the typical incentive structure of previous federal place-based tax policies, which often focused on reducing the upfront costs associated with employment or initial investment. In particular, the New Markets Tax Credit program allocates tax credits to specialized financial institutions known as Community Development Entities that then use these tax credits to attract capital from private investors, including banks and corporations, who provide funds in exchange for the credits. The raised funds are then invested by the Community Development

Entities in businesses or real estate projects within low-income areas, often through loans or equity investments. Investors receive a tax credit equal to 39 percent of their investment, distributed over seven years. This further differs from other programs like Empowerment Zones and Enterprise Communities that offer a mix of tax incentives, grants, streamlined regulations, and infrastructure investments to encourage business investment and job creation in economically distressed areas. These incentives include employment and investment tax credits, accelerated depreciation, and capital gains exclusion, among others. In return, businesses are encouraged to reinvest in the local community through job training programs and community development projects.

Another important change with Opportunity Zones as compared to some other programs is the role of the federal (or local) government in the investment process. Beyond setting the requirements for eligibility that piggy-backed off previous place-based policies, government involvement in Opportunity Zones is comparatively minimal. For comparison, the New Markets Tax Credit involves multiple stages of application, evaluation, investment, and compliance to ensure that the funds are directed to eligible projects and effectively contribute to the economic development of low-income communities and is subject to a Congressional legislative cap. None of these apply to Opportunity Zone investments.

The differing design of incentives across the programs is likely to shape their ultimate outcomes. For example, the Opportunity Zone incentive that rewards long-held investments with larger capital gains may have outcomes focused in real estate development, because these investments more easily satisfy the minimal requirements necessary to receive the tax benefits, whereas programs that subsidize upfront investment costs or hiring could encourage other types of business development and job creation.

Overall, the evidence on the effectiveness of Enterprise Communities and Empowerment Zones on improving socioeconomic outcomes in struggling communities is mixed. Ham et al. (2011) study state and federal programs and find positive impacts on local labor markets and poverty, though the effects vary widely across states and for the state programs, Neumark and Young (2019) show that data problems and selection drive most of the positive outcomes and Neumark and Young (2021) find no evidence of longer-run effects. Busso, Gregory, and Kline (2013) study federal Empowerment Zones and find substantial job growth, but Reynolds and Rohlin (2015) suggest that the zones primarily benefited higher-income households. Freedman (2012) studies the New Markets Tax Credit using a regression discontinuity design and finds modest positive effects in distressed communities. Some of the positive effect is due to compositional changes in neighborhood residents rather than gains for existing residents. The Community Development Financial Institutions Fund, which administers the New Markets Tax Credit program, regularly publishes reports on the program's impact. These reports generally show that the program has been successful in attracting investment to low-income communities and creating jobs. However, it is unclear whether these investments would have occurred in any case or whether the policy was crucial on the margin.

The Opportunity Zones Policy

The two major components of the Opportunity Zone policy are the rules for initially selecting Opportunity Zones, and the rules that dictate the tax incentives for investing in them.

Rules for Selecting Opportunity Zones

The US Census Bureau divides the country into "census tracts," which are designed to contain 1,200 to 8,000 residents: as a result, census tracts range in geographic area from the size of a neighborhood in densely populated parts of cities to much larger areas in rural parts of states. The eligibility criteria for census tracts to be designated as Opportunity Zones largely follow the criteria for census tracts that can receive investment from the earlier New Markets Tax Credit, while also extending potential eligibility to census tracts contiguous to selected low-income tracts. Specifically, a census tract was eligible to be selected if: (a) it had an official poverty rate of at least 20 percent; (b) it had a median family income below 80 percent of the median family income in the state or metropolitan area; or (c) it was contiguous with a selected census tract meeting one of the conditions in (a) or (b), and also had a median income less than 125 percent of the qualifying census tract. A maximum of 5 percent of a state's Opportunity Zones could be designated on the basis of contiguity.

Out of approximately 73,000 census tracts in the United States, 42 percent were eligible to be selected as Opportunity Zones based on their median family income or poverty rate (conditions a and b), and an additional 14 percent were potentially eligible if a contiguous tract were selected (condition c).[3] The Tax Cuts and Jobs Act allowed each state governor to designate up to 25 percent of eligible census tracts as Opportunity Zones. Governors were required to submit their selections for Opportunity Zones to the US Treasury within 90 days, which limited the time for a highly informed selection process, especially given that Opportunity Zones were included only at a late stage in the legislative process and with little attention until after the bill was passed (Wessel 2021).

States varied widely in their approaches. For example, several states including California, Michigan, Nevada, and Vermont solicited public input on an initial set of potential Opportunity Zones (Wessel 2021). Some states relied heavily on quantitative data to target areas with higher levels of distress or more investment potential. As demonstrated by Frank, Hoopes, and Lester (2022), political alliances also played a role, with governors 8 percent more likely to select a census tract as an Opportunity Zone if the state representative shared the governor's political party.

Rules for Tax Incentives from Investing in Opportunity Zones

In addition to prescribing the process for designating Opportunity Zones, the Tax Cuts and Jobs Act also laid out what qualifies as an Opportunity Zone

[3] See CFDI (2024) for list of eligible and selected Opportunity Zones.

investment—and the associated tax benefits. Those who invest unrealized capital gains in Opportunity Zones via Qualified Opportunity Funds could defer any taxes owed on the original capital gain for as long as the investment remains in the Qualified Opportunity Funds, through the end of 2026. If the investment remains in the Qualified Opportunity Funds for at least five years, then 10 percent of the original capital gain is excluded from taxation, and if the investment remains for at least seven years, then 15 percent of the original capital gain is excluded from taxation. After 2026, the original capital gains must be realized and taxes paid. Furthermore, any capital gains accrued based on the investment in the Qualified Opportunity Fund (above the original capital gain) are not subject to any taxation if the investment in the Qualified Opportunity Fund is maintained for at least ten years. In addition to capital gains tax, this allows investors to forgo payment of the net investment income tax and taxes on "depreciation recapture" (that is, tax owed when an individual deducts depreciation of an asset over time, but then sells the asset for more than its adjusted cost basis).

The rules regarding what investment is eligible for tax benefits hinged on quantifying certain aspects of the statute. For example, the statute requires that "substantially all" of the property of the Qualified Opportunity Fund be tangible, which the US Treasury defined as 70 percent. The Treasury's proposed rules were made public in October 2018 and made final in December 2019. This delay in finalizing the rules for determining what investment qualifies could have dissuaded some early investment.

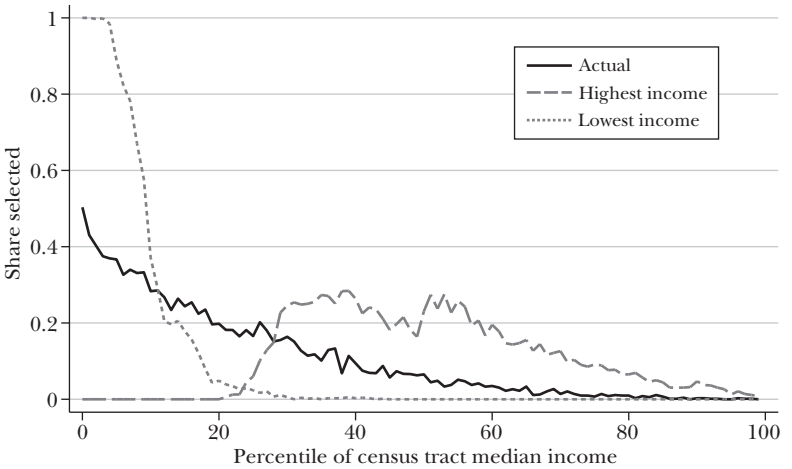
Which Areas Were Selected as Opportunity Zones?

A necessary condition for success of the Opportunity Zones policy is that it increases private investment in distressed areas. Whether Opportunity Zones were successful in attracting investment to distressed areas depends on first, whether distressed areas were selected as Opportunity Zones, and second, whether investment ultimately flowed to the selected distressed areas. This section focuses on the first question. In the following section we turn to the second question regarding investment.

As described previously, Congress adopted a variant of the eligibility conditions used for the New Markets Tax Credit, which ultimately led 31,848 (43 percent) of census tracts to be deemed eligible, not counting the 10,312 "contiguous" tracts that could potentially be selected if an eligible bordering tract was selected as well. State governors ultimately nominated 8,764 census tracts as Opportunity Zones, which were published by the US Treasury on July 9, 2018. Every state and two-thirds of counties had at least one census tract selected as an Opportunity Zone (Corinth and Feldman 2023).

In Figure 1, the solid black line depicts the extent to which the census tracts designated as Opportunity Zones were drawn from the lower end of the income distribution, by indicating the share of census tracts in each percentile of the census tract median income distribution that were selected. For context, the twentieth

Figure 1
Share of Census Tracts Selected as Opportunity Zones, by Percentile of Census Tract Median Income



Source: US Census Bureau (2024), CFDI (2023), and authors' calculations
Note: Figure plots census tracts based on their percentile in the distribution of median income over all census tracts. The solid black line plots the share of census tracts in a given percentile that were selected as Opportunity Zones. The gray dashed (dotted) line plots the share of census tracts that would have been selected as Opportunity Zones if each state governor selected the same number of census tracts as they actually chose, but selected the highest (lowest) income census tracts possible. The dashed line allows governors to select contiguous tracts of selected low-income tracts, up to the maximum number of contiguous tracts. We select the highest income contiguous tracts that are contiguous to the highest income low-income tracts, ensuring our algorithm is not first order stochastically dominated by another set of tracts that could have been selected instead (for example, it is possible that an unselected low-income tract has a contiguous tract that has a higher median income than one of the tracts we ultimately select as an Opportunity Zone; however, the low-income tract itself will have a lower income than all of the tracts we selected).

percentile census tract has a median household income of $37,679, the fortieth percentile census tract has a median household income of $49,267, and the sixtieth percentile census tract has a median household income of $61,429, as of 2013–2017 and expressed in 2017 dollars (US Census Bureau 2024). The solid black line is generally decreasing with income percentile, implying that census tracts with lower median incomes were more likely to be designated as Opportunity Zones. The probability of selection as an Opportunity Zone was about 50 percent at the very bottom percentile, 20 percent at the twentieth percentile, 10 percent at the fortieth percentile, and close to zero percent at the sixtieth percentile and above.

The gray dotted line represents a hypothetical scenario in which each state designated as Opportunity Zones the census tracts with the lowest possible median incomes of those eligible. The gray dashed line represents an alternative hypothetical scenario in which each state designated as Opportunity Zones the eligible census tracts with the highest possible median income. In other words, if actual selections

(black solid line) lined up exactly with the gray dotted line, that would indicate that state governors selected the census tracts with the lowest possible median incomes, conditional on the tracts made eligible. If actual selections lined up exactly with the gray dashed line, that would indicate that state governors selected the eligible census tracts with the highest possible median incomes.

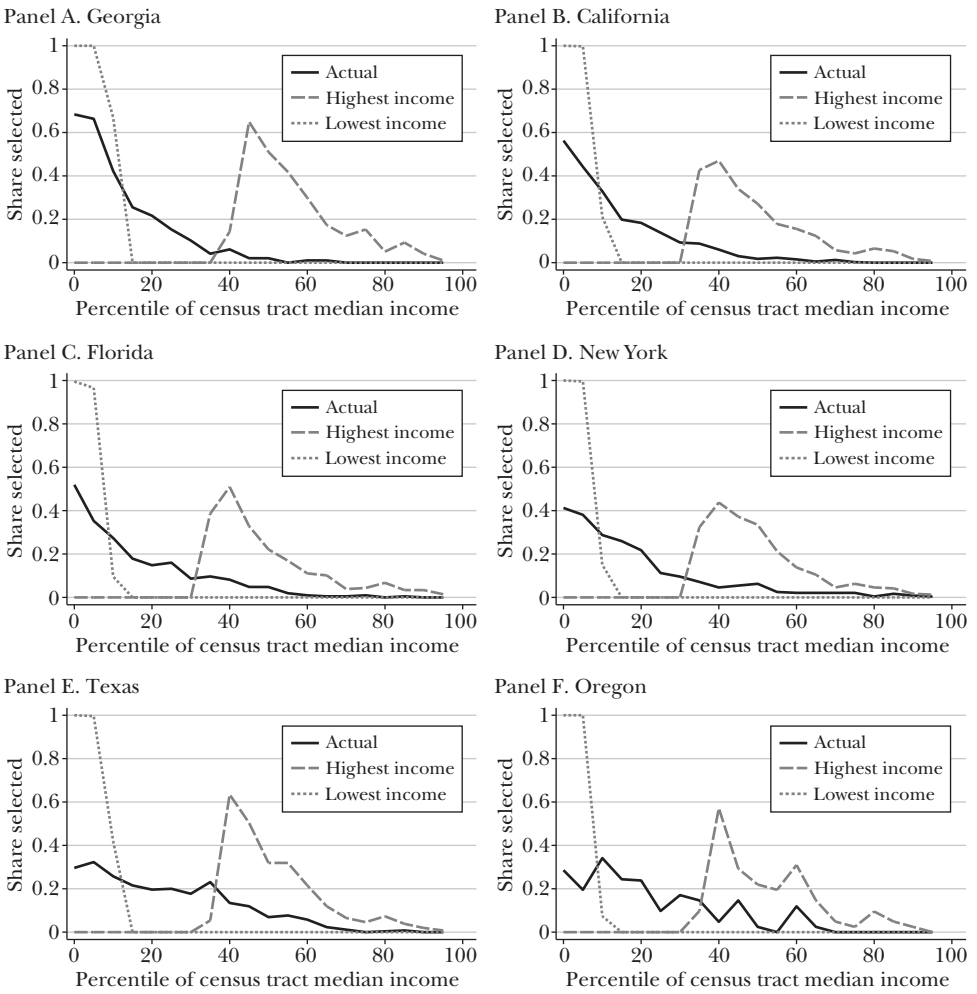
Clearly, Congress allowed states substantial flexibility between these extremes to choose their Opportunity Zones. Overall, states chose 58 percent of Opportunity Zones from census tracts in the bottom income quintile. Conversely, states selected only 15 percent of Opportunity Zones from the top three quintiles. Four census tracts were selected as Opportunity Zones despite having a median income of more than $125,000, placing them in the top 5 percent of census tracts nationally. Three of the top four census tracts are located in New York City and of these, each qualified because of their contiguity with another tract with a sufficiently low median income, and one attracted controversy for being a candidate for a second headquarters for Amazon in 2018. The fourth census tract, with the highest median income among all selected tracts, is in Washington, DC, and contains the now-abandoned former stadium of the Washington professional football team, which is slated to be replaced with either a new stadium or other development.

States varied widely in the extent to which they targeted their most distressed areas. Figure 2 shows for six states the share of census tracts in each percentile of census tract median income in the state that were actually selected (black line) and which could have been selected if either the highest (gray dashed line) or lowest (gray dotted line) income eligible tracts were selected. For example, Georgia stands out because it could have selected Opportunity Zones almost exclusively from the top three quintiles of its census tracts, but in practice, it selected Opportunity Zones overwhelmingly from the bottom quintile. California also more heavily targeted distressed areas than most other states, though to a lesser extent than Georgia. Florida and New York were closer to the norm among all states.

Texas and Oregon are examples of states that did less than most states to target their most distressed census tracts. Texas was nearly as likely to select census tracts from around the fortieth percentile as it was to select census tracts from the bottom of the distribution. Oregon selected a significant share of its Opportunity Zones from the middle of the distribution or higher.

Ultimately, the Opportunity Zone rules in the Tax Cuts and Jobs Act gave states considerable flexibility, and most states used this flexibility to leave out a substantial share of the most distressed areas and to choose instead a significant number of census tracts from the middle of the distribution that probably should not be classified as distressed. Selecting a group of Opportunity Zones that contains even a relatively small number of nondistressed areas can still heavily distort the effects of the policy away from the most distressed areas, because the tax break may encourage private investment flows in the nondistressed areas instead. Finally, we note that it is not obvious that investment should always go to the most distressed areas and any deviation from this group of census tracts is undesirable. Instead, investment should ideally balance need with a higher probability of success as captured by a social

Figure 2
Share of Census Tracts Selected as Opportunity Zones, by Percentile of Census Tract Median Income in State



Source: US Census Bureau (2024), CFDI (2023), and authors' calculations
Note: Figure plots census tracts based on their percentile in the distribution of median income over all census tracts within a given state. The black line plots the share of census tracts in a given percentile that were selected as Opportunity Zones. The gray dashed (dotted) line plots the share of census tracts that would have been selected as Opportunity Zones if each state governor selected the same number of census tracts as they actually chose, but selected the highest (lowest) income census tracts possible. For further details, see Figure 1 notes.

return on investment. This, however, is not necessarily prioritized or known by the private investor, though state governors may attempt to guide investors towards selecting certain tracts for targeted investment.

Investment in Opportunity Zones

A causal effect of Opportunity Zones on driving additional private investment is a necessary (but not sufficient) condition for a successful policy. After all, if the Opportunity Zone policy did not drive increased investment in designated areas, then it is unlikely to have had other effects on economic outcomes. In this section, we first characterize the nature and magnitude of the Opportunity Zone investment incentives. We then document the Opportunity Zone investment that has occurred and whether the policy induced additional investment. Of course, a successful place-based policy also requires that the additional investment leads to improved outcomes, which might be measured by employment, wages, and income of those living in these areas—a topic we tackle in the following main section.

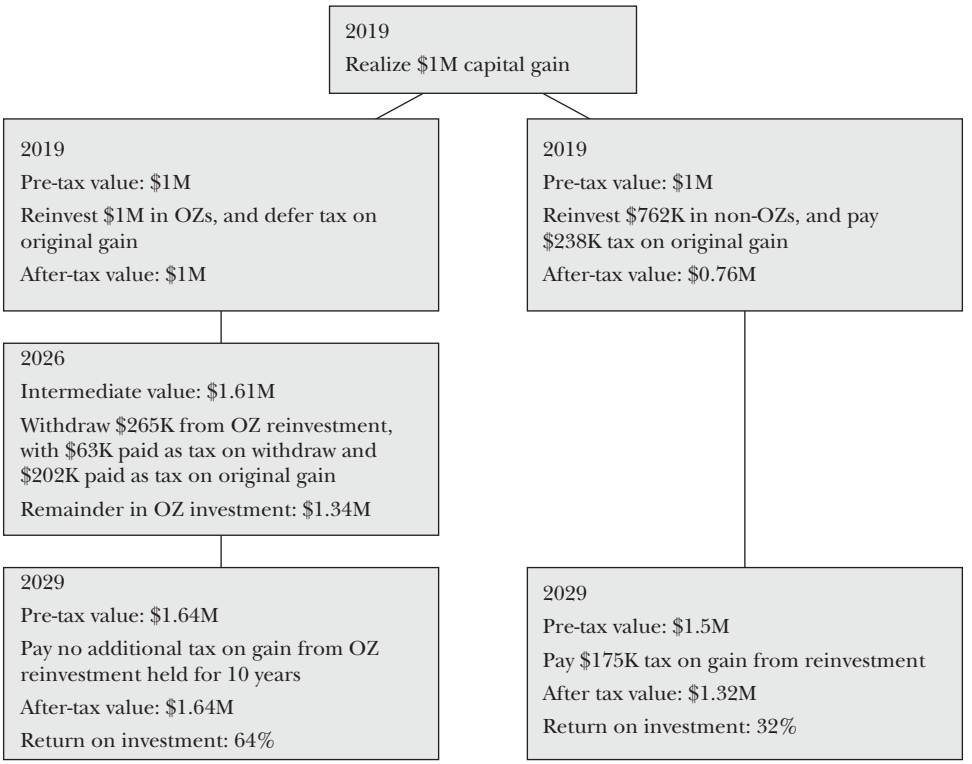
Characterizing the Opportunity Zone Tax Incentives

The Opportunity Zone tax incentive can be illustrated with an example in Figure 3, which compares the tax implications of investing in Opportunity Zones compared to investing elsewhere. We begin by assuming that an individual realizes a $1 million capital gain in 2019. An investor who realizes that capital gain and then reinvests it outside the Opportunity Zone (right-hand side of the diagram) would pay a tax of $238,000, reflecting the 20 percent long-term capital gains tax rate plus an additional 3.8 percent tax on net investment income. Then, an investor who made an additional gain of $737,000 over the next ten years (based on a 7 percent annual rate of return), and realized that additional gain in 2029, would pay an additional $175,000 in capital gains taxes. The final value of the investment after ten years is $1.32 million, reflecting a 32 percent nominal return on investment.

If this investor had instead reinvested the original $1 million gain in an Opportunity Zone (left-hand side of diagram), the capital gains tax on the original gain would be deferred until 2026. The investor would also reduce the tax burden by 15 percent by maintaining the Opportunity Zone investment for seven years and so at that time would pay only $202,000 in taxes on the original capital gain, while paying an additional $63,000 tax on the withdraw by realizing capital gains on the reinvestment after seven years. The remaining $1.34 million value of the Opportunity Zone reinvestment would grow to $1.64 million by 2029, and the investor would pay no additional tax on the capital gain because it was held for at least ten years. The nominal return on investment is thus 64 percent, double the rate of return on investment of newly realized capital gains without the benefit of the policy. The difference could be larger if the investor reduced their tax liability during this period based on depreciation of the asset, because they could avoid the tax based on depreciation recapture by investing in an Opportunity Zone. At the same time, the difference could be smaller if the investor had a lower capital gains tax rate based on income and filing status.

This stylized example provides a convenient illustration of the wide and uncertain range of potential costs to the government of Opportunity Zones. In the diagram, the total tax paid in the absence of Opportunity Zones is $413,000,

Figure 3
Hypothetical Tax Benefits from Investment in Opportunity Zones



Source: Authors' creation.
Note: We assume an annual rate of return of 7 percent. Capital gains are assumed to be taxed at a rate of 23.8 percent, except when otherwise reduced by the Opportunity Zone tax provisions. The portion of the original gain subject to taxation is reduced by 15 percent if the Opportunity Zone investment is held for at least seven years.

while the total tax paid in Opportunity Zones is $265,000, a difference of $148,000. This implies that the government cost of Opportunity Zones is 14.8 percent of total Opportunity Zone investment. However, this calculation assumes that every million dollars of existing capital gains invested in Opportunity Zones would have still been realized in the absence of the policy, an unrealistic assumption as capital gains taxes can be avoided by holding them until death and receiving a step up in basis and escaping estate taxation. In the extreme case in which none of the capital gains invested into Opportunity Zones would have been subject to taxation in the absence of the policy, the government receives additional revenue of $265,000 per million dollars of Opportunity Zone investment, implying a negative cost of 26.5 percent of total Opportunity Zone investment. Because $44 billion of qualifying investment was made into Opportunity Zones in 2019 and 2020 (Coyne and Johnson 2023),

this would imply that Opportunity Zone investment in those two years could have cost the government as much as $6.5 billion or brought in additional revenue of as much as $11.7 billion.

We emphasize that these magnitudes are only illustrative of the wide range of potential costs of the policy, because the values do not account for somewhat different tax benefits for Opportunity Zone investment made in 2019 versus 2020, heterogeneity in the rate of return on investment, and the different tax brackets of investors, among other factors.

We can also use the hypothetical example in Figure 3 to illustrate the types of investment likely to be induced by the Opportunity Zones policy. This example assumes that the rate of return on the investment is the same inside and outside of Opportunity Zones. However, one motivation behind a place-based policy like Opportunity Zones is that the rate of investment is lower in these areas, which is why a policy response is needed. Thus, a key question concerns the incentives that arise in a setting where investments in Opportunity Zones yield lower rates of return.

To gain insight into this point, Figure 4 illustrates the subsidy from the Opportunity Zones policy, for different pre-tax annual rates of return on investment in Opportunity Zones, ranging from 3 percent to 9 percent as indicated on the horizontal axis. The figure holds fixed the pre-tax annual rate of return on investment outside of Opportunity Zones at 7 percent. Thus, the pre-tax annual rate of return on investment is lower in Opportunity Zones at all points to the left of the vertical line at 7 percent, which are the investments the policy is intended to induce. The vertical axis denotes the percentage point difference in the post-tax return on investment after ten years. Thus, a positive value means that the post-tax return on investment in Opportunity Zones is higher than in non–Opportunity Zones. We define the "subsidy" as the additional return to the investor of investing in Opportunity Zones relative to other areas that results from the policy.[4]

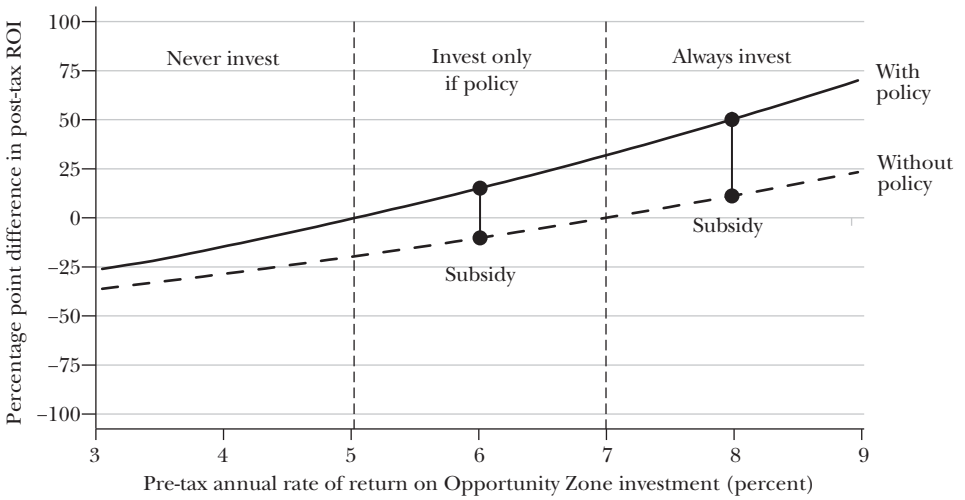
Consider first the previous example shown in Figure 3 in which investment both inside and outside Opportunity Zones has a pre-tax annual rate of return of 7 percent. With the Opportunity Zone legislation, the investment in the Opportunity Zone will have a 32 percentage point greater post-tax return on investment after ten years than investment outside of Opportunity Zones, as indicated by the solid line in Figure 4. Because there would be no difference in the post-tax return on investment without the policy (as indicated by the dashed line), the subsidy is equal to 32 percent of the initial investment, the gap between solid line and dashed line.

But what if the returns inside Opportunity Zones are different than returns outside of Opportunity Zones? If for example, the pre-tax annual rate of return on investment is 6 percent in Opportunity Zones, then without the policy (dashed line) the post-tax return on investment after ten years would be 10 percentage points lower in Opportunity Zones. But with the policy (solid line), the post-tax return

[4]As seen in Figure 4, this is not equivalent to the reduction in taxes paid.

Figure 4

Percentage Point Difference in Post-tax Return on Investment from Investing in Opportunity Zone versus Non–Opportunity Zone, by Pre-tax Rate of Return on Opportunity Zone Investment



Source: Authors' creation.

Note: Capital gains are assumed to be taxed at a rate of 23.8 percent, except when otherwise reduced by the Opportunity Zone tax provisions. Pre-tax annual rate of return is assumed to be 7 percent in non–Opportunity Zones, and as shown by the horizontal axis for Opportunity Zones. Post-tax rate of return in Opportunity Zones and non–Opportunity Zones accounts for taxes paid on original capital gain and any taxes on gain from the new investment. Investment is assumed to be made in 2019 and thus qualify for the full 15 percent reduction in the original gain subject to taxation when paid in 2026. Investment held in Opportunity Zones for 10 years or more qualifies for the elimination of capital gains tax on the new investment. Vertical axis indicates the difference in the post-tax return on investment in Opportunity Zones versus the post-tax return on investment in non–Opportunity Zones, per dollar of original capital gains.

on investment would be 15 percentage points higher, for an effective subsidy of 25 percent of the initial investment. If the pre-tax annual rate of return on investment is 8 percent in Opportunity Zones, the subsidy would be a larger 39 percent of the initial investment. The higher the pre-tax rate of return in Opportunity Zones, the higher the subsidy.

Figure 4 also informs the types of Opportunity Zone investments that are likely to occur. Investment in Opportunity Zones with a pre-tax annual rate of return below 5 percent will not occur regardless of the policy, because even when the policy is in effect the post-tax return on investment is lower inside Opportunity Zones than outside them (because the solid line is below zero percent). Investment in Opportunity Zones with a pre-tax annual rate of return above 7 percent will occur regardless of the policy and thus provide a windfall for investors, because the post-tax return on investment is higher in Opportunity Zones even without the policy

(because the dashed line is above zero percent). Investment in Opportunity Zones will only be induced by the policy if the pre-tax annual rate of return is between 5 percent and 7 percent.

The relatively narrow window of investments induced by Opportunity Zones, in addition to the fact that the subsidy is largest for investment that would have occurred regardless of the policy, suggests that much of the Opportunity Zone tax benefit is likely to go to investments that would have occurred anyway. Some additional investments that were on the margin of being worthwhile could also occur in the absence of Opportunity Zone tax benefits, although they will need to be large enough in scale to outweigh the transaction costs of identifying Qualified Opportunity Funds and ensuring compliance with relevant tax rules. We can rule out the possibility that the Opportunity Zone tax incentives will encourage investment in places where the economic return is substantially less than a normal rate of return. In addition, more uncertainty is likely to reduce the likelihood of investment, because the lower subsidy in cases of lower rates of return will exacerbate the downside risk. Areas that are less distressed or already improving may have greater certainty of a positive return and thus may be the areas where Opportunity Zone investment is more likely. Similarly, investment in residential real estate may be more likely than in sectors where returns are less certain.

The actual window of investments induced by Opportunity Zones may be even narrower than the figure implies. One reason is that investments made after the 2019 scenario depicted in the figure will receive fewer tax benefits and thus the subsidy will be lower. Another reason is that the longer investment is held beyond ten years, a higher than 5 percent rate of return is needed in Opportunity Zones to make the investment more profitable than investing outside Opportunity Zones. Finally, as previously discussed, not all capital gains invested into Opportunity Zones are likely to have been realized in the absence of the policy, and so the subsidies shown may overstate the reward to the investor.

Documenting Opportunity Zone Investment

Empirical research has sought to measure the quantity of investment in Opportunity Zones and where that investment was made, and also to find ways to determine the extent to which that investment was caused by the Opportunity Zone policy.

We can compare total investment for Opportunity Zones and the earlier New Markets Tax Credit. As mentioned above, Coyne and Johnson (2023) estimate about $44 billion has been invested in Qualified Opportunity Funds from 2019 to 2020. In contrast, New Markets Tax Credit allocatees invested about $62.5 billion in Qualified Low-Income Community Investments over fiscal years 2003 to 2021 (CFDI 2023). Focusing just on fiscal years 2019 and 2020, New Markets Tax Credit allocatees invested $6.5 billion. Thus, the amount of investment under Opportunity Zones tax incentives is several times larger than its most comparable program over the same period.

The data for Coyne and Johnson (2023) were assembled from tax forms filed by Qualified Opportunity Funds, which require reporting on the census tracts

where investments were made. They find that investment was disproportionately concentrated among eligible census tracts with higher levels of median income. The 20 percent of selected census tracts with the highest median income levels received 34 percent of Opportunity Zone investment through 2020. Investment was spread relatively evenly among the remaining 80 percent of census tracts, with between 15 and 19 percent of Opportunity Zone investment taking place in each of the bottom four quintiles of the median income distribution. Another indication that Opportunity Zone investment is flowing to areas with a higher rate of return is that Opportunity Zone investment was disproportionately made in places with higher home prices. Coyne and Johnson (2023) calculate that the average dollar of Opportunity Zone investment went to a census tract with a median home value that was 78 percent higher than in eligible Opportunity Zones that received no investment. Also, before being designated as Opportunity Zones, the areas receiving Opportunity Zone investment were already improving more quickly—in terms of income, poverty, unemployment, home values, and education—than the Opportunity Zones that received no investment.

Within the category of designated Opportunity Zones, investment flowed to areas that were already relatively better off and already improving more quickly. Still, these areas were typically worse off than census tracts not eligible to become an Opportunity Zone. To the extent that this investment would not have occurred in the absence of the Opportunity Zone policy, it may still have benefited residents.

Answering how much Opportunity Zones boosted investment, compared to a counterfactual without the policy, is difficult. It requires constructing a control group that mimics the investment that would have occurred in Opportunity Zones if they had not been selected. One approach is to use eligible but not selected census tracts as the control group, and attribute any difference in investment trends after Opportunity Zones were designated to the policy change. However, the fact that Opportunity Zones were improving more quickly than otherwise eligible areas before the policy took effect can make it difficult to determine whether the difference between Opportunity Zones and eligible but not selected census tracts was caused by the policy.

Corinth and Feldman (2023) address this issue by comparing census tracts that were just barely eligible to be selected as an Opportunity Zone with census tracts that were just barely not eligible—a regression discontinuity design. There is no reason to think that these census tracts were meaningfully different from one another on any dimension, and which side of the eligibility threshold on which they fell was essentially random. The authors exploit this feature of the policy design by comparing the investment in tracts barely eligible to tracts barely not eligible to estimate the causal effect of the policy on investment. Their data capture the universe of real estate transactions valued over $2.5 million. Coyne and Johnson (2023) find that most Opportunity Zone investment has gone into real estate, and so any investment effect is most likely to occur within the real estate sector.

Within the real estate sector, Corinth and Feldman (2023) find no evidence of a causal effect of Opportunity Zone eligibility on commercial investment between

2018 and 2022. However, they find potentially important effects on investment in multifamily housing in certain years, including in 2021 and 2022 following the worst effects of the COVID-19 pandemic. Using a different method which compares selected Opportunity Zones to eligible but not selected census tracts, Wheeler (2022) also finds that the Opportunity Zone policy increased the likelihood of new residential development projects in a collection of large cities. He also finds a smaller (in percentage point terms) but statistically significant effect on the likelihood of new commercial development. It is unclear whether the different result for commercial development is a result of bias from using eligible but not selected tracts as a control group, despite potential underlying differences with Opportunity Zones, the lower statistical power of the regression discontinuity design, differences in the underlying sample, or other methodological differences. But ultimately, the evidence of an effect on residential investment seems robust. Investing in apartments in areas with relatively high and rising home prices may allow investors the scale and certainty that makes investment worthwhile, given the Opportunity Zone incentives. Nonetheless, it is less likely that investment in multi-family housing contributes as directly to overall economic development in distressed areas. This finding also stands in contrast to arguments made at the time of Tax Cuts and Jobs Act's passage that Opportunity Zone incentives would facilitate investment in businesses that would have important effects on employment and other improvements.

Downstream Outcomes

While Opportunity Zones were designed as direct incentives for private investment, their ultimate purpose was to promote broader economic prosperity in distressed areas and to improve the well-being of residents, along with the productivity and fiscal health of the nation as a whole. Evidence on this broader question, at least to date, suggests limited effects.

One area in which positive effects might be expected soon after Opportunity Zone designation is in home prices. To the extent that the Opportunity Zone policy led potential home buyers to anticipate increased prosperity in an Opportunity Zone in the future as a result of increased investment, they should have been willing to pay more for housing in the near term. Thus, whether home prices rose after Opportunity Zones were designated is a test of the policy's anticipated effects. Chen, Glaeser, and Wessel (2023) find little if any effect of Opportunity Zones on home prices, and potentially even modest price declines in Opportunity Zones with low employment levels. They speculate that the price decline could be due to expectations of increased housing supply in Opportunity Zones, which is consistent with their additional finding that residential building permits increased modestly in Opportunity Zones relative to eligible but not selected census tracts.

In terms of promoting more downstream outcomes such as employment, wages, household incomes, and economic activity in general, there is little evidence

of positive effects to date. Using individual-level data from the American Community Survey through 2019, Freedman, Khanna, and Neumark (2023) test the initial impact of Opportunity Zone designation on resident well-being. They detect no impacts of Opportunity Zones on employment, earnings, or poverty rates. Relying on a near universe of online job postings from Burning Glass Technologies, available at the zip code level through March 2020, Atkins et al. (2023) find no overall increase in job postings in zip codes that overlap with at least one Opportunity Zone, although they find small effects in certain types of areas (that is, urban areas and areas with a larger black population). Finally, in the study mentioned earlier with a regression discontinuity design, Corinth and Feldman (2023) find no evidence of a causal effect on various dimensions of economic activity, such as business formation and spending based on MasterCard data. One exception to studies finding limited effects is Arefeva et al. (2024), who find that employment rates in Opportunity Zones rose substantially as soon as 2019, the first year with significant Opportunity Zone investment (see Coyne and Johnson 2023), implying fast deployment of capital into previously unplanned projects requiring large numbers of workers. Future research will be needed to reconcile the findings of the early research on Opportunity Zones to determine their effect on downstream outcomes.

The mostly limited evidence for positive impacts of Opportunity Zones on resident wellbeing or other downstream outcomes, at least to date, is consistent with a relatively limited investment response in sectors most relevant for workers. Ultimately, Opportunity Zones were designed in a way that provided the largest tax incentives for investment that would have occurred anyway. Opportunity Zones also incentivized some investment that would not have otherwise occurred, but only if it had close to the rate of return it could have received outside the Opportunity Zone. The empirical evidence to date is consistent with these implications of the program's design. The causal effect of Opportunity Zones on investment appears relatively limited, except in the case of residential investment, where returns may be more certain over the long-run. There is limited evidence that the investment effect that occurred has translated into broader improvements to resident well-being, the ultimate goal of the Opportunity Zone policy. Wessel (2021) offers examples of projects such as storage centers and apartment buildings for students, which may be less likely to drive employment growth. While there are likely specific examples in which the policy-induced investment would not have otherwise occurred and that resident well-being will improve as a result, this does not necessarily appear to be the norm to date. Of course, it may take more time for the effects of increased investment to translate into broader changes in wellbeing (Fikri and Glasner 2023). It will be important to continue to monitor the effects on investment, economic development, and resident well-being in the years to come so that we may have a more informed view of the effects of Opportunity Zones on distressed neighborhoods. This includes any effects on the housing market and geographic sorting. To the extent that increased investment in multi-family housing does not crowd out other housing construction, the expanded supply could relieve pressure on home price increases in gentrifying areas. To the extent that increased multi-family investment increases home prices

without adding to overall housing supply, it could make housing less affordable for renters while increasing the wealth of existing homeowners.

Implications for Future Place-Based Policies

What implications does the experience with Opportunity Zones offer for designing future policies that attempt to reduce geographic disparities in well-being by providing tax incentives for investment? We focus on two criteria: targeting distressed areas and improving the outcomes of residents in those areas.

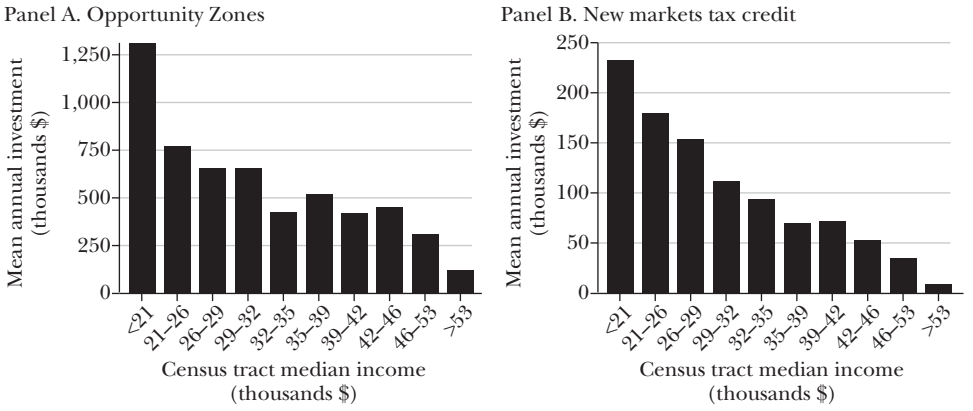
Targeting Distressed Areas

The central purpose of place-based policies is to improve the outcomes of economically distressed neighborhoods or regions. Contrary to early concerns that Opportunity Zones would ultimately benefit relatively better off areas, investment in Opportunity Zones has disproportionately flowed to the lowest income census tracts for the country as a whole. In Figure 5, we plot mean investment in Opportunity Zones for census tracts in various median income buckets, without conditioning on the presence of Opportunity Zone investment, designation as an Opportunity Zone, or eligibility to be an Opportunity Zone. Thus, this figure evaluates the targeting of the Opportunity Zone policy as a whole, incorporating the initial decision by Congress to make certain areas eligible, the decisions by state governors to designate certain eligible areas as Opportunity Zones, and the decisions by private investors to invest in certain Opportunity Zones. In the lowest median income bucket, including census tracts with median household incomes as of 2013–2017 (in 2017 dollars) of less than $21,000, the average census tract received about $1.1 million of Opportunity Zone investment annually. That is close to twice the Opportunity Zone investment received by census tracts with median incomes between $21,000 and $29,000, over three times that received by census tracts with median incomes between $29,000 and $46,000, and over ten times that received by census tracts with median incomes above $46,000.[5]

As shown in Figure 5, Opportunity Zone investment is only modestly less targeted at lower income census tracts than New Markets Tax Credit investment. For example, census tracts with median incomes below $21,000 ($42,000) received 10 percent (55 percent) of Opportunity Zone investment compared to 14 percent (72 percent) of New Markets Tax Credit investment. This pattern holds despite the fact that Opportunity Zone investments are constrained only by the census tracts that were eligible and ultimately chosen by state governors. In contrast, each New Markets Tax Credit project had to be separately approved by authorities. An

[5]We rely on publicly reported data from Coyne and Johnson (2023) on Opportunity Zone investment. We note that H.R. 7467, introduced in the United States House of Representatives in April 2022, would require Treasury to make census tract level investment, among other items, publicly available. Such reporting would be highly beneficial for purposes of evaluating the Opportunity Zones policy.

Figure 5
Mean Annual Investment by Census Tract Median Income, Opportunity Zones and New Markets Tax Credit, 2019–2020



Source: US Census Bureau (2024), CFDI (2023), Coyne and Johnson (2023), and authors' calculations.
Note: Figure plots mean Opportunity Zone investment (panel A) and mean New Markets Tax Credit investment (panel B) by census tract median income, for the period 2019–2020. The amount of Opportunity Zone investment shown is the amount of qualified Opportunity Zone property as of 2020, which includes a small amount of investment made in 2018 in the initial months after zones were designated. Means are calculated over all census tracts in each bucket, regardless of whether a tract received or was eligible for investment. Median income buckets are defined based on the results in Coyne and Johnson (2023) which reported dollars of Opportunity Zone investment in each decile of the Opportunity Zone distribution, but not the full census tract distribution.

important lesson is that allowing for substantial flexibility does not necessarily undermine targeting relative to a more centralized and prescriptive approach. At the same time, the Opportunity Zone policy as a whole was not as targeted as it could have been. Over half of all census tracts were originally made eligible to potentially be designated as Opportunity Zones. In many states, state governors could have selected a substantially more distressed set of census tracts than they actually did.

Policymakers could improve the targeting of future place-based policies by further restricting the set of eligible areas; for example, limiting the contiguity condition for Opportunity Zones, increasing the poverty rate limit, or decreasing the median income limit. If states are to play a role in the selection of areas, they could be provided more time and resources to design a more careful selection; indeed, the process could be overseen by the US Treasury to ensure it meets the goal of targeting and relies on evidence about the places most likely to benefit from increased investment. At the same time, if a policy only provides incentives for investment in highly distressed areas that are unlikely to receive investment regardless of the incentive, then such a policy is doomed to fail. The ideal is to identify areas where the marginal social product of capital is higher than the private value, and to provide sufficient incentives to induce investment.

Improving Outcomes of Residents in Targeted Areas

For a policy that provides incentives for investment in distressed areas to succeed, then (1) the policy needs to induce investment that would not otherwise have occurred, and (2) the induced investment must improve the outcomes of distressed areas, preferably in a cost-effective way that does not harm other distressed areas.

Designing a policy to reward investment that would not have otherwise occurred is difficult, because policymakers cannot observe a counterfactual world without the policy. Instead, policymakers must rely on crude criteria, such as targeting the incentive to places that are more distressed or perhaps have received less investment in the past. Such criteria can be applied at the geographic level, in the case of Opportunity Zones, or at both the geographic and the investment level, in the case of the earlier New Markets Tax Credit. When policymakers or their designees select specific investments for rewards, they can rely on the characteristics of the investment and investor to try to assess whether it would have occurred in the counterfactual world without the policy. At the same time, the individuals and systems charged with selecting individual investors may have imperfect information and conflicting motivations, so it is not necessarily the case that more centralized approaches will more effectively reward investment that would not otherwise have occurred.

Opportunity Zones were designed in a way that rewarded investment that would otherwise have occurred in the policy's absence. Qualified Opportunity Funds have no obligation to invest in marginal projects, nor are there rules that attempt to make this more likely. This design choice was intentional design, given that Opportunity Zones sought to remove the layers of red tape, oversight, and complexity that can hamstring place-based investment incentive programs (Bernstein and Hassett 2015). But it does come with a potential cost in providing windfalls for investment that would have occurred anyway. Another lesson of the Opportunity Zones experience is that more attention should be paid to finding ways of ensuring that a greater share of investment benefiting from the policy is caused by the policy, without necessarily centralizing investment decisions to central authorities that can stifle participation and have its own problems in identifying productive projects that would not have otherwise occurred. Policymakers could strengthen incentives for inframarginal investment in Opportunity Zones. For example, one simple reform could provide greater forgiveness of the tax on the original capital gain, which would disproportionately increase the reward for investments with a somewhat lower private rate of return, but a potentially substantial social rate of return.

Even if a place-based policy induces investment, it will succeed only if that investment improves the outcomes of residents in distressed areas. For example, it is possible that new investment projects induced by the policy ultimately fail because of a skills mismatch with the existing workforce, a lack of necessary infrastructure for the particular project, or other factors. Alternatively, it is certainly plausible that Opportunity Zone investments that are induced by the policy and succeed on their

own terms do not ultimately benefit area residents. For example, Wessel (2021) documents the case of an investor who sets up a Qualified Opportunity Fund to open a storage facility, which employs a minimal number of workers and is likely to have little impact on the area economy. The mostly limited evidence for significant improvements for Opportunity Zone residents suggests that any investment induced by the policy has not necessarily improved Opportunity Zones resident outcomes, at least so far. Policymakers could consider restricting tax benefits to project types that employ a substantial number of workers.

Finally, residents of targeted areas should be helped without hurting residents of other distressed areas. To the extent that place-based tax incentives move investment from one distressed area to another, it will not improve overall welfare. Designating Opportunity Zones at the census tract level, a relatively fine geographic area, could potentially make negative spillover effects more likely. At the same time, providing state governors with autonomy to select Opportunity Zones—at least in theory—allowed them to select groups of contiguous tracts when appropriate, as long as each tract qualified. Thus, one approach may simply be to offer governors better information on the implications of Opportunity Zone selection for potential spillover effects, prior to the selection process.

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