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US Public Policy

Finding Opportunity in Opportunity Zones

Investors with unrealized capital gains can receive significant tax benefits by reinvesting in newly designated Opportunity Zones. We summarize the opportunity and explore direct and secondary beneficiaries.

ALPHAWISE
Evidence-based research



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Finding Opportunity in Opportunity Zones

Investors with unrealized capital gains can receive significant tax benefits by reinvesting gains in newly designated Opportunity Zones. We summarize the ALPHAWISE X opportunity and explore direct and secondary beneficiaries.

The Tax Cuts and Jobs Act introduced a new federal tax incentive designed to promote capital formation and investment in designated economically distressed communities called Opportunity Zones. Over 8,700 census tracts have been designated across the country, including in Puerto Rico and other US territories. The incentive has the possibility to become the nation's largest economic development program, with estimates of \$100 billion in initial investment. ¹ We see the greatest opportunity for benefits in urban zones and tracts with high population density, such as the New York, Los Angeles, Chicago, and Houston metropolitan areas.

Redeploying unrealized capital gains into Opportunity Funds may lead to significant tax benefits for investors. The incentive provides deferral and a reduction of taxes upon realizing capital gains and excludes taxes on new gains generated by Opportunity Funds, if held for 10 years. For 10-year investments with annual returns between 5% and 15%, investors could realize after-tax profit increases between 27% to 52% versus traditional investments. ²

Investment Implications Summary:

• Real Estate & Asset Managers: We believe real estate will be the primary asset class for Opportunity Fund investment. For property types, we see the greatest benefit to affordable and workforce housing, where there are significant rental affordability challenges facing the market. Indeed, while it will likely have a small impact on the 7.2mn national shortfall of affordable rental housing, it's impact could be much greater across individual cities and states (see Exhibit 9 and Appendix B: Rental Affordability Gap by State). Investment formation is likely geared to private

- partnership Opportunity Funds versus REITs, given the structure's already low-tax profile. Platform real estate managers, such as Blackstone (BX), also have the scale and expertise to monetize this opportunity through developments and as fund sponsors.
- Retailers & Restaurants: ~76% of Opportunity Zones lie within metro areas and ~10% of the US population live within a designated zone. Leveraging our proprietary AlphaWise retail database, we were able to screen for retail companies that are well positioned. We like Dollar Stores and Discounters' exposure, particularly DG. In restaurants, we believe WING, DPZ, DNKN are well suited given their domestic growth profiles (note these companies are franchisors that would benefit from incremental royalty/ franchisee fees). In broadline retail, HD, WMT, LOW, COST, TSCO, and LL have strong exposure and may benefit from increased economic activity.
- Municipal Credit: Opportunity Zone incentives create a credit uplift opportunity as zones are disproportionately located in lower-rated geographies: the median single-A county has 14% of its population living within a designated zone versus 5% for the median Aaa county. Investment in these communities could boost the tax base and improve credit health. But a credit uplift is not guaranteed; Opportunity Zone incentives alone likely can't change the complex dynamics governing whether or not an underperforming area transforms into a more vibrant economic zone.
- Impact Investing: Opportunity Funds can provide an interesting alternative for impact investing with the potential to generate attractive economic returns and societal benefits. It is important for Opportunity Funds to have a clearly defined strategy and to target improvements in key demographic KPIs, providing a means to effectively measure the impact created.

WSJ: Big Stock Windfall? New Rule Defers Taxes With Real Estate Investment

² See Investment Return Profile & Considerations

Summary of Key Tax Benefits:

- Deferral of Capital Gains: Individuals or corporations with any capital gain, from the sale of stock to the sale of real estate, can defer taxation on an unlimited amount of realized gains until 2027 if the gain is reinvested in an Opportunity Fund.
- Reduction of Capital Gains: 10% of the realized capital gain tax is forgiven for fund investments held for 5 years, and 15% is forgiven for funds held for at least 7 years, via a tax basis step-up.
- Permanent Exclusion of Taxable Income on Fund Gains: Most appealing, investors pay no capital gain taxes on new gains generated by Opportunity Funds if held for 10 years.

Forthcoming Regulations Are a Key Catalyst: While the contours of the law are known, supporting regulations and agency interpretation are critical for investor participation. US Treasury is expected to release the first round of Opportunity Zone regulations later this month, which we expect will catalyze investment deployment into 2019.

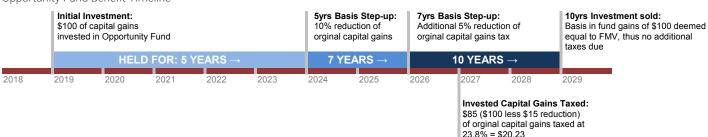
Opportunity Zone Fund Investment Example: Assume a taxpayer has \$100 of capital gains in an existing investment and a 23.8% tax rate. The taxpayer sells the investment and reinvests the capital gains in an Opportunity Fund. This allows the taxpayer to defer paying capital gains taxes until December 31, 2026, or upon sale of the Opportunity Fund investment, whichever comes first.

If held for five years, the \$100 capital gain basis is stepped up by 10%, leaving only \$90 of the deferred gain taxable. After seven years, the basis is stepped up an additional 5%, resulting in an \$85 tax basis. On December 31, 2026, the taxpayer will owe \$20 (\$85*23.8%) in tax. Once the tax is paid on the deferred gain, there will be no additional taxation on the initial \$100 investment.

If the fund investment is held for 10 years, the investor will receive a tax basis step-up equal to the fair value of the fund, thus eliminating any tax liability on the appreciation of the \$100 fund investment.

Exhibit 1:





Source: Morgan Stanley Research

Assuming a 10-year holding period and an 8% annual return, the Opportunity Fund investment would return ~\$196 after tax compared to a traditional investment after tax return of \$143. The structure results in an excess benefit of \$52, or a **36% increase in after-tax profit.**

Todd Castagno, Snehaja Mogre, and Evan Silverberg are members of Morgan Stanley's Accounting & Valuation team. They are not expressing recommendations on equity securities.

Michael Zezas is a fixed income strategists and is not opining on equity securities. His views are clearly delineated.

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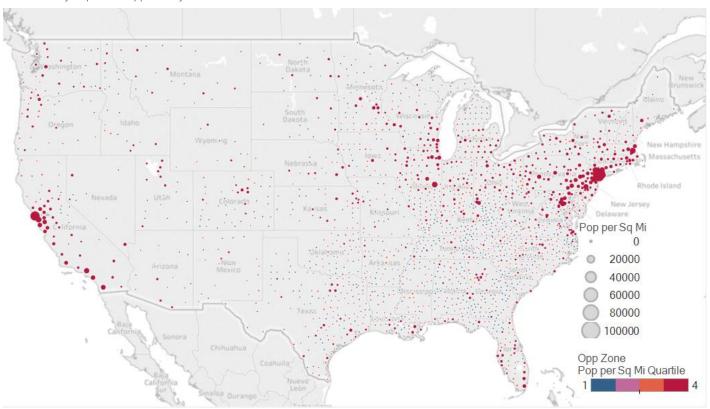
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Opportunity Zone FAQs

Summary: Opportunity Zones are economically distressed census tracts designated by state governors and the Treasury Department. The program permits the reinvestment of capital gains into Opportunity Funds, which then make the investments into qualified Opportunity Zones. Taxpayers are incentivized to invest in Opportunity Funds through the ability to defer taxation on the reinvested capital gains, as well as the potential to eliminate capital gains on Opportunity Fund appreciation.

Exhibit 2:Most Densely Populated Opportunity Zones



Source: AlphaWise, US Census, Morgan Stanley Research

What are Opportunity Zones, and what are the benefits for investors?

Opportunity Zones were created under the Tax Cuts and Jobs Act (TCJA) to incentivize investment and development in economically challenged areas by providing investors with tax benefits.

Deferral

Investors obtain the ability to defer an **unlimited amount of taxable capital gains** by investing part or all of the proceeds of a gain in a qualified Opportunity Fund (O Fund). The property sold can be stock, business assets, personal assets, or any other property. The deferral

of the capital gain taxation lasts until the earlier of the date on which the Opportunity Zone investment is sold, exchanged, or December 31, 2026 (the "Recognition Date").

Basis Step-Up

In addition to being able to defer taxation on reinvested capital gains, a taxpayer will receive an increase in the basis of the deferred gains if the investment is held for certain lengths of time:

- a 10% increase in basis if the O Fund investment is held for at least
 5 years, and
- an additional 5% increase in basis if the O Fund investment is held for at least 7 years.

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A basis step-up effectively functions as a discount factor on the amount of capital gains taxes ultimately due.

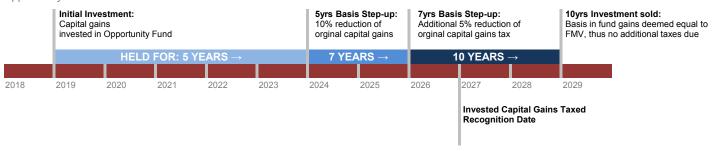
10-Year Holding Period

Most appealing, if the O Fund investment is held for 10 years, then the investor's tax basis in the O Fund will be reset equal to the fair market value. This effectively eliminates any capital gains tax exposure for the cumulative 10-year O Fund investment's gains.

While the tax incentives for a 10-year holding period are lucrative, it is important to remember that the tax liability of the previously deferred capital gains are due at the Recognition Date. In the case of a 10-year investment in an O Fund, the holding period will straddle this date. As a result, the taxpayer must be able to pay the tax liability on the original invested capital gain.

Exhibit 3:

Opportunity Fund Benefit Timeline



Source: Morgan Stanley Research

What are the requirements to become an Opportunity Zone?

To qualify, state governors had until March 21, 2018, to nominate low-income census tracts, which were then certified by the Treasury Department. Low-income census tracts typically have poverty rates of at least 20%, or a median family income no greater than 80% that of the surrounding area. ² Additionally, a population census tract that does not qualify as a "low-income census tract" may be designated as a qualified Opportunity Zone if:

- it is contiguous to a low-income community census tract that has been designated as a qualified Opportunity Zone, and
- the median family income of the tract does not exceed 125% of the median family income of the contiguous low-income tract.

In an effort to concentrate capital flows and increase the likelihood of economic development, governors were limited to nominating 25% of all low-income census tracts within their jurisdiction. ³ States with fewer than 100 qualified census tracts were allowed to nominate up to 25 tracts.

How and when will the investments in Opportunity Zones be made?

An investment in an Opportunity Zone must be made throught an O Fund, which is an investment vehicle that is set up as either a partnership or a corporation with the explicit purpose of investing in Opportunity Zones. No pre-certification or approval is required. An eligible taxpayer may simply self certify by completing a form and attaching to their federal income tax return.

Once taxpayers complete a sale that triggers a capital gain, they have 180 days, beginning on the date of the sale, to invest the amount of the gain into an O Fund. Should a taxpayer invest only a portion of the gain into an O Fund, then only the amount of the gain could be deferred. The excess would be taxable in the year of sale. Conversely, should a taxpayer invest more than the gain into an O Fund, then any amount invested in excess of the gain is not eligible for preferential tax treatment.

² Based on the 2011-2015 American Community Survey

³ Whether in a state, territory, or commonwealth

What can an O Fund invest in?

A O Fund can invest in "qualified Opportunity Zone property," which includes 1) qualified Opportunity Zone stock, 2) qualified Opportunity Zone partnership interests, and 3) qualified Opportunity Zone business property (see <u>Appendix A: Program Specifications</u> for details on investment requirements). There is an exception that disallows investments in certain "sin businesses." ⁴

An O Fund must keep at least 90% of its assets in qualified opportunity zone property. Failure to meet the 90% threshold in a given year does not disqualify the fund, but there will be a penalty for each month it which it fails to meet the requirement. The penalty can be avoided if the O Fund can demonstrate that the failure to meet the 90% test was due to a reasonable cause.

What will happen at the end of the Opportunity Zone designation period?

Currently, the Opportunity Zone designation is set to expire in 2028. However, depending on the success of the structure, Congress may choose to extend. Rep. Mark Meadows (R-N.C.) recently introducted legislation that would provide redesignation of qualified Opportunity Zones every 10 years.

What items are expected to be addressed in the forthcoming regulations?

While the overall tax incentives associated with Opportunity Funds are known, there are critical uncertainties that require resolution through regulations and interpretive guidance. Some of these issues include, but are not limited to:

- The treatment of debt in the context of a partnership Opportunity
 Fund and allocation of fund gains.
- The movement of gains from one Opportunity Fund to another Opportunity Fund, and whether or not this triggers the recognition of a gain.
- Whether new funds can have a "preparatory period" before it is required to satisfy the program requirements.
- $\bullet \quad \hbox{Clarity of how the 10-year benefits will work on investments made} \\$

after 2018 given that the Opportunity Zone designation expires on 12/31/2028.

Once these items, among others, are addressed by the US Treasury we expect investors to mobilize quickly to maximize benefits.

⁴ Including: owning or operating any private or commercial golf course, country club, massage parlor, hot tub facility, suntan facility, racetrack or other facility used for gambling, or liquor store.

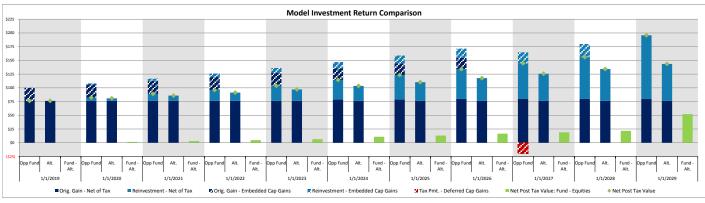
Investment Return Profile & Considerations

Opportunity Fund benefits relative to existing investments accrue through deferral of capital gains and a basis step-up on Opportunity Fund returns in year 10. Given the persistent appreciation of equity markets following the crisis, and since 2016 in particular, many investors hold substantial embedded capital gains in their portfolios. Opportunity Funds are set up to incentivize movement from existing investments with embedded gains given the deferral of tax liability on these gains and the basis step-up offered at the end of a 10-year period. The ability to defer taxes may be an attractive prospect to many investors, particularly those who lack the option to defer capital gains tax liabilities by continuing to hold existing investments, as money that otherwise would be paid out can continue to be used to generate returns. At the end of a 10-year hold period, the basis step-up in gains on the Opportunity Fund investment offer substantial upside to after tax returns vs alternatives.

A stylized comparison of Opportunity Fund and alternative investment post-tax returns. Exhibit 4 compares post-tax returns of an investment of \$100 in prior capital gains in both an Opportunity Fund and an alterative investment with a similar nominal return profile. We assume 1) returns for both investments of 8%, 2) that all gains are in the form of price appreciation for both investments, 3) that investment returns involve no fees, and 4) that in the alternative scenario to the Opportunity Funds, capital gains taxes must be paid at the start of the period, which would be consistent with gains from the sale of a business or private-equity distribution

though not with holding an existing position in an equity portfolio. Due to the deferral of capital gains taxes in the Opportunity Fund, the net post-tax return of the Opportunity Fund immediately begins to move ahead of the alternative, even though both earn the same nominal rate of return. This spread, shown as the light green bar in **Exhibit 4**, grows gradually over the holding period and eventually jumps materially higher (to just over \$52 on an original investment of \$100) in year 10, when gains in the Opportunity Fund receive a basis step-up to FMV.

Exhibit 4:Tax Deferral and Basis Step-Up Boost Opportunity Fund Returns



Source: Morgan Stanley Research.

The basis step-up from a 10-year hold magnifies higher pre-tax rates of return. Exhibit 5 shows the year by year spread in total post-tax rate of return (including point in time embedded tax liabilities) between the two different investments. In our hypothetical, the Opportunity Fund produces a 52% higher return after 10 years on the original \$100 invested, or about 4.3% a year annualized over the 10-year period. Looked at another way, Exhibit 6 shows the percent by which Opportunity Fund investment total dollar values exceed alternative investment dollars on a post-tax basis for different rates of return and holding periods. In all cases the FMV step-up in year 10 provides a larger relative return boost, an effect that grows with higher pretax returns.

Exhibit 5:Relative Return Spike from Opportunity Fund Comes in Year 10

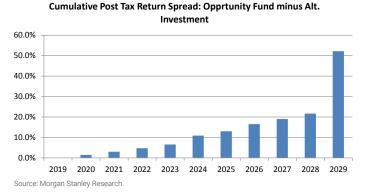


Exhibit 6:After-Tax Investment Difference

	Holding Period				
t Irn		5	7	10	
ment Return	5%	7.00%	10.10%	26.50%	
 	8%	8.18%	12.00%	36.48%	
Inves	12%	8.86%	13.42%	46.40%	
An	15%	8.91%	13.87%	51.89%	

Source: Morgan Stanley Research

Investors without a forced recognition of capital gain see smaller benefits from Opportunity Funds as they have an option to defer capital gains by holding onto existing investments. The examples above assume that an investor must choose between an Opportunity Fund or a liquidation and tax payment on existing capital gains before reinvestment. For an investor who faces no such forced capital gain tax payment, by continuing to hold on to existing investments, embedded tax liabilities can be postponed, allowing for returns to accrue on embedded liabilities similar to the Opportunity Fund. This limits the benefits of the Opportunity Fund for this class of investors to basis step-ups in years 5,7, and 10, with the vast majority of any benefit only accruing in year 10. Using similar assumptions as in the example above, we calculate only a 19% gross post-tax dollar differential and 2.7% annualized rate of return differential vs 36% and 4.3% respectively in the prior example involving deferral of an otherwise forced tax liability recognition.

Structural considerations may mean Opportunity Fund investments appeal to a particular subset of investors rather than all investors looking to defer embedded capital gains taxes. The examples above illustrate 1) the added benefit for investors who would otherwise be forced to recognize a capital gain and 2) the importance of holding Opportunity Funds for 10 years to reap their full relative benefits. Though the ability to defer capital gains and see a rising investment basis may be a substantial contributor to returns eventually, the illiquidity inherent in this strategy may limit its applicability for a broad swath of investors. The benefit concentration at the 10-year horizon may also mean that older investors and their heirs may not actually benefit from the basis step-up as more liquid equity investments (below a threshold amount) would receive a basis when passing through a decedent's estate in any case. Other considerations when comparing Opportunity Funds to alternative investments include the specialized nature of Opportunity Funds potentially causing higher management fees that offset the relative return gap and less ability to mark investments to market to track gains or losses than public market investments. We think these considerations will confine any outflows from public equities into Opportunity Funds in a range that may be meaningful for the various Opportunity Zones, but immaterial for public markets from an outflow perspective.

Investment Implications

Commercial Real Estate

Opportunity Zones are designed to give investors tax breaks for investments in designated areas, which may have significant implications for commercial real estate. Bottom line, capital gain taxes are deferred to encourage investment in over 8,700 designated low-income communities around the country.

We think this likely provides incentives for patient, long-term investments in these areas. We think the primary beneficiary is likely to be high net worth individuals and family offices as they seek to mitigate their tax burdens. We could also see real estate "opportunity" funds start to emerge, but the opportunity for REITs is less meaningful.

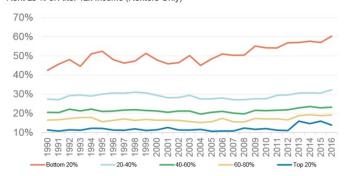
- Opportunity Funds. According to the Real Estate Round Table, the first Opportunity Funds may be closely held partnerships so that decisions are made quickly and efficiently. Indeed, there are regulatory burdens associated with an opportunity fund including how it's structured, the timing of investment, and what qualifies as an investment. With regard to the latter, the law states that the original use of the "qualifying" property must commence with the Opportunity Fund, or the property must be substantially improved by the Opportunity Fund. This likely benefits new construction and development, but may create additional challenges for existing properties. As these requirements are ironed out over time, the pool of Opportunity Fund investors may grow.
- Real Estate Investment Trusts. REITs may be less affected given:
 1) they are tax-exempt entities and 2) they often don't invest in low income areas. The caveat is the potential for REITs to distribute greater capital gains to investors that are currently taxed as ordinary income, but those could theoretically be exempt from taxes if structured appropriately.

In terms of property types, we see the greatest benefit to affordable and workforce housing. As we've discussed at length, there are significant rental affordability challenges facing the market. According to a Zillow article in August 2017, renters nationally spend 29.1% of their income on rent, up from 25.8% historically. In the 25 largest metro areas in the country, people with low incomes pay far more than 30% for rent. For instance, of the top 25 largest metros, rents are most affordable in St. Louis; there, the bottom one-third of renters spend 38.5% of their income on the lowest quality rental properties. In all the other top 25 markets, low-income renters spend

more than 45% of their incomes on rent. In notoriously pricey New York, Los Angeles, and San Francisco, the median low-income wage will not even cover a low-end apartment: Median bottom-tier rents in those markets require 111.8%, 107.8%, and 99.9% of the median low-income wage, respectively, according to Zillow. We believe the challenges facing affordability are not because rents are too high, but rather that we don't have enough supply of these type of properties. Indeed, developers don't typically build Class B/C apartments; instead, buildings drift down the quality scale as they age without being refurbished. If Opportunity Zones can provide an incentive for greater development, they could help mitigate some of these affordability issues.

Exhibit 7:

Rents are rising, particularly the lowest income quintile; more than 11 million renter households pay at least half of their income for housing Rent as % of After Tax Income (Renters Only)

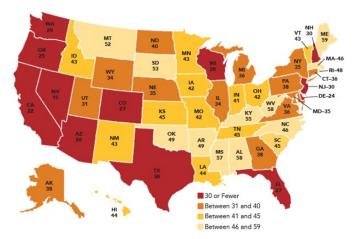


Source: Bureau of Labor Statistics, Morgan Stanley Research

Indeed, the National Low Income Housing Council estimates that the US has a shortage of 7.2 million rental homes affordable and available to extremely low income renters whose incomes are at or below the poverty guideline, or 30% of their area median income. Only 35 affordable and available rental homes exist for every 100 extremely low income renter households. This varies significantly across states, ranging from 15% of affordable and available rental homes in Nevada to 59% in Maine. For the 50 largest metropolitan areas in the US, the supply ranges from 10 affordable and available rental homes for every 100 extremely low income renter households in Las Vegas, Nevada, to 47 in Providence, Rhode Island. Please see The Gap: A Shortage of Affordable Rental Homes for an interactive map providing more detail.

Exhibit 8:

Rental homes affordable and available per 100 extremely low income renter households by state



Source: National Low Income Housing Coalition, Morgan Stanley Research

Assuming all of the \$100 billion in estimated initial investment is allocated to multifamily, we project that this could only fulfill 2-3% of the 7.2mn national shortfall in affordable housing men-

tioned above. It may surprise some people to learn that it's actually expensive to build affordable housing and not materially different from what it costs to build Class A apartments, which is why few developers do it (see The cost of affordable housing: Does it pencilout?). To put things in perspective, it costs as much as 45600k/unittobuild affordable housing in San Francisco. That said, (assuming a cost of \$500k/unit), it would still produce 200,000 units (and potentially more if the cost can be driven lower), which is sufficient to solve the affordable rental housing gap in 40 states on an individual basis and 20-60% of the gap in high impact states.

Please see **Appendix B: Rental Affordability Gap by State** for a more detailed analysis.

Exhibit 9:

Opportunity Zones can fill the 20-60% of the affordability gap in high impact states

Rental Affordability Gap - High Impact States



Source: National Low Income Housing Coalition, Morgan Stanley Research

Alternative Asset Managers

Existing real estate investments in Opportunity Zones could benefit from a potentially larger pool of interested potential buyers. This could lead to better exit values on existing investments, and better returns, while new investments could benefit from tax incentives.

Within our coverage, Blackstone (BX, Overweight) is best positioned to benefit from the incentive as it is the largest buyer and borrower in the commercial real estate industry. We think BX could benefit from more incremental buyers on existing investments which could provide upside to sales prices and investment returns. Opportunity Zones in many areas may coincide with BX's investment philosophy of targeting areas where innovation drives growth in tenants over time. While tax benefits could make investing in Opportunity Zones more attractive, we think the investment would need to fit into BX's overall buy it, fix it, sell it, opportunistic investing philosophy. Further, BX does not do much in the way of new development investing in its opportunistic strategies. Thus, we could see BX as more of a beneficiary on existing investments than on new investments. However, we see an opportunity for BX to create a retail client targeted Opportunity Zone Fund, leveraging its investing expertise and recently built-out retail distribution capabilities and best-in-class brand.

Retail Exposure

According to the US Census Bureau, ~76% of Opportunity Zones lie within metro areas, and a total of 31.3 million people (~10% of US population) live within Opportunity Zones in the 50 United States. Including Puerto Rico and other territories, the total number of people living within Opportunity Zones increases to 35 million. We see the retail sector as being a possible beneficiary of inflows going into these communities.

Leveraging our AlphaWise retail database, we were able to screen for retail companies that may be positioned to receive second-order benefits from Opportunity Zones. **Exhibit 5** lists companies with at least 10% of their existing locations falling within qualified Opportunity Zones and at least 25% are within the zones or within a 1-mile radius.

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Exhibit 10:Retail Companies with Significant Opportunity Zone Exposure

					1M Buffer +
RIC	Company Name	Analyst	Industry	Zone %	Zone %
SFS.N	Smart & Final Stores, Inc.	Sinisi, Vincent	Grocers	18.3%	50.0%
DLTR.O	Dollar Tree, Inc.	Sinisi, Vincent	Food/Dollar	18.1%	46.1%
QSR.N	Restaurant Brands International Inc	Glass, John	Restaurants	16.1%	43.4%
DENN.O	Denny's Corporation	NA	Restaurants	16.4%	41.8%
TACO.O	Del Taco Restaurants, Inc.	NA	Restaurants	11.3%	41.7%
RAD.N	Rite Aid Corporation	NA	Healthcare	14.8%	41.4%
JACK.O	Jack in the Box Inc.	Glass, John	Restaurants	13.4%	41.3%
LOCO.O	El Pollo Loco Holdings Inc	NA	Restaurants	11.6%	40.6%
YUM.N	Yum! Brands, Inc.	Glass, John	Restaurants	14.7%	40.4%
FRED.O	Fred's, Inc. Class A	NA	Healthcare	21.1%	39.9%
RUTH.O	Ruth's Hospitality Group, Inc.	NA	Restaurants	13.4%	39.6%
BIG.N	Big Lots, Inc.	Sinisi, Vincent	Food/Dollar	12.4%	39.5%
DPZ.N	Domino's Pizza, Inc.	Glass, John	Restaurants	13.3%	38.7%
OLLI.O	Ollie's Bargain Outlet Holdings Inc	Sinisi, Vincent	Food/Dollar	13.4%	38.7%
WING.O	Wingstop, Inc.	Glass, John	Restaurants	10.7%	38.4%
WEN.O	Wendy's Company	Glass, John	Restaurants	13.8%	38.2%
WBA.O	Walgreens Boots Alliance Inc	Goldwasser, Ricky	Healthcare	11.1%	38.2%
MCD.N	McDonald's Corporation	Glass, John	Restaurants	14.6%	37.9%
TSCO.O	Tractor Supply Company	Gutman, Simeon	Hardlines	16.4%	37.6%
LL.N	Lumber Liquidators Holdings, Inc.	Gutman, Simeon	Hardlines	12.7%	37.6%
BOJA.O	Bojangles', Inc.	NA	Restaurants	18.2%	36.9%
DNKN.O		Glass, John	Restaurants	10.7%	36.8%
PZZA.O	Papa John's International, Inc.	NA	Restaurants	10.2%	36.5%
DIN.N	Dine Brands Global, Inc.	NA	Restaurants	11.8%	35.4%
SONC.O	Sonic Corp.	Glass, John	Restaurants	15.6%	35.4%
CVS.N	CVS Health Corporation	Goldwasser, Ricky	Healthcare	10.3%	34.3%
HD.N	Home Depot, Inc.	Gutman, Simeon	Hardlines	10.2%	33.6%
SPLS.O	Staples, Inc.	NA	Hardlines	10.8%	33.0%
WMT.N	Walmart Inc.	Gutman, Simeon	Food/Dollar	13.0%	32.7%
LOW.N	Lowe's Companies, Inc.	Gutman, Simeon	Hardlines	11.1%	32.2%
BWLD.O	·	NA	Restaurants	11.4%	32.2%
DG.N	Dollar General Corporation	Sinisi, Vincent	Food/Dollar	14.4%	32.0%
ODP.O	Office Depot, Inc.	NA	Hardlines	10.4%	31.3%
COST.O	Costco Wholesale Corporation	Gutman, Simeon	Hardlines	10.7%	29.9%
CBRL.O	Cracker Barrel Old Country Store, Inc.	NA	Restaurants	13.1%	29.7%
2211210	2.22.2. 22 2.2 22 2.0.0, 11101			70	

Source: AlphaWise, Morgan Stanley Research

Hardline/Broadline Retail (covered by Simeon Gutman): As capital investment in Opportunity Zones increases, presumably improving the economic health of these communities, retailers with high exposure to these zones (HD, WMT, LOW, COST, TSCO, and LL per AlphaWise) could benefit from increasing consumer spending in these neighborhoods. In addition, retailers with growing footprints but less exposure to these zones may elect to take advantage of the favorable tax treatment by adding new stores or distribution centers in these areas. For example, we expect ORLY, AZO and HOME to add ~300, ~175 stores, and ~70 stores, respectively, in 2019-20, and

many of our retailers are adding distribution centers in efforts to optimize supply chains and bolster omni-channel capabilities.

Food Retailers & Dollar Stores (covered by Vincent Sinisi): We especially highlight Dollar Stores and Discounters, whose store bases are often concentrated within lower income cities and communities, as prime candidates to take advantage of Opportunity Zones. In the above list, DLTR, DG, and OLLI have the added advantage of being unit growth stories (~600 annually for DLTR, ~1,000 for DG, and ~50 for OLLI), which may allow these companies to further

increase their exposure to Opportunity Zones. We favor OW-rated DG among our Dollar Stores coverage and believe its systematic, rigorous real estate selection program, which has been successfully honed over the decades, could be best equipped to take advantage of Opportunity Zones and resulting tax benefits. On the Food Retail side, only UW-rated SFS has notable exposure to Opportunity Zones currently. However, SFS's unit growth has materially slowed in the past year as the company right-sizes its operations and remains pressured under a highly competitive Food Retail industry backdrop. Thus, we are less confident in SFS's positioning and ability to utilize favorable tax treatment on its Opportunity Zone stores.

Restaurants (covered by John Glass): Within Morgan Stanley's Restaurants coverage, we see the greatest potential from Opportunity Zones for higher growth all-/nearly-all-franchised quick service restaurant systems, particularly for those where Opportunity Zones can bolster already-stated above-average domestic store growth goals. Note that the primary economic beneficiaries of incremental restaurant unit growth of these nearly-all or all-franchised systems would be franchisees, with the publiclytraded franchisors (noted here) benefiting secondarily from additional royalty/franchisee fees from accelerated unit growth. The greatest beneficiary from Opportunity Zones, in our view, should be WING (OW-rated), which has nearly 1,100 domestic units in its system (plus another >100 internationally). Given its history of growth and long runway for continued growth, its national footprint (WING is located in 43 states), and its willingness to develop in and adaptability to a wide range of real estate opportunities (i.e., "B" and "C" level locations, as opposed to only "A" sites), WING stands poised to benefit the most from Opportunity Zones. We also see DPZ (EW) and DNKN (EW) as likely benefitting from Opportunity Zones, as each brand seeks to expand domestically. In the case of DPZ, it has a stated domestic store potential/target of 8,000+ units, from its current ~5,700 unit base, as it seeks to grow carryout transactions (facilitated by wider store availability). For DNKN, it continues to execute on its goals of leveraging national advertising and awareness to expand more meaningfully beyond its core and established markets, primarily in the Northeast and Florida. Finally, while we see more of QSR's (OW) and YUM's (EW) estimated medium-term MSD+ global unit growth coming from international, established domestic franchisee bases and relatively higher current exposure to Opportunity Zones may present opportunity to shift some unit growth back to the US.

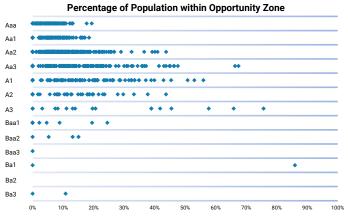
Muni Exposure: An Opportunity, Not a Guarantee

Key Takeaways:

- A credit uplift opportunity... Relative to the muni market,
 Opportunity Zones are disproportionately located in lower-rated
 geographies. Hence there are greater investment incentives in
 lower-rated areas which could boost the tax base, suggesting
 potential for an overall improvement in muni credit health.
- But not a credit uplift guarantee... While Opportunity Zones help incentivize real estate development by lowering the cost of capital for investment, they don't otherwise change the complex dynamics governing whether or not an underperforming area transforms into a more vibrant economic zone. This is borne out in the mixed results of several historical analogues to Opportunity Zones.

Along with our accounting and equity colleagues, we believe Opportunity Zones will drive incremental investment to the designated distressed communities. Theoretically, the incentives and commensurate investments could catalyze economic growth enough to buoy credit quality of exposed municipalities through higher incomes and property values. If the program succeeds, then we should see an uplift to credit quality, all else equal, especially given the greater exposure of lower-rated credits to Opportunity Zones. (The median rating of counties with over 25% of their population living in Opportunity Zones is A1 versus Aa1 for the general market.)

Exhibit 11:Opportunity Zones are concentrated in lower-rated counties



Source: Morgan Stanley Research, Moody's MFRA, Census Bureau, US Treasury

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Exhibit 12:

The median rating of counties with over 25% of their population in a designated Opportunity Zone is 3 notches below that of the general market

Distribution of Muni County Debt by Exposure to Opportunity Zones

Moody's rating	> 25% of Population is in OZ	> 10% of Population is in OZ	>0% of Population is in OZ	All counties
Aaa	0%	20%	41%	41%
Aa1	0%	10%	17%	17%
Aa2	22%	37%	22%	22%
Aa3	27%	13%	■ 6%	7%
A1	38%	3%	2%	2%
A2	6%	14%	9%	9%
A3	6%	2%	1%	1%
Baa1	0%	0%	1%	1%
Baa2	0%	1%	1%	0%
Baa3	0%	0%	0%	0%
Ba1	1%	0%	0%	0%
Ba2	0%	0%	0%	0%
Ba3	0%	0%	0%	0%
Total	1,271	39,204	115,508	119,868
Median rating	A1	Aa2	Aa1	Aa1

Source: Morgan Stanley Research, Moody's MFRA, Census Bureau, US Treasury

However, we doubt Opportunity Zones will prove to be a panacea that creates a virtuous cycle of economic and wage growth in the designated communities. Federally sponsored place-based policies to fuel economic development are not new; similar programs have been implemented locally and nationally since Congressman Jack Kemp imported the concept of Enterprise Zones from England in the 1980s. In 1993, Congress created Empowerment Zones and Enterprise Communities through the Omnibus Budget Reconciliation Act. The Community Renewal Tax Relief Act in 2000 further expanded these programs and complemented them with Renewal Communities and the New Markets Tax Credit (NMTC) program.¹

Generally, these place-based programs entice investments in distressed communities through grants, tax credits tied to employment, and other tax incentives. (This Congressional Research Service report provides more detailed descriptions of the various programs.) Companies, investors, and developers have taken advantage of the benefits (investors are expected to have used over \$20 billion of tax credits from the NMTC by 2019), yet the jury is out on whether place-based stimulative policies improve local economies. The 2011 Congressional Research Service report noted above found that studies by the Government Accountability Office and the US Department of Housing and Urban Development "have failed to link [Empowerment Zone] and [Enterprise Community] designation with a general improvement in community outcomes." Furthermore, their review of academic studies "found modest, if any effects [of zone incentives], and call into question the cost-effectiveness of these

programs."² Separately, in 2013 the Urban Institute estimated that projects which received tax credits from the first four allocation rounds of the NTMC program created over 130,000 permanent jobs, but the authors acknowledged that research had yet to produce "definitive results about the effectiveness of community and economic tax development expenditures."³ This isn't to claim the initiatives are ineffective by any means, but the inconclusive results cast doubt on the ability of place-based federal incentives to improve regional economic conditions.

There is also concern that Opportunity Zone-induced investment will be concentrated in zones which were already attracting investors prior to the enactment of tax reform due to favorable demographics.⁴ ⁵ While the incremental investment would aid the recipient communities, ratings agencies and the market should already be attuned to the positive underlying trends.

High Impact Opportunity (Zone) Counties (Los Angeles, Chicago, New York City, and Houston) identified by our AlphaWise colleagues should serve as large-scale case studies to follow. Their diversified economies will likely blunt any overall uplift in credit quality, particularly for the three which are already highly rated (Los Angeles, New York City, and Houston). The sporadic highlighting of these city maps (Exhibit 14 - Exhibit 17) illuminates another issue of place-based economic policies; a portion of the investments in Opportunity Zones likely will have been shifted from non-designated surrounding areas. This would mitigate the potential growth in a county's or city's tax base.

We do note that there are important differences between Opportunity Zones and their historical analogues, including a focus on real estate development instead of local employment requirements and a more diversified national presence instead of designations awarded only to certain communities. These differences could produce better, or at least more easily quantifiable, outcomes, but we are adopting a wait-and-see approach.

 $^{1\,}$ Wallwork, Adam & Schakel, Linda. Primer on Qualified Opportunity Zones. Ballard Spahy LLP. May 2018.

² Empowerment Zones, Enterprise Communities, and Renewal Communities: Comparative Overview and Analysis. CRS. February 2011.

³ Abravanel, M, et al. <u>NEW MARKETS TAX CREDIT (NMTC)PROGRAM EVALUATION</u>. Urban Institute. April 2013.

⁴ Looney, Adam. <u>Will Opportunity Zones help distressed residents or be a tax cut for gentrification?</u> Brookings. February 2018.

⁵ Theodos, B., Meixell, B., Hedman, C. <u>Did States Maximize Their Opportunity Zone Selections?</u> The Urban Institute. July 2018.

⁶ New Markets Tax Credit: An Introduction. CRS. August 2016.

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In regards to supply, we do not expect that the program, as currently structured, will noticeably increase muni issuance. Unlike the Low Income Housing Tax Credit (LIHTC) program, where tax credits are allocated alongside of multifamily housing bonds, Opportunity Zones only cheapen the cost of equity capital for qualified businesses. Unless Congress creates a bond-specific program, like Enterprise Zone facility bonds, tied to Opportunity Zones, we would expect Opportunity Zones only to foster bespoke transactions similar to the NMTC program.

Impact Investing: New Alternative for Positive Social Impact

Opportunity Funds can provide an interesting alternative for impact investing. Impact strategies are typically based on the idea that investing in companies whose products and services have a meaningful social or environmental benefit, while offering an equally attractive financial return. The impact of these investments can be measured in various ways, both qualitatively and quantitatively, to enable investors to assess the positive societal or nonfinancial benefits that they have achieved as a result of their capital allocation decisions. We note that over the last 12 months, there has been a noticeable in interest in impact investing in the US, with investors continuing to explore new and innovative strategies.

Opportunity Funds can achieve a similar objective, generating a positive social impact, if executed properly. As shown in the chart below, major economic indicators of the designated Opportunity Zones are meaningfully below the broader US, with notably higher poverty levels (32% vs. US average 12%), and significantly higher unemployment rates (13.1% vs. US average 3.7%). Capital inflows into these areas, if allocated appropriately, can potentially help mitigate some of these inequalities and foster greater inclusive growth, or growth that is more fairly distributed across these regions. The alternative - rising inequality - can limit underlying growth and spending power, and also lead to underinvestment in areas like education and development.

Exhibit 13:Economic Comparison of Opportunity Zones with US Averages

	Opportunity	US
	Zones	Average
Median household income	\$33,345	\$61,372
Poverty rate	31.8%	12.3%
Unemployment	13.1%	3.7%
Median home value	\$145,187	\$309,800
Homeownership	44.6%	64.3%
Age 25+ with bachelor's degree or higher	38.0%	45.7%

Source: Urban Institute, Census.gov, Federal Reserve Bank of St. Louis, National Center for Education Statistics. Morgan Stanley Research

From an impact investment standpoint, we expect that two key elements of Opportunity Funds will be 1) having a well-defined framework in place and 2) effectively measuring and reporting on the impact being created. Opportunity Funds will likely appeal to a wide spectrum of investors, with different objectives and strategies. Therefore, we think it is important for a fund to clearly define its impact strategy. For single-asset, or geographically concentrated Opportunity Funds, strategies might include active engagement with key community stakeholders at the local level to infer where incremental capital might have the most impact. Diversified Opportunity Funds might target the improvement of various KPIs via investments across different Opportunity Zones.

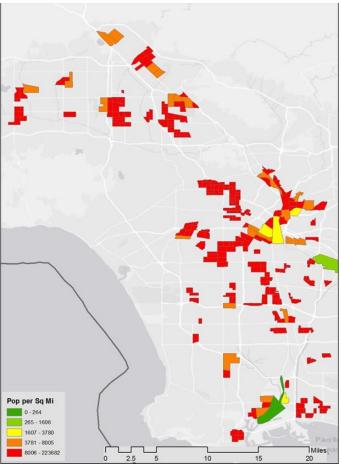
Possible KPIs that an Opportunity Fund might consider include:

- Number of jobs created as a result of capital investments
- Change in unemployment rates over the course of the investment
- Trajectory of median household income, or change in poverty rate
- Number of affordable housing units created and percentage of population served
- Change in homeownership levels and/or change in the number of individuals living under severe rent burdens

High Impact Opportunity (Zone) Counties

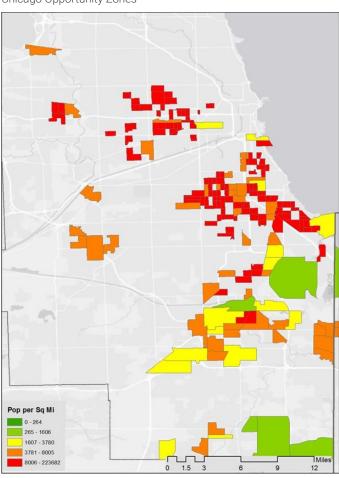
While Opportunity Zones are designed to help both rural and urban communities, there is a far larger number of people living in the urban zones. Los Angeles County, California, has the largest number of people who reside in Opportunity Zones of any county, with a impacted population of 1,134,881. Cook County (Chicago), Illinois, is second with a population of 594,917 living within Opportunity Zones. Kings County (Brooklyn), New York, has the third largest population with 469,418 people residing within Opportunity Zones. The five boroughs that comprise New York City (New York, the Bronx, Brooklyn, Queens, and Staten Island) combine for a total of 1,377,197 people residing in Opportunity Zones. Harris County (Houston), Texas, rounds out the top four affected counties with a total of 464,854 people residing within Opportunity Zones.

Exhibit 14:Los Angeles Opportunity Zones



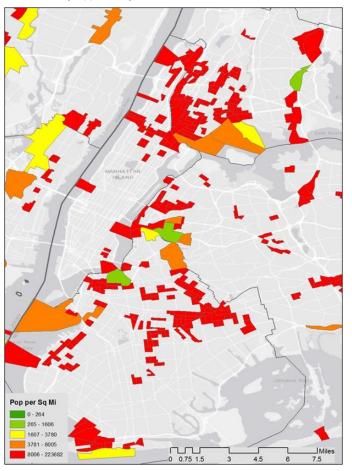
Source: AlphaWise, US Census, Dept. of Treasury, ESRI, Morgan Stanley Research

Exhibit 15:Chicago Opportunity Zones



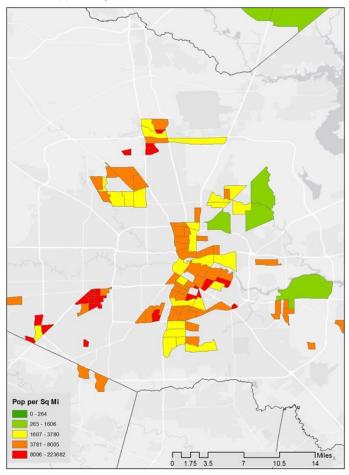
Source: AlphaWise, US Census, Dept. of Treasury, ESRI, Morgan Stanley Research

Exhibit 16:New York City Opportunity Zones



Source: AlphaWise, US Census, Dept. of Treasury, ESRI, Morgan Stanley Research

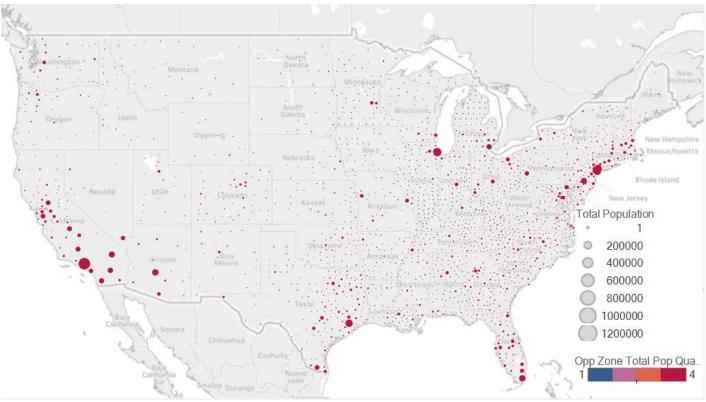
Exhibit 17:Houston Opportunity Zones



Source: AlphaWise, US Census, Dept. of Treasury, ESRI, Morgan Stanley Research

Interestingly, looking at the population density of the Opportunity Zones yields some quite different results than looking purely at the population. While Los Angeles County has the greatest amount of people living in Opportunity Zones, it is only the 12th most densely populated in the US, and the 3rd most densely populated in California. Manhattan, the Bronx, Brooklyn, and Queens rank 1st, 2nd, 4th, and 5th, respectively, in terms of most densely populated Opportunity Zones. These densely populated areas may prove to be a draw for Opportunity Funds, especially in the retail sector.

Exhibit 18:Most Populated Opportunity Zones

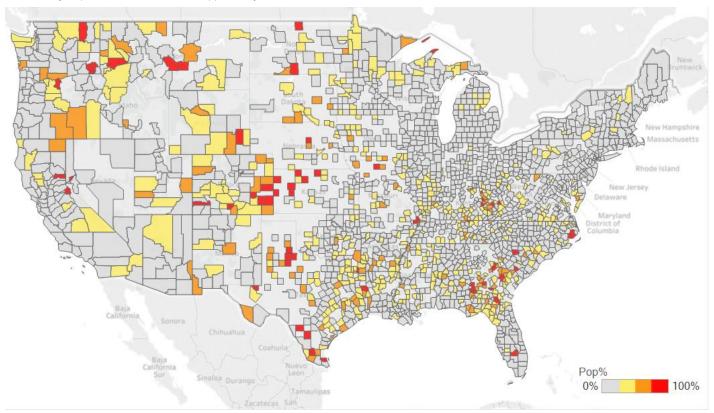


Source: AlphaWise, US Census, Morgan Stanley Research

When looking at the percent of a county's population that resides within Opportunity Zones, there is a significant shift away from major cities (**Exhibit 19**).

Exhibit 19:

% of County Population that Lives in an Opportunity Zone



Source: AlphaWise, US Census, Morgan Stanley, Research

Appendix A: Program Specifications

Qualified Opportunity Zone Business

- A trade or business in which:
- substantially all of the tangible property that is owned or leased by the entity is Opportunity Zone business property,
- a substantial portion of intangible property must be used in the active conduct of the business,
- at least 50% of its gross income is from the active conduct of a trade or business, and
- less than 5% of its assets are invested in nonqualified financial property (stocks, bonds, options, etc.).

Qualified Opportunity Zone Stock

- Stock of a domestic corporation that is:
- acquired by the O Fund after 12/31/2017,
- at original issuance strictly for cash, and
- at issuance, and during substantially the entire O Fund holding period, the corporation is a qualified opportunity zone business.

Qualified Opportunity Zone Partnership Interest

Includes any interest organized as a partnership as long as the same requirements as Opportunity Zone stock are met.

Qualified Opportunity Zone Business Property

Opportunity Zone business property must be tangible property that is used in a trade or business. In order to meet the requirements set forth in the TCJA the property must be acquired after December 31, 2017, be for original use that commences with the Opportunity Zone business or the Opportunity Fund business must substantially improve the property, and substantially all of the use of the property comes from the Opportunity Zone.

Original Use

The term "original use" is not defined in the TCJA. While it may seem straight forward, we expect to see the Treasury Department address this issue when the regulations are finally released, as there are different definitions of original use in the tax code. Within Section 1394, property is considered to be of original use if it was vacant for at least a one-year period prior, including the date of zone designation. The topic of original use is of importance to the real estate community, as was noted in a Real Estate Roundtable letter to Congress. The letter specifically asked for clarity on whether, if a building is unused or vacant for a significant period of time, a new investment into the building be considered an original use purpose.

Substantial Improvement

Opportunity Zone business property is considered to be substantially improved if, during any 30-month period following the acquisition of the property, there are additions to the basis that are equal to the tax basis of the property at the beginning of the 30-month period.

The Real Estate Roundtable also asked the Treasury to clarify whether there would be any relief should the substantial improvement period extended beyond 30 months due to circumstances outside the taxpayer's control. In the Roundtable participants' view, allowing an extension beyond the 30-month period due to unforeseen circumstances would remove a great amount of investor uncertainty and would promote greater investment and development.

Appendix B: Rental Affordability Gap by State

Exhibit 20:

State-by-State Affordable Rental Gap Analysis

	# of extremely low	% of affordable and	Affordability	Estimated
	income renter households	available rental homes	Gap (Units)	% Filled
AK	17,384	38%	10,778	100%
AL	190,170	58%	79,871	100%
AR	117,620	49%	59,986	100%
AZ	214,776	26%	158,934	100%
CA	1,387,142	22%	1,081,971	18%
со	171,933	26%	127,230	100%
СТ	140,531	36%	89,940	100%
DE	26,766	24%	20,342	100%
FL	584,782	26%	432,739	46%
GA	353,762	38%	219,332	91%
HI	36,317	44%	20,338	100%
IA	100,763	42%	58,443	100%
ID	51,313	43%	29,248	100%
IL	470,457	34%	310,502	64%
IN	227,314	41%	134,115	100%
KS	95,864	45%	52,725	100%
KY	182,589	55%	82,165	100%
LA	201,713	44%	112,959	100%
MA	299,505	36%	191,683	100%
MD	190,950	35%	124,118	100%
ME	39,425	59%	16,164	100%
MI	329,892	36%	211,131	95%
MN	161,286	43%	91,933	100%
МО	206,108	42%	119,543	100%
MS	111,419	57%	47,910	100%
MT	34,270	52%	16,450	100%
NC	354,851	46%	191,620	100%
ND	26,964	40%	16,178	100%
NE	66,111	35%	42,972	100%
NH	38,131	30%	26,692	100%
NJ	299,191	30%	209,434	95%
NM	71,508	43%	40,760	100%
NV	95,734	15%	81,374	100%
NY	949,634	35%	617,262	32%
ОН	450,759	42%	261,440	76%
OK	134,675	49%	68,684	100%
OR	134,438	25%	100,829	100%
PA	420,045	38%	260,428	77%
RI	54,077	48%	28,120	100%
		45%		
SC	164,965		90,731	100%
SD	29,065	53%	13,661	100%
TN	241,225	45%	132,674	100%
TX	873,417	30%	611,392	33%
UT	61,797	32%	42,022	100%
VA	257,338	36%	164,696	100%
VT	21,410	43%	12,204	100%
WA	230,395	29%	163,580	100%
WI	193,698	28%	139,463	100%
wv	62,076	58%	26,072	100%
WY	16,356	34%	10,795	100%
Total / Avg	11,191,911	39%	7,253,631	2.76%

Source: National Low Income Housing Coalition, Morgan Stanley Research

Morgan Stanley is acting as financial advisor to Gramercy Property Trust ("Gramercy") in connection with its definitive agreement with affiliates of Blackstone Real Estate Partners VIII, under which Blackstone will acquire all outstanding shares of common stock of Gramercy, as announced on May 7, 2018. The proposed transaction is contingent upon customary closing conditions, including the approval of Gramercy's shareholders. Gramercy has agreed to pay fees to Morgan Stanley for its financial services which are contingent upon consummation of the transaction. This report and the information provided herein is not intended to (i) provide voting advice, (ii) serve as an endorsement of the proposed transaction, or (iii) result in the procurement, withholding or revocation of a proxy or any other action by a security holder. Please refer to the notes at the end of this report.

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Jonathan F Garner; Pankaj Mataney; Takeshi Economics != Yamaguchi

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Life Science Tools & Diagnostics Steve Beuchaw September 18, 2018

US Dental: It's Not Getting Any Easier: We review feedback on the Dental sector, post updates from STMN, DHR, MMM, and our AlphaWise team, relevant also for ALGN, XRAY, HSIC and PDCO.

Source: AlphaWise

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Within the last 12 months, Morgan Stanley has received compensation for investment banking services from AmerisourceBergen Corp., Apollo Global Management LLC, Ares Management, L.P., At Home Group Inc, BJ'S Wholesale Club, BlackRock Inc., Brightsphere Investment Group PLC, Catalent, Inc., Charles River Laboratories International, Charles Schwab Corp, Chipotle Mexican Grill, Inc., Diplomat Pharmacy Inc, E*Trade Financial Corp, Express Scripts, Inc., Franklin Resources Inc., Hamilton Lane Incorporated, Home Depot Inc, Inovalon Holdings Inc, Invesco, Jack in the Box Inc., KKR & CO. L.P., Kroger Co., McDonald's Corporation, Starbucks Corp., T. Rowe Price Group, Inc., The Blackstone Group L.P., The Carlyle Group L.P., Valvoline Inc., Victory Capital Holdings Inc, Virtu Financial Inc, Virtus Investment Partners, Walgreens Boots Alliance Inc, Walmart Inc, WW International Inc., Yum! Brands, Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Advance Auto Parts Inc, Allscripts Healthcare Solutions Inc, AmerisourceBergen Corp., Apollo Global Management LLC, Ares Management, L.P., athenahealth Inc, AutoZone Inc., Bed Bath & Beyond Inc., Best Buy Co Inc, BJ'S Wholesale Club, BlackRock Inc., Bloomin' Brands Inc, Brightsphere Investment Group PLC, Brinker International Inc., Cardinal Health Inc, Catalent, Inc., Cerner Corporation, Charles River Laboratories International, Charles Schwab Corp, Chipotle Mexican Grill, Inc., Costco Wholesale Corp, Darden Restaurants Inc., Dick's Sporting Goods, Diplomat Pharmacy Inc, Dollar General Corporation, Dollar Tree Inc, Dunkin Brands Group Inc, E*Trade Financial Corp, El Pollo Loco Holdings, Express Scripts, Inc., Franklin Resources Inc., GNC Holdings Inc, Hamilton Lane Incorporated, Home Depot Inc, Inovalon Holdings Inc, Invesco, Iqvia Holdings Inc, Jack in the Box Inc., KKR & CO. L.P., Kroger Co., Laboratory Corp. of America Holdings, Legg Mason Inc., Lowe's Companies Inc, LPL Financial Holdings Inc., McDonald's Corporation, McKesson Corporation, Medidata Solutions Inc., Nextgen Healthcare Inc, O'Reilly Automotive Inc, Oaktree Capital Group, LLC, Party City Holdco Inc, Performance Food Group Co, Quest Diagnostics Inc., Restaurant Brands International, Inc., Shake Shack Inc, Sprouts Farmers Market Inc, Starbucks Corp., Sysco Corp, T. Rowe Price Group, Inc., Target Corp, TD Ameritrade Holding Corp., The Blackstone Group L.P., The Carlyle Group L.P., The Cheesecake Factory, Inc., The Michaels Companies, Inc., The Wendy's Company, Tractor Supply Co, Ulta Beauty Inc, US

Foods Holding Corp., Valvoline Inc., Victory Capital Holdings Inc, Virtu Financial Inc, Virtus Investment Partners, Waddell & Reed Financial Inc, Walgreens Boots Alliance Inc, Walmart Inc, Williams-Sonoma Inc, Wingstop Inc, WisdomTree Investments, Inc., WW International Inc., Yum! Brands, Inc.

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Global Stock Ratings Distribution

(as of September 30, 2018)

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	Coverag	e Universe	Inve	estment Banking Clien	ts (IBC)	Other Material Inv	vestment Services Clients (MISC)
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1178	37%	308	42%	26%	562	40%
Equal-weight/Hold	1378	44%	343	46%	25%	625	44%
Not-Rated/Hold	49	2%	5	1%	10%	7	0%
Underweight/Sell	554	18%	83	11%	15%	224	16%
Total	3,159		739			1418	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

 $Unless \ otherwise \ specified, the time \ frame \ for \ price \ targets \ included \ in \ Morgan \ Stanley \ Research \ is \ 12 \ to \ 18 \ months.$

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

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Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/15/2018)
Simeon Gutman, CFA		
Advance Auto Parts Inc (AAP.N)	O (06/23/2014)	\$166.93
At Home Group Inc (HOME.N)	0 (06/26/2018)	\$27.58
AutoZone Inc. (AZO.N)	E (07/06/2017)	\$787.00
Bed Bath & Beyond Inc. (BBBY.0)	U (06/23/2014)	\$13.94
Best Buy Co Inc (BBY.N)	E (01/19/2016)	\$72.99
BJ'S Wholesale Club (BJ.N)	E (07/23/2018)	\$24.10
Costco Wholesale Corp (COST.0)	E (10/06/2017)	\$224.51
Dick's Sporting Goods (DKS.N)	E (05/20/2016)	\$33.86
GNC Holdings Inc (GNC.N)	E (05/30/2018)	\$4.10
Home Depot Inc (HD.N)	0 (02/23/2017)	\$191.17
Lowe's Companies Inc (LOW.N)	O (01/21/2015)	\$104.67
Lumber Liquidators Holdings Inc (LL.N)	E (03/02/2015)	\$13.14
National Vision Holdings Inc. (EYE.0)	0 (11/20/2017)	\$42.18
O'Reilly Automotive Inc (ORLY.O)	E (07/06/2017)	\$343.54
Party City Holdco Inc (PRTY.N)	E (01/19/2016)	\$11.05
Pier 1 Imports, Inc. (PIR.N)	U (04/01/2015)	\$1.64
Sally Beauty Holdings Inc (SBH.N)	U (11/08/2017)	\$18.49
Target Corp (TGT.N)	U (06/23/2014)	\$84.60
The Michaels Companies, Inc. (MIK.0)	0 (01/17/2017)	\$16.36
Tractor Supply Co (TSCO.0)	E (06/23/2014)	\$86.57
Ulta Beauty Inc (ULTA.O)	0 (01/17/2018)	\$281.73
Valvoline Inc. (VVV.N)	E (10/18/2016)	\$19.83
Vitamin Shoppe Inc (VSI.N)	E (09/17/2018)	\$9.99
Walmart Inc (WMT.N)	E (01/21/2015)	\$93.82
Wayfair Inc (W.N)	E (04/25/2018)	\$121.05
Williams-Sonoma Inc (WSM.N)	E (08/28/2014)	\$61.27
Stock Ratings are subject to change. Please see latest		
research for each company.		
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INDUSTRY COVERAGE: Food Retailers

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/15/2018)
Vincent J Sinisi		
Big Lots Inc (BIG.N)	O (09/25/2017)	\$43.71
Dollar General Corporation (DG.N)	O (02/16/2016)	\$106.39
Dollar Tree Inc (DLTR.O)	E (02/16/2016)	\$80.97
Five Below Inc (FIVE.0)	E (06/24/2014)	\$114.14
Kroger Co. (KR.N)	E (06/19/2017)	\$27.50
Ollie's Bargain Outlet Holdings Inc (OLLI.0)	E (09/25/2017)	\$88.90
Performance Food Group Co (PFGC.N)	E (10/27/2015)	\$28.59
Smart & Final Stores, Inc. (SFS.N)	U (08/16/2016)	\$5.05
Sprouts Farmers Market Inc (SFM.0)	E (06/15/2017)	\$27.33
Supervalu Inc (SVU.N)	E (07/29/2015)	\$32.46
Sysco Corp (SYY.N)	E (01/16/2018)	\$68.96
United Natural Foods Inc. (UNFI.O)	U (04/11/2016)	\$26.59
US Foods Holding Corp. (USFD.N)	O (05/15/2018)	\$28.48
WW International Inc. (WTW.N)	E (09/13/2018)	\$65.55
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INDUSTRY COVERAGE: Restaurants

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/15/2018)
John Glass		
BJ's Restaurants, Inc. (BJRI.0)	E (09/16/2015)	\$67.24
Bloomin' Brands Inc (BLMN.O)	U (01/17/2017)	\$19.84
Brinker International Inc. (EAT.N)	U (01/17/2017)	\$46.05
Chipotle Mexican Grill, Inc. (CMG.N)	O (08/15/2018)	\$431.74
Darden Restaurants Inc. (DRI.N)	E (10/30/2014)	\$106.74
Dominos Pizza Inc. (DPZ.N)	E (03/27/2008)	\$272.94
Dunkin Brands Group Inc (DNKN.O)	E (09/06/2011)	\$73.16
Jack in the Box Inc. (JACK.0)	E (03/26/2018)	\$82.02
McDonald's Corporation (MCD.N)	E (10/06/2014)	\$163.67
Red Robin Gourmet Burgers, Inc. (RRGB.0)	E (01/09/2013)	\$38.37
Restaurant Brands International, Inc. (QSR.N)	O (03/26/2018)	\$57.60
Shake Shack Inc (SHAK.N)	E (12/07/2017)	\$58.03
Sonic Corp. (SONC.0)	E (06/19/2013)	\$43.31
Starbucks Corp. (SBUX.0)	E (06/20/2018)	\$56.75
Texas Roadhouse, Inc. (TXRH.O)	E (01/17/2017)	\$66.51
The Cheesecake Factory, Inc. (CAKE.O)	E (03/27/2008)	\$50.36
The Wendy's Company (WEN.O)	E (01/08/2015)	\$17.26
Wingstop Inc (WING.0)	O (07/07/2015)	\$72.30
Yum! Brands, Inc. (YUM.N)	E (01/09/2014)	\$88.45
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INDUSTRY COVERAGE: Healthcare Services & Distribution

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/15/2018)
Brian Essex, CFA		
Medidata Solutions Inc. (MDS0.0)	E (05/21/2018)	\$67.32
Ricky R Goldwasser		
Allscripts Healthcare Solutions Inc. (MDRX.0)	U (12/13/2016)	\$13.53
AmerisourceBergen Corp. (ABC.N)	E (09/14/2017)	\$89.54
athenahealth Inc (ATHN.O)	E (10/26/2016)	\$124.63
Cardinal Health Inc (CAH.N)	U (11/19/2017)	\$51.53
Catalent, Inc. (CTLT.N)	O (09/21/2017)	\$41.57
Cerner Corporation (CERN.O)	E (08/10/2017)	\$62.43
Charles River Laboratories International (CRL.N)	E (03/03/2010)	\$121.86
CVS Health Corp (CVS.N)	O (01/05/2018)	\$73.06
Diplomat Pharmacy Inc (DPLO.N)	E (10/01/2015)	\$18.81
Express Scripts, Inc. (ESRX.O)		\$93.52
Inovalon Holdings Inc (INOV.0)	U (03/14/2018)	\$10.14
Iqvia Holdings Inc (IQV.N)	O (06/18/2013)	\$124.26
Laboratory Corp. of America Holdings (LH.N)	O (02/23/2015)	\$169.53
McKesson Corporation (MCK.N)	E (09/14/2017)	\$131.37
Nextgen Healthcare Inc (NXGN.O)	U (12/13/2016)	\$19.53
Quest Diagnostics Inc. (DGX.N)	O (05/29/2018)	\$99.96
Walgreens Boots Alliance Inc (WBA.O)	E (10/06/2017)	\$74.72
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INDUSTRY COVERAGE: Brokers & Asset Managers

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/15/2018)
Michael J. Cyprys, CFA, CPA		
Apollo Global Management LLC (APO.N)	0 (01/03/2018)	\$31.15
Ares Management, L.P. (ARES.N)	E (12/15/2014)	\$20.65
BlackRock Inc. (BLK.N)	O (09/18/2015)	\$426.94
Brightsphere Investment Group PLC (BSIG.N)	E (01/26/2016)	\$12.28
Charles Schwab Corp (SCHW.N)	0 (09/26/2016)	\$47.64
E*Trade Financial Corp (ETFC.0)	O (01/03/2018)	\$49.36
Franklin Resources Inc. (BEN.N)	U (03/16/2017)	\$28.95
Hamilton Lane Incorporated (HLNE.O)	E (10/05/2017)	\$39.04
Invesco (IVZ.N)	E (01/03/2018)	\$20.42
KKR & CO. L.P. (KKR.N)	E (02/17/2016)	\$24.82
Legg Mason Inc. (LM.N)	U (10/05/2017)	\$29.10
LPL Financial Holdings Inc. (LPLA.0)	E (01/03/2018)	\$59.53
Oaktree Capital Group, LLC (OAK.N)	O (12/15/2014)	\$41.03
T. Rowe Price Group, Inc. (TROW.0)	E (10/05/2017)	\$100.67
TD Ameritrade Holding Corp. (AMTD.0)	E (09/26/2016)	\$49.78
The Blackstone Group L.P. (BX.N)	O (12/15/2014)	\$35.15
The Carlyle Group L.P. (CG.O)	0 (02/17/2016)	\$20.75
Victory Capital Holdings Inc (VCTR.0)	O (03/05/2018)	\$7.88
Virtu Financial Inc (VIRT.0)	E (08/08/2018)	\$22.57
Virtus Investment Partners (VRTS.0)	E (06/01/2017)	\$111.53
Waddell & Reed Financial Inc (WDR.N)	U (09/18/2015)	\$20.20
WisdomTree Investments, Inc. (WETF.0)	E (09/18/2015)	\$7.45
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