JUNE 2024 | INVESTMENT RESEARCH

Addressing Housing Affordability: Two Opportunities

Executive Summary

- Rental housing in the United States, which accounts for over one-third of all housing, is now unaffordable for more than 20 million households.
- The underlying cause of declining affordability is demand for housing that has outstripped net new supply, particularly over the past 15 years.
- This presents an opportunity for private investors to help, by investing in regulated affordable rental units and by providing new market-rate rental housing.

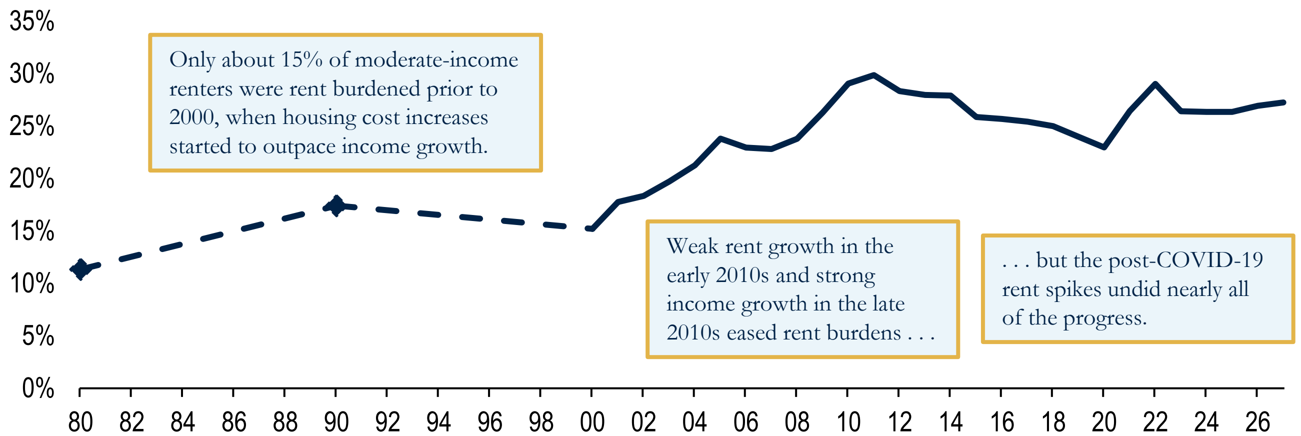
More than one in four middle-income renter households spend more than 30% of their earnings on rent, as shown in **Exhibit 1**. Investors can help to reduce rent burdens with a two-pronged approach:

- **Preserving regulated affordable housing is a first-order approach**, by matching residents with housing that is attainable when market-rate units are out of reach. This is essential to address today's needs.
- **Building market-rate rental housing is also critical**. Every new unit of market-rate housing is occupied by a resident who otherwise would have rented an older, more affordable unit.

These solutions are presented as two-pronged, but they are not always or even usually exclusive. For example, many new market-rate rental multifamily communities include an affordable component, due to regulatory requirements or incentives. Affordability needs can be addressed by building both types.

Exhibit 1: Rent Burdens Are Rising Again

Share of Households Earning 60% to 120% of Area Median Income Who Are Rent Burdened



Sources: U.S. Census Bureau, PGIM Real Estate. As of June 2024. **Forecasts are not guaranteed and may not be a reliable indicator of future results**.

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1. The Current State of Housing Affordability

Rental housing affordability has declined for most of the last two decades, with a rising share of rental households cost burdened by paying more than 30%[1] of their income for housing as compared to the pre-2000 period. At the national level, about half of renters are classified as rent burdened under this metric.

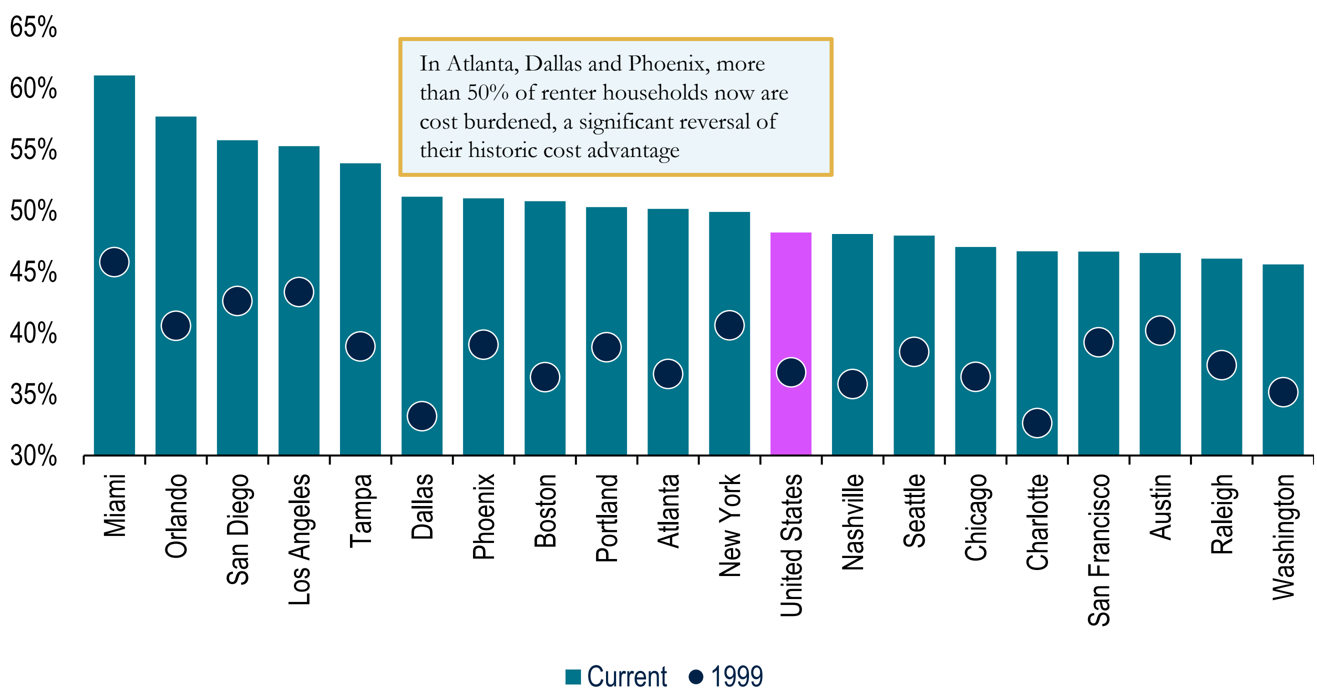
However, **stretched affordability is no longer a problem just for the lowest earning households**. As shown in **Exhibit 1**, more than one-quarter of households earning between 60% and 120% of local area median incomes are rent burdened compared to just 15% as of 2000.

More metropolitan areas have become unaffordable to many as well, even those that have historically been affordable. As shown in **Exhibit 2**, many Sunbelt markets, which historically have attracted domestic migrants due in part to the affordability of housing, now have rent burdens higher than the national average.

Concurrently, the United States has gone from a surplus in the 2000s – a period when housing construction was running at an historically high pace – to **a severe shortage that we estimate to be 3.3 million units today**, as shown in **Exhibit 3**.

Exhibit 2: Affordability Has Deteriorated in All Major Markets

Cost-Burdened Renter Households (% of All Renters)



Sources: JCHS tabulations of U.S. Census Bureau, Oxford Economics, PGIM Real Estate. As of June 2024.

[1] HUD considers households as cost burdened if they spend more than 30% of their gross income on housing costs, including rent and utilities.

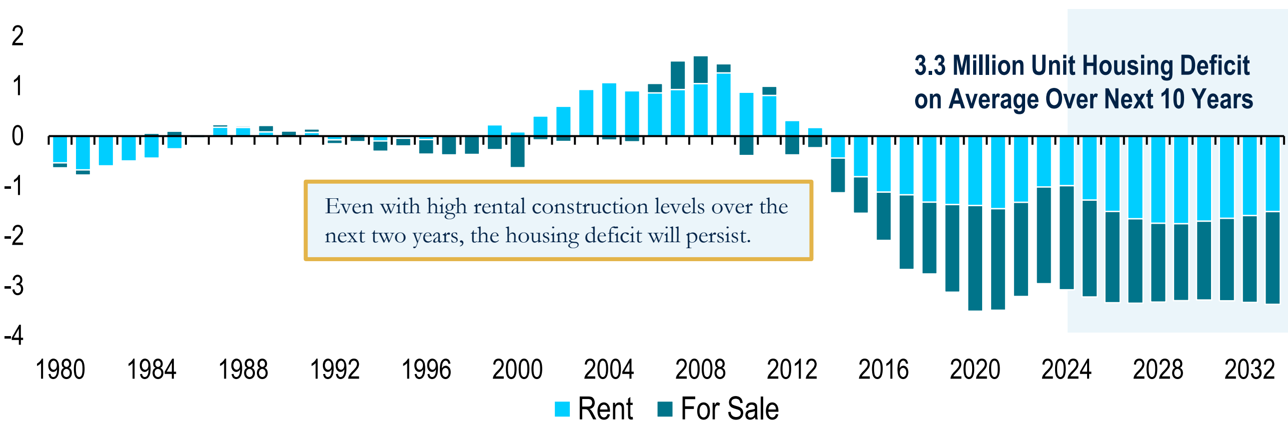
We expect this deficit to persist over the next decade, with new construction insufficient to offset the current deficit as well as housing taken out of the inventory due to abandonment, fire or other cause.

The high cost of homeownership further limits renters' options. As shown in **Exhibit 4**, the cost of owning a home is now, on average, 60% higher than renting. We expect this gap to persist:

- Some of that gap is due to high mortgage rates, but the gap was already growing prior to the mid-2022 tightening of monetary policy, as home price growth outpaced rent growth by more than 10%.
- High home prices will keep many higher income renters from buying, since they either cannot afford or do not want to take on higher homeownership costs.
- Those higher income renters will continue to occupy units that otherwise would have been available to moderate-income households.

Exhibit 3: The U.S. Has a Structural Housing Shortage

Estimated Surplus/Deficit in Housing Stock (Units, Millions)*

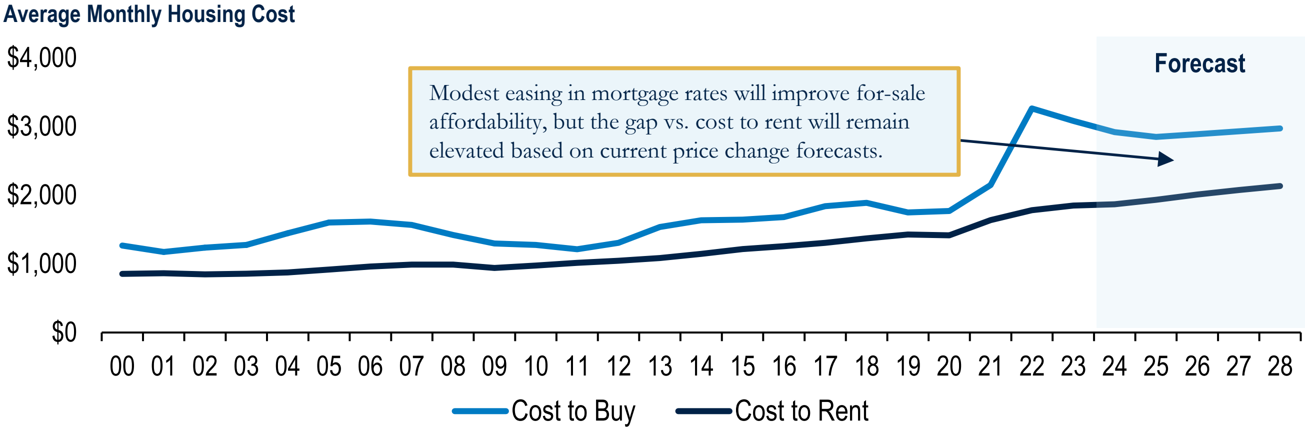


Sources: U.S. Census Bureau, PGIM Real Estate. As of June 2024. **Forecasts are not guaranteed and may not be a reliable indicator of future results.**

*The housing surplus/deficit is calculated by 1) estimating potential pent-up demand for housing based on the difference between current headship rates and historical averages and 2) estimating the additional vacant stock required to bring current vacancy rates up to their historical averages, less an obsolescence rate of 0.4%

Exhibit 4: High For-Sale Costs Will Keep Would-Be Homeowners Renting Longer

Average Monthly Housing Cost



Sources: Federal Reserve Bank of St. Louis, RealPage, Oxford, PGIM Real Estate. As of June 2024.

Forecasts are not guaranteed and may not be a reliable indicator of future results.

Note: Mortgage payments based on quarterly median home price for a 30-year fixed rate mortgage, 90% LTV, taxes, insurance, and PMI.

The current increase in rental housing supply will help alleviate some pressures on renters over the next two years. As shown in **Exhibit 5**, the rapid increase in construction starts is providing renters with more housing options than at any time since the mid-2000s housing crash. Over the next few years, rental housing will become more affordable to many renters.

However, with interest rates higher than most of the last two decades and capital flows out of real estate, **this relief for renters will be short-lived**:

- We expect multifamily completions to plunge after 2024, and by 2026 the pace of new deliveries will be less than one-third of today's level – and well below our estimates of what is needed to make up for the deficit that has accrued over the past decade.
- It has taken decades for rental housing to become as unaffordable to many as it is today, and even with policy changes there is unlikely to be any meaningful improvement over the next decade or longer.

Improvement, if it is to occur, will be incremental, even with a two-pronged approach that addresses the immediate needs of rent-burdened households via provision of regulated affordable rentals and the long-term needs of future households by increasing the supply of rental housing.

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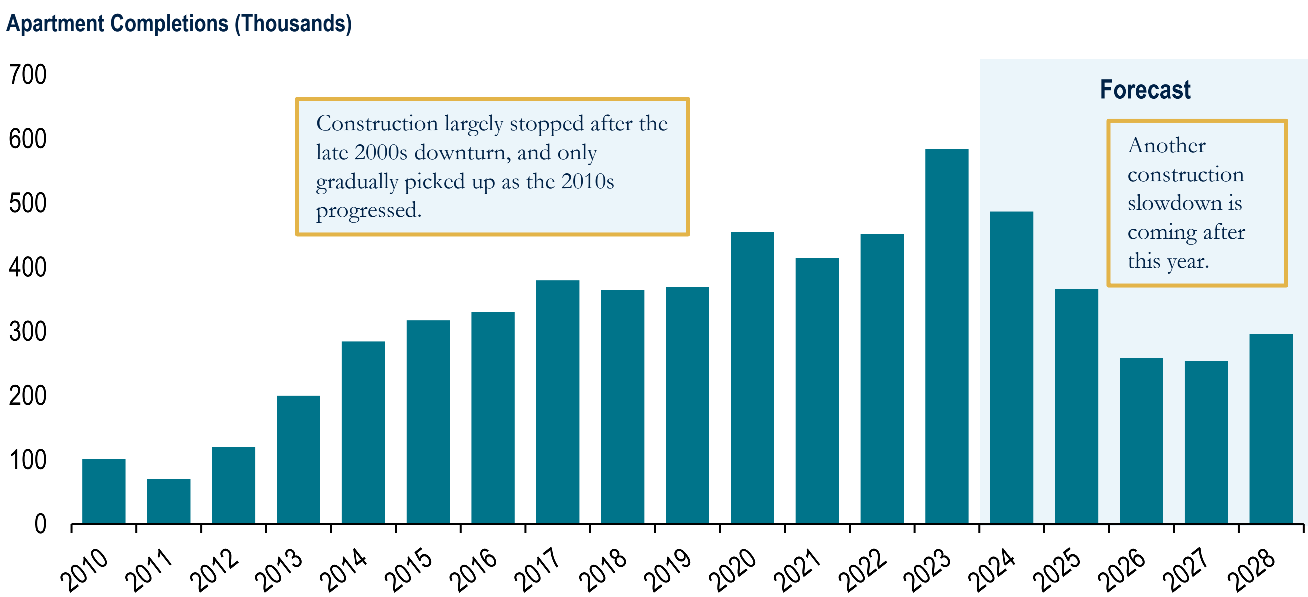
Exhibit 5: Supply Will Plunge Starting Next Year



Sources: CoStar, RealPage, U.S. Census Bureau, PGIM Real Estate. As of June 2024. **Forecasts are not guaranteed and may not be a reliable indicator of future results.**

2. The Investment Opportunity Part 1: Regulated Affordable Housing

The case for investing in regulated affordable housing[2] is underpinned by the higher durability and predictability of cash flows relative to market-rate rentals. Regulated affordable rentals have:

- **A more stable income** augmented by financial incentives in various forms, including tax abatements, increased permitted units and other subsidies intended to incentivize affordable housing.
- **Rent increases that are indexed to growth in metropolitan area median household incomes**, so that housing accounts for a manageable share (most typically, 30%) of those incomes.
- **Eligibility targeting households with incomes below to slightly above area medians**, with more generous subsidies available for renters that earn well below the area median. Those financial incentives can offset the foregone upside if market rents grow faster than area median incomes.

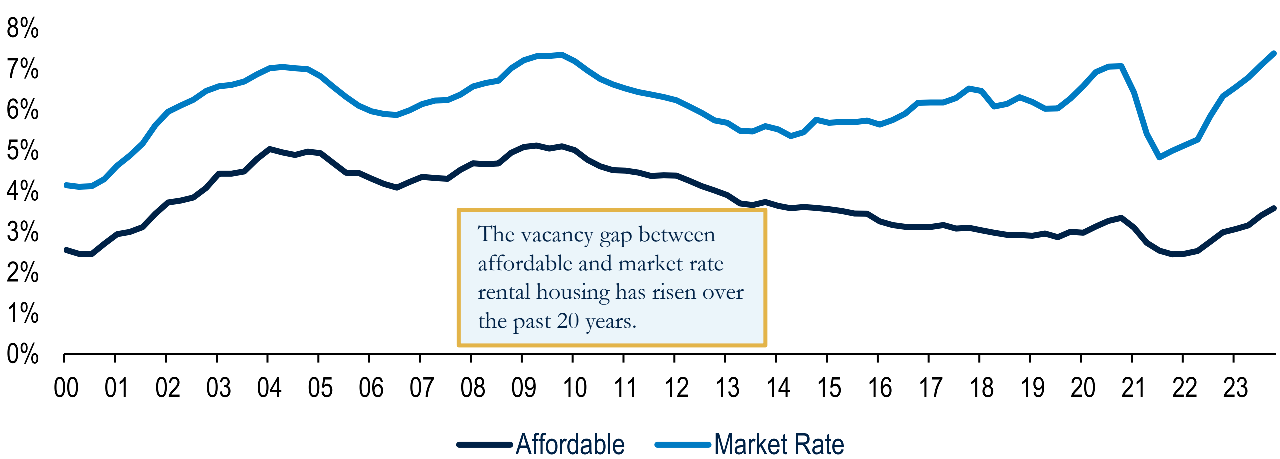
Regulated affordable housing is not immune from market cycles, but by nature of having rents held below market the sector has built in shock absorbers. For example, as shown in **Exhibit 6**, vacancies in affordable housing often rise coterminous with market-rate housing.

Yet vacancies are structurally lower for affordable housing:

- Vacancy among affordable housing units averaged 3.8% since 2000 as compared to 6.2% for market-rate units, according to CoStar.
- Moreover, the gap between market-rate and affordable vacancies has increased over the past decade, which is evidence that existing affordable housing stock is insufficient to meet demand.

Exhibit 6: Vacancies Are Structurally Low in Affordable Rentals

Multifamily Vacancy Rates



Sources: CoStar, PGIM Real Estate. As of June 2024.

[2] This section discusses the entire universe of regulated affordable housing, which includes many different ownership structures and regulatory requirements. Over the past 50 years, ownership of regulated affordable housing has largely transitioned away from the public sector to both non-profit and for-profit owners, most of which benefit from a subsidy for keeping units affordable to low- and moderate-income renter households. Some subsidies are explicit, such as the Low-Income Housing Tax Credit (LIHTC) program. Other subsidies are in-kind, such as density bonuses that allow developers to build more units if subsets of projects are rented as regulated affordable units.

Regulated affordable rental housing is distinct from market-rate rental housing that is affordable to low- and moderate-income renters, often referred to as naturally occurring affordable housing (NOAH). NOAH units exist in most markets because they have fewer amenities than newly built housing and/or are in locations less desirable for higher-income renters. While rents in NOAH units are lower than in most newer rentals, the lack of regulations means that rent growth may outpace income growth for prolonged periods of time, making them unaffordable for lower-income renters.

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The lower volatility in vacancy is mirrored in affordable housing rent growth, as shown in **Exhibit 7**. Over most time periods, affordable housing rent growth matches or lags only slightly behind market-rate. Rent growth lags market-rate during boom periods, such as the post-GFC period and, notably, the post-2020 frenzy. However:

- That underperformance is partially offset by **steady growth during weaker market-rate performance**, such as the subdued growth in the economically lackluster mid-2010s, and more recently in the brief demand collapse in 2020.
- We now **expect affordable housing rents to continue to grow over the next two years**, even as the temporary increase in multifamily supply constrains market rent growth.

The combination of stable rent growth and low vacancies has drawn increased institutional investment into regulated affordable housing. According to Real Capital Analytics, transactions volumes have grown over the past decade to a peak of just under $55 billion in 2022, before the recent slowdown in all real estate transactions activity.

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Exhibit 7: Affordable Apartment Rent Growth Is Stable

National Multifamily Rent Growth

Sources: CoStar, PGIM Real Estate. As of June 2024. **Forecasts are not guaranteed and may not be a reliable indicator of future results.**

Despite that increased investment, cap rates for subsidized sales have tracked closely with broader multifamily markets, as shown in **Exhibit 8**:

- In most periods, there is a premium to compensate investors for the lack of upside during strong market rent growth periods.
- However, the series occasionally converge during periods when market rent growth decelerates, such the late 2000s, the mid-2010s and today.

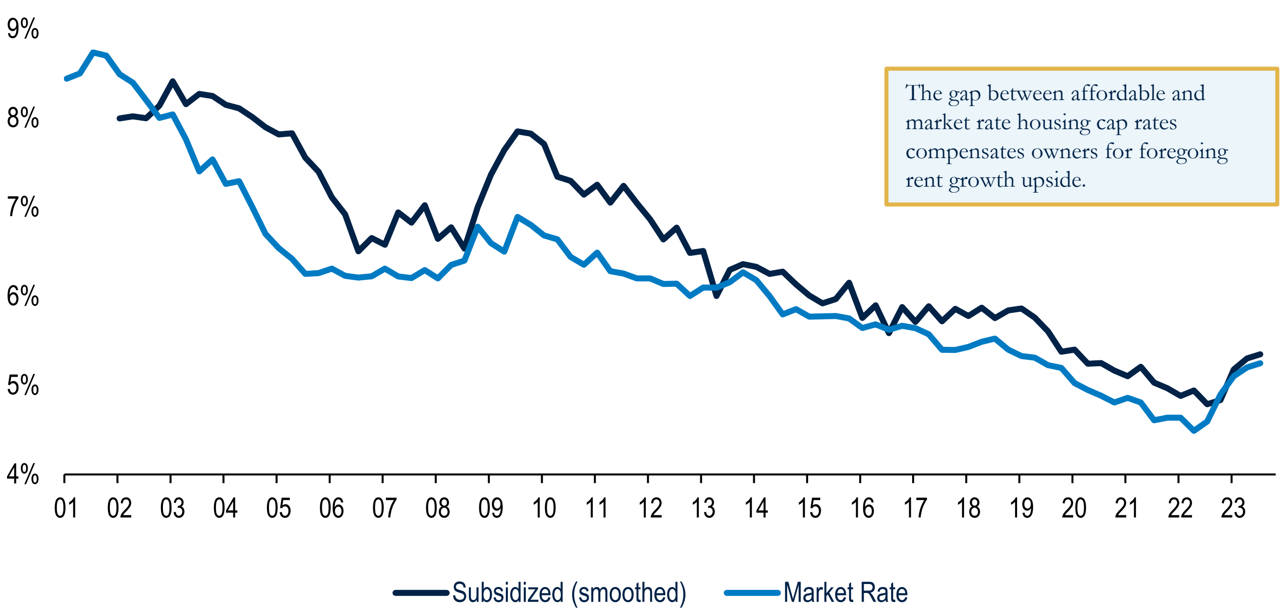
Investing in regulated affordable housing is not without risk. **The most significant risk is that expenses grow faster than allowed rent increases**. Mitigants to that risk include:

- Even during periods when market rents fall, **regulated affordable rent growth usually remains positive**.[3]
- Many regulations allow for **owners to recoup some or all major capital improvement costs** via rent increases above regular maximums.
- **Consistently raising rents by the maximum allowed**: most regulations do not allow owners to "make up" years when rents were raised less than the maximum.

The combination of steady revenues and elevated yields leads us to the conclusion that **investors in regulated affordable housing are appropriately compensated for foregone rent growth upside**. We expect that profile will be attractive to an increasing share of institutional investors.

Exhibit 8: Affordable Cap Rates Are Higher to Compensate for Lower Rent Growth

Multifamily Cap Rates



Sources: MSCI Real Capital Analytics, PGIM Real Estate. As of June 2024.

[3] The exceptions are periods when nominal household incomes decline, which are rare and usually less than 1%.

3. The Investment Opportunity Part 2: Building Market-Rate Rental Housing

What does market-rate housing, sometimes including nonessential amenities like modern fitness studios and saltwater swimming pools, have to do with affordable housing?

- While counter-intuitive, **construction of new multifamily units makes existing rental units more affordab**le than they would have been without new supply additions.[4]
- This second-order effect means that **building new market-rate housing can improve housing affordability** alongside providing regulated affordable housing.

The need for new housing is most acute in metropolitan areas that have:

1. A growing number of households;
2. Rising household incomes;
3. And, supply constraints that limit the density of new housing.

More so, **housing can become unaffordable even in places that don't have all three of these things happening at the same time**. Below we review each of these housing demand drivers in more detail.

1 The most important housing demand driver is, by definition, household growth.

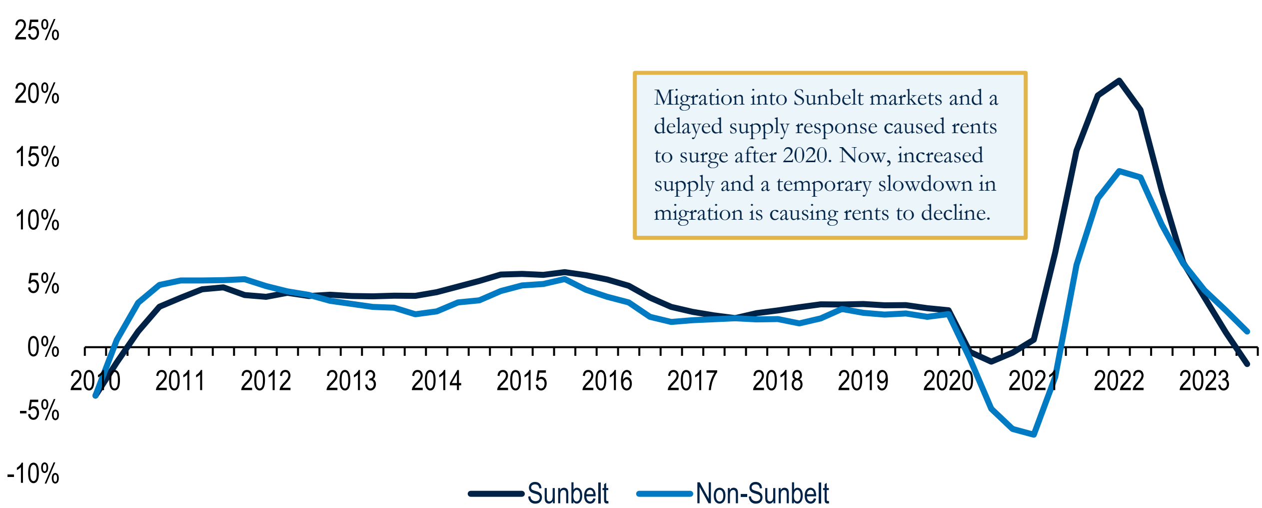
This is closely related to population growth, which is in part due to a combination of domestic and international migration. Over the past two decades, domestic migration flows have generally been from the Northeast, Midwest and California toward the Sunbelt.

Developers in those Sunbelt markets have historically been able to accommodate that growth, and therefore rent growth was only slightly higher than slower-growing non-Sunbelt markets from 2010, as shown in **Exhibit 9**.

However, the COVID-19-era surge in Sunbelt migration was too much and too fast to add enough new housing, causing rents to soar at an average rate of over 20% per year at the beginning of 2022.

Exhibit 9: Sunbelt Markets Are Giving Back Some Post-2020 Gains

Multifamily Rent Growth by Geography



Sourcse: RealPage, PGIM Real Estate. As of June 2024.

[4] See for instance "Supply Skepticism Revisited", "Supply Shock Versus Demand Shock: The Local Effects of New Housing in Low-Income Areas", "Are Private Markets and Filtering a Viable Source of Low-Income Housing? Estimates from a 'Repeat Income' Model", and "Local Effects of Large New Apartment Buildings in Low-Income Areas".

A pause in net migration to these Sunbelt markets combined with a supply surge has caused rents to decline slightly since late-2023. Nevertheless, relief for renters will be temporary. Construction has largely shut down, setting the stage for a further tightening in rental housing markets in 2025 and beyond. New market-rate housing will be needed for those who will continue to move to these high population growth Sunbelt markets.

2 Now, consider income growth and income distribution.

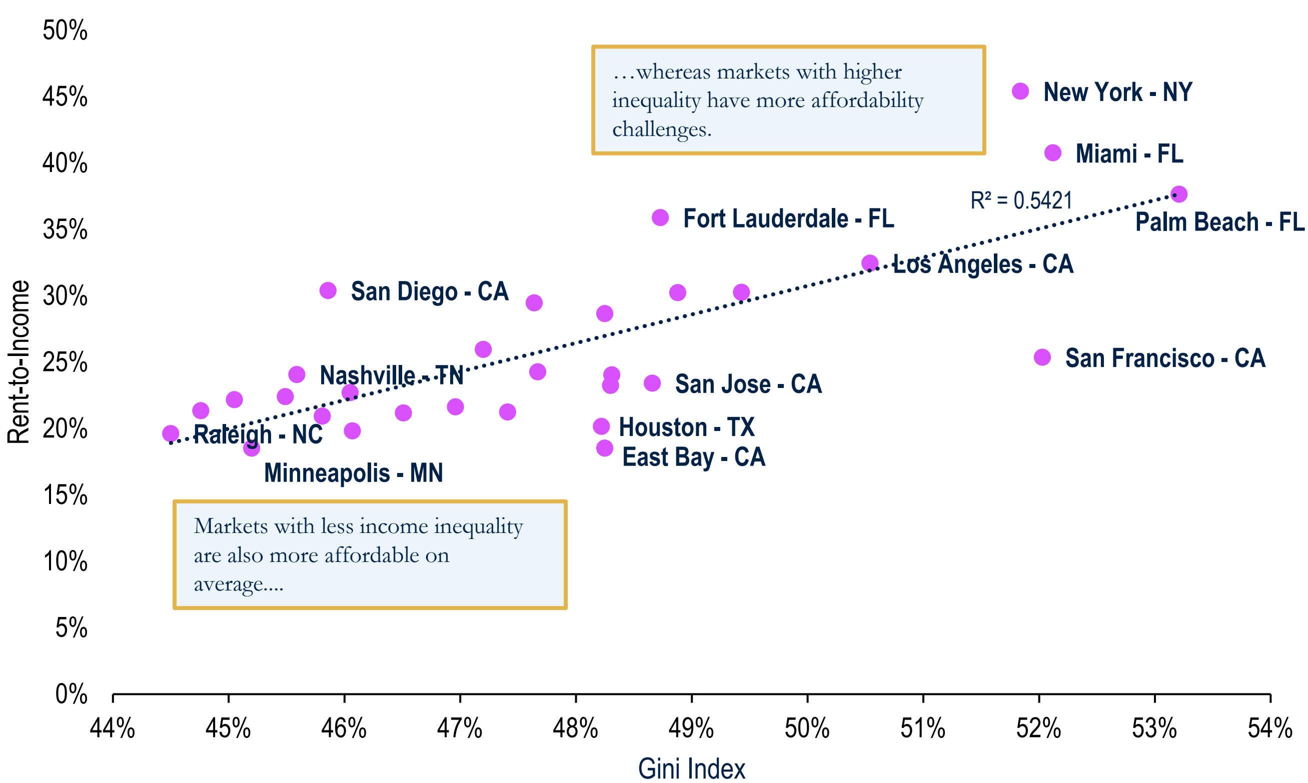
Despite weak population growth and migration flows, many Northeast and California markets have highly unaffordable housing markets.

Over at least the past 50 years, household expenses have accounted for an increasing share of personal consumption expenses.[5] Put differently, as household incomes rise, demand for housing increases even faster.

Areas such as the Northeast and California also have a disproportionate share of the highest-earning households in the country. This further contributes to affordability challenges. Areas with the highest level of inequality, as measured by a Gini coefficient, are typically less affordable for average renters, as shown in **Exhibit 10**. This is because higher-earning households consume a disproportionate share of housing, not only because they prefer larger units, but also because they are more likely to have smaller households (including fewer roommates).

Exhibit 10: Affordability Is Lowest in Metros With Highest Inequality

Multifamily Rent-to-Income Ratio vs. Gini Coefficient of Inequality



Sources: U.S. Census Bureau, CoStar, PGIM Real Estate. As of June 2024.

[5] See for example "Housing Demand Cost of Living Inequality and the Affordability Crisis".

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3 Finally, physical and regulatory[6] supply constraints cause affordability to deteriorate.

Supply constraints are typically highest in areas that historically have high income growth, as shown in **Exhibit 11**, which groups metropolitan areas by high (green) to average (yellow) to low (red) income growth since 2000.

This supply inelasticity means that in metropolitan areas such as San Francisco and New York, even small increases in household formations can push housing costs up. (Note that this exhibit measures regulatory constraints only, and physical constraints such as shorelines and mountains may exacerbate regulatory restrictions.)

Those supply constraints limit competition for new housing that does get built. While demand shocks can cause housing rents to decline during recessions in places like San Francisco, those downturns are likely to be short-lived given the limited pace of building even during economic boom periods. In short, **places where it is hardest to develop new housing also offer high returns to those who can build it.**

Exhibit 11: As Metro Areas Get Richer, Supply Constraints Rise

Land Use Regulation versus Median Household Income Growth

Sources: U.S. Census Bureau, Wharton Land Use Survey, PGIM Real Estate. As of June 2024.

[6] The Wharton Land Use Regulatory Index (WLURI) is the most cited and accepted measure of regulatory constraints in the United States. The methodology quantifies the restrictiveness of a variety of regulatory measures, including the number of entities that can approve projects, density restrictions, open space requirements, development fees and project review delay times.

Conclusion

Housing affordability has deteriorated over the last two decades, which ended with the simultaneous rent and homeownership cost spikes that significantly exceeded income growth. For reasons including regulatory constraints, income inequality and rising construction costs, supply has not kept up with demand.

A two-pronged approach is needed to address this imbalance. Over the longer term, the solution is construction of new housing, which creates needed competition for residents and reduces housing cost growth. Nevertheless, the imbalance is sufficiently large, and the rent burdens of lower and moderate-income households sufficiently high, that there will be a continued role for the preservation of and conversion to regulated affordable housing.

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