

U.S. Rental Housing: An \$8 Trillion Sector Bet

A BERKSHIRE RESEARCH VIEWPOINT

January 2018

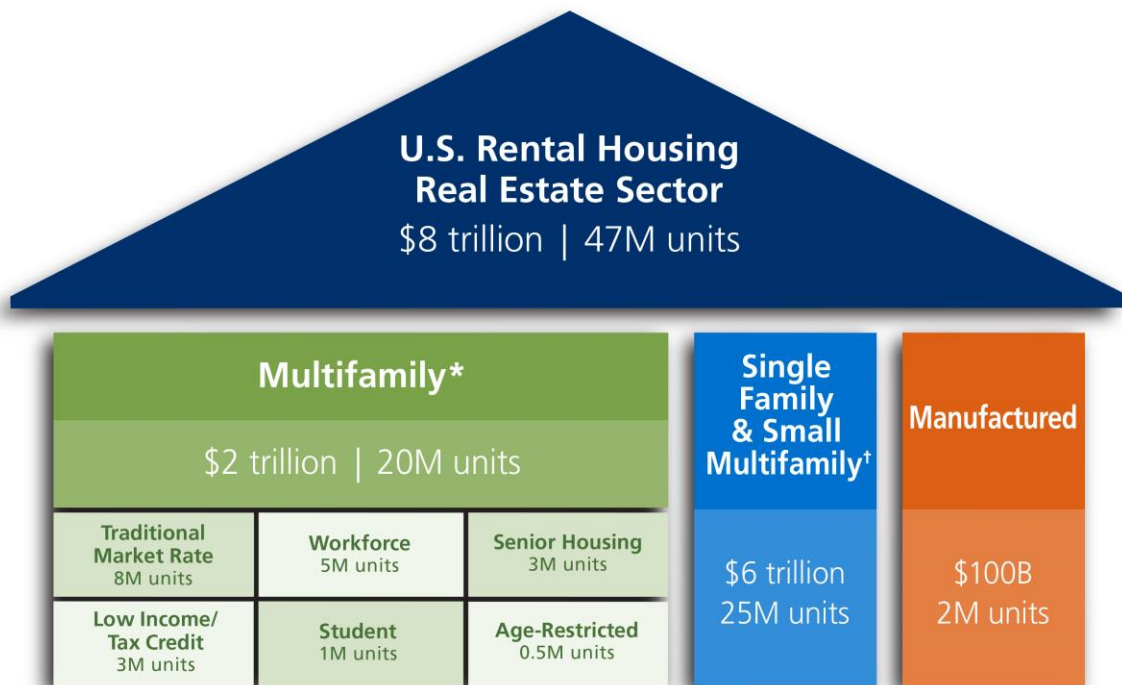


Berkshire



U.S. Rental Housing: An \$8 Trillion Sector Bet

A BERKSHIRE RESEARCH VIEWPOINT
January 2018



*5+ units

[†]2-4 units

Sources: Bureau of the Census, Real Capital Analytics, Yardi Matrix, Zillow, Berkshire Group Research

EXECUTIVE SUMMARY

Even after more than a decade of significant growth, U.S. rental housing demand still has the potential to keep expanding above the historical pace.

- The U.S. rental housing market is larger than that of office, industrial, and retail combined yet the super-segment remains meaningfully underweighted in institutional real estate portfolios.
- Even after more than a decade of significant growth, U.S. rental housing demand still has the potential to keep expanding above the historical pace. Relatively stable homeownership and improving overall household formation puts renter demand growth at about 600,000 per year, with the multifamily share expected to rise.
- Smaller households are expected to be the dominant driver of housing in the market going forward, benefiting the rental housing super-segment.
- The population aged 65 to 79 is the fastest growing component of the U.S. population and their housing choices will be crucial in shaping the market in this decade and beyond.
- The share of population under the age of 35 living with parents is at a record high, creating tangible upside potential for future household growth as this pent-up demand is unlocked.
- There are multiple ways to invest in rental housing, with various segments of multifamily expected to offer the most opportunities in the next decade along the demographic spectrum, particularly at the lower and higher ends of the age brackets.

INTRODUCTION

The U.S. housing market is in the midst of a major transformation shaped by the shifting demographic composition of the population and socio-economic trends such as urbanization (encompassing higher-density smaller cities and towns within metro areas) and the rise in single-person living. This transformation is bound to benefit the rental segment which is comprised of over 47 million units with an estimated market value of about \$8 trillion based on current valuation.¹

While the vast majority of rental housing is owned by individual investors, institutional capital has been steadily gaining market share over the last 30 years starting with traditional market-rate apartments and, more recently, expanding into subsectors such as student housing, age-restricted housing, senior housing and single-family homes.² Institutional demand for various types of rental housing assets will likely continue growing in this decade and beyond given the attractive return and risk characteristics relative to other asset classes as well as the favorable long-term outlook for rental housing fundamentals.

Even after more than a decade of record growth, U.S. rental housing demand still has the potential to continue expanding above the historical pace. Households over the age of 60, those under the age of 35, and singles, are expected to be the dominant groups shaping the market going forward. A wide array of needs and demands within these groups, both in terms of product and location, will create opportunities for a broad range of investment strategies.

Unlike other categories of commercial real estate, rental housing is built to satisfy a fundamental human need—shelter.

WHY RENTAL HOUSING?

The overall benefits of investing in apartments are well known by now as the sector has established a track record of strong risk-adjusted performance relative to other major property types. Currently, market rate apartments is the most established segment of rental housing with enough history to allow for an in-depth comparison of its long-term investment performance to commercial real estate. For apartments, records date back to the inception of the NCREIF's National Property Index (NPI) in 1978. At the same time, there is relatively little understanding of other rental housing segments among institutional investors, which is similar to where apartments were in the 1980s. As interest in apartments has grown, so has its share in institutional real estate portfolios, from less than 5% 30 years ago to about 24% today.

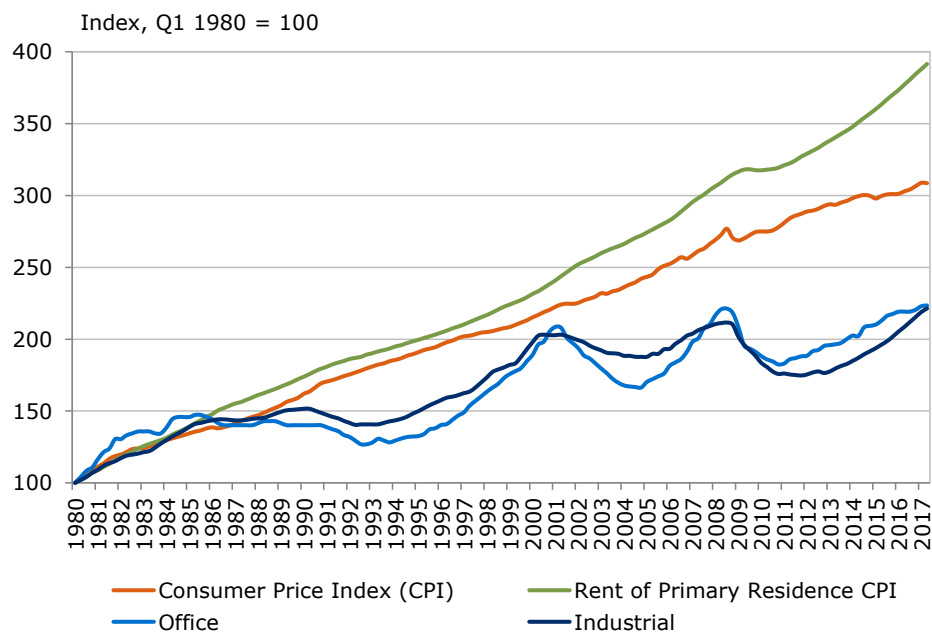
¹ The current average sale price of a rental apartment property is about \$140,000 per unit according to Real Capital Analytics while the average value of a rental homes with 1-4 units is about \$230,000 according to Zillow.

² Institutional ownership is much higher in commercial real estate where it accounts for well over half of existing inventory compared to about 25% of rental multifamily and less than 1% of rental housing with 1-4 units.

One of the reasons behind the growing appeal of rental housing as an investment is that, unlike other categories of commercial real estate, this property type is built to satisfy a fundamental human need—shelter. People, no matter their age, income, or employment status, require a place to live. A firm going out of business has to vacate its office space yet a person losing a job will still need a residence.

The dichotomy in long-term real estate performance that can result from these rather different demand dynamics is striking. The chart below contrasts national rent trends for office and industrial sectors relative to the consumer price index (CPI) and the rent of primary residence component of CPI since 1980.³

Commercial vs. Residential Rent Inflation Since 1980



Sources: CBRE Econometric Advisors, Bureau of Labor Statistics, Berkshire Group Research.

Over this period, rent of primary residence (for all types of housing including single-family) has increased by 3.9 times compared to 3.1 times for overall consumer inflation.⁴ In contrast, industrial and office rents have grown only by 2.2 times and showed a tangible inflation-adjusted decline in the last 30 years. The gap between residential rent and overall CPI has been widening since 2000 and especially since 2010 as the U.S. went through a housing boom and subsequent bust, spurring record growth in rental demand.

³ The earliest period for which rent indices for office and industrial are available. Retail sector is not shown on this chart due to a more limited history of its rent index.

⁴ As measured by the “rent of primary residence” component of the consumer price index (CPI).

Property income trends spanning the last 10 years (2007-2016), which include the Great Recession and subsequent recovery/expansion, also indicate that rental housing has outperformed other property sectors. For example, data for privately owned institutional-quality properties included in NPI shows that during this period the same-store net operating income (NOI) for apartments grew by 4.1% per year compared to annual gains of 2.4% for retail, 1.8% for office, and 1.2% for industrial, before adjusting for inflation. For publicly-owned real estate, Green Street Advisors' data shows that during this period same-store NOI growth averaged 4.5% for manufactured housing, 4.0% for apartments, 3.6% for senior housing, and 3.3% for student housing compared with 2.8% for malls, 2.6% for office, 2.1% for strip centers, and 1.8% for industrial. Over this period, consumer price inflation has averaged 1.8% per year.

Despite the clear advantage of rental housing based on property income growth, it remains significantly underweighted in institutional portfolios.

Despite the clear advantage of rental housing based on property income growth, it remains significantly underweighted in institutional portfolios relative to its share in the investable universe of U.S. real estate. Estimating the size of this universe has been the subject of several studies and papers, which suggest that the current market value of all non-residential real estate in the nation, which includes corporate-owned as well as all specialty segments such as farm land, vineyards, golf courses and ski resorts, is about \$15 trillion.⁵ Within this commercial real estate universe, the major property types that are the primary focus for most institutional portfolios (i.e., office, industrial, and retail) account for about half.

Meanwhile, the total U.S. rental housing stock is comprised of about 47 million units, including rental homes with 1-4 units as well as apartments, and at current valuations the overall market value is estimated to be about \$8 trillion.⁶ While only about a quarter of this inventory is suitable for institutional investment today, the sheer size of the rental housing market suggests that it should account for at least a third and potentially up to half of a broadly-diversified real estate portfolio.

Technological and socioeconomic changes taking place globally further support the case for long-term over-weighting of rental housing relative to commercial property. In terms of technological disruption, rapid growth in e-commerce is already reshaping retail and industrial demand while advances in supply-chain management will likely reduce growth in inventories and, subsequently, demand for traditional warehousing. More flexible and innovative workplace patterns will create further efficiencies in the use of office space, further reducing square feet per worker. In contrast, aggregate housing demand is not affected by these disruptors and is therefore more stable.

From a socioeconomic perspective, the U.S. is in the early stages of a major demographic shift as baby-boomers enter retirement. Some of

⁵ Federal Reserve Flow of Funds.

⁶ Sources: Bureau of the Census, Real Capital Analytics, Zillow.

the implications for the economy include slower job growth, a rising dependency ratio (population in the labor force compared to population not in the labor force), rising costs of healthcare and social security, and changing consumption patterns. These trends also present uncertainties and potential headwinds for aggregate demand for commercial real estate, which depends on job growth as a key driver. At the same time, population aging and the eventual improvement in household formation among young adults should provide tailwinds to rental demand, particularly various types of multifamily product including senior housing as well as more traditional apartments.

RENTAL HOUSING DEMAND OUTLOOK

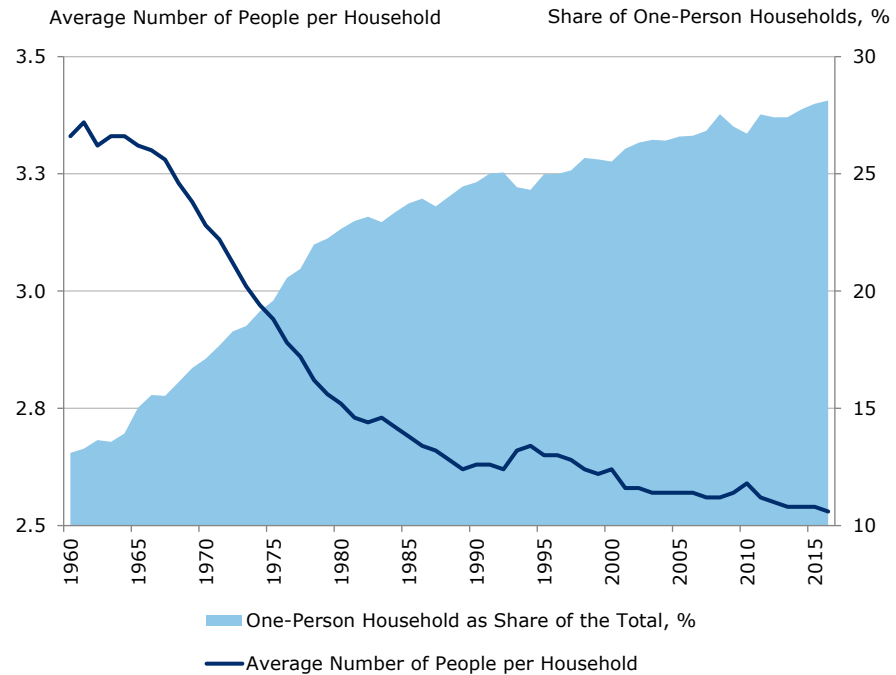
U.S. housing demand has undergone a dramatic change in the aftermath of the housing bust that was a key trigger behind the Global Financial Crisis and the Great Recession that followed. Over the last decade, the nation's rental demand expanded by about 9 million households, while owner demand has contracted slightly. This was a striking contrast to the historical pattern when owners accounted for over 60% of overall household growth. The main driver behind this was a sharp drop in the nation's homeownership from a record high of 69% in 2004, to a 50-year low of 63% in 2016, with a potential for it to continue declining.

One of the demographic headwinds to homeownership is a steady rise in the share of single-person households and an associated decline in the average household size.

One of the demographic headwinds to homeownership is a steady rise in the share of single-person households and an associated decline in the average household size.⁷ Since 1940, the share of single-person households increased from approximately 8% to 28%. This share is expected to continue edging higher with the number of one-person households rising from 33 million in 2015 to over 37 million by 2025. As a result, singles will account for about 40% of total housing demand growth over the period, far more than they have historically. Considering that about half of one-person households are renters, they are likely to have a major impact on the homeownership trends as well as product composition of future housing demand growth (i.e., how much single-family vs. multifamily housing will be needed).

⁷ The rise in share of two-person households is also contributing to this trend.

Single Living to Drive Housing Demand

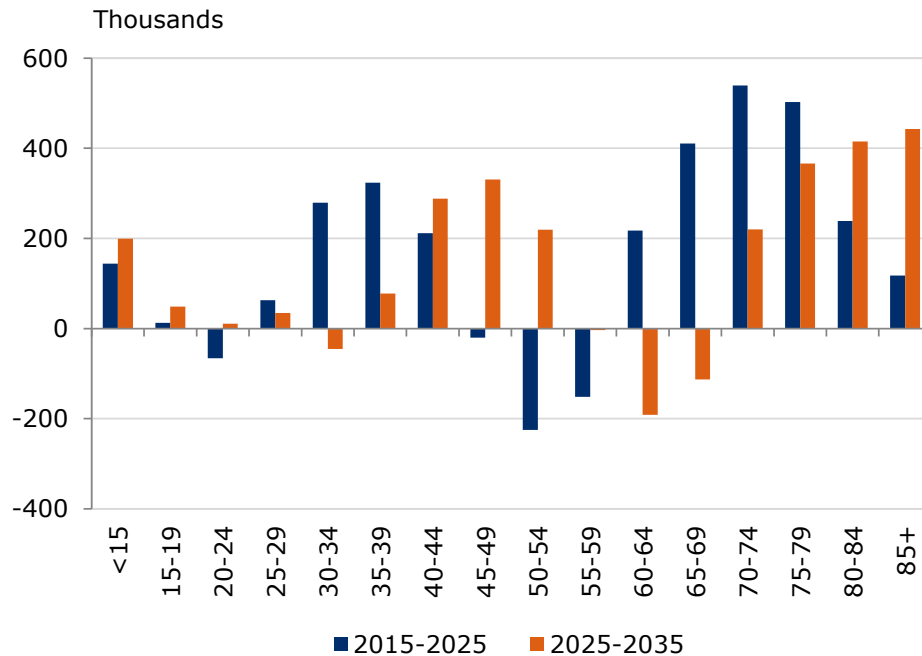


Sources: Bureau of the Census, Berkshire Group Research.

Rapid growth among single person households presents a major opportunity for the multifamily segment to expand its share of the rental market. Singles account for about half of all apartment residents yet capture only a fifth of the total single-family demand. The housing choices of single-person households vary greatly by age; however, a relatively large number of singles approaching and entering retirement currently live in single-family homes. As they age, these households are likely to seek living arrangements that are more manageable from both physical and financial standpoints and potentially offer certain health care services or other forms of assistance.

Choices of the population over the age of 60 will be a crucial factor for the U.S. housing market in this decade and beyond. As indicated in the below chart, age groups 65-79 are expected to grow the most in both absolute and percentage terms accounting for over half of the nation’s total population change from 2015-2025.

Average Annual Change in the U.S. Population by Age Group



Sources: Bureau of the Census, Berkshire Group Research.

Although households over the age of 65 have the highest homeownership rates among the major age groups, these rates have been dropping over the last five years, particularly for those over the age of 75. While about two-thirds of seniors have already paid off their mortgages, the hardship of maintaining single-family homes, burden of property taxes, and need for health services is prompting many to consider apartment living or even more specialized housing such as senior housing.

There could be significant pent-up demand for renting among seniors, as at least some of them are reluctant homeowners who would like to free up their home equity to live on.

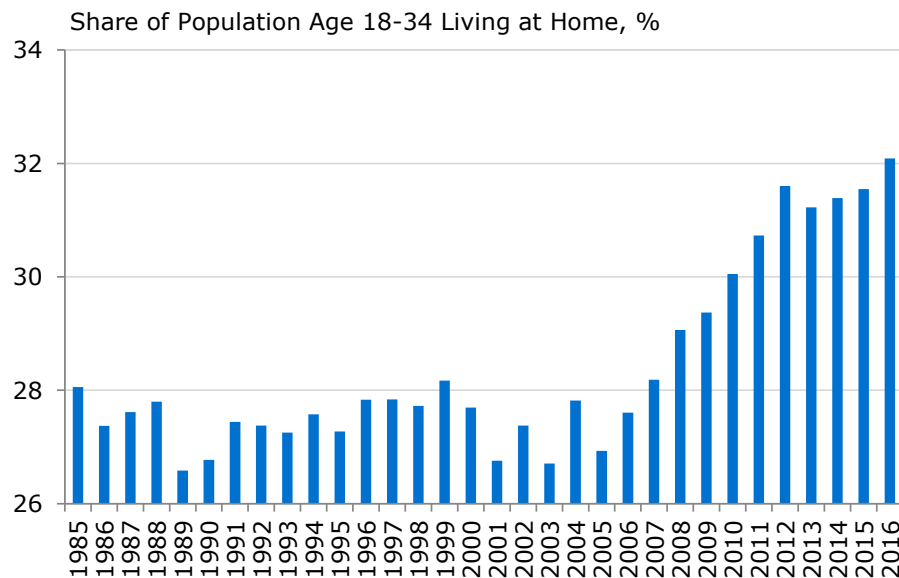
In fact, there could be significant pent-up demand for renting among seniors, as at least some of them are reluctant homeowners who would benefit from using their home equity as a source of cash flow, but very few actually do. There are two potential reasons why seniors are not renting. The first is that seniors are on fixed incomes and are very risk-averse, while rents are often volatile. In contrast, the cost of living in a fully-owned home or a home with a fixed-rate mortgage is relatively stable. One potential incentive for a rental housing option could be longer leases, which are common in Japan. For example, leases could be structured where rents are fixed at higher levels than in typical short-term leases to compensate landlords for any risks. The second reason is simply that there is a shortage of affordable rental multifamily housing that is suitable for seniors. The overall growth in the population over the age of 65 is so strong that even if their age-specific homeownership rates remain steady, seniors are still likely to contribute more to the net change in overall rental demand than households under the age of 35 who have the highest propensity to rent.

The overall growth in the population over the age of 65 is so strong that even if their age-specific homeownership rates remain steady, seniors are still likely to contribute more to the net change in overall rental demand than households under the age of 35.

In addition to some indications of a potential return to renting among seniors, homeownership is facing another major headwind as populations in age groups between 45 and 59 (who are primary consumers of single-family homes) decline for the first time since the 1980s.

Rental demand growth is a function of two factors: overall household formation and changes in the homeownership rate. Overall household growth has been very slow over the last 10 years, averaging about 900,000 per year compared to an expected 1.2 million based on historical trends. Much of this weakness is due to a record-high share of young adults (population 18-34), who are the primary drivers of new housing demand, living with parents. This share continued to soar since the housing crisis and reached a record high of approximately 32% last year. Young adults are delaying their decisions to get married and have children, which subsequently postpones their transition to homeownership. The current pent-up demand formed by this age group alone is over 2 million households. When and how this pent-up demand unleashes greatly depends on the strength of the labor market and housing affordability, but it has the potential to increase annual household growth by at least 200,000 over the next decade.

Record Share of Young Adults Living with Parents



Sources: Bureau of the Census, Berkshire Group Research.

The range of estimates of future changes in the U.S. homeownership rate proposed by both academic and industry research varies widely in both magnitude and direction given the interplay between economic, demographic, and policy-related factors impacting it. Berkshire's

baseline scenario of a relatively stable homeownership rate and improving overall household formation estimates renter demand growth at about 600,000 per year, including units needed to replace losses in stock due to obsolescence.⁸ However, the estimate is highly sensitive to the changes in the homeownership rate. A slight drop in the homeownership rate could further boost rental demand growth of up to 800,000 annually, nearly twice the historical pace, while a slight increase could reduce the baseline growth to approximately 200,000 annually. Meanwhile, the current levels of new rental deliveries are less than 400,000 per year. Although more existing single-family homes are being converted into rental supply, this level still does not meet demand keeping vacancy rates low and rent levels high across markets and product types.

IMPLICATIONS OF RENTAL DEMAND DYNAMICS FOR FUTURE INVESTMENT

Growth in rental housing demand is expected to exceed new supply, creating a broad spectrum of opportunities for investment.

There are multiple ways to invest in rental housing. With respect to institutional investor exposure, professionally-managed multifamily properties (five units or more) comprise by far the largest segment, including market-rate, workforce, senior, low income/tax-credit, student, and age-restricted housing. The rentable inventory of this segment is about 20 million units, with a high concentration in major urban areas. Rentable inventory in properties with 1-4 units is about 25 million units, which is larger than multifamily housing, yet institutional investors currently account for direct ownership of only 200,000 and their market share is unlikely to expand beyond 1 million in the near future. Rentable inventory of manufactured housing is about 2 million units, much of which is concentrated in rural areas, but institutional ownership in this segment is also relatively low.

To better understand the spectrum of future opportunities in the rental market, investors should consider current trends in rental demand and distribution of its growth across market segments, age cohorts, and income brackets.

Market Segmentation

Properties with 1-4 units in structure captured 78% of total growth in renter households over 2005-2015 as millions of previously owner-occupied homes were converted into rentals in the aftermath of the foreclosure crisis.⁹ During the same period multifamily and manufactured housing captured about 20% and 2% of growth in renter demand, respectively. Given the full recovery in home prices and the previously discussed demographic trends, single-family own-to-rent conversions are expected to dissipate with a much higher share

⁸ Our estimate is consistent with a study released by the National Multifamily Council and the National Apartment Association called "U.S. Apartment Demand – A Forward Look" (May 2017).

⁹ Source: American Housing Survey.

of future rental demand growth expected to be absorbed by the multifamily segment.

Age Composition

Because growth over the last decade was mainly driven by shifts from owning to renting due to foreclosures rather than household formation, half of all new renters were age 45-64, or twice the anticipated share for this demographic. Meanwhile, households age 25-34 (Millennials) and those over the age of 65 contributed only about 20% each to overall renter demand during this period. In the case of Millennials, it was much less than expected given their traditional status as primary renters, whereas rental demand among seniors was far more than expected. Going forward, it is expected that virtually all renter demand growth will be driven by just these two groups, with each accounting for about half of the total and with most of the upside potential coming from households over the age of 60. The latter will create a broad spectrum of investment opportunities ranging from age-restricted apartments for active adults to various types of senior housing including independent living and assisted living.

Income Distribution

The upper segment of the rental market has expanded rapidly in recent years. One of the key drivers behind this was strong growth in higher wage jobs (including those in science, technology, and engineering) in a number of major urban markets. Another major factor was that middle-aged home owners displaced by foreclosures were in higher income brackets compared to younger households and seniors. A closer comparison of changes in underlying income distribution among renters relative to that of all households suggests that the strongest growth in demand was among households with annual incomes between \$60,000 and \$100,000. Demographic trends suggest that this income group will continue to be a key driver of rental demand. Considering that much of the multifamily demand since 2010 was concentrated at the upper end of the market, the middle and upper-middle segments are expected to have greater rent growth over the next several years.

Real estate investors should consider their relative exposure to the rental housing super-sector and its performance advantages relative to commercial real estate.

CONCLUSION

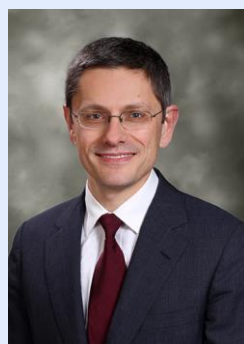
Demographic shifts taking place in the U.S. present upside potential to rental demand and various segments of multifamily housing. Properties designed for populations under the age of 35 and above the age of 60, from traditional apartments to various types of age-restricted and senior housing, particularly those targeting the middle and upper-middle income tiers, are likely to have the most upside potential for investment performance. To take advantage of these opportunities, investors should consider their relative exposure to the rental housing super-sector due to its size and its investment and operational performance advantages relative to other types of commercial real estate.

Disclaimer

The opinions expressed herein represent the current, good faith views of the Berkshire Group at the time of publication and are provided for limited purposes. The information presented in this article has been developed internally and/or obtained from sources believed to be reliable; however, the Berkshire Group does not guarantee the accuracy, adequacy or completeness of such information. Predictions, opinions, and other information contained in this article are subject to change continually and without notice of any kind and may no longer be true after the date indicated. Any forward-looking statements speak only as of the date they are made, and the Berkshire Group assumes no duty to and does not undertake to update forward-looking statements. Forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Actual results could differ materially from those anticipated in forward-looking statements.

This material is for informational purposes only. It is not intended to, and does not constitute financial advice, investment management services, an offer of financial products or to enter into any contract or investment agreement in respect to any product offered by Berkshire Group and shall not be considered as an offer or solicitation with respect to any product, security, or service in any jurisdiction or in any circumstances in which such offer or solicitation is unlawful or unauthorized or otherwise restricted or prohibited. All rights reserved. No part of this material may be (i) copied, photocopied, or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient, without Berkshire Group's prior written consent.

The Berkshire Group provides investment management services to advisory clients that invest in the multifamily housing sector. In respect of its investment management services, the Berkshire Group may receive performance-based compensation from such advisory clients. Accordingly, the Berkshire Group may financially benefit from the appreciation of multifamily housing units.



**Gleb Nechayev,
Senior Vice President, Head of Economic & Market Research**

Mr. Nechayev leads the development of original real estate research at Berkshire Group. He is a recognized real estate economist specializing in multifamily markets, with nearly two decades of industry experience counseling institutional and private clients. Mr. Nechayev holds a Masters in City Planning from the Massachusetts Institute of Technology, and is a graduate of the National Economic University of Kiev, Ukraine. He is a member of both the Urban Land Institute and National Multifamily Housing Council.



Berkshire

One Beacon Street, 24th Floor
Boston, MA 02108

T 617.646.2302
F 617.646.2370

www.berkshire-group.com