2018 U.S. Multifamily Outlook: Income Comes to the Fore
2018 U.S. Multifamily Outlook: Income Comes to the Fore

A BERKSHIRE RESEARCH VIEWPOINT
April 2018
## 2018 MULTIFAMILY INDICATORS

<table>
<thead>
<tr>
<th></th>
<th>Expectation</th>
<th>Momentum</th>
<th>Berkshire View</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECONOMY &amp; HOUSING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Growth</td>
<td>▲</td>
<td>Expanding</td>
<td>The near-term outlook for the labor market was revised upward on the expectation of stronger economic growth</td>
</tr>
<tr>
<td>Income Growth</td>
<td>▲</td>
<td>Expanding</td>
<td>With the labor market tightening, the income trend is improving</td>
</tr>
<tr>
<td>Household Growth</td>
<td>▲</td>
<td>Expanding</td>
<td>Overall household growth remains constrained due to a record share of young adults living at home with parents</td>
</tr>
<tr>
<td>Home Price Growth</td>
<td>▼</td>
<td>Moderating</td>
<td>Affordability of homeownership will continue declining, supporting rents in most areas despite slowing appreciation of home prices</td>
</tr>
<tr>
<td><strong>MULTIFAMILY FUNDAMENTALS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand Growth</td>
<td>▼</td>
<td>Moderating</td>
<td>The multifamily sector is gaining market share over 1-4 unit rental housing</td>
</tr>
<tr>
<td>Supply Growth</td>
<td>▲</td>
<td>Expanding</td>
<td>Supply risk is rising but still relatively concentrated in the central urban core</td>
</tr>
<tr>
<td>Vacancy Rate</td>
<td>▲</td>
<td>Bottoming</td>
<td>Vacancy rates should have moderate increases in most markets but remain near long-term average levels</td>
</tr>
<tr>
<td>Rent Growth</td>
<td>▲</td>
<td>Expanding</td>
<td>Effective rent growth is in line with consumer price inflation and is expected to be supported by rising incomes and wage</td>
</tr>
<tr>
<td><strong>CAPITAL FLOWS &amp; PRICING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Volume</td>
<td>▼</td>
<td>Moderating</td>
<td>Apartment sales should remain healthy, supported by new product as well as maturing debt</td>
</tr>
<tr>
<td>Cap Rates</td>
<td>▲</td>
<td>Bottoming</td>
<td>Cap rates are likely to stabilize and potentially edge slightly higher as long-term interest rates rise</td>
</tr>
<tr>
<td>Property Price Growth</td>
<td>▼</td>
<td>Moderating</td>
<td>After a period of record gains, the pace of property price growth is starting to moderate</td>
</tr>
</tbody>
</table>

Note:

The direction of the arrows reflects expected change in a given indicator compared to the prior year (orange color denotes potential for a more direct negative impact on operational performance and property appreciation).
# OUTLOOK SCORECARD

<table>
<thead>
<tr>
<th></th>
<th>2018 Expectation</th>
<th>2017 Actual</th>
<th>2017 Expectation</th>
<th>Cycle Momentum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direction</td>
<td>Value</td>
<td>Direction</td>
<td>Value</td>
</tr>
<tr>
<td>Economy &amp; Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Growth</td>
<td>▲</td>
<td>2.3 mil.</td>
<td>▼</td>
<td>2.2 mil.</td>
</tr>
<tr>
<td>Income Growth</td>
<td>▲</td>
<td>3.0%</td>
<td>▲</td>
<td>2.5%</td>
</tr>
<tr>
<td>Household Growth</td>
<td>▲</td>
<td>1.1 mil.</td>
<td>▲</td>
<td>0.9 mil.</td>
</tr>
<tr>
<td>Home Price Growth</td>
<td>▼</td>
<td>4.5%</td>
<td>▼</td>
<td>5.8%</td>
</tr>
<tr>
<td>Multifamily Fundamentals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand Growth</td>
<td>▼</td>
<td>1.0%</td>
<td>▼</td>
<td>1.2%</td>
</tr>
<tr>
<td>Supply Growth</td>
<td>▲</td>
<td>1.5%</td>
<td>▲</td>
<td>1.5%</td>
</tr>
<tr>
<td>Vacancy Rate</td>
<td>▲</td>
<td>+50 bps</td>
<td>▲</td>
<td>+25 bps</td>
</tr>
<tr>
<td>Rent Growth</td>
<td>▲</td>
<td>2.4%</td>
<td>▼</td>
<td>2.1%</td>
</tr>
<tr>
<td>Capital Flows &amp; Pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Volume</td>
<td>▼</td>
<td>$130 bil.</td>
<td>▼</td>
<td>$150 bil.</td>
</tr>
<tr>
<td>Cap Rate</td>
<td>▲</td>
<td>0/+10 bps</td>
<td>▼</td>
<td>-10 bps</td>
</tr>
<tr>
<td>Property Price Growth</td>
<td>▼</td>
<td>5%</td>
<td>▼</td>
<td>10%</td>
</tr>
</tbody>
</table>

Notes:

The direction of the arrows reflects expected or actual change in a given indicator compared to the prior year (orange color denotes potential for a more direct negative impact on operational performance and property appreciation).

The vacancy rate for Berkshire Group’s target markets is expected to increase from an average annual rate of 4.8% in 2017 to 5.3% in 2018.

The cap rate for Berkshire Group’s target markets is expected to increase from an average annual rate of 4.4% in 2017 to 4.5% in 2018.
EXECUTIVE SUMMARY

The U.S. multifamily market had solid performance last year and expansion is expected to continue in 2018. The key highlight of 2017 was stronger-than-expected growth in multifamily demand, which was particularly impressive considering that job gains have moderated and the number of renter households declined slightly, while the nation’s homeownership rate increased for the first time since 2004. Additionally, the multifamily segment continues to gain a larger share of broader rental demand relative to housing with 1-4 units. As a result, vacancy rates remained low by historical standards in most markets despite rising new supply, keeping rent growth above consumer inflation.

Real estate fundamentals should remain balanced in 2018 with some upside potential for rents and revenues. With the recent passage of the Tax Cuts and Jobs Act (TCJA), growth in the U.S. economy, employment and wages is projected to pick up relative to last year just as new multifamily supply is leveling off. Stronger economic growth in 2018 is also likely to bring higher inflation and interest rates, putting some pressure on real estate prices and valuations. Steady or rising investor demand for multifamily assets could potentially offset that pressure and help keep cap rates and property values fairly stable. Apartment prices are likely to edge higher again this year, although not as much as in 2017. While underlying property income growth in apartments might have passed its peak, the sector still offers relative stability, long-term value and better protection against the risk of rising inflation relative to other asset classes. Demographic tailwinds supporting apartment demand remain strong and continue to serve as a source of upside potential and factor into prolonging the current cycle.

Given the relative value that multifamily assets offer compared to other asset classes and property types, investors may consider increasing their allocation to this sector, or to rental housing more broadly. Investment returns in the next few years will be greatly dependent on the ability of property managers to generate revenue and control expenses. In an environment of flattening and potentially rising cap rates, selecting markets and submarkets that can provide support to operating performance at the property level becomes even more crucial than in the last few years.

As in 2017, there remain a number of risks in 2018 mainly due to geopolitical uncertainty in the U.S. and abroad. While property operational performance is largely a function of market-specific demand/supply fundamentals, real estate pricing is greatly impacted by factors that are shaped globally such as capital flows, availability of debt, interest rates and risk premiums. From this perspective, 2018 is likely to be another year when macroeconomic and capital market dynamics will have the potential to impact real estate pricing and returns more than local job or wage growth.
THE ECONOMY AND HOUSING

The TCJA was signed into law at the end of 2017, enacting sweeping changes to the federal tax system for both businesses and individuals. Many of the changes to the individual and corporate income tax laws could have material implications for the economy and the real estate industry, including multifamily investments.

The TCJA generally favors owners and operators of U.S. real estate businesses and is expected to improve investor sentiment and boost near-term growth in the gross domestic product at the national level, contributing to the potential for rising inflation and interest rates 2018. Despite stronger economic growth, the TCJA is still likely to expand the U.S. federal deficit over the next decade, which can also add to further decline in the dollar exchange rate and push yields on Treasury bonds more than expected.

Some uncertainty remains regarding other key U.S. economic policy areas in 2018, including foreign trade and infrastructure spending and their effects on inflation and interest rates. However, given current geopolitical risks, capital is expected to continue favoring income-producing assets, including U.S. commercial real estate and apartment properties.

Employment Growth

The U.S. labor market continued to expand in 2017, adding 2.0 million jobs, or 1.4%, reflecting a slightly more moderate pace compared to 2.3 million in 2016. Similar to 2016, job growth continues to be primarily driven by professional and business services and the health and education sectors. The passage of the TCJA is expected to improve investor sentiment and boost economic growth in 2018, with the baseline scenario projecting 1.5% job growth nationally, or approximately 2.2 million jobs, which should help generate a net absorption of about 300,000 rental units.

Most Berkshire target markets are expected to see stronger job growth in 2018 relative to last year, led by Houston. Other metro areas expecting robust gains include Phoenix, Orlando, Tampa, Dallas and Austin. Job growth is projected to continue moderating in San Francisco and San Jose, which have been among the fastest-growing markets over the last five years.
Stronger Job Growth Expected in Most Target Markets in 2018

### Wage Growth

With the labor market nearing full employment, wage growth continued to grow ahead of consumer price inflation in 2017 but at a slightly slower pace than in 2016. With the labor market expected to tighten further in 2018, wage growth should rebound helping mitigate affordability concerns for the apartment sector as a whole. The robust wage growth reported in January of 2018 is expected to pick up even more as the year progresses. Considering that apartment occupancy in most markets is close to full capacity, local wage growth will be an increasingly important driver of apartment rent growth.

### Household Growth

Total household growth improved at the end of 2017, expanding by 1.4 million in Q4 2017 on a year-over-year basis compared to 0.9 million in 2016. On an annual basis; however, household growth has largely kept pace with the prior year. Unlike in 2016 where the homeowner segment was the primary beneficiary of this trend, gaining over 1.1 million households, the U.S. homeownership rate edged up by about 40 basis points for all of 2017. Despite a slight decline in broader rental demand, which includes single-family homes, multifamily demand growth remained strong and exceeded expectations with a net absorption of 330,000 units compared to 265,000 units in 2016. In 2018, the total number of households is expected to grow by 1.1 million, with the rental market accounting for about 0.4 million, if homeownership remains at its current rate of about 64%.
Homeowners Drove Total Household Growth in 2017

New Housing Supply Growth
Total housing completions continued to increase in 2017, rising to 1.2 million units from 1.1 million in 2016, with multifamily completions increasing from 311,000 to 347,700 units. Accounting for demolitions, effective growth in total housing supply has largely kept up with demand and the total vacancy rate for all year-round housing units remaining steady at 9.6% as a result.

Based on the current level of starts, new housing completions are expected to increase to about 1.2 million units in 2018, with about 350,000 units delivered in the multifamily segment. Given the shortage of the current rental supply and the outlook for solid job and household growth, only slight increases in apartment vacancy rates can be expected for most target markets.

Sources: Census Bureau, Berkshire Group Research.
The Vacancy Rate is Approaching Historical Norm*

* The Supply Risk Index is a proprietary metric developed by Berkshire Group Research to evaluate relative supply risks across markets. The index takes into account growth in stock relative to growth in employment and compares the current difference between the two to the historical averages for each metro area. An index above 1.0 indicates rising supply risk and upward pressure on the vacancy rate.


Rising home prices, along with higher mortgage rates, should further reduce the affordability of homeownership and stimulate rental demand.

Home Price Growth

Despite weak owner demand, home prices continued to climb in 2017 due to a low supply of homes for sale relative to actual sales. Strong year-over-year home price appreciation reported in Seattle, San Diego, Denver and Portland contributed to strong growth for these markets, and higher home prices should continue to put upward pressure on rents in 2018. Rising home prices, along with higher mortgage rates, should further reduce the affordability of homeownership and stimulate rental demand.
Rising Home Prices Support Rent Growth in 2018

The S&P/Case-Shiller Home Price Indices are the leading measures of U.S. residential real estate prices, tracking changes in the value of single-family homes both nationally as well as in 20 metropolitan areas. The indices measure changes in home prices given a constant level of quality; changes in the types and sizes of houses or changes in the physical characteristics of houses are specifically excluded from the calculations to avoid incorrectly affecting the index value1.

Sources: S&P/Case-Shiller, Berkshire Group Research.

Interest Rates

Multifamily cap rates are expected to be fairly stable in 2018 even as long-term interest rates are rising. The latest outlook calls for a moderate (50-75 basis points) increase in the 10-year Treasury rate in 2018 as priced by the futures market. The 10-year Treasury has remained fairly stable through much of 2017, with the monthly average rate fluctuating in the 2.2-2.5% range. Present expectations of stronger economic growth and higher inflation suggest that the 10-year Treasury rate will move into a 3.0-3.3% range by the second half of 2018.

The national appraisal-based cap rate for apartment properties in NCREIF averaged 4.3% in Q4 2017, or 17 basis points below levels one year ago. The cap rate spread relative to the 10-year Treasury rate was 194 basis points in Q4 2017, slightly below the 217 basis points spread averaged over the prior decade. The spreads are likely to tighten further but should remain in the 120-150 basis points range in 2018.

While cap rates are lower than a year ago in most of Berkshire Group’s target markets, there was less compression in large metro areas, with

---

1 S&P/Case-Shiller Home Price Indices Methodology, February 2015.
the latest figures providing further evidence that cap rates are stabilizing. With growth in net operating income (NOI) expected to remain positive, apartment values should continue rising, but at a slower pace than last year. As such, property appreciation in 2018 will be driven more by NOI growth than changes in cap rates.

As long as 2018 short-term and long-term interest rates and multifamily borrowing spreads rise in line with the expectations of stronger economic growth, the impact on the pricing of core institutional-quality apartment assets should be relatively small due to the offsetting effect of property income and investor demand. However, a potential increase in borrowing rates could affect pricing for buyers, especially those pursuing value-add acquisitions.

**Cap Rate Spread Relative to 10-Year Treasury Yield Expected to Compress in 2018**

Rising rates should create more investment opportunities as a significant volume of multifamily loans will be maturing in 2018, contributing to increased activity in sales, refinancings and recapitalizations. Rising mortgage rates combined with rising home prices, property taxes and other costs such as insurance premiums will push affordability of home ownership down. In addition, federal income tax benefits that have incentivized home ownership for decades have been nearly eliminated by the TCJA and this change should also support rental demand.
MULTIFAMILY MARKET TRENDS

Vacancy and Rent Growth

After seven years of expansion, multifamily market fundamentals softened slightly in 2017 but the overall performance was slightly above expectations from 2016. The average vacancy rate across Berkshire’s 32 target markets increased from 4.8% in Q4 2016 to 4.9% in Q4 2017, and remained well below the 15-year average of 5.5%. Average market vacancy rates in 2017 were below the 15-year averages in all of Berkshire’s target markets except Baltimore, Houston and South Florida, where they were slightly above the norm.

Markets where 2017 vacancy rates were particularly tight relative to historical norms included Orlando, Phoenix, Minneapolis, Fort Worth, Charlotte and Dallas. Higher levels of new completions combined with relatively stable job growth should likely lead to a moderate (50-100 basis points) increase in vacancy rates in 2018 across Berkshire’s target markets.

Average effective rent growth across the 32 target markets moderated from 2.5% in 2016 to 2.1% in 2017, which was consistent with the long-term pace after adjusting for consumer price inflation. The variation in rent growth trends narrowed in 2017, with half of the target markets falling within a 1.0-3.0% range. Markets with flat or declining rents included Austin, West Palm Beach and Stamford. The strongest effective rent growths of 3.5% and higher were reported in Long Island, San Diego, Houston, Phoenix and Orlando.

Effective rent growth in 2018 is expected to stay in the 1.0-3.0% range across our target markets. Overall, a combination of moderate vacancy increases and continuing rent growth should support positive operational performance across target markets in 2018.

Rent Growth Slowed in 2017 but Remained Near the Long-Term Average Pace

* Share of target markets where rent growth is improving relative to a year ago
Sources: Axiometrics, Berkshire Group Research.
Apartment investing moderated slightly in 2017 with a national sales volume of $150 billion compared to $161 billion in 2016. About 8,500 apartment properties, totaling about 1.1 million units, sold nationally with secondary and tertiary markets continuing to gain investor interest share in the total sales volume.

Strong market fundamentals and investor demand keep pushing apartment prices to new records, with the Moody’s/RCA CPPI index up 10.6% from a year ago as of December 2017. The apartment sector had the strongest price appreciation relative to all other major sectors and the pace was only slightly lower compared to December 2016, when prices increased by 12.5% on a year-over-year basis.

Considering the strong investor demand for apartments and the amount of capital currently being allocated to the sector for 2018, Berkshire expects prices to continue rising this year although not as strongly as in 2017. Based on near-term income growth and current cap rates across targeted locations, there are likely to be attractive opportunities in 2018 for buying existing apartment properties in areas adjacent to the central urban core of primary markets in well located, high quality product in secondary markets, and in high density supply-constrained suburban locations.

Apartment Sales Volume Dropped Slightly in 2017 with Continued Gains in Pricing

Investment Performance

Total unleveraged returns for apartment properties privately owned by institutional investors edged down from 7.3% in 2016 to 6.2% in

* The Moody’s/RCA Commercial Property Price Index (CPPPI) based on repeat sales transactions.

Sources: Real Capital Analytics, Berkshire Group Research.
2017. This compression was largely driven by slower appreciation, which in turn was a result of weaker growth in NOI. Same store NOI grew by 0.8% on a year-over-year basis in Q4 2017 compared to 4.0% a year prior.

There was a wide variation in returns across various types of apartment properties and markets. Garden-style apartments continued to outperform high-rise product by a wide margin with 2017 total returns for the two sub-segments being 8.9% and 4.7%, respectively. The year-over-year appreciation return for high-rises was just 0.6%, as many of the properties in central urban core submarkets struggled with oversupply.

The divergence in returns was even wider across locations. The table below shows last year’s top 10 and bottom 10 performers among Berkshire’s 32 target markets. Nashville and Orlando not only had the highest total returns of over 10% in 2017 but have also showed considerable improvement relative to 2016. Meanwhile, most gateway markets including Chicago, New York, San Francisco and Washington, D.C., continued to underperform the apartment index. Houston’s economy and apartment fundamentals started to rebound last year, even prior to the hurricane, and this was reflected in improving investment returns, a trend that should continue in 2018.

Sources: NCREIF, Berkshire Group Research. Past performance is neither a guarantee nor a prediction of future results.

Total unleveraged gross returns across target markets are expected to remain within a 5.5-6.5% range in 2018, with appreciation returns in the 0.5-2.5% range.
Overall Multifamily Outlook

Apartment fundamentals and investment performance are expected to remain healthy in 2018 supported by stronger growth in the economy, employment, incomes and home prices.

With new multifamily supply leveling off, vacancy rates should remain within historical norms keeping rent growth in line with consumer price inflation.

Overall, 2018 is expected to be a positive, but potentially more volatile year for multifamily operational performance and pricing, with greater differentiation across markets and types of product. Similar to 2017, the market should present new investment opportunities resulting from higher volumes of maturing multifamily debt and recently completed product.
Disclosures

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.

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.

Private investment marketing and other broker-dealer services are offered through a partnership with
SDDCO Brokerage Advisors, LLC, Member: FINRA/SIPC ("SDDCO-BA"). All such services offered by
Berkshire Group associated persons are done so in their capacities as registered representatives of
SDDCO-BA. Berkshire Group and its affiliates are independent and unaffiliated with SDDCO-BA.

Notice to investors in Switzerland

Swiss representative: Mont-Fort Funds AG, 63 Chemin Plan-Pra, 1936 Verbier, Switzerland
Swiss paying agent: Neue Helvetische Bank AG, Seefeldstrasse 215, CH-8008 Zurich, Switzerland
Place of performance and jurisdiction: In respect of the interests distributed in or from Switzerland,
the place of performance and jurisdiction is the registered office of the Swiss representative.
Gleb Nechayev,
Senior Vice President, Head of 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.