

Growing Opportunity for Investing in Middle-Income Multifamily

A BERKSHIRE RESEARCH VIEWPOINT

October 2018



Berkshire



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EXECUTIVE SUMMARY

- Acute shortage of housing in the U.S. is contributing to escalating costs of buying and renting
- Much of the aggregate housing supply shortage is concentrated in the low-to-middle income segment of the rental market
- Rapid increases in housing costs are changing income criteria differentiating renters by choice from renters by necessity and re-defining demand for middle-income rental housing
- A major share of the total rental housing shortage is accounted by the multifamily sector where the national supply deficit is estimated to be around 200,000 units
- The current demand/supply imbalance in the multifamily sector presents an opportunity to invest in new development and in the rehabilitation of existing properties targeting middle-income renters
- Markets that were hit the hardest by the housing bust and foreclosure crisis now have the lowest vacancy rates by historic standards for apartments targeting middle-income renters including Florida, Arizona, Nevada, parts of California and the Midwest, with greater potential to absorb new supply over the next two years
- The least affordable markets on the coasts including California and the Northeast region still offer the deepest pools of demand for middle-income rental multifamily and the best long-term potential for investment in this segment

Introduction

The U.S. residential market has undergone a major change in the last decade. Since the Great Recession, rental demand expanded by about 6 million units, not accounting for demolitions. In contrast, only 2.5 million units of new supply were added over this period. Despite the additional supply through own-to-rent conversions of existing housing, rental vacancies still dropped to historically low levels while rents grew at rates well above consumer price inflation and household incomes.

The collapse of home prices during the housing bust was followed by a strong recovery. Nationally, home price growth grew notably faster than rents in the last five years, making ownership less affordable. In many major cities, renter households earning a median income are unable to qualify to purchase a home, often finding themselves spending a higher share of income on rent. Middle-income renters are one of the groups most affected by rising housing costs.

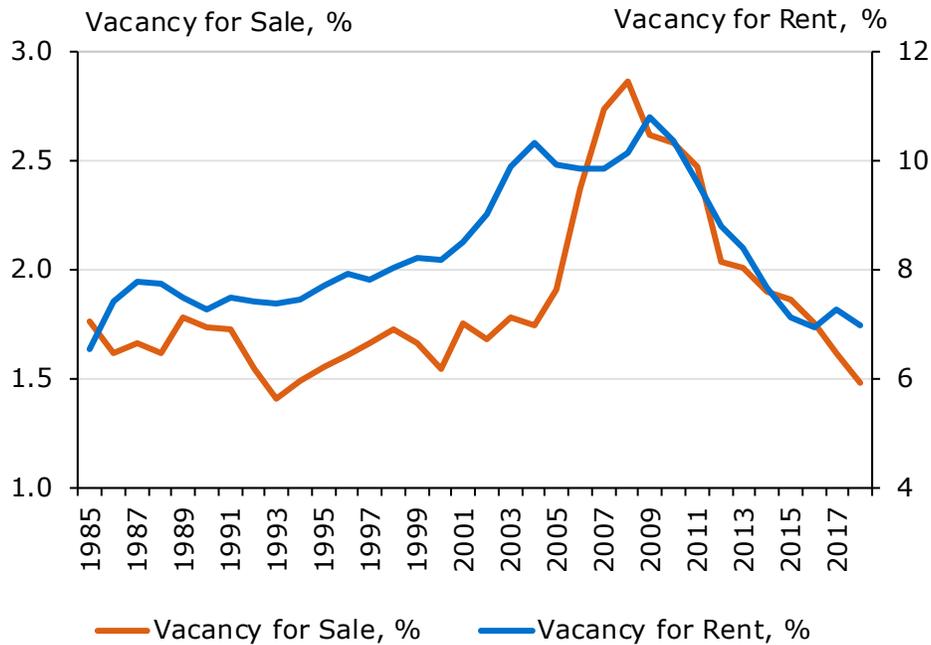
This situation presents a major opportunity for investors and developers of professionally-managed multifamily housing, which currently captures over 40% of all renter households in the nation. Over the last decade, and particularly in the last five years, multifamily investment and development has shifted towards higher-end properties. However, much of the pent-up rental demand remains concentrated in the middle range of the income spectrum. One of the key steps in developing a strategy for investing in middle income rental housing is defining demand for this segment across multiple markets.

After years of widening disparity between home prices and household incomes, the current definitions of middle income or so-called “workforce” housing often used to analyze this segment can be too narrow. For example, the U.S. Department of Housing and Urban Development defines middle income housing as households making 80-120% of the metro area’s median family income (AMI), while the Urban Land Institute suggests a broader range of 60-150% of AMI. Rather than using a specific income range, it would be more appropriate to define middle income housing as renter households that can neither qualify for any form of public housing subsidy nor are they in the position to buy a median-priced home in their community. Based on this approach, in a few major U.S. cities (especially in coastal markets) the upper cap can be as high as 200% of AMI and even higher in some submarkets.

One indication of pent-up demand for middle income rental housing is that the share of households spending 30% or more of their income on rent continues to rise, especially in the coastal cities where housing is traditionally more expensive. Meanwhile, the supply of rental units catering to this segment keeps shrinking with some shifting towards the lower end of the stock due to obsolescence and depreciation and other units shifting towards the upper end through renovation or gentrification. The current supply shortage in the middle income rental segment is estimated to be at least 500,000 units, with much of it concentrated in the multifamily space and in high-cost areas in particular.

Housing Supply Shortage and Escalating Housing Costs

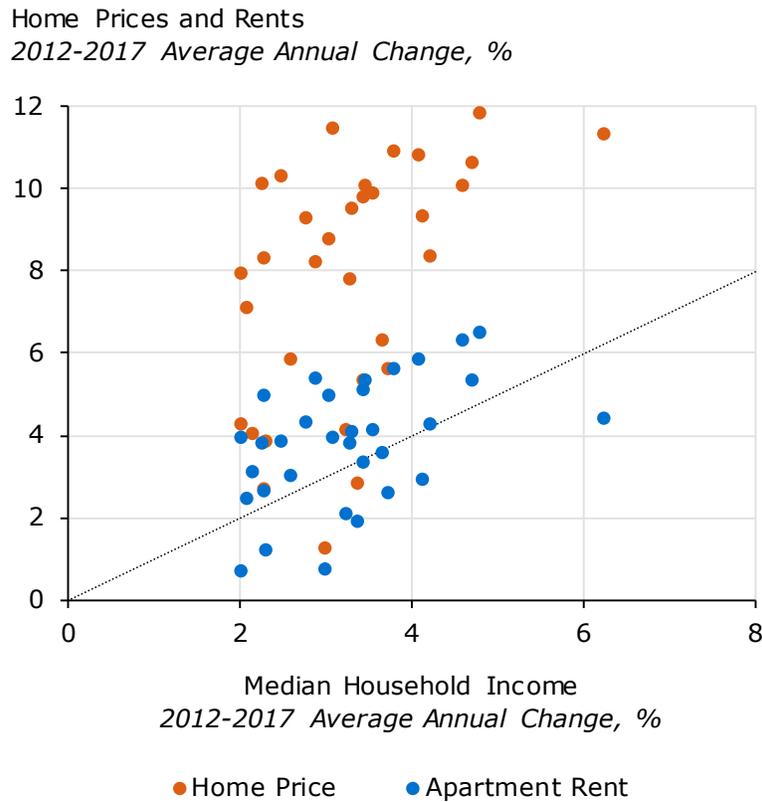
The current shortage of housing supply relative to demand in the U.S. is one of the key factors contributing to the widening disparity between household incomes and housing costs for owners and renters alike. Over the decade following the Great Recession, the share of housing stock available for sale has dropped from a peak of 2.9% in 2008 to 1.5% today, the lowest since the early 1980s and about 40 basis points below the 30-year average.



Sources: Bureau of the Census, Berkshire Group Research.

Most of the current housing shortage is concentrated in the rental segment, which accounted for about 80 percent of the total housing demand growth since 2008. The vacancy rate for all rental housing (including properties with 1-4 units) has dropped from a peak of 10.8% in 2009 to 7.0% in 2018 and remains near historically low levels, about 150 basis points below the historical norm.

The tight housing market helps explain the strong growth in housing costs. For example, between 2012 and 2017, home prices and apartment rents in the nation’s 30 major markets grew at an average annual rate of 7.8% and 3.8%, respectively. Meanwhile, median household incomes have lagged in most of these markets, growing at an average rate of 3.3% per year. At the same time, the 30-year fixed mortgage rate edged up slightly, contributing to lower home buying affordability. The following chart shows that during this period home prices grew faster than household incomes in all but two markets. The disparity was less extreme in the rental segment but here too housing affordability has fallen in most areas. The impact of rising rents was most pronounced among middle- and upper-income households.

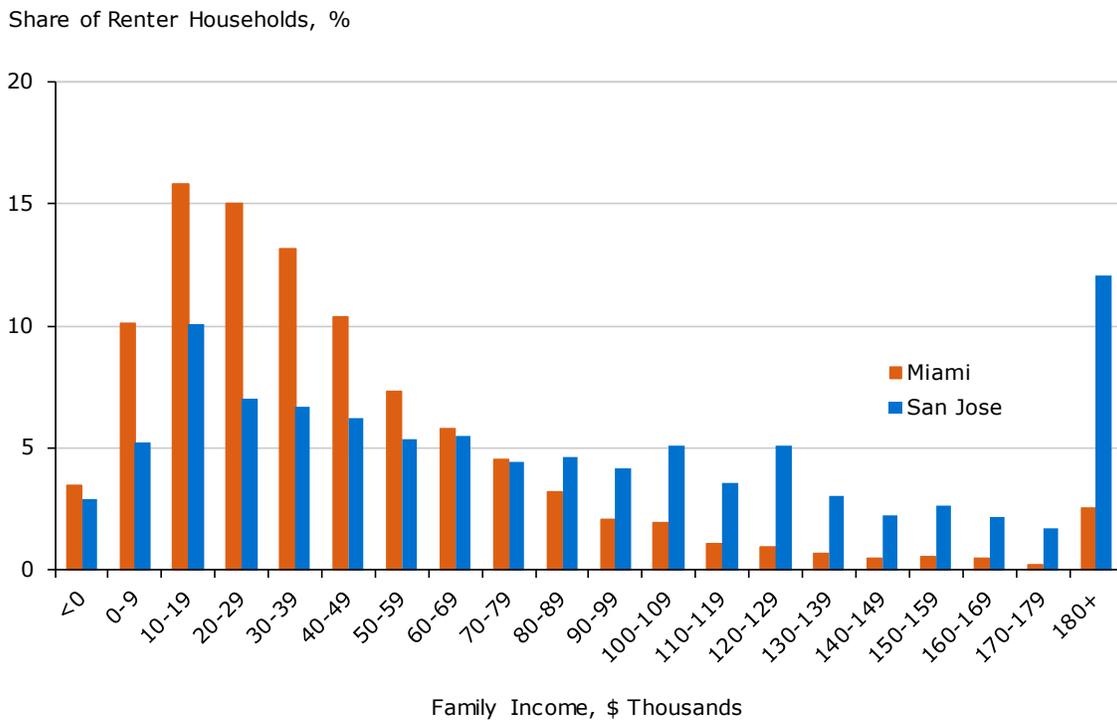


Sources: RealPage, FHFA, Berkshire Group Research.

Who are Middle Income Renters?

There is no exact definition of “middle-income” and methodologies for estimating it vary depending on the source and purpose of analysis. Household and family incomes are being used most often as criteria, yet the resulting distributions based on each are quite different. For example, based on 2016 American Community Survey, the U.S. median household income was \$57,617 while the U.S. median family income was \$71,062.

Furthermore, household and family income distributions vary widely by household size, tenure (i.e., homeownership status), and location. For example, median incomes would be much higher for a three-person household versus a single-person household, for an owner versus a renter household, or for a household in San Jose versus one in Miami.



Sources: Bureau of the Census, Berkshire Group Research.

Another layer of complexity is added when “middle income” is used interchangeably with “middle class”. A recent analysis by the Pew Research Center noted “middle class can connote more than income, be it a college education, white-collar work, economic security, homeownership, or having certain social and political values. Class could also be a state of mind, that is, it could be a matter of self-identification.”¹ As recent polls show, over 60% of Americans identify themselves as middle class.

Median Family and Household Incomes*, 2016

Metro Area	Median Income, \$ Ths		Median Household Income, \$ Ths	
	Family	Household	Owner	Renter
San Francisco	125.9	105.9	135.2	84.5
San Jose	122.2	110.0	138.3	80.4
Long Island	116.7	99.2	114.1	51.3
Silver Spring	116.3	97.8	122.6	61.2
Washington, D.C.	111.9	95.4	121.4	61.3
Cambridge	108.7	88.4	115.3	50.5
Oakland	105.1	90.4	118.9	63.0
Montgomery County	103.6	84.5	101.9	46.4
Seattle	102.1	83.5	107.4	55.3
Newark	101.2	80.5	112.6	42.1
U.S.	71.1	57.6	73.1	37.3
Fort Lauderdale	64.5	54.2	67.2	41.4
Las Vegas	63.8	54.4	71.2	39.5
New Orleans	63.2	48.8	66.7	29.3
Tampa	62.9	51.1	61.1	38.2
Memphis	61.3	49.8	67.8	30.9
Orlando	61.3	52.4	66.2	39.2
Tucson	60.1	47.6	60.2	32.3
Philadelphia	59.1	47.3	62.1	32.7
Detroit	56.5	43.5	59.5	26.0
Miami	51.7	45.9	65.2	33.0

The table lists top 10 and bottom 10 metro areas (among those with population of 1 million and greater) based on median family income.

Sources: Bureau of the Census, Berkshire Group Research.

¹Pew Research Center, May 11, 2016, “America’s Shrinking Middle Class: A Close Look at Changes Within Metropolitan Areas.”

To develop a framework for analyzing housing demand across various segments, we divide all households into five groups based on their distribution by family income, adjusting for household size and location.² The resulting distribution is as follows: the top 20% is the upper income tier, the next two groups are middle income tiers (with 60-80% being upper middle and 40-60% being lower middle) and the bottom two are low income tiers (with the bottom 20% being very low). While family incomes vary widely by household size and location, the national middle-income for renters falls within an approximate range of \$43,600 and \$115,000 per year, or about 60% to 160% of the median. As the following table shows, this group accounted for 33.3% of all renters in 2016 and about 80% of all renters with annual family income above \$43,600.

Renter Households by Family Income, 2016

Income Tier	Family Income, \$ Ths	Renter Households	
		Millions	% Total
Very Low	< 22.7	14.6	33.3
Low	22.7-43.5	11.2	25.5
Lower Middle	43.6-69.9	8.6	19.6
Upper Middle	70.0-114.9	6.0	13.7
Upper	115+	3.5	7.9
Total		43.8	100.0

Sources: Bureau of the Census, Berkshire Group Research.

In observing the changes in renter households between 2011 and 2016, the two middle income tiers accounted for over half of the total growth. The upper income renter tier grew the fastest by percentage (3.3%), closely followed by the upper-middle income tier (3.0%). Together, the middle income and upper income tiers accounted for over two thirds of the total gain in rental demand over the last five years.

Change in Renter Households, 2011-2016

Income Tier	Average Annual Change		Share of Total, %
	%	Mil.	
Very Low	0.4	0.1	9.2
Low	1.4	0.1	23.0
Lower Middle	1.9	0.2	24.6
Upper Middle	3.0	0.2	26.6
Upper	3.3	0.1	16.5

Sources: Bureau of the Census, Berkshire Group Research.

²The U.S. Department of Housing and Urban Development (HUD) uses family rather than household incomes to set its limits for various low-income housing assistance programs and does not differentiate between owners and renters when setting those limits.

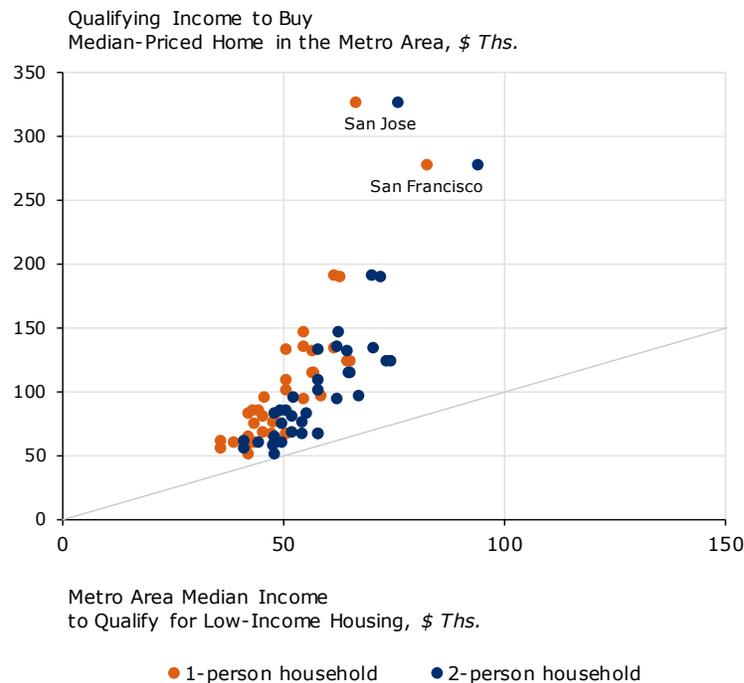
To refine this analysis, we apply two additional adjustment factors. The first is determined by potential eligibility of middle income households for any forms of public subsidies based on HUD's income criteria. Based on HUD's guidelines, the median family income for the U.S. in 2016 was \$65,700 (compared to \$71,062 based on 2016 American Community Survey).³ Given HUD's income limits, which are determined as percentages of the area's median income (AMI) adjusted by household size, a four-person household with family income of \$52,000 would be eligible for low income housing assistance nationally. In our proposed definition, any households that might qualify for such assistance would be considered low income and therefore excluded from our middle-income definition.

The second adjustment factor is determined by the potential ability of upper income renter households to become homeowners, i.e., being renter by choice rather than by necessity. Just as the income ranges that define middle income households vary widely by household size and location, so does the costs of buying a home. In San Jose, where the median home price is currently one of the highest in the country at almost \$1.4 million, the middle-income range is approximately \$84,000-\$212,600, based on the distribution of family incomes in the metro area. There, the middle-income tier accounts for over 36% of all renter households and the upper-income tier accounts for about 10%. The income required to qualify for a mortgage to buy a median-priced home in the area is estimated to be over \$327,000. By adding the ability to buy a home to the criteria that defines the upper income or renter-by-choice tier, it effectively starts at \$328,000 rather than \$212,600, also expanding the middle-income renter tier from 36.4% to 43.4% of the total.

³ Source: U.S. Department of Housing and Urban Development, <https://www.huduser.gov/portal/datasets/il/il16/Medians2016.pdf>

Housing affordability is particularly challenging for renter households in the low middle-income tier. The following chart contrasts incomes that would qualify one- and two-person households for low income housing based on HUD’s 2018 limits, versus incomes that would be required to buy median priced homes across 30 major metro areas. In these markets one- and two-person renter households whose incomes are just above HUD’s low-income level cannot qualify for a loan to buy a typical house in their area. The qualifying income to buy a median-priced home is now almost twice the average income limit that separates lower middle income from low income for one- and two-person households, who account for 64% of all renters nationally.

Renter Households by Family Income, 2016



Sources: Bureau of the Census, HUD, Moody's Analytics, Berkshire Group Research.

In most major markets, a renter household making the area’s median family income (AMI) is still unable to buy a home. While the common view is that households making at least 120% of AMI are renters by choice, our analysis shows that this is not the case in most coastal markets including San Francisco, San Jose, Oakland, San Diego, Los Angeles, Orange County, New York, Miami and Seattle. These metro areas, which are traditionally among the least affordable housing markets in the country, also have the more severe shortages of housing for middle income renters.

To compare markets based on their pent-up demand for middle-income rental housing, we examined the following four metrics across the 100 largest metropolitan statistical areas (MSAs):

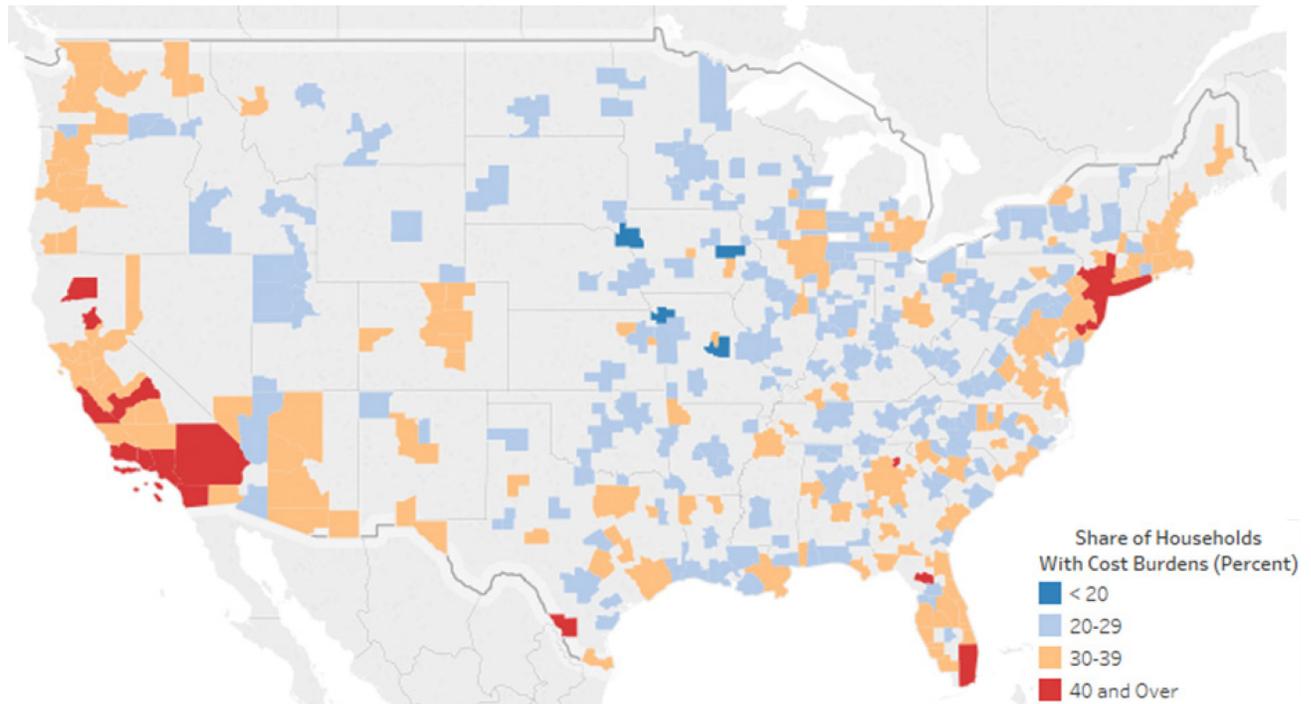
1. Share of homes in a metro area available for purchase by middle-income renter households
2. Share of homes in a metro area available for purchase by upper-income renter households
3. Share of all renter households spending more than 50% of income towards rent
4. Share of renter households with incomes of \$50,000 and above spending more than 30% of income towards rent

The following table lists the top 25 metros based on the aggregate score that weights each of the above four variables equally (with the top five ranked markets for each metric highlighted in blue). Not surprisingly, markets with the highest home prices relative to incomes also have the highest pent-up demand for middle-income rental housing. While such areas have always been among the least affordable from either a homeownership or renting standpoint, the housing cost pressures on middle income renters have grown even more in the last five years.

Market	Variable			
	1	2	3	4
Los Angeles	6.6	17.8	24.4	25.8
Honolulu	6.4	25.0	19.5	37.9
Ventura	5.1	16.7	18.4	32.9
San Diego	10.9	27.7	21.3	28.0
San Jose	9.3	23.7	17.0	28.0
New York	9.8	39.1	22.8	21.0
San Francisco	5.1	29.3	18.0	24.3
Miami	22.2	47.8	24.3	23.4
Fresno	8.2	41.5	22.7	12.2
Riverside	18.0	45.4	21.5	21.3
Stamford	16.7	44.5	19.1	25.5
Stockton	11.9	29.7	18.8	14.9
Sacramento	10.9	34.0	18.7	16.0
Boston	10.6	40.4	16.8	19.4
Denver	11.7	38.1	14.5	18.6
Portland	9.5	37.5	15.2	13.6
Seattle	10.8	45.0	14.8	16.7
Washington, D.C.	17.9	52.3	15.1	22.9
Bakersfield	16.3	47.9	17.6	13.0
New Orleans	13.0	51.8	18.6	8.6
U.S.	30.5	64.3	15.6	4.9

Sources: Bureau of the Census, Berkshire Group Research.

Share of Households Spending More than 30% of Income Towards Housing Costs

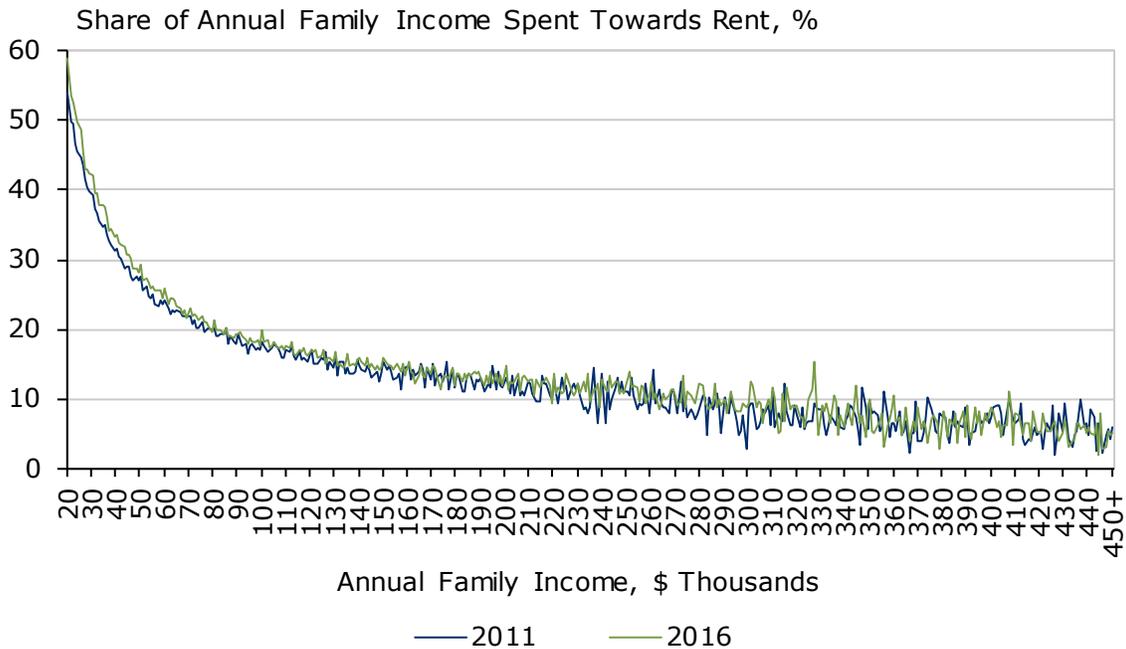


Sources: Bureau of the Census, Berkshire Group Research.

A Closer Look at the Shortage of Middle Income Rental Supply

While the shortage of housing in the U.S. is evidenced by historically low residential vacancy rates, it is harder to say how this aggregate demand/supply imbalance might be distributed across the different segments based on prices and rents. One of the reasons for this is that vacancy rate data for the broader market is simply not available at such level of detail. Another challenge is that there is no accepted approach for classifying existing housing inventory (for rent or for sale) into low, middle or upper income. While there are certainly recognizable general differences between each of these tiers, there are no clear-cut thresholds based on prices or rents separating them from one another, just as there are no set rules as to what share of income should be spent towards housing.

To get a better understanding of how existing rental supply is distributed along the income spectrum, we used American Community Survey micro-data (over 3 million records) to calculate ratios of rents to family incomes nationally and across markets. As the following table depicts, there is a strong inverse relationship between the level of family income and its share spent towards rent.⁴ These shares trend to range 30-60% for low-income households, 20-30% for lower-middle income households, 15-20% for upper-middle income households, and 5-15% for upper-income households.



Sources: Bureau of Census, Berkshire Group Research.

The distribution of rent-to-income ratios helps to determine approximate rent ranges for the different income tiers, but it also suggests shortages of housing for low- and middle-income renters as well a potential supply surplus (and therefore lower-than-expected rent levels) for the upper-income renters, at least on the aggregate. Over the last five years, the average shares of family income spent on rent increased for all renters except those in the upper income tier where the share dropped slightly.⁵ Most low- and middle-income renters are paying higher rents than would be expected based on the above distribution due to a shortage of at least 500,000 rental units or over 3% of the estimated inventory for this segment.

⁴The relationship is logarithmic: share of income spent towards rent drops more sharply transitioning from low to middle income levels than from middle to upper income levels.

⁵The average shares of annual family income spent towards rent increased from 25.4% in 2011 to 26.5% in 2016 for lower middle-income households and from 19.2% to 19.8% for upper middle-income households.

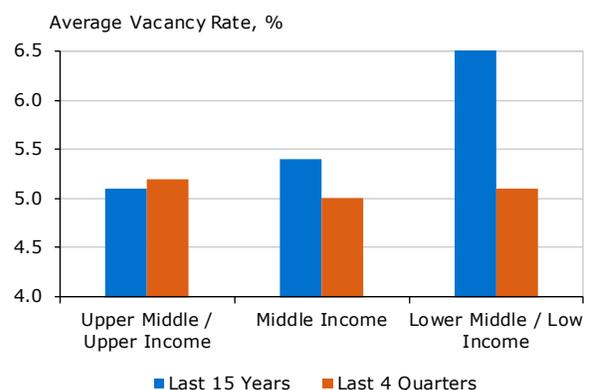
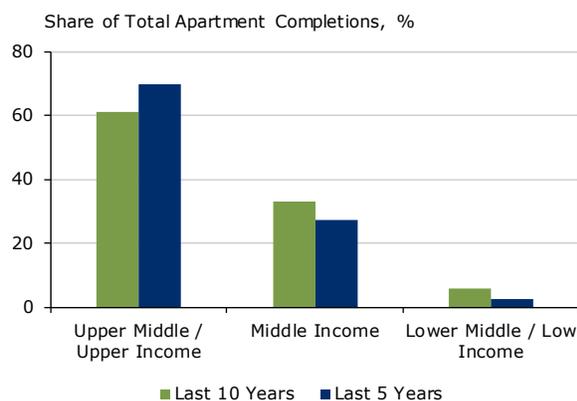
A major share of the rental housing shortage is likely to be concentrated in the multifamily sector where the current deficit is estimated to be around 200,000 units. As the following table shows, properties with five or more units capture 43% of the total rental demand and a slightly lower share of its middle-income tier. This share is higher however in major metropolitan areas, especially urban core, that have higher concentration of multifamily in the local housing stock. A notion of multifamily shortage in urban areas may sound surprising considering the high volume of development that has taken place in recent years. Much of this new supply however was targeting upper-income renters, with vacancy rates for class A apartments already reflecting a slight oversupply whereas vacancy rates for class B and C properties are undersupplied.

Distribution of Renter-Occupied Stock by Units in Structure, %				
Income Tier	1 unit	2-4 units	5+ units	Other
Very Low	25.6	20.2	48.9	5.3
Low	32.4	19.3	43.6	4.7
Lower Middle	36.8	17.5	42.2	3.6
Upper Middle	41.1	15.6	41.3	2.1
Upper	41.3	13.9	43.7	1.1
Total	34.8	17.7	43.0	4.5

Sources: Bureau of the Census, Berkshire Group Research.

To analyze the trends in more detail, we examined a sample of over 50,000 professionally-managed apartments with a total of about 10 million units (which captures most of the existing institutional-grade rental multi-family properties in the nation). The properties were classified into three tiers based on the likely income of their tenants and on the current rent levels: "upper middle/upper income", "middle income", and "lower middle/low income".

As the following table shows, 60% of all apartments built in the last decade were targeting the upper tier, with only a third targeting the middle tier, and less than 10% targeting the bottom tier. Not surprisingly, the vacancy rate in the upper tier has now surpassed the historical norm with a moderate oversupply nationally and more severe pressures in select markets and submarkets (urban core in particular). Meanwhile, the vacancy rates for the middle and especially the low tier remain below their historical norms nationally, with many major markets experiencing substantial supply shortages.



Sources: RealPage, Berkshire Group Research.

The following table shows the top 10 metro areas with population over 1 million where vacancy rates for each of the tiers are the lowest relative to their 10-year averages. The general pattern is that most markets that are among the tightest by historical standards are in areas where housing was hit the hardest by the housing bust and the foreclosure crisis, including Florida, Arizona and Nevada, as well as parts of California and the Midwest region. While there are some markets that show up on all three lists (such as Tucson, Las Vegas, Jacksonville and Phoenix), there is no tangible correlation between the overall apartment vacancy rates across markets and their tier-specific vacancy rates. This reinforces the view that both overall market conditions and class-specific fundamentals need to be compared when targeting various income tiers of renters

Difference Between 2018 and 2008-2017 Average Vacancy Rates by Income Tier, basis points

Market	Upper Middle / Upper Income	Market	Middle Income	Market	Lower Middle / Low Income
Richmond	-192	Tucson	-203	Tucson	-492
Tucson	-164	Las Vegas	-200	Jacksonville	-443
Las Vegas	-148	Columbus	-184	Charlotte	-414
Detroit	-131	Detroit	-177	Phoenix	-397
Kansas City	-124	Orlando	-167	Atlanta	-392
Tampa	-121	Minneapolis	-154	Las Vegas	-358
Sacramento	-86	Jacksonville	-152	Riverside	-345
Phoenix	-82	Phoenix	-139	Tampa	-338
Orlando	-68	Birmingham	-133	Orlando	-335
Jacksonville	-67	Cincinnati	-109	Richmond	-281
Nation	11	Nation	-31	Nation	-130

Sources: RealPage, Berkshire Group Research.

The above results also highlight the differences between broader rental market dynamics and current conditions within its multifamily segment. In fact, for many of the most expensive housing markets, vacancy rates for middle-income apartments are not as low as one would expect given the aggregate shortage of rental housing in this segment. A key reason for this is that average rent levels for middle-income apartments in such areas are often simply too high relative to incomes. Opportunities for middle income rental multifamily investment in such areas need to be evaluated carefully at the submarket level and focus on locations and properties where rent-to-income ratios are relatively low and where potential to attract new demand is strongest.

Conclusion

As the U.S. economy approaches the longest expansion in history, there remain considerable shortages of housing for rent and for sale, particularly in the middle-income and low-income segments. In many major markets, particularly on the coasts, the lack of affordable housing is also a serious challenge for businesses seeking to attract workers in the environment where the national pool of qualified labor is already limited by low unemployment. This housing challenge is also changing income criteria that differentiate renters by choice from renters by necessity and effectively broadening the local definitions of middle income rental housing.

The current demand/supply imbalance in middle income rental housing is a significant macro investment opportunity. Professionally-managed multifamily rental housing captures over 40 percent of the total rental demand and this share will likely rise over the next decade as the U.S. population ages and household sizes get smaller. In many ways, market fundamentals of rental multifamily have followed the broader market and there are indications of a nationwide supply shortage in the low- and middle-income tiers.

The multifamily sector also offers greater transparency relative to the broader market which allows one to identify near-term targets for middle-income multifamily investment. Many of the areas that were hit the hardest by the housing bust and foreclosure crisis now have the lowest vacancy rates by historic standards for apartments targeting middle-income renters including Florida, Arizona, Nevada, parts of California and the Midwest region (such as Detroit, Columbus, and Minneapolis) and therefore have greater potential to absorb new supply over the next two years. Meanwhile, the least affordable housing markets (including their central cities as well as suburbs) still offer the deepest pools of demand for middle-income rental multifamily and the best long-term potential for investment in this segment as reflected in the current asset prices.



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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.



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