

Primer on Multifamily Housing & Finance

U.S. HOUSING STOCK:

- Renters occupied 36% of units in 2017, up from 33% in 2007 but down 1% from 2015
- Single family renter occupied units increased by 28% from 11.7 million in 2007 to 14.9 million in 2017
- Multifamily (5+ units) renter occupied units increased by 17% from 16.1 million in 2007 to 18.9 million in 2017
- The Harvard Joint Center for Housing Studies (JCHS) forecasts 4.2 million new renter households between 2018 and 2028

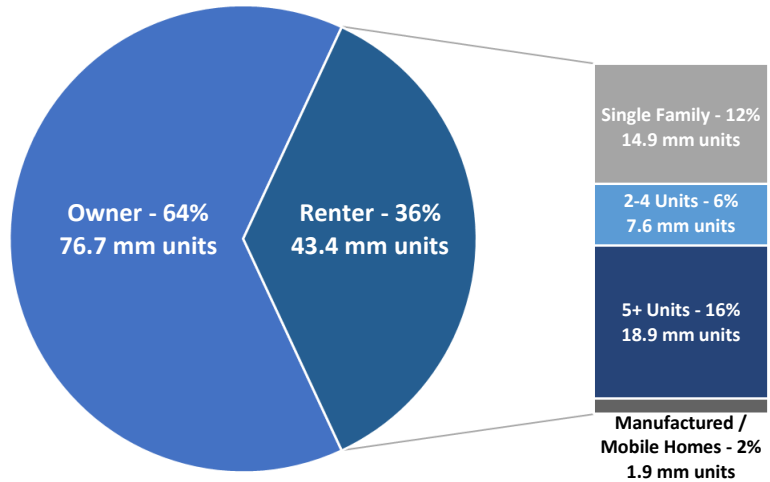
DEMOGRAPHICS:

- Renter households are younger, smaller and a higher percentage of minorities than owner households
- Median renter household incomes have consistently been 51% or less of owner incomes
- Affordability challenges remain, but homeownership is at the highest level (64.8%) since the beginning of 2014
- Over the same period, renter households younger than 54 have decreased by 2.3% while those over 55 have increased 7.0%

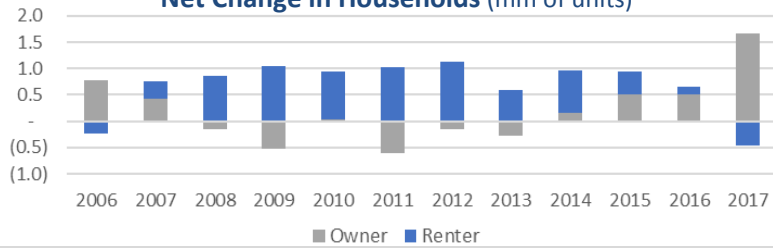
MULTIFAMILY PERFORMANCE:

- According to National Multifamily Housing Council, the total value of occupied apartments in 2017 stood at \$3.70 trillion
- Vacancy rates for all rental housing dropped to 6.6% in 2018 Q4 - the lowest figure in 33 years
- Per the Bureau of Labor Statistics, rent of primary residences showed continued strength in 2018, growing 3.5% and outpacing inflation (2.4%)
- Professionally managed apartments are a subset of the overall multifamily (5+ units) market
- According to RealPage, vacancies for professionally managed apartments ended 2018 at 4.6% and rent growth was 3.3% in 2018

Occupied U.S. Housing Stock is 120 mm Units

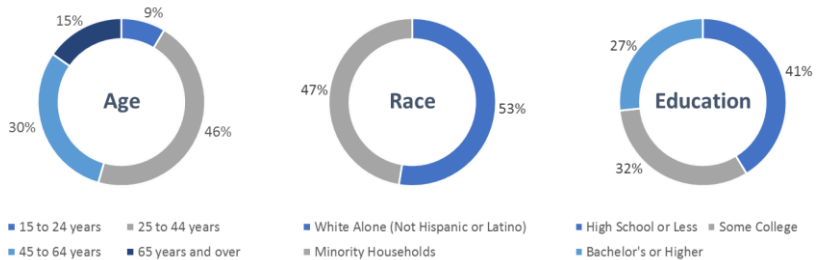


Net Change in Households (mm of units)

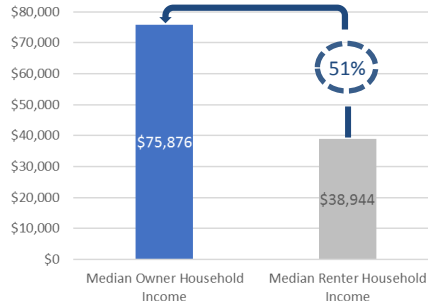


Source: U.S. Census Bureau, 2017 American Community Survey 1 Year Estimates

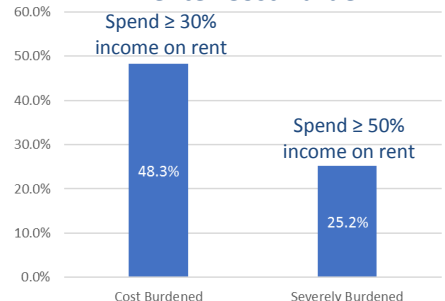
Renter Demographics



Median Household Income



Renter Cost Burden



Source: U.S. Census Bureau, 2017 American Community Survey 1 Year Estimates

MULTIFAMILY DEBT:

- Multifamily debt outstanding remained flat throughout the credit crisis; subsequent growth has been driven by GSEs, FHA, Banks and Life Companies
- Single family (1-4 family residence) debt outstanding remains below the pre-crisis peak, while multifamily debt is at an all-time high
- Debt backed by the GSEs (Fannie Mae and Freddie Mac) grew from 25% of multifamily debt outstanding in 2007 to 39% in 2018 Q4
- The GSEs' annual multifamily debt originations have kept pace with the overall market; their share averaged 46% for the last three years

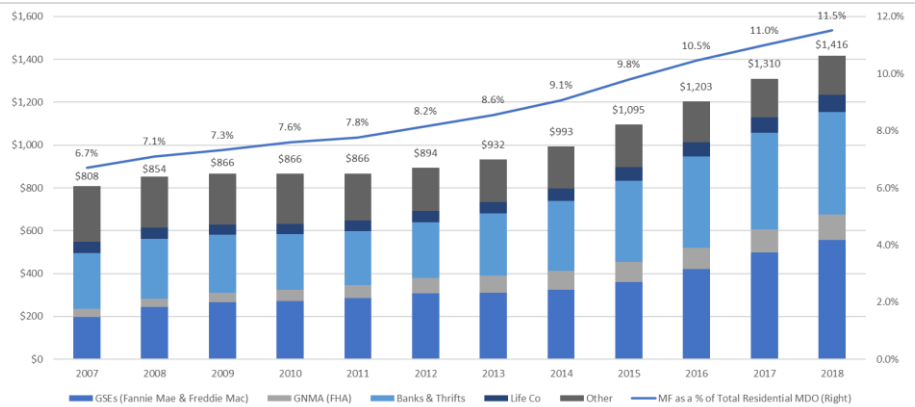
CHARACTERISTICS:

- Typically, 7 to 10-year term floating and fixed rate debt, except for FHA and specialty products
- Debt for properties financed with Low-Income Housing Tax Credits typically have 15 to 18 year terms
- Usually features balloon maturities, which require refinancing at regular intervals
- Property renovations are often done in conjunction with refinancing
- Considered "B2B" as multifamily debt is backed by income producing assets operated as a business
- Loan servicers have responsibility for processing debt assumptions, reserve releases and other matters, in addition to processing payments
- Requires active asset management for life of loan, including regular inspections and financial reviews

DEBT PERFORMANCE:

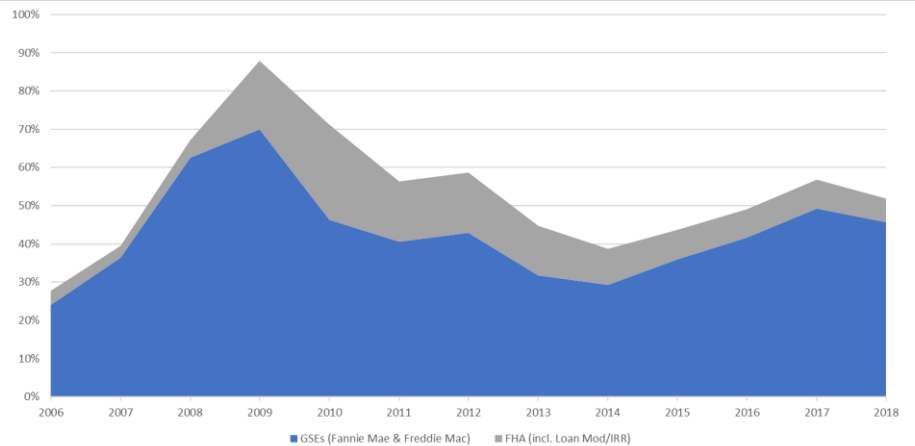
- GSE multifamily debt has outperformed the market, with consistently low delinquency rates
- CMBS delinquency rates includes Real Estate Owned (REO) while others do not; the resolution of these troubled loans has contributed to the recent decline in delinquency rates
- Peak post-crisis multifamily credit losses for Fannie Mae and Freddie Mac were a fraction of similar losses for Banks and CMBS

Multifamily Mortgage Debt Outstanding (\$ in billions)



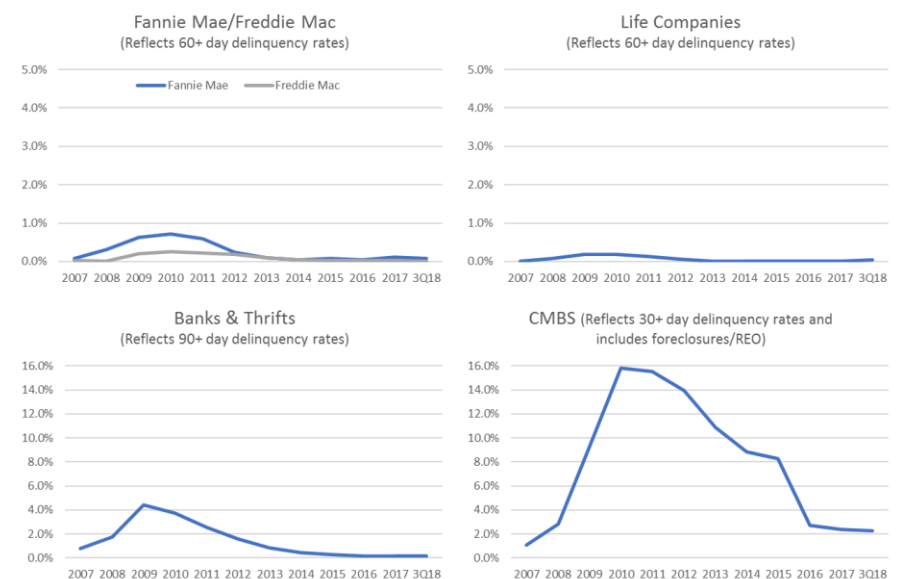
Source: Federal Reserve Mortgage Debt Outstanding Historical Data

GSE and FHA/HUD Multifamily Debt Originations (% of Total U.S. Multifamily Debt Originations)



Source: MBA Annual Report on Multifamily Lending, Fannie Mae, Freddie Mac, FHA/HUD Database

Multifamily Delinquency Rates



Source: Fannie Mae, Freddie Mac, FDIC, American Council of Life Insurers (ACLI), Trepp