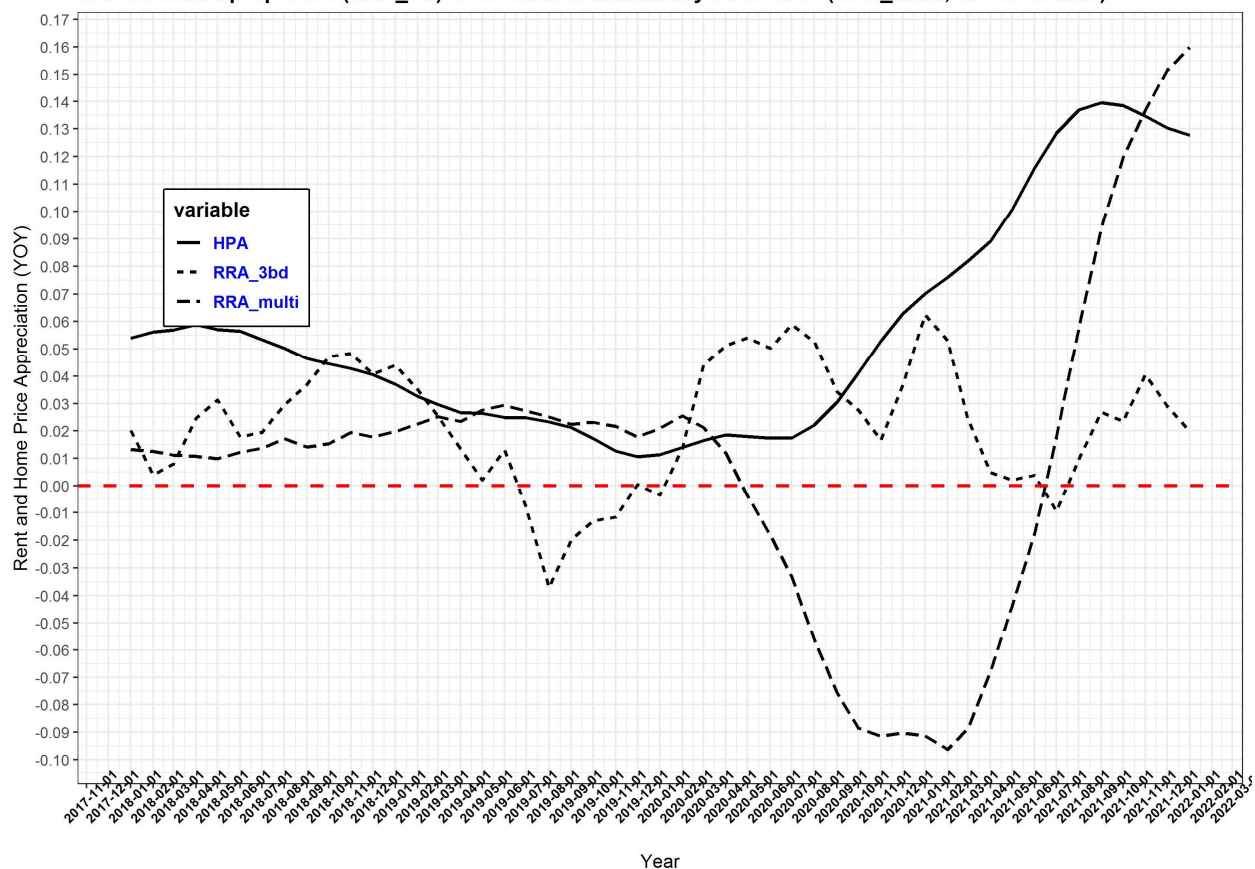


Feb-22: New York, NY

A combination of low mortgage rates, and a desire for more space in order to prevent infection and have additional room to work and play, had led some apartment dwellers to terminate their rental lease and move during 2020, but 2021 has been a different story. Chart 1 shows how rent appreciation in multi-unit structures (RRA_multi, dashed lines) in New York, NY since the start of 2021 have almost kept pace with home price appreciation. It also has been widely reported that home price appreciation (HPA, solid line) during the 12 months ending in Jan-22 was very rapid in almost all cities. This has been true for New York, NY. We can see the contrast between both home price appreciation and rent appreciation for New York, NY in Chart 1.

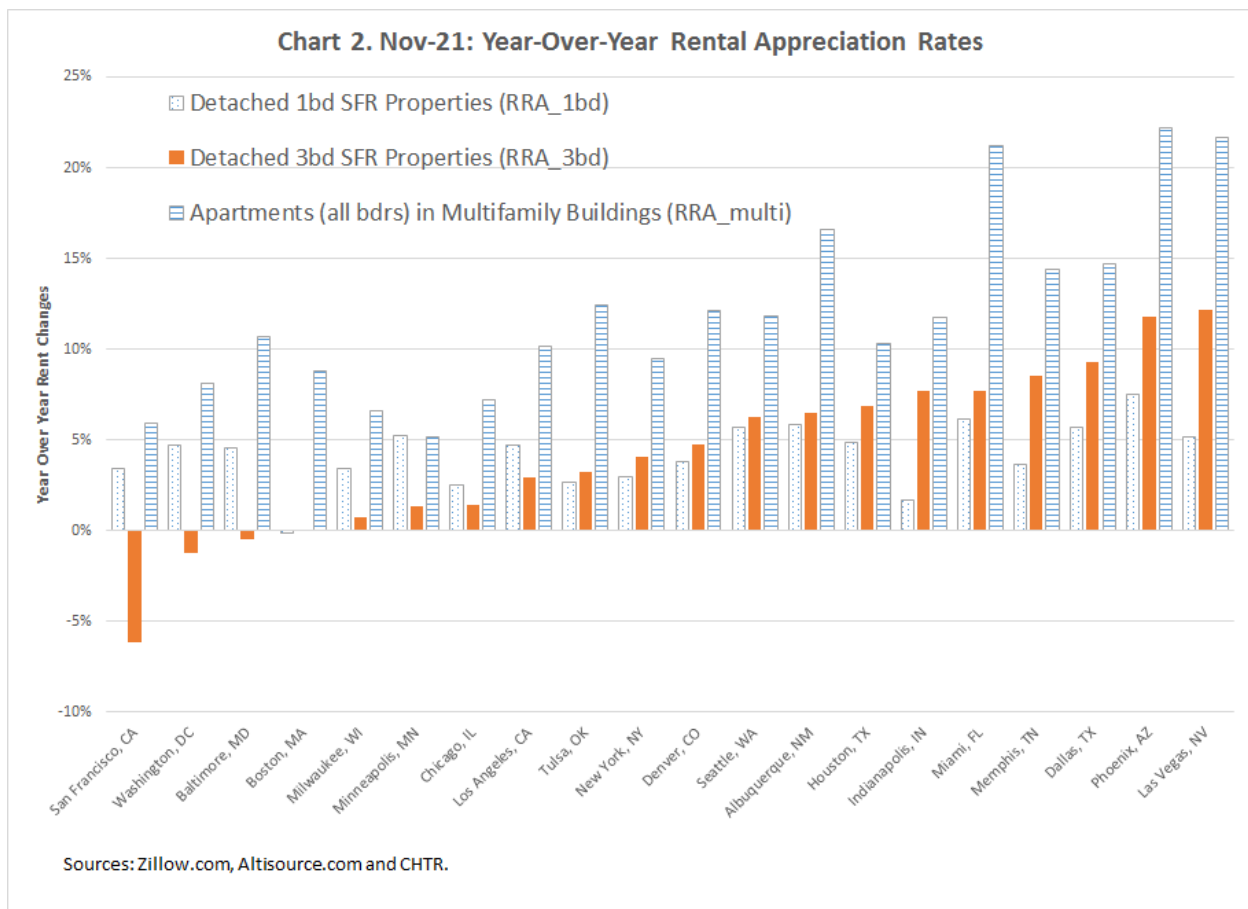
Chart 1. New York, NY: 3bd Home Price Appreciation (HPA_sfr) & Rent Appreciation SFR detached properties (RRA_sfr) & for Units in Multifamily Structures (RRA_multi, all bdr counts)



Sources: Zillow.com, Altisource.com, CHTR

We also see rent appreciation for apartment units and SFR properties in New York, NY relative to 19 other major Core Business Statistical Areas (CBSAs) in Chart 2. Chart 2 shows the current observations of rent appreciation for one and three bedroom single family residential properties (RRA_1bd, and RRA_3bd), and rent appreciation for apartments in multi-unit structures (RRA_multi) for 20 CBSAs. The data for New York, NY is identical in both charts.

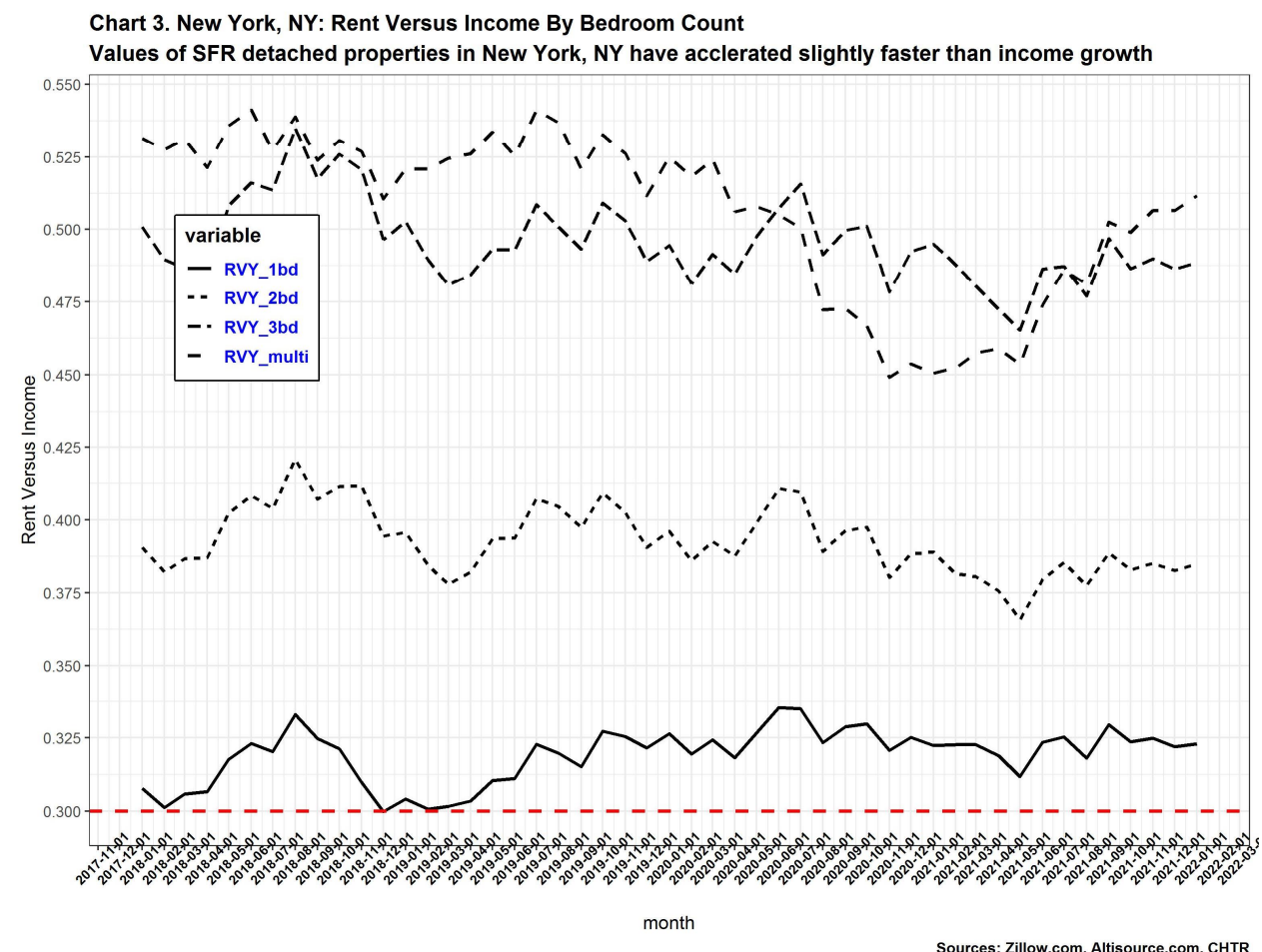
Chart 2 shows that New York, NY saw mid-range home price and apartment rental price increases relative to other CBSAs. In Chart 1 we can see that the increases in RRA_multi were less than for HPA_3bd, but still very strong.



This is what is surprising about Charts 1 and 2: the big increases in home price appreciation (HPA) have almost been matched by the large increases in rents in apartments (RRA_multi). One might have guessed that the increased demand for SFR detached properties to buy or to rent would have slowed demand for apartment rentals more. The large rent increases we see for apartments in multi-unit rentals, however, does not show up in rents of 3 bedroom SFR detached properties.

There appear to be three renter classes and we therefore see three trends: 1) Renters of single family properties (who would need to have strong incomes) chose to substitute away from renting and towards purchasing a home (thus RRA_3bd slows). 2) Renters of apartments with strong incomes but have not found a home to purchase. For this group, as home prices rise, higher home prices price out these renters who would otherwise buy. And because the home sales market has gotten so hypercompetitive, many frustrated renters in the market for a home have simply given up because the process is so exhausting and demoralizing. This group of renters also have high incomes relative to other renters. they are in the bubble of being able to buy a house after all. so the home sales market is keeping high-income tenants in the rental market longer than they want

to be because they cannot buy a house (RRA_multi). 3) Finally, some renters cannot afford to buy and must resort to renting. Thus, rent continue to rise.



How have these changes impacted relative affordability in New York, NY? If incomes in a CBSA increase as fast as home prices or rents have increased, then the denizens of that CBSA who already own their homes are better off as their wealth has increased. Renters, however, are worse off because they transfer larger amounts of wealth to the landlord each time rents increase. In Chart 3, we show the cost of renting (R) relative to income (Y) for three different bedroom counts and for apartments in multi-family buildings (all bedroom counts). This yields a RVY ratio for each property type. It is a measure of income flow.

A rough rule of thumb is that RVY for new homebuyers should be around 30%. In Chart 3, three of four RVY ratios are above 30%, but all four RVY ratios seems relatively stable. Thus the very large increases in home prices and rents for SFR properties have been matched by increases in incomes in New York, NY. This suggest that renters of SFR detached properties are not much worse off than they were before the pandemic. One has to suspect that renters of both single family detached properties and apartments are credit constrained. The worsening of the RVY ratio makes it harder for renters to accumulate wealth. It, in turn, makes it harder to accumulate the downpayment to potentially make a purchase in the future.