Real Estate Strategy & Research

TIAA
GLOBAL ASSET MANAGEMENT

Apartment "seasoning": A recipe for better investment performance?

Edward F. Pierzak, Ph.D.,
Managing Director

Shannon Wright,
Senior Director

One of the most important elements of cooking is seasoning. Chefs and foodies know that proper seasoning can make or break a dish. Too little seasoning can result in a bland, unsatisfying dining experience; too much seasoning can make a meal unpalatable. Can the culinary arts offer some sage advice for institutional apartment investors? In this paper, we examine the relationship between apartment "seasoning," as measured by property age, and total return investment performance using data from the NCREIF Property Index (NPI). Similar to the principles of gastronomy, we find that "just the right amount" of seasoning may lead apartment investors to the most satisfying investment result.

Specifically, we find that portfolios of newer, less seasoned apartment properties, i.e., those with ages ranging from zero to five years, have tended to underperform the apartment component of the NPI. Portfolios of multifamily properties that are not "too young" and not "too old," i.e., those ranging in age from 11 to 15 years, have tended to outperform. All other examined age-based portfolios experienced total return performance akin to the broad apartment sector. The results indicate that seasoning matters for multifamily investment. They also suggest that market and pricing inefficiencies may exist in the apartment sector. This is a particularly interesting result given many investors' current acquisition preferences for new apartment properties and the amount of new multifamily construction on the horizon.

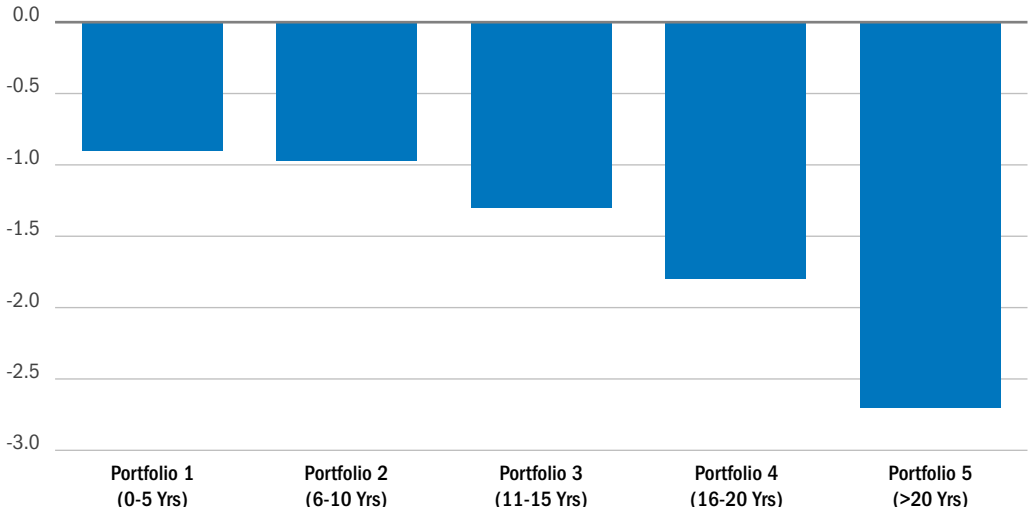
Seasoning preferences...more or less?

When it comes to seasoning food, everyone has their preferences; some prefer more, others less. The same can be said for apartment investors. Some investors prefer to acquire newer, less seasoned multifamily properties; others concentrate on acquiring older, more seasoned assets.

Without the benefit of subsidies, the economics of development has focused new apartment construction toward the high-end of the market. As a result, new projects tend to be "class A" properties. Many investors are attracted to the physical and locational characteristics of these assets. They find these properties appealing because they typically represent the "best of the best" in rental living, offering the latest building finishes and amenities, as well as access to in-demand neighborhoods. These investors are also drawn to newer apartment properties because they generally require more limited capital expenditures (Cap Ex) than their older counterparts and that, to the extent necessary, these expenditures are typically better defined. On the other hand, some investors see the need for Cap Ex on older properties as a value-add opportunity with potential for incremental returns.

The Cap Ex benefit of newer apartment properties can be conceptualized using apartment data from the NPI. Exhibit 1 displays the average annual drag of capital expenditures as a component of total return across five different age-based apartment portfolios from 1Q93 to 4Q15.[1] Portfolio 1 contained the newest properties with ages ranging from zero to five years, ages for Portfolio 2 properties spanned from 6 to 10 years, Portfolio 3 included properties with ages between 11 and 15 years, property ages in Portfolio 4 ranged from 16 to 20 years and Portfolio 5 was composed of the oldest properties with ages in excess of 20 years. For each quarter of history, properties may enter and leave a particular portfolio dependent upon their age; the portfolios can also adjust due to property transaction activity.

Exhibit 1: Average annual capital expenditure drag as a component of total return (%, 1Q93 – 4Q15)



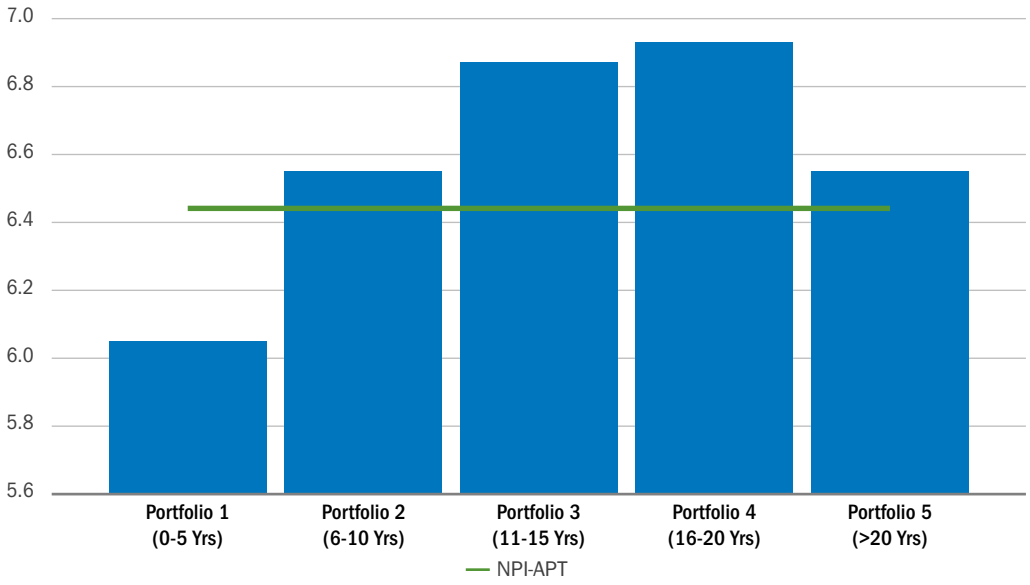
Source: NCREIF, as of 1Q16; TIAA; Authors' Calculations

A clear, but unsurprising relationship is evident in the chart. There is a performance pecking order across the age-based portfolios; the drag of Cap Ex as a component of total return increases with property age. Cap Ex for the portfolio of the newest apartment properties (Portfolio 1) decreased total return, on average, by less than 1%; similar results were found for Portfolio 2. But, the drag of Cap Ex associated with the portfolios of older apartments increased at an increasing rate. This culminated with the Cap Ex drag associated with Portfolio 5, the portfolio with the oldest properties, being triple that of Portfolio 1. Focusing solely on these results, it is understandable why some investors may be drawn to newer apartment properties and biased against older properties.

Yet, other investors eschew new development in favor of more seasoned apartment assets. These investors typically worry about the high rents, "full" acquisition prices and unproven operational histories often associated with new apartment developments. Concerned about reliance on the "top" of the renter pyramid, these investors prefer to capture a wider swath of the renter pool by placing greater focus on the "renter by necessity." Such investors also tend to be price sensitive, exhibiting discomfort with opportunities that demand the lowest capitalization (cap) rates.

Differences in real estate pricing across apartment portfolios with different levels of seasoning is highlighted using NPI-derived initial yields.[2] The initial yield is a gauge of the commercial real estate pricing environment; it is akin to a backward-looking cap rate. Note that a cap rate is the ratio of a property’s net operating income (NOI) to market value. All else equal, property prices rise as cap rates (initial yields) decline. Exhibit 2 displays the average annual initial yields for each of the previously-defined, age-based apartment portfolios and the broad apartment sector from 1Q93 to 4Q15.

Exhibit 2: Average annual NPI-derived initial yields (%, 1Q93 – 4Q15)



Source: NCREIF, as of 1Q16; TIAA; Authors’ Calculations

A quick review of the data reveals that the average annual initial yield for the portfolio of the newest multifamily properties is very different from the other, more seasoned portfolios. The average initial yield for Portfolio 1, at 6.05%, was well below that of the broad apartment sector; each other portfolio’s average yield was above the sector average of 6.46%. Interestingly, there is evidence of relative initial yield persistence for some portfolios. The initial yields for Portfolio 1 were less than the sector average for each quarter from 1993 to 2015. In contrast, initial yields for Portfolios 3 and 4 were consistently above the sector average over the same time period. All else equal, these results suggest that newer properties tend to command higher prices. So, the appeal of newer properties appears to come at a price. But, apartment investments with the lowest initial yields do not necessarily translate into the best performers from a total return perspective.

Seasoning and quality

Most real estate professionals would agree that the concepts of apartment age and quality are often intertwined in a complex fashion. While not absolute, an apartment property generally tends to move down the quality spectrum as it ages. Thus, newer properties are more likely to be “class A” properties, but as they age or season, they tend to transform into “class B” properties and beyond. So, property age may be a proxy, albeit imperfect, for property quality. With this in mind, it is worthwhile to explore some recent research from both the private and public real estate markets that examine the impact of new apartment supply on different “classes” of existing multifamily properties.

An article in *The Journal of Portfolio Management* examined apartment market dynamics in Austin and Boston.[3] Key determinants in the study included the “class” of existing apartment properties and their distance from new supply. With the assumption that most new construction built during this cycle has focused on the luxury space, the study found that existing “class B” properties tended to benefit from proximity to new construction by offering renters a palatable entry point into desirable neighborhoods. But, existing “class A” apartments experienced a dampening effect on rent growth due to direct competition with the new developments.

Green Street Advisors (GSA) examined the performance of apartment real estate investment trust (REIT) portfolios with strong exposure to Washington, D.C. during its recent supply boom.[4] They found that the performance of apartment REIT portfolios that were primarily composed of lower-quality (“class B”) properties tended to hold up well with respect to rent growth in the face of new supply, while portfolios focused on higher-quality (“class A”) properties tended to fare worse. GSA also found that even if new deliveries were concentrated in specific submarkets, “class A” portfolios across the market were similarly negatively impacted. GSA has indicated that these lessons can also be applied to New York and the San Francisco Bay area.

Both sets of findings align nicely with one another. Synthesizing the results of these case studies, it appears that existing “class B” apartment properties tend to “win” with respect to rent growth in the face of new development due to their abilities to offer cost-conscious or less affluent renters entry into sought-after neighborhoods. But, existing “class A” multifamily properties tend to “lose” due to the effects of increased competition. These results are intuitively appealing and offer actionable insights for investors. But, they also provide the impetus for a broader, more general question. Do “class B” (older, more seasoned) multifamily properties tend to be “winners” and “class A” (newer, less seasoned) properties tend to be “losers” when it comes to total returns?

Does seasoning matter?

Perhaps the simplest way to highlight the relationship between apartment seasoning and total return performance is to examine NPI data for each of the five age-based portfolios. Equal-weighted NPI apartment data were used to create total return time series for each portfolio.[5] Total return spreads were then calculated by subtracting overall NPI apartment total returns from total returns for each of the portfolios. Exhibit 3 displays the resultant portfolio total return spreads for the calendar years from 1993 to 2015, as well as select summary statistics, and the number of outperforming or “up” and underperforming or “down” years for each of the portfolios.[6] In each calendar year, portfolio outperformance (positive spreads) and underperformance (negative spreads) are indicated by green and red shading, respectively.

Exhibit 3: Calendar year total return spreads (bps, 1993 – 2015)

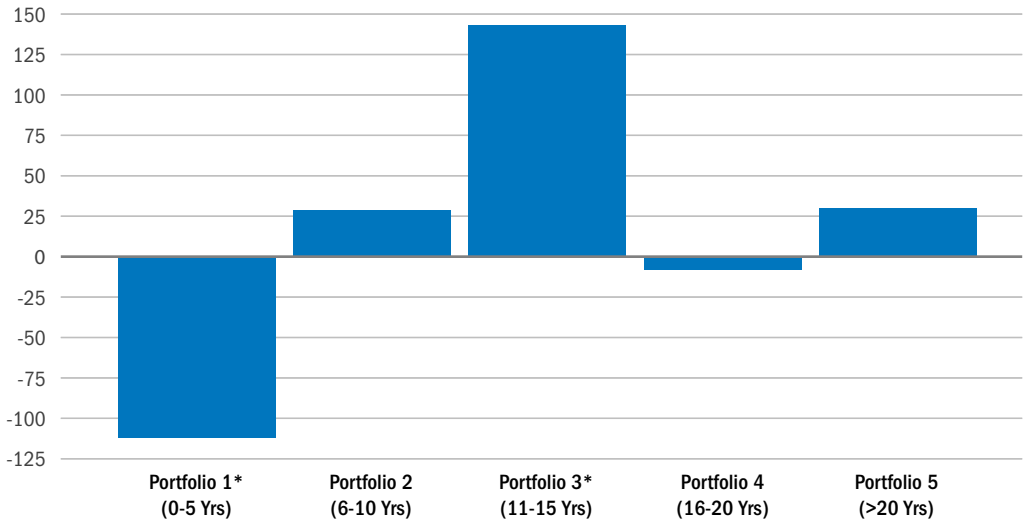
Year	Portfolio 1 (0-5 Yrs)	Portfolio 2 (6-10 Yrs)	Portfolio 3 (11-15 Yrs)	Portfolio 4 (16-20 Yrs)	Portfolio 5 (>20 Yrs)
1993	-228	121	552	18	-116
1994	-34	32	76	-121	-408
1995	-140	-48	283	589	-95
1996	-181	60	74	143	66
1997	-215	23	-67	-7	459
1998	-387	38	47	408	491
1999	-206	-10	64	47	360
2000	-178	-76	162	-160	240
2001	-60	19	78	10	11
2002	-66	-198	148	119	-14
2003	6	-196	241	-90	79
2004	-1	55	292	-222	-33
2005	50	904	54	-765	-272
2006	-35	88	396	-60	-240
2007	-265	-87	235	-53	217
2008	-202	-60	80	-78	46
2009	-1	-125	-57	-89	-62
2010	164	394	256	-85	-431
2011	-222	144	216	243	-47
2012	4	149	-18	-49	-62
2013	29	-65	39	27	-30
2014	-63	-193	-45	-19	198
2015	-356	-293	183	7	331
Average	-112	29	143	-8	30
Standard Deviation	137	240	152	245	247
"Up" Years	5	12	19	10	11
"Down" Years	18	11	4	13	12

Source: NCREIF, as of 1Q16; TIAA; Authors' Calculations

The shading reveals the performance track record of each portfolio relative to the apartment component of NPI through time. Looking across the portfolios, there does not appear to be any sign of consistent calendar year performance with the exception of 2009; this year marked the depths of the last property cycle downturn. The patterns of outperformance and underperformance also reveal that the portfolio of the newest apartment properties (Portfolio 1) tended to underperform; the "middle-aged" portfolio (Portfolio 3) tended to exhibit outperformance; and the remaining portfolios (Portfolios 2, 4 and 5) had a more balanced performance experience.

The tally of "up" and "down" years shows that Portfolio 1 underperformed in approximately 80% of the examined calendar years, Portfolio 3 outperformed over 80% of the time and the other portfolios outperformed around 50% of the time. Analysis of the average annual total return spreads further reinforces these observations (see Exhibit 4).

Exhibit 4: Average annual total return spreads (bps, 1993 – 2015)



Source: NCREIF, as of 1Q16; TIAA; Authors' Calculations

* Significant at the 1% level.

The average annual total return spreads highlight potential opportunities and pitfalls for apartment investors. The average annual total spreads for Portfolios 1 and 3 were -112 basis points and 143 basis points, respectively. These results were statistically significant indicating that Portfolio 1's underperformance and Portfolio 3's outperformance should be meaningful to investors. The average annual spreads for the other portfolios were not statistically significant, suggesting that total return performance for these portfolios was similar to that of the benchmark. Delving further into the performance of Portfolios 1 and 3 reveals that the newer, less seasoned apartment portfolio was plagued by persistently low initial yields and percent leased rates over the examined period; in stark contrast, the "middle-aged" portfolio consistently enjoyed above-average values for both measures.[7] A final consideration is risk as measured by the standard deviation of total return spreads (see Exhibit 3). The comparatively low standard deviations of Portfolios 1 and 3 are indicative of tighter distributions around averages that represent underperformance and outperformance, respectively. Clearly, Portfolio 3 offered the most attractive total return performance on both an absolute and risk-adjusted basis.

The overall results suggest that investors may want to be cautious in their pursuit of newer apartment properties, but need not be afraid of multifamily properties with more, but not too much, seasoning. They are also suggestive of the presence of market and pricing inefficiencies in the apartment sector. Investors may have overestimated the performance benefits of newer multifamily properties and underestimated the merits of more seasoned properties that are not “too young” and not “too old.” These are interesting observations given investors’ current fondness for new apartment properties and the wave of new multifamily deliveries that are on the horizon. Data from CBRE Econometric Advisors indicate that apartment completions as a percentage of total stock are anticipated to reach an all-time high in 2016. Rising new supply is a material risk at this stage of the real estate cycle, but opportunities still await investors who understand the nuances of apartment seasoning.

The Goldilocks principle and seasoning

These investment sentiments are somewhat reminiscent of the tale of Goldilocks. In the childhood story, the heroine stumbles upon the vacant home of three bears and proceeds to try each bear’s porridge only to find one “too hot,” another “too cold” and the last “just right;” she has similar experiences when trying the bears’ chairs and beds. The story’s message has been generalized and developed into a concept called the “Goldilocks principle;” this notion has been used in a variety of disciplines including medicine, education and economics. In the case of apartments, our results indicate that properties with “too little” seasoning on average have materially underperformed; those with “too much” seasoning have provided decent, but less than ideal performance; and those with “just the right amount” of seasoning have significantly outperformed. Thus, similar to the story, the middle ground is the preferred choice over other options that include two opposite extremes.

TIAA
GLOBAL ASSET MANAGEMENT

1. Average annual total returns were deconstructed into four component parts, i.e., initial yield, a component related to cap rate compression, net operating income (NOI) growth, and capital expenditures. This process allowed for a closer examination of the relationship between a property's age and capital expenditures. Note that the values for capital expenditure components of total return are negative because they represent a drag on total return.
2. Initial yields were calculated as part of the average annual total return deconstruction process.
3. See Hans Nordby, Michael Taylor, and Lee Everett, "Averages Tell You Little: The Effects of Multifamily Construction on Rents," The Journal of Portfolio Management, 2015.
4. See Conor Wagner, Ryan Burke, John Pawlowski, CFA, Ryan Lumb, and Dave Bragg, "Residential Sector Update: The Eye of Supply," Green Street Advisors, May 26, 2016.
5. Equal-weighted data was utilized to control for the effects of property size. But, we recognize that there are a myriad of factors that were not controlled for in this analysis.
6. Our analysis begins in 1993. This was the first year for which all age groupings had consistent representations of 10 or more properties.
7. NPI data indicate that Portfolio 1 experienced average percent leased rates below that of the apartment sector average for the last 18 calendar years; Portfolio 3 experienced above-average percent leased rates for the last 17 calendar years. Initial yields for Portfolio 1 were less than the sector average for each quarter from 1993 to 2015; initial yields for Portfolio 3 were consistently above the sector average over the same time period.