Real Estate

Principal[SM]

Back to school – An overview of the student-housing sector

Jim Halliwell, Managing Director, Principal Real Estate Investors

Key findings:

Student housing can provide both strong performance and diversification benefits.

An increasing amount of investor capital is moving into the student-housing sector.

Focusing on space-market fundamentals can help overcome a disappearing risk premium between student housing and conventional multi-family.

Sector idiosyncrasies necessitate a high degree of selectivity required for the best opportunities

Until recently, investing in university student housing was a niche business.

Ownership was mostly concentrated in the hands of private local investors and operators. Institutional investments were largely tactical and came through specialized publicly traded real estate investment trusts (REITs). In private real estate equity, several factors hampered institutional investor interest and allocation of capital:

- Market locations considered to be tertiary
- Uncertainty about property management firms' depth and breadth of experience
- Limited financing availability
- Liquidity and exit-strategy concerns
- Property age and quality

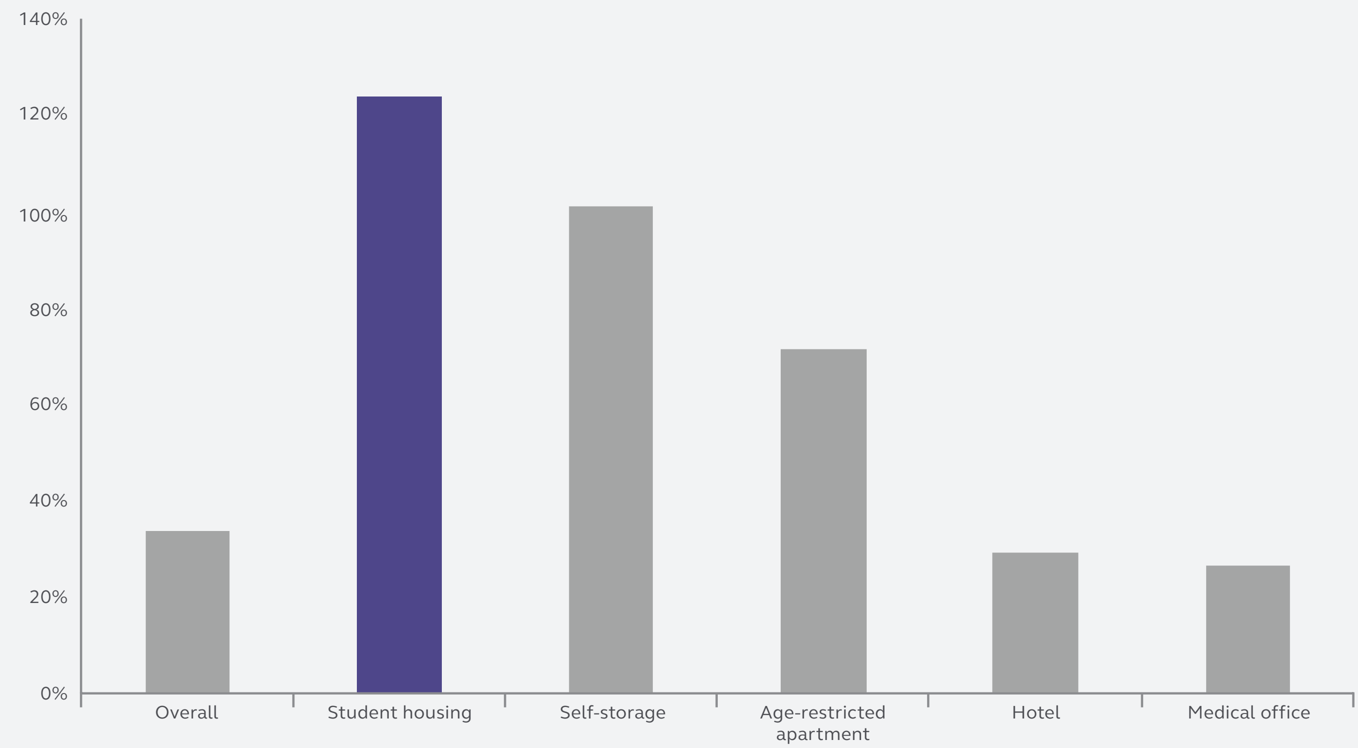
That landscape has changed dramatically over the last decade, and the amount of institutional capital invested in the student-housing sector has grown exponentially in that time. This new, broader market for student-housing investment includes public, private, institutional, individual, U.S., non-U.S., and both open- and closed-end funds. Student-housing strategies also now span a wider risk spectrum, from core and value-add to ground-up development. This expansion means that most active institutional commercial real estate investors have already made or are contemplating student-housing investments. Similarly, the number of lenders willing to provide financing for student-housing projects has also grown significantly.

The real estate sales-transaction volume in this sector has grown exponentially over the last several years. During the two-year time period of 2013-2014, annual sales-transaction volume of student housing averaged US$3.4 billion, but then surged to a US$7.62 billion annual pace during the two-year period of 2015-2016.[1] This 124% growth is considerably greater than the market as a whole. Admittedly, the larger percent gain of student housing can be partially explained by its small base[2]; nevertheless, the magnitude of the percentage increase is not only impressive, it also exceeds that of several other niche property sectors, including hotel, medical office, self-storage, and age-restricted multi-family.

Exhibit 1: Growth of student-housing transactions outpaces the rest of the real estate market

Between 2013 and 2016, the growth in transaction volume of student housing eclipsed the real estate market as a whole, and many other niche property sectors.

Sales-volume transaction: percentage change from 2013-2014 to 2015-2016



	Overall	Student housing	Self-storage	Age-restricted apartment	Hotel	Medical office
Peak year	2007	2016	2015	2015	2007	2007
Peak volume	$545.3 b	$9.1 b	$2.1 b	$1.8 b	$91.9 b	$99.0

Source: Real Capital Analytics, Principal Real Estate Investors, February 2017

[1] "Real Capital Analytics Transaction Volume." *Commercial Real Estate Database*. Real Capital Analytics, Feb. 2017.

[2] By way of comparison, student-housing sales volume averaged about $2.5 billion per year during 2005 – 2008. In 2016, it reached US$9.1 billion.

Disappearing risk premium?

The increase in transaction volume clearly indicates the weight of institutional capital flowing into commercial real estate is finding its way into student housing. Of course, when select property-type categories become the recipients of well-above-average capital flows, investor competition for assets intensifies. All else being equal, prices tend to get bid up, and yields compress correspondingly. This is indeed what is occurring in the student-housing sector; cap-rate spreads compared to conventional multi-family assets have demonstrated a methodical decline. Currently, there is virtually no cap-rate premium required by investors relative to conventional multi-family.

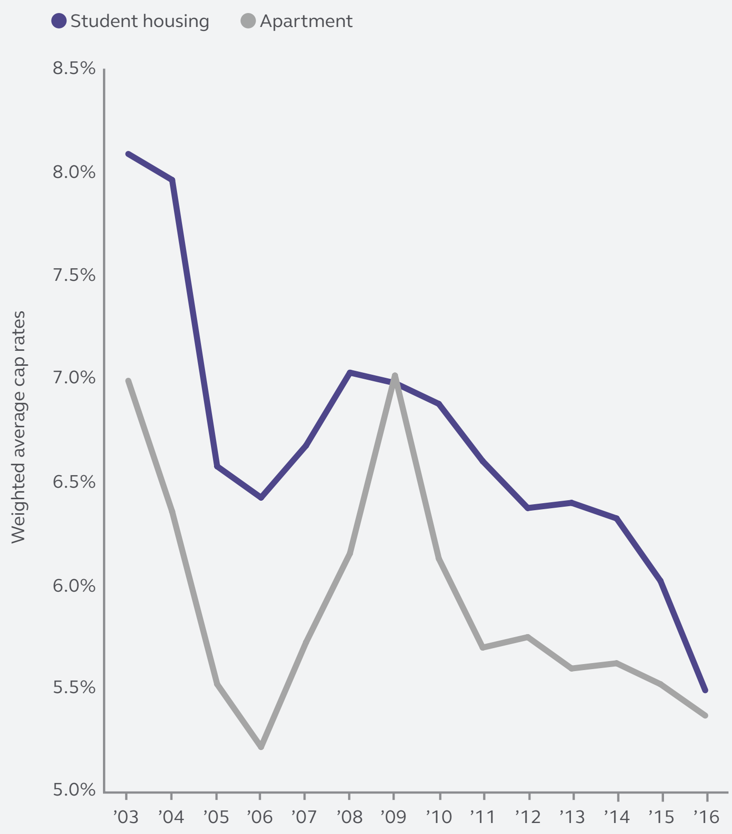
But is the disappearance of student housing's historical cap-rate premium driven only by the weight of capital? After all, capital allocations to the sector have surged as a result of investors that either had no exposure or were underweight to that property type. However, other factors have likely played a role in rapid cap-rate compression, including a favorable shift in the underlying risk profile of the student-housing sector over time. Several factors have gradually improved, reducing the actual or perceived investor risks:

- The average property age and quality
- The breadth and depth of property manager experience
- Reduced credit-default risk as a result of more standardized and widely accepted approaches to parental guarantees
- And overall liquidity in the student housing sector (despite the preponderance of property still located in tertiary markets)

Exhibit 2: The cap-rate premium of student housing over conventional multi-family is eroding

Investor competition over the last several years has eroded the cap-rate premium that student housing held over conventional multi-family.

Student housing cap rates



Source: Real Capital Analytics, Principal Real Estate Investors, February 2017

Going forward, however, an evaluation of the sustainability of student-housing cap-rate compression and the disappearance of the historical risk premium relative to conventional multi-family must focus heavily on space-market fundamentals. For example:

- How strong and sustainable will demand for student-housing units be amid demographic shifts and structural changes in the delivery method of higher education?
- Is the demand profile likely to result in strong "same store" net operating income (NOI) growth, and how volatile will that growth be?
- On the supply side, is the student-housing sector likely to become overbuilt, especially as high prices for core student property lead investors to consider ground-up development in order to both achieve higher returns and to avoid paying more than reproduction costs to get exposure to the sector?

Student-housing demand

The assessment of the demand picture on student housing comprises both simple and nuanced evaluations. In one respect, the number of new university students will likely be highly correlated with the total number of U.S. high school graduates. This figure can be estimated with a high degree of accuracy. However, other factors come into play:

- The percentage of high school graduates attending college, itself influenced by the rapid rise in the cost of a college education
- The number of non-U.S. students pursuing their higher education in America
- The growth of online college courses
- The numbers of current workforce who return to college

While recent trends can help with these estimates, these demand components are more difficult to predict.

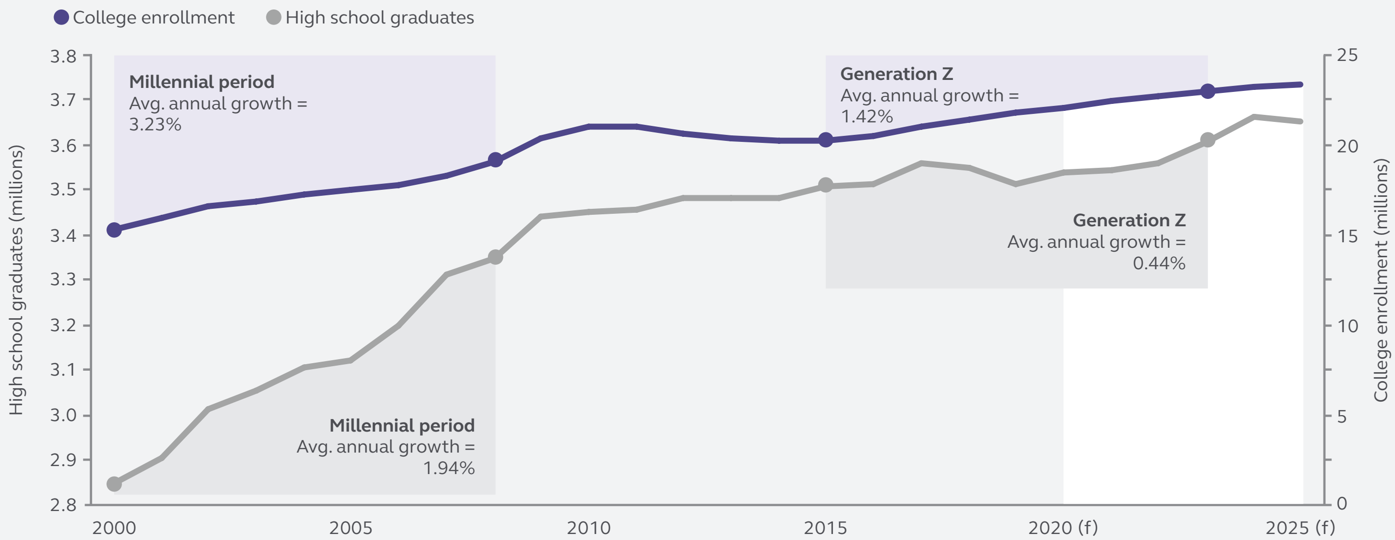
Examining data on U.S. high school graduations, their average annual growth rate, and total college enrollments reveals a system that has seen peak growth. Growth of high school graduates slowed dramatically after 2008. That growth is even expected to decline later in this decade before resuming a slow growth pattern. College enrollment is following a similar pattern, and indeed has already seen a temporary absolute decline, although is now beginning to recover.

Projected growth for both graduations and college enrollment is not robust, especially compared to the first decade of the new millennium, when millennials entering college fueled a peak growth for college enrollment. Millennials are the generational cohort generally regarded as those born from the early 1980s through the mid-1990s. The enrollment growth rate is expected to fall by more than half (1.42% versus 3.23%) going forward, given the dramatic fall-off in the growth of high school graduates.[3,4] That drop off is largely due to the smaller size of the generation Z cohort, typically

Exhibit 3: Slowing growth in high school graduations and college enrollments

After the period of peak growth ended around 2010, both high school graduations and college enrollments have slowed. Generational demographics will likely keep projected growth limited in the future.

High school graduations and college enrollment



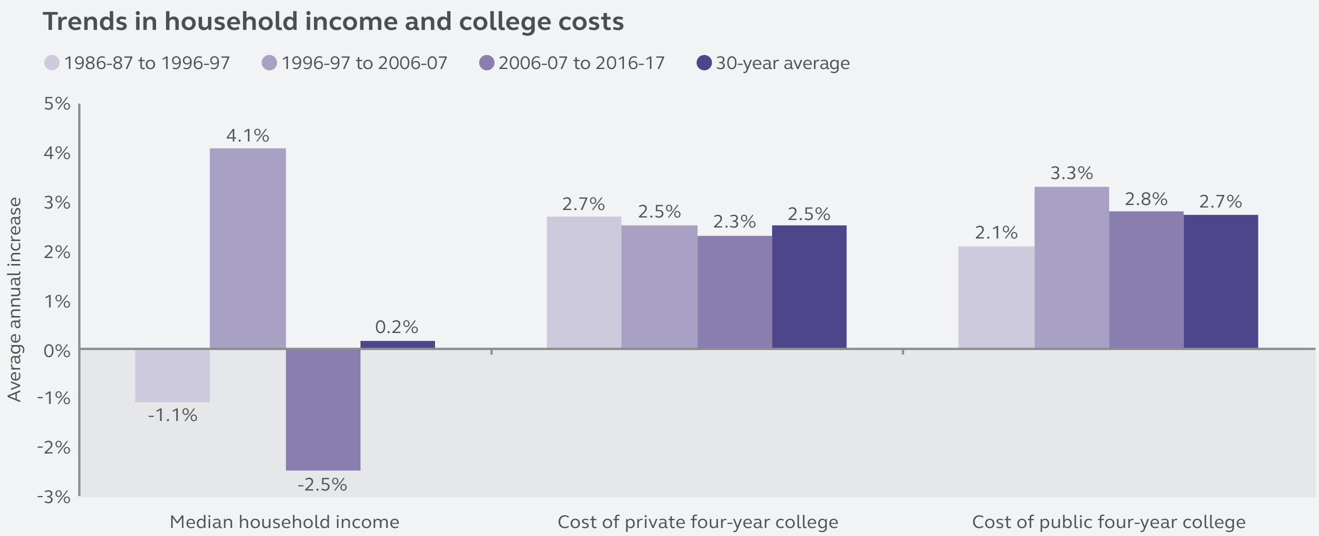
Source: National Center for Educational Statistics
(f) future projection

[3] "Total Fall Enrollment in Degree-granting Postsecondary Institutions, by Attendance Status, Sex of Student, and Control of Institution: Selected Years, 1947 through 2025." Digest of Education Statistics. National Center for Education Statistics, Feb. 2016.

[4] "Total Fall Enrollment in Degree-granting Postsecondary Institutions, by Attendance Status, Sex of Student, and Control of Institution: Selected Years, 1947 through 2025." Digest of Education Statistics. National Center for Education Statistics, Jan. 2016.

Exhibit 4: Trends in household income and college costs

Over the last 30 years, growth in median real household income in the United States has failed to keep up with the increase in the cost of a college education.



Sources: College Board, Annual Survey of Colleges; NCES, Integrated Postsecondary Education Data System (IPEDS); US Census Bureau; Bureau of Labor Statistics, Principal Real Estate Investors, March 2017.

defined as those with birth dates after the mid-1990s. However, despite a slowing growth rate, college enrollments are still expected to outpace high school graduations. A major contributing factor is the number of international students. A study by Boston Consulting Group indicates that "international enrollment in all universities nearly doubled from the 1992–1993 school year through the 2012–2013 school years".[5] This growth has been led by private universities, but the largest public universities have also gained traction in the growth of international students.

While international students have and likely will continue to provide favorable demand elements to student housing, there are potentially unfavorable demand forces affecting student housing. Online learning is gaining in terms of both quality and credibility. In addition, while the real (i.e., inflation-adjusted) cost of a college education has steadily risen over the past few decades, college affordability has slipped over the past ten years because of a significant decline in median real household income.

Further, high default rates on student loans have raised the cost of debt capital in the sector, despite extensive government debt-forgiveness initiatives. A lack of clarity about the Trump administration's immigration policies and status of individuals with H-1B visas also contribute to demand uncertainty, at least over the intermediate term. These cumulative factors, taken in isolation, might suggest the glory years for the demand side of the student-housing sector have past. Therefore, the logic behind the recent surge of capital into the sector may seem enigmatic.

While the overall macro demand statistics may paint a mixed outlook, those that specialize in the student-housing sector argue that evaluation and pursuit should

[5] Tyce Henry, Ernesto Pagano, J. Puckett, Joanne Wilson, "Five Trends to Watch in Higher Education," Boston Consulting Group, BCG Perspectives (April 2014).

be on individual basis rather than a macro basis. This argument is similar to the generally accepted case made in the retail sector: while the United States has too many shopping centers, certain individual retail centers with the right locations, demographics, and tenant base will be successful despite the continuing advance of online retailing.

Indeed, there is likely some merit to this “selectivity” argument as applied to student housing. That said, the reasoning needs to include an analysis of the winners and losers among educational institutions themselves, as well as an examination of specific student-housing properties. That is, any imbalances that develop in the student-housing space market will, to some degree, derive from imbalances within the college and university system itself. On a national scale, there are too many colleges and universities pursuing too few students, and the financial and competitive capabilities of these colleges and universities vary greatly.

The National Center for Educational Statistics estimates there are approximately 3,026 colleges providing four-year degrees. These institutions compete for the estimated 1.8 million students who graduate from high school every year and search for a four-year degree. These colleges also compete for international students, who represent the main student growth sector. Yet, the spectrum of universities seriously considered by international students has, to date, been quite narrow. While the Boston Consulting Group study indicated that, in 2012, international students made up about 4% of total U.S. college enrollment, the paper also noted that the top-six private and top-18 public universities had achieved average international student enrollment of 24% and 15%, respectively. Clearly, many universities have not been able to generate much market penetration into the relatively higher-growth sector of international students. Add in financial pressures, including reduced state financial assistance, and it becomes clearer that this is not a sustainable business model, with mergers and cost cutting occurring within the higher-education sector.

While Moody’s Investor Services offered a stable outlook to the higher education sector at the end of 2016, pressures are building nonetheless. An improving economy has resulted in a slight increase in state aid to public universities. And better investment-market performance has improved endowment balance sheets. Despite these advances, cost pressures, including underfunded pensions and higher labor costs, are growing for higher-learning institutions. Moody’s indicates that over the next couple of years, a shift to a negative outlook is more likely than a shift to a positive outlook. Importantly, however, higher-education institutions will likely become a bifurcated market, with apparent winners and losers. Specifically, small, non-selective, private universities have faced and will continue to face daunting challenges. According to a 2015 report by Moody’s, the closure or merger rates for private universities with revenue below US$100 million and public universities with revenue below US$200 million are projected to be three times their historical averages. Further, tuition discounting at these small universities has gone from 31% in 2009 to 57% in 2014. Nearly 40% of small private colleges are projecting declines in net tuition for fiscal year 2017, and close to 30% of all private institutions have negative net tuition revenue growth.

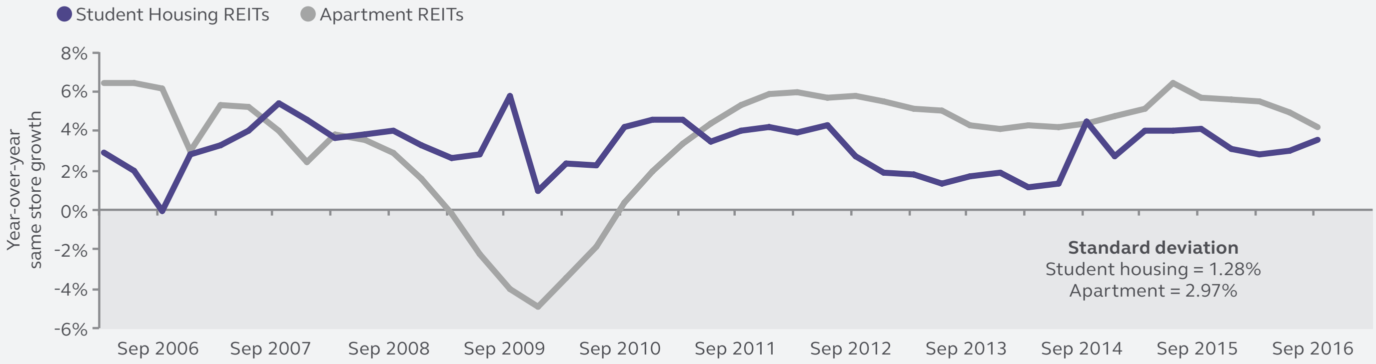
Moody’s points out that the gap between larger- and smaller-sized institutions in virtually all metrics is widening. The larger schools have greater brand recognition, course diversity, technological resources, and better entertainment and athletic options. Further, larger schools are more often located at or near urban areas, which hold greater appeal with millennials and international students. Statistics also point to a positive correlation between a university’s credit rating and its enrollment growth. A 2012 study by Moody’s shows that from 2004 to 2012, the admissions yield (students attending divided by students accepted) dropped by approximately 15% for lower-rated universities, compared to only a 4% drop for universities with the highest ratings[6,7].

[6] Schwarz, Emily. “More US Colleges Face Stagnating Enrollment and Tuition Revenue, According to Moody’s Survey.” Moody's Investors Service (January 2013)
[7] Admissions yields are declining because of the increase in the number of schools each applicant applies for.

Exhibit 5: Potential diversification benefits from student housing

Student housing is a potential diversifier for conventional multi-family. The difference in the two sectors' reactions to the global financial crisis of 2008 demonstrates the potential for risk mitigation.

Revenue growth: student housing and apartments



Source: Bloomberg, Principal Real Estate Investors, January 2017

Clearly, the higher-education industry is undergoing profound changes. Fierce competition among universities and colleges, financial pressures, demographic changes, curriculum delivery methods (including on-line classes), and possible federal government policies and initiatives that could impact international student enrollment trends are all factors that make it challenging not only to determine the survivors, but also to accurately assess the resultant underlying demand for student housing.

And once demand is determined, investor selectivity will be critically important at the asset level. Outperformance or underperformance will be a function of such factors as campus proximity, security, amenities, quality of property management, liquidity, and the all-important new supply factor.

Supply

Fortunately for investors and the institutions themselves, most colleges and universities are exiting the business of directly providing new supply of student housing. They now prefer to channel their capital elsewhere, allowing the surge in weight of capital from investors to take care of bringing new supply on line.

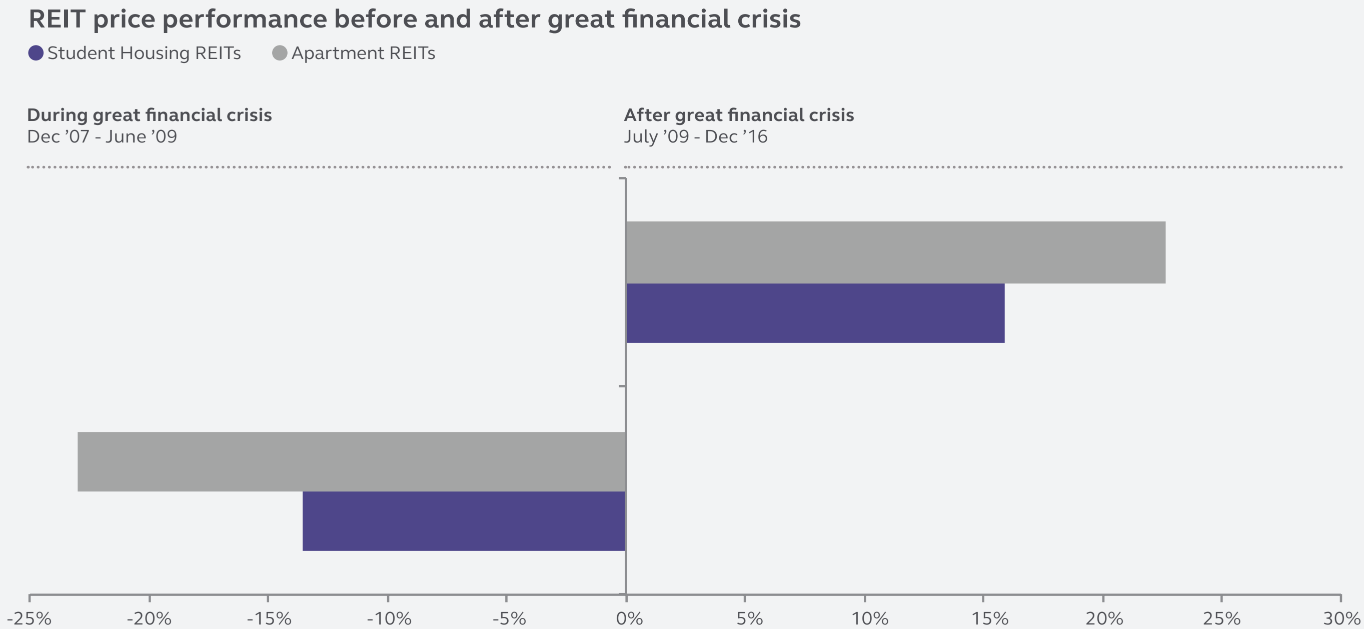
Of course, this leads to the question of whether this new source of capital will be able to navigate the intricacies of the fragmented student-housing demand issues and exhibit an appropriate discipline in the new-supply response for both quantity and college location. While the projected rate of college-enrollment growth is slowing, the national supply of student housing has increased recently. According to Axiometrics, an apartment and student-housing data provider, between 2000 and 2010, new supply of student housing averaged 74,500 beds per year (3.4% average growth rate), and increased to 97,500 beds during the period from 2011 to 2016 (3.6% average growth). Axiometrics also indicated that fall-2016 new supply reached a record of almost 48,000 new beds. The distribution of that record amount varied widely by geography, with most of the new supply occurring in the South. Whether because of close-to-campus land availability constraints or overall developer discipline, Axiometrics projects that student-housing vacancies will remain below 5% nationally through 2021. However, there conceivably will be some university and college locations where overbuilding will occur, reinforcing the need for a high degree of investor selectivity.

Revenue patterns

Turning to an assessment of property-revenue trends, student-housing properties have behaved differently than conventional multi-family over the past 10 years. One way to see this is to compare revenue growth over time between publicly traded student-housing REITs and conventional multi-family REITs.

Exhibit 6: Price performance hints at diversification benefits too

Student-housing REITs weathered the global financial crisis better than apartment REITs, though apartments recovered more strongly afterwards.



Source: Bloomberg, Principal Real Estate Investors, January 2017

It is evident that student-housing revenue fared far better during the global financial crisis, but not as well during the subsequent expansion. A comparison to the underlying stock price performance displays a similar pattern.

Further, the student-housing revenue stream exhibited far less volatility, making a case for lower risk. Thus, there is a compelling case that the student-housing sector is a potentially effective portfolio diversifier given what has been low same-store revenue beta behavior in the public sector. And the diversification benefits likely extend from within an investors' overall multi-family strategy to other asset classes. Since the United States is now in the eighth year of an economic expansion, incorporating some defensive or recession-resistant assets in a real estate portfolio seems prudent and may also contribute to the increased weight of capital flowing to the sector.

Conclusion:

Like most property types, student housing in the United States is encountering a combination of headwinds and tailwinds. Nationally, there is excess college and university capacity in the relative to intermediate-term demand. The growth of online education options poses an increasing threat to the brick-and-mortar university experience. However, pockets of strength exist since graduation rates in the South and West display strong growth. Some universities are well positioned to take advantage of the increasing number of international students, subject to risks and uncertainty from federal government policy. The aging housing stock for many universities bodes well for new, purpose-built assets. And the trend towards larger, well-branded, financially strong universities seems to position assets in these locations in a favorable light. Student housing proved to be an outperformer during the last recession. So with an economic expansion heading into its eighth year, the sector merits consideration as a defensive element within a broader real estate portfolio.

From pricing and yield perspectives, it is unclear how much of the decline in cap rates and elimination of the historical risk premium relative to conventional multifamily is due to the forces of the weight of capital versus overall reduction in risks in the student housing. There is some evidence, however, that cap-rate compression has been uneven across universities and colleges. This unevenness suggests at least some level of investor selectivity. On a macro level, the supply and demand fundamentals suggest the demographically driven glory days are past and overall growth may be muted unless there is a greater surge in international students.

The dynamics underlying the student-housing sector suggest a need for a very high level of selectivity to maximize outperformance. There are several possible strategies to best position an investor for success in the student-housing sector:

- Pursue larger, financially strong, public universities that have increasing enrollment growth and are located in dynamic areas that carry strong global appeal. For these public universities, it is important to understand how dependent the university is upon state funding. If dependency is on the higher side, evaluation of the financial condition of the applicable state is critical.
- For private universities, focus on those that are highly selective, appeal to international students, have strong endowments, and are experiencing growing enrollment.
- Focus on locations that are "walkable" to campus and near popular amenities.
- Focus on physical assets that have best-in-class amenities, security, parking, diverse bedroom types, and best-in-market bedroom-to-bath ratios.
- Understand any existing or pending obstacles to private campus housing. For example, is there a requirement to be on-campus for both freshman and sophomore years versus just freshman year?
- Consider teaming up with an owner or operator that has experience with the unique leasing and management nuances involved in student housing. Carefully assess any pending university-owned or planned private supply, and compare to the current and prospective demand outlook.
- Evaluate exit strategies and liquidity, and determine whether a portfolio, versus a single stand-alone property, sale would result in greater liquidity.
- As with any asset class that has seen a sharp decline in cap rates, evaluate the relationship of property pricing to reproduction costs to avoid being at a cost-basis disadvantage to new construction coming on line.
- Evaluate the breadth and pricing of debt capital available to finance student-housing acquisitions, especially those located in tertiary markets.

In summary, investors that can thoughtfully and skillfully navigate the challenging dynamics of the U.S. student-housing environment should find themselves able to not only find assets that provide strong performance on a stand-alone basis, but to also gain portfolio benefits from a defensive positioning perspective, helping reduce downside volatility when the next economic downturn occurs.

Disclosures

Unless otherwise noted, the information in this document has been derived from sources believed to be accurate as of March 2017. Information derived from sources other than Principal Global Investors or its affiliates is believed to be reliable; however, we do not independently verify or guarantee its accuracy or validity. Past performance is not necessarily indicative or a guarantee of future performance and should not be relied upon to make an investment decision.

The information in this document contains general information only on investment matters. It does not take account of any investor's investment objectives, particular needs or financial situation and should not be construed as specific investment advice, an opinion or recommendation or be relied on in any way as a guarantee, promise, forecast or prediction of future events regarding a particular investment or the markets in general. All expressions of opinion and predictions in this document are subject to change without notice. Any reference to a specific investment or security does not constitute a recommendation to buy, sell, or hold such investment or security, nor an indication that Principal Global Investors or its affiliates has recommended a specific security for any client account.

Principal Financial Group, Inc., Its affiliates, and its officers, directors, employees, agents, disclaim any express or implied warranty of reliability or accuracy (including by reason of negligence) arising out of any for error or omission in this document or in the information or data provided in this document.

Any representations, example, or data not specifically attributed to a third party herein, has been calculated by, and can be attributed to Principal Global Investors. Principal Global Investors disclaims any and all express or implied warranties of reliability or accuracy arising out of any for error or omission attributable to any third party representation, example, or data provided herein.

All figures shown in this document are in U.S. dollars unless otherwise noted.

This document is issued in:

- The United States by Principal Global Investors, LLC, which is regulated by the U.S. Securities and Exchange Commission.
- Europe by Principal Global Investors (Europe) Limited, Level 1, 1 Wood Street, London, EC2V 7JB, registered in England, No. 03819986, which has approved its contents, and which is authorised and regulated by the Financial Conduct Authority.
- Singapore by Principal Global Investors (Singapore) Limited (ACRA Reg. No. 199603735H), which is regulated by the Monetary Authority of Singapore and is directed exclusively at institutional investors as defined by the Securities and Futures Act (Chapter 289).
- Hong Kong by Principal Global Investors (Hong Kong) Limited, which is regulated by the Securities and Futures Commission and is directed exclusively at professional investors as defined by the Securities and Futures Ordinance.
- Australia by Principal Global Investors (Australia) Limited (ABN 45 102 488 068, AFS License No. 225385), which is regulated by the Australian Securities and Investment Commission and is only directed at wholesale investors (as defined in sections 761G and 761GA of the Corporations Act).
- This document is issued by Principal Global Investors LLC, a branch registered in the Dubai International Financial Centre and authorized by the Dubai Financial Services Authority as a representative office and is delivered on an individual basis to the recipient and should not be passed on or otherwise distributed by the recipient to any other person or organization. This document is intended for sophisticated institutional and professional investors only.

In Europe, this document is directly exclusively at Professional Clients and Eligible Counterparties and should not be relied upon by Retail Clients (all as defined by MiFID). In connection with its management of client portfolios, Principal Global Investors (Europe) Limited may delegate management authority to affiliates that are not authorised and regulated within Europe. In any such case, the client may not benefit from all protections offered by rules and regulations enacted under MiFID.

This material is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

Investing involves risk, including loss of principal.

Potential investors should be aware of the many risks inherent to owning and investing in real estate, including: adverse general and local economic conditions that can depress the value of the real estate, capital market pricing volatility, declining rental and occupancy rates, value fluctuations, lack of liquidity or illiquidity, leverage, development and lease-up risk, tenant credit issues, circumstances that can interfere with cash flows from particular commercial properties such as extended vacancies, increases in property taxes and operating expenses and casualty or condemnation losses to the real estate, and changes in zoning laws and other governmental rules, physical and environmental conditions, local, state or national regulatory requirements, and increasing property expenses, all of which can lead to a decline in the value of the real estate, a decline in the income produced by the real estate, and declines in the value or total loss in value of securities derived from investments in real estate. Direct investments in real estate are highly illiquid and subject to industry or economic cycles resulting in downturns in demand. Accordingly, there can be no assurance that investments in real estate will be able to be sold in a timely manner and/or on favorable terms.

Principal Global Investors is the asset management arm of the Principal Financial Group. Principal Real Estate Investors is the dedicated investment manager for Principal Global Investors.