



EXECUTIVE SUMMARY

Student housing has been a success story on the commercial real estate scene for many years, but investors are wondering what COVID-19 and the ensuing global pandemic mean for the future of universities and the housing serving those campuses. Virtus has been an active investor in student housing since before it was more broadly institutionally accepted. The space has evolved materially since the early days, with increased demand for off-campus housing, waves of new supply, waves of new capital, expansions in valuations (like all CRE), changes in funding for college education, changes in housing demands, and significant increases in development costs—among a number of other modifications to the investment landscape. COVID-19 is throwing another curveball at the sector, and we believe now is a very interesting time in student housing. As such, we would like to share our updated thoughts on the space.

The main takeaways from our research and analysis on student housing today are as follows:

- COVID-19 has hastened a trend that was already in place pre-pandemic: high Return on Investment ("ROI") universities will continue to grow in demand, while low ROI universities will have to re-invent themselves or shut their doors;
- As such, there will be greater dispersion in performance in student housing, with clear winners and losers, both during and after the pandemic;
- University enrollment, in general, remains very resilient and is even countercyclical, along with the resilience of the housing stock at high ROI universities;
- Contrary to popular belief, most universities will have on-campus learning for the 2020/2021 academic year, and housing demand has remained quite high;
- The two most significant headwinds to student housing investment in recent years—over-supply and toppy valuations may moderate due to COVID-19; and
- COVID-19 has created a compelling opportunity for Virtus to re-enter the student housing space.



UNIVERSITIES AND STUDENT HOUSING BACKGROUND

Universities are central to America's economic health and growth. Even when it seems like the global influence or competitiveness of the nation is hampered, our universities remain magnets for the brightest and most innovative minds in the world. Universities function as engines for metropolitan growth; the new ideas and companies fostered by universities tend to stay rooted in their communities even when their market is global. Further, while the fruits of higher education support the market, universities themselves are less correlated to market movements, and enrollment demand has historically been remarkably resilient in downturns. In short, universities have such a pervasive impact that their value can be difficult to quantify. This is also why the sector has been a natural target for overheating in all respects—student debt, tuition costs, and student housing development. Real estate investors are typically most concerned with the risk factor associated with development, but investing in student housing requires an intimate knowledge of all aspects of higher education.

At Virtus, we believe the topic is timely because the COVID-19 pandemic has completely disrupted an industry that had become crowded and frothy as of late 2019. We have already seen the exit of many players who gravitated toward student housing after the sector's very resilient performance during the Global Financial Crisis made it trendy for investment. During that same period, Virtus went from one of the most active student housing buyers to a seller of all of the Firm's existing assets. While the current crisis has soured many on the asset class, Virtus believes that now is an ideal time to assess the landscape for high-quality deals that have been few in number during recent years — as well as to give the sector much needed time to absorb a historic supply wave that has drawn many individual markets off track.

Importantly, we do not purport to know precisely what path enrollment or investor interest will take over the next few years. But while we provide historical evidence of counter-cyclical demand, as well as incoming data that supports this view, we have not based our current strategy on the continuance of past trends. Instead, Virtus is pursuing a strategy we believe functions well where enrollment declines or is disrupted for at least a year because the clustered nature of college competition favors high-quality universities that offer students a positive ROI for their time and money. Virtus believes focusing on institutions with track records of such positive outcomes provides a roadmap for involvement in a vital and dynamic, but likely shifting, sector over the coming years.



properties and turning them around.

VIRTUS' EXPERIENCE WITH STUDENT HOUSING

After members of the Virtus team experienced the early days of the rent-by-the-bed, offcampus student housing space that was born in the early 1990s, Virtus laid the groundwork for its student housing platform in 2006 with the publication of its whitepaper on cycleresilient property segments. That was the turning point to shift exclusively into investments in education, healthcare, workforce housing, and self-storage related real estate segments. Over the next decade, Virtus became one of the largest owners of student housing, having purchased roughly 11,500 beds throughout the country. Student housing began garnering the attention of generalist investors shortly after the Global Financial Crisis when the relative attractiveness of the sector's performance was stark against the backdrop of other commercial real estate assets, many of which were in freefall at the time. The impact of this increased attention became more pronounced as the recovery progressed. By 2016, Virtus went from being one of the larger fish in a small pond to another fish in a somewhat more crowded sea. There were benefits to this institutionalization: liquidity has grown substantially; debt issuance has matured, with both agency and non-agency debt readily available; and as new entrants entered the sector, it often created opportunities for experienced investors to profit by selling to these new aggressive investors or buying their underperforming

However, student housing is still a relatively small sector, and it became a victim of its success, as development pipelines began overheating in many markets. Supply issues drove our "exit" from the sector, which was driven less by a formal decision to exit than a lack of deals that met our standards. This decision was supported by two of our properties hit especially hard by over-building in their respective markets, where we had to fight just to wring out a small return on our invested capital. Ultimately, there were two key reasons for our decision to lower our targeted allocation to the student housing space: (1) significant waves of new supply at targeted universities; and (2) increased valuations that did not fully reflect the operational intensity of the asset class or its susceptibility to new supply risk. Even though demand for student housing is more resilient and less cyclical than demand for traditional multifamily assets, because cap rates compressed to within 50 bps of multifamily (and at one point were below multifamily), we believed pricing did not fully reflect the aforementioned relative risks or the lower relative liquidity of student housing compared to multifamily assets.

For these reasons and others, Virtus found more fertile investment opportunities in other cycle-resilient asset classes in recent years. Virtus made its last student housing acquisition in January of 2016 and sold the predominance of its student housing portfolio by the first quarter of 2017, with the balance trading in 2018, primarily to large institutional buyers who had recently entered the space. In late 2018, our student housing team began hunting



distressed opportunities in a handful of university markets that had compelling enrollment growth prospects but had temporarily been hit with too much new supply at one time, creating disruption for one to three leasing cycles. Although in a normal market this would have been an effective acquisition strategy, the unprecedented amount of capital raised by debt funds between 2015 and 2018 found its way into many of these troubled student housing properties. This allowed the owners and developers to extend the holding period on their asset longer than would typically be possible during more normal times of liquidity.

Fast forward to today, the intense nature of the COVID-19 pandemic has meant enough disruption in the student housing space that Virtus anticipates significant opportunities for better investment deployment opportunities in the coming years. While the past is hardly sufficient to trace the forward trajectory of the sector, some context is likely helpful.

WHY STUDENT HOUSING IN THE FIRST PLACE?

RESILIENT AND ASYMMETRIC RETURNS

Simply put, demand for university education has historically been inelastic, with demographic trends and increases in college attendance rates augmenting university enrollments, both in good times and bad. Not surprisingly, demand for housing supporting universities benefited from the same factors, bolstering the resilience of the asset class to economic and market cycles.

Generally, when Virtus references "cycle-resilient" asset classes, we mean the decline in demand or profitability is muted compared to other property types during periods of economic distress and/or other market volatilities. In student housing, we see *counter*-cyclical demand growth, due to the opportunity cost of pursuing education, which is lowered in downturns. This "recession surge" comes not only from post-graduate students avoiding a weak job market to pursue a higher degree and better their prospects, but also from the millions of typical college-aged students whose economic positions prevent college from being the obvious, immediate choice. When those individuals (who are generally most likely to face job risk) cannot find employment, they are much more likely to pursue college – especially in an environment where student financial aid and loans are widely available. Therefore, enrollment has historically increased during each of the last six recessions in the U.S., including the most recent Great Recession.



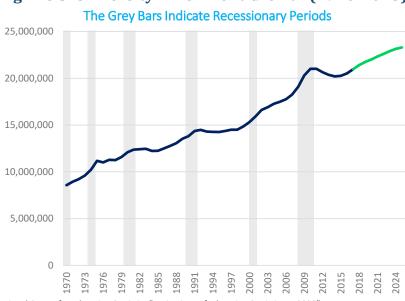


Fig 1: U.S. University Enrollment Growth (1970-2025)

Source: National Center for Education Statistics "Projections of Education Statistics to 2028"

Although the most recent projections from the National Center for Education Statistics do not account for COVID-19 downturns, they provide a baseline account of the pure demographic expectations colleges have. While enrollment growth is not projected to be as robust as in previous years, there is still growth expected despite the muted size of the Gen Z cohort compared to Millennials. Of course, no university's pipeline exactly fits the national average; every institution has a unique and complex combination of student demand, institutional desires, and fiscal realities that drive enrollment. In fact, this landscape is complicated enough that universities have increasingly outsourced the physical aspects of housing to the private sector.

UNIVERSITIES WILL CONTINUE TO OUTSOURCE HOUSING

Simultaneously with continued enrollment growth, universities have spent this period transferring real estate from their balance sheet to better use both capital and human resources. Most universities have determined that their core competencies are education and research, not housing development, management, and financing. Cash-rich universities would rather deploy funds into expanding their educational offering or investing in their endowment portfolios than tie up capital in large illiquid real estate deals tied to the fate of the institution. Meanwhile, cash-poor universities cannot access funds for infrastructure investment at rates more attractive than private capital can supply it. These factors — combined with shrinking support from state budgets for public universities — are why most universities have realized



that providing a large housing stock for its students is no longer a top priority. Moreover, the student body's highly diverse desires and budgets are generally better served by a private market. For all these reasons and others, Virtus expects the current trend of greater private involvement will continue for student housing and other university infrastructure needs.

Indeed, we believe the COVID-19 pandemic will accelerate many of the existing trends that were already playing out regarding product obsolescence. Many older dorms were built with double occupancy and often common showers. Despite their superior location to most off-campus student housing options, these assets are typically the least favored by students due to their age, close oversight from university officials, and lack of private space and amenities. In the pandemic environment, these assets have become almost wholly unacceptable to students and the universities, with some schools taking certain dormitories offline to segregate as temporary housing for infected students, while simultaneously scrambling to house students in off-campus housing or empty hotels. According to Student Housing Business, 79% of campus offices are planning to keep at least one dormitory offline for the Fall 2020 semester. Flagship universities often have a significant stock of obsolete product. The growth of their academic research and athletics offerings has typically been prioritized over updating old dormitories (which historically had mandated freshman occupancy). The pandemic has turned those assets into a potential crisis hampering student life and university revenue.

The operational headache universities are currently experiencing is another reminder of the relative complexity of providing housing. Students have radically different budgets and values; some want to be in the thick of the campus environment, others want to be near the bars and nightlife, while others may desire a remote cottage-style oasis. The "one size fits all" attitude with which dorms were built simply disagrees with the hyper individualist desires of the modern student body. Moreover, more Millennials and Gen Z members grew up with their own bedrooms and bathrooms than their Baby Boomer and Gen X counterparts. Such concerns may seem secondary in a pandemic, but they will drive value for decades after this situation has passed. Universities are neither fiscally nor operationally well-suited to such an endeavor, and any downward pressure on tuition costs coming from a more austere environment will only drive such functions further from their abilities. In short, real estate development is inherently both risky and capital intensive, and the risk does not stop when the building is completed. Below, we discuss the challenges inherent to student housing, illustrating why it has evolved into a sector dominated by private, specialist operators.



CHALLENGES OF THE SECTOR

Supply risk has been the central factor shaping both the sector and individual markets because university markets are highly centralized and generally small enough such that in some markets, even one or two additional new development deals can swing the fortunes of an entire competitive set, at least in the short term. Furthermore, many universities are in small "college towns" that typically have low barriers to entry and would not otherwise attract investments of the asset quality or institutional backing that student housing properties have in recent years. This can also make it more difficult to deliver projects on time (due to shallow labor pools), not to mention harder to manage once built. Finally, the entire sector revolves around academic calendar milestones, so missing a development delivery by even a couple of weeks could constitute an operational and reputational disaster for the owner.

Nonetheless, the central supply problem is simply quantity, especially as it has not been evenly distributed. Much of this new supply has concentrated in massive, high-growth markets, with good reason, initially. For instance, during the height of development in 2018, Florida State University and Texas A&M together accounted for 11% of the entire construction pipeline. Such universities not only have the greatest critical mass, but generally also have the greatest growth potential. This is another reason why a sector-wide growth rate can be misleading when ascertaining any individual investment's attractiveness: some markets have barely budged, while others have more than doubled their supply.

Fig 2: 2019 Student Housing Inventory Growth Hotspots

Rank	University	2019 Deliveries (Number of Beds)	Inventory Growth (as a % of 2011-2018 deliveries)
1	Purdue	2,118	98%
2	Florida State	1,693	16%
3	U of Illinois-Urbana Champaign	1,562	39%
4	Temple	1,517	105%
5	Mississippi State	1,476	33%
6	U of Texas at Austin	1,378	22%
7	Georgia State	1,361	150%
8	U of Arizona	1,318	31%
9	Georgia Institute of Technology	1,290	98%
10	Sam Houston State	1,197	86%

Source: Axiometrics / RealPage Analytics



Even before COVID-19, there was widespread acknowledgment that current development pipelines would not be sustainable and would be reverting soon. Experienced investors pointed toward increasing caution from agency lenders and reports of increasing student housing distress in CMBS portfolios. Thus, it is not surprising that the pandemic appears to have cemented the slowdown in construction. It is anticipated that this year and next will have the lowest number of new deliveries since 2011. This will undoubtedly take some pressure off a competitive landscape that had become overheated in recent years, but it is still important to remember that the sector poses operational challenges that will only deepen in the current environment.

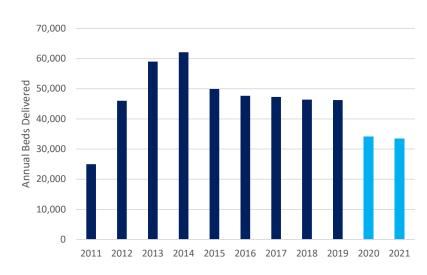


Fig 3: Historical and Projected National Inventory Growth

Source: Axiometrics / RealPage Analytics

While student housing may seem only marginally different than conventional multifamily, it has a myriad of small idiosyncrasies that collectively make it an entirely different sector operationally. First off, assets come with a challenging leasing cycle: only a 30% renewal rate owing to the short time frames and horizons of prospective tenants. Further, the leasing season is not year-round. Some university markets have leasing seasons from October to July, while other typically "second choice" schools might be forced to sign the majority of their leases in a four to five-month period in the late spring and summer. Short leasing cycles can lead to higher competition intensity and, thus, potential variability in gross potential rent. Moreover, although the vast majority of the purpose-built off-campus student housing ("POSH") space has conditioned students to expect twelve-month leases, many tenants may only need the property for nine months of the year. This means the sector has had to negotiate the value of different lease lengths, for both owner and tenant. The



clustered nature of a university market contributes to unfortunate competitive tendencies when markets overheat. In addition to rate drops in certain oversupplied markets, many other markets have overbuilt assets in amenity "arms races." It has become common to find properties in a sub-100,000 population college town that would rival upscale resorts in their zero edge pools, premium exercise equipment, tanning beds, and other perks. It is hard to know which is a more significant liability: depressed rental rates that will take several leasing cycles to reclaim, or a permanently overbuilt asset that simply cannot be profitable at its cost basis. It is also a simple truth that college students can be hard tenants on a property, necessitating more maintenance, which is exacerbated by a VERY brief turn period (usually only two weeks) shortly before the fall semester begins. For these reasons and others, experienced student housing owners often jest that managing a student community is more akin to managing a hotel filled with a bunch of 19 and 20-year-olds than to managing a traditional multifamily community. In short, while the demand for student housing is quite resilient and quite possible to project, the supply dynamics and operational challenges can be volatile.

If these qualities seem like challenges discouraging investors, they are also the barriers that had kept the Virtus student housing team close to the sector for years, even during times we did not anticipate any purchases. When valuations are in harmony with the sector's fundamentals, student housing offers outsized returns and lower macroeconomic correlations in exchange for operational risks that the Firm has the expertise to manage.

ACCELERATING EXISTING TRENDS AND GREATER DISPERSION IN CRE PERFORMANCE

Despite the massive shift in daily life that quarantine has brought, many of its real estate sector effects are more accelerations of existing trends than entirely new outcomes. Two obvious examples are the hastening decline of retail and the ascendancy of industrial. These were long-standing trends prior to COVID-19, but the ensuing pandemic has very abruptly demonstrated a harsh contrast in tenant demand based ultimately on the demands of the American consumer and its buying habits. Eventually (perhaps already), industrial will become a victim of its own success with soaring valuations and the delivery of overwhelming supply, thus diluting investment performance. This is nothing new, as industrial has historically been a very cyclical asset class, but it is no doubt buoyed by the increased velocity of e-commerce. For the time being, and certainly during the pandemic and some period after that, industrial will be a clear winner, and retail will be a clear loser (both from the tenant and the investor perspectives).



This trend of greater dispersion in outcomes, both between property types and within them, is something we called for in our 2020 Market Outlook piece from early January. Little did we know that a global pandemic was ensuing and how abruptly and blatantly this dispersion would take place. The effects of the pandemic are ubiquitous. First, the economic freeze of quarantine itself will likely dislodge many poorly assembled deals, even if various forms of relief and debt extensions delay the distress by months or well into 2021. Second, as the economic tide shifts, the fundamental health of real estate assets will begin to matter more than just existing investor sentiment, even in a highly liquid environment. Benjamin Graham was speaking of the Great Depression's aftermath when he said the market functions as a "voting machine" in the short term, but time forces its judgments into a "weighing machine." That sentiment could certainly apply to the current environment. Such periods frequently provide the most accretive opportunities for private equity and other market participants that thrive in times of dislocation and difficulty. See our most recent thought piece, The Resilient Distressed Opportunity, for more detail.

The student housing sector is a perfect example where overall volatility – and even the possibility of wholesale declines – will create a divergent environment of obvious winners and losers over this disruptive period. Much of this is due to the overall resilience of education demand in America and especially during recessions. Other factors have to do with the physical and operational nature of the sector compared to typical multifamily. And finally, much will depend on any individual investment manager's ability to take decisive positions on individual prospects in this unclear time.

These factors have combined into a compelling opportunity for Virtus to re-enter the student housing space after several years in which we were content to observe intently from the sidelines.

RELYING ON THE PAST IS NOT ENOUGH

While the past provides ample evidence that student housing will continue to attract countercyclical demand, we believe the COVID-19 pandemic defies easy applications of the past. As such, we have entertained all possibilities and keep ourselves attuned to evidence that our existing models may be outdated. Nonetheless, early evidence points toward the continued resilience of student housing properties. Rent collections across the sector stayed consistently above those of conventional multifamily through June of this year – notable considering how far above other asset classes like retail the multifamily sector is. Moreover, the REIT American Campus Communities (NYSE: ACC), whose portfolio is overrepresented by high-quality flagship schools and prime assets, sits well above the sector at large. This is also crucial early evidence



for the Virtus thesis of relative value within higher education (discussed below). In short, these are encouraging signs that education is still as "needs-based" as it has historically been during recessions.

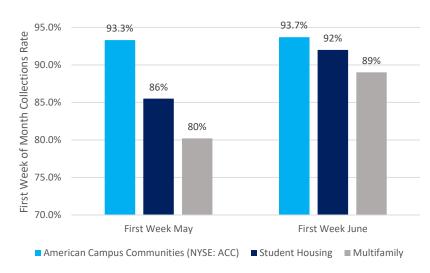


Fig 4: Student Housing vs Multifamily Collections Rates

Source: American Campus Communities 1Q20 quarterly reports, NMHC Collections Tracker for multifamily and student housing sectors

of a sector. And there is enough evidence that we have reached an inflection point in our existing models for the "value" of an education, such that we believe it is necessary to entertain scenarios with total enrollment declines over the next years, even if improbable. While this is not a "base case" assumption for Virtus, we remain open to the possibility that any number of factors could prompt enrollment declines in future years beyond the lower growth rates of college-aged prospective students coming through the system, such as (1) a reduction in the availability of student loans or consumer appetite for private loans; (2) increased demand from marginal students for a lower cost remote learning format; and (3) greater interest in alternative careers not requiring a traditional four-year degree. Crucially, while such trends would be negative for education overall, and disastrous for certain universities, it would also be beneficial to other universities.

However, collection rates only give information about current portfolios, not the trajectory

COMPETING IN CLUSTERS

Enrollment decline occurs chiefly because of the way universities compete for students, as well as the apparent hierarchy in the attractiveness and demand for some institutions more than others. This greater connectivity in enrollment trends of similar types of institutions of



higher learning is because, unlike other types of highly-distributed real estate (hospitality, non-mall retail, office), the loss of one single university will generally have a noticeable impact on demand for similar universities in the tuition network. To illustrate, imagine a simplified "market" of only two universities (despite there being nearly 3,000 four-year colleges in the U.S.), each facing possible enrollment declines. Crude as this model is, it is not misleading: an in-state tuition scheme means each student often has only a handful of options when seeking a full range of academic opportunities, including graduate-level coursework. While the enrollment decline is minor and gradual, the situation hurts both universities. However, if the decline is severe and acute enough, one university may close or downsize.

It seems clear the first university in the example above will benefit from this situation; the question is to what degree? Virtus believes that in the case where the first university is more fiscally healthy and offers a superior value proposition to students and their parents, any macro decline that challenges the second university will benefit the first. Higher-quality universities – flagship state schools, Ivy League schools, and other major private research universities face demand that is nearly inelastic compared to available seats. That is why Tier I public flagship universities have continued to experience record applications and falling acceptance rates. Any source of volatility that reduces supply capacity will benefit these flagship schools first. For example, The University of Texas at Austin had 50,576 applicants for the 2019 entering class, with a 39% acceptance rate and capped enrollment. Even if a number of students choose to defer due to COVID-19 or other factors, and the acceptance rate increases to 45%, the same number of students will still be entering the University this fall. Even in a situation where true disruptions in education demand – involving the dissolution of many departments and degree paths – flagship universities would still be the first recipients of the new demand landscape. Readers can find an analogous process in the closing of malls (where supply is similarly clustered). There have been two decades in which "the death of malls" has been a hot topic in real estate – and indeed, many individual malls were closing even in the earlier years of the retail decline. Yet until the pandemic, the REIT Simon Property Group (NYSE: SPG) maintained exceptional performance prior to COVID-19 compared to its cohort by focusing precisely on flagship and high-growth malls that stand to benefit from dislocations in supply. While the beta sensitivity of education demand is entirely different from retail – and unlike retail, most universities will survive/thrive – the general pattern of how large clusters of supply compete can still be instructive.

Thus far, we have maintained that education demand is quite resilient during recessions and that while the pandemic may have challenged the logistics of formal education, it has not yet altered its cultural primacy. Further, we contend that any dislocation or distress in the entire sector will eventually benefit the highest quality institutions, even if it means pain across the board. But how does one compare universities, especially



across value propositions and state lines? The hierarchy between a flagship state school and a small community college may be clear, but any private equity manager knows that attractive markets, and ultimately individual deals, will generally depend on more subtle value judgments.

FOCUS ON RETURN, NOT PRESTIGE OR PERCEPTION

We believe the current environment is forcing investors, universities, and students alike to reframe their metrics for success. One key trend is the move away from the "prestige" of an education to its utility. For instance, if forced to compare them, most people would probably say a small, seemingly selective liberal arts college is more "prestigious" than a non-flagship public university. Yet if you compare the "return" on each, frequently the public school proves the better investment in terms of economic mobility. Importantly, even the less quantifiable aspects in the "value" of an education (for instance, the cultural enrichment, "critical thinking skills," or simply connections one makes there) can be roughly accounted for in how they impact the lives of their students. This kind of thinking has often been discouraged (often by colleges themselves). However, the stark reality of a downturn, combined with increasing awareness on the risks of student debt, means this "return-based" thinking is increasingly the first thing student families consider. What are the primary factors students and their parents consider when determining the return of a specific university's value proposition? Numerous surveys have been conducted through the years, including several in-house surveys at Virtus in specific university markets. The primary drivers of value tend to be:

- 1. Quality of academics
- 2. Total cost of attendance
- 3. Post-college job placement
- 4. Campus life
- 5. Logistics, proximity to home, safety, and student-specific proclivities
- 6. Reach and influence of the alumni network
- 7. Adequate range of academic programs

With academic quality and cost of attendance as the primary drivers of value, there is no doubt that public flagship universities with strong academics, especially those in a Power 5 athletic conference, command a very strong ROI. The differences may be more subtle when comparing a somewhat prestigious private school perhaps in another state to a solid



non-flagship public school, such as UC Irvine or the College of William and Mary. The public schools are likely closer to proximity to prospective students, and in-state tuition will likely cost half as much as the private school. Even though the private school <u>may</u> offer a slightly better academic experience, many students (and their parents' pocketbooks) may opt for the public school option, which likely also offers a compelling campus life and potentially compelling local job prospects. The fact that public universities are more likely to have deep graduate research programs than all but the largest and most prestigious private universities (Ivy League, Stanford, Duke, University of Chicago, etc.) adds a further advantage to the ROI of the public school.

These factors may be more critical now than ever. Indeed, there is already pandemic-related evidence that students have internalized this value system. Simpson Scarborough has been polling incoming college freshman for months, finding an escalating number of both incoming and returning students that could be considered "unclear" at this time, which may influence which school they attend and/or when – that is to say, whether they choose to take a gap year for the 2020-2021 school year. (2) These figures have risen to 40% of polled first-year students declaring their current plans were unclear as of July. While these figures alone are concerning, the story deepens for smaller private schools with materially higher rates. Finally, an analysis by Fitch Ratings showed the impact that five, ten, and twenty-percent declines in enrollment would have depending on the existing credit rating of the school. They found that in a five percent decline scenario, about 65% of private colleges would maintain coverage in line with current rating levels. With a ten percent decline, about 50% of institutions would maintain sufficient coverage, and at a 20% decline, just 15% would.⁽³⁾ Both the student survey and Fitch Ratings' credit analysis converge on a similar takeaway: smaller private institutions with lower credit ratings are more at risk for even modest enrollment declines as a factor threatening solvency. In short, the emerging evidence suggests that education demand will be robust over the next few years. Still, the coming leasing year may be extremely volatile and even destructive of value, from the asset to the university level. In our base and upside cases, total enrollment maintains its counter-cyclical upward trend, even if the pandemic reduces the first year of incoming students for the 2020/2021 school year. However, in a downside case, the recession enrollment surge is countered by a broad, structural move away from higher education. While this unlikely scenario would surely impact sector liquidity and pricing, Virtus believes a defensive commitment to high-quality, positive ROI universities would still find accretive opportunities not only despite, but in some cases, because of distress elsewhere in the sector.



THE WAY FORWARD

The first goal is to understand the financial health and value proposition of a university, as well as the strength of its student sourcing pipeline, which is a product of state population growth rates and institutional share. In addition to the factors above driving the assessment an individual student or their parent may use to deduce ROI, one cannot ignore the simple math of population growth and high school matriculation rates. For example, high-growth states like Texas are not only producing substantially more high school graduates than several states combined (and 70% of high school graduates now attend some form of college), the biggest increase in growth rates of college attendance is being seen from minority cohorts (and Texas has not been majority Caucasian since 2005) and foreign students. No doubt, the latter has been more in question during the current administration's position on stricter immigration control, and the lockdowns and travel bands due to the pandemic have added temporary headwinds for international students attending U.S. universities. There are 1.1 million international students nationwide, 92% of which remained in the U.S. during the pandemic, according to CBRE. Even the 269,000 new international students that typically come to the U.S. for the first time each year are offset by the 300,000 to 400,000 U.S. students who study abroad each year. It is also worth noting that the Chronicle of Higher Education, which is tracking 1,035 universities, has indicated that as of June, 80% of those universities have planned to open their campuses for the fall 2020 semester, with 63% fully open and 17% open under a hybrid on-campus/remote model. It is also telling that ACC has indicated that they are at 90% pre-leasing rates as of their last earnings call for their California university properties, all of which have said they are going to be 100% remote learning for at least the Fall 2020 semester and likely for the entire year.

Aside from university quality, what are the other guideposts for the future? In the short term, we believe the greatest opportunities will be in either liquidity constrained deals or rescue capital opportunities. Many investors have gone to the sidelines in general and specifically in student housing. Deals that would have had significantly more equity interest a year ago still need to deploy into the current environment, and this has already shifted joint venture terms and pricing favorably. As previously cited, there will be a near-term pivot away from density and campus proximity, as universities are already lowering campus density. Still, developments underway now will deliver into the subsequent 2021-22 or 2022-23 school years, when the pandemic is likely behind us. While the longer-term effects of the pandemic on college life are unclear, student housing managers will only stay solvent for the future by adequately responding to the present.

There will, of course, be distressed opportunities as the economic effects of the pandemic set in. Some of these opportunities will be simple cases of overbuilt, but fundamentally sound



deals delivered into a market that could not support the leasing assumptions in the first year or two. For instance, if a deal underwriting fails to account for one competing development in its market impact assessment, it may derail the first two years of occupancy. Lately few deals have been underwritten for such disruptions. Recent years also saw increasingly aggressive capital structures, and many otherwise healthy deals may unwind simply because the joint venture cannot handle a few years of difficulty. As previously noted, the extent of such overheating was calmed by debt funds extending their terms in the last few years, even before COVID-19. That music is likely to stop very soon for many of those owners and lenders. During the Great Recession, Virtus was an active buyer of notes, REOs, and related transactions with banks. We think it is likely that we will again be an investor in such distressed transactions, but perhaps more with debt funds than traditional banks over the next couple of years. Alternately, or in addition to, there may have been operational missteps at the property – forays into student housing from generalist investors who lacked bandwidth or expertise to manage them. All such cases are expected based on existing trends, and they are likely to accelerate should COVID-19 pose greater volatility to enrollment in the short term.

CONCLUSION

We return to the unavoidable need for case by case diligence on any university system. We believe the best options are Tier I (especially Power 5) universities and Tier II state schools in high-growth regions. Smaller private schools — especially those without graduate-level research programs — are likely to be trouble, as are for-profit schools calling on lower-tier students, even if exactly such institutions have been buoyed by cheap student debt and a coasting bull market. This means the coming years will see high-quality, recent vintage assets attached to low ROI universities with significant headwinds on their viability. Virtus believes staying away from such universities is key to any forward strategy.

While past and present evidence suggests that student housing remains well-positioned for enduring performance after this year's volatility, we have been mindful that any current investments must remain solvent in a wider and more extreme environment than the sector has historically enjoyed, at least for the next year. However, the current environment's risks are mitigated through judicious purchasing, deep sector literacy, and effective management. Further, we believe the competitive pressure placed on higher education will forge more lasting institutions with better outcomes for students, even if there is significant pain along the way. As such, Virtus believes that investors will need to tread carefully in a market



upheaval that will widen outcomes, minting extremes of both winners and losers. The general resilience of the sector will remain, as will the clustered nature of university supply, all leading to diverging outcomes in different educational investments that the current environment will more than highlight.

ABOUT VIRTUS

Virtus Real Estate Capital, founded in 2003, is a hands-on, data-driven, curious investor that delivers compelling outcomes from cycle-resilient investments for all stakeholders. Through thoughtful evolution and resilience in challenging times, Virtus has purposefully worked to foster thriving communities that empower people to live better lives. Over the last 17 years, it has acquired 242 properties for a combined acquisition value of over \$4.2 billion, and has fully realized 179 property investments. With a strong and established track record, Virtus has proven to be successful in all phases of the market cycle. For more information, please visit virtusre.com.

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