

Commercial real estate: risks and resilience in the global pandemic

As the health and economic impacts of the coronavirus continue to challenge global markets, it's clear that commercial real estate is still being affected as much as, or perhaps more than, any other asset class. The effects have been far from uniform, however, resulting in widely divergent performance across real estate subsectors globally. The following analysis, informed by the expertise of Nuveen's public and private real estate research teams, offers our perspective on the experience of each property type during the pandemic thus far, as well as our near- to medium-term outlook.

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ECONOMICALLY SENSITIVE SECTORS STILL FACE HIGH HURDLES TO RECOVERY

Given their more cyclical nature, property sectors such as lodging and retail were among the hardest-hit by the initial pandemic-related economic shutdowns. They remain under pressure as few areas have seen business activity return to normal. Many reopenings have been partial at best, and the recent resurgence in COVID-19 cases has led to renewed restrictions in some locations. Similarly, the office sector has languished as “work from home” remains the prevailing mode for employees across broad swaths of the economy.

Lodging

Local, state and national restrictions have weighed most heavily on economic sectors with the greatest exposure to

travel and mobility. Within real estate, lodging has suffered more than any other area. In the U.S., many hotels completely shut down in March as travel ground to an abrupt halt. Several have reduced hotel-level operating expenses by upward of 70%-75% in an effort to reduce cash burn levels.

Occupancy rates appeared to bottom in April, with demand increasing gradually since then — initially from emergency and health care workers, and later from the general public as people became more comfortable leaving their homes for leisure purposes and restrictions were eased across the country. Demand for corporate travel, however, has remained quite modest. We expect that to remain the case until companies become more confident in allowing their employees to travel.

Occupancy levels vary by property and market, with select-service hotels generally experiencing better rebounds than full-service hotels, which tend to rely more on business and group travel. As of September, occupancy for many publicly traded select-service REITs surpassed 40%, thought to be a breakeven level in terms of cash flow. Full-service hotels have seen some improvement but in general have been operating at levels more in the 20%-30% range. Some full-service properties, particularly those focused on leisure-oriented demand, have achieved occupancy levels on par with those of their select-service counterparts. For U.S. lodging segments overall, revenue per available room (RevPAR) troughed in April, in some cases falling by as much as 90%+ year-over-year. This trend has gradually improved since then, to the high 50s%-low 60s% range.

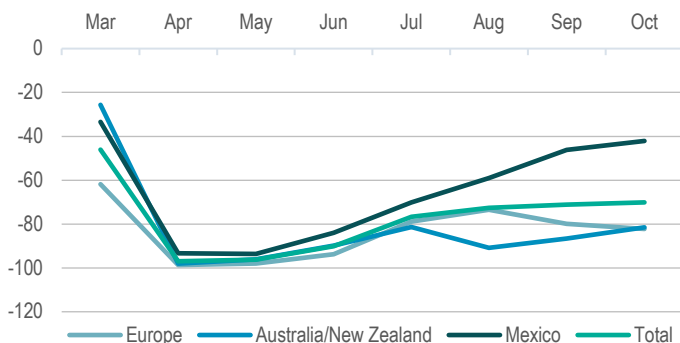
Although investment volumes have picked up somewhat in recent months, questions remain about how asset values in the U.S. have been affected since the worst of the pandemic. Asset pricing for the hotel sector seems to be down 20%-30% on average, but this will differ among assets and markets and may be heavily influenced by specific encumbrances at the management and brand levels.

The lodging environment outside the U.S.

Tourism and international/regional travel has been an important economic driver in Asia, and COVID-19 has taken a heavy toll. International tourist arrivals in Hong Kong, Singapore, Japan, Thailand and elsewhere in the region remain in the doldrums, down between -85% and -99%. While domestic travel in China has rebounded sharply after lockdown measures were lifted there, this has yet to translate into substantially improved RevPAR or occupancy metrics for major hotel operators in that country.

Figure 1. A severe impact on air travel in 2020

Average passenger volume declines (%), listed airports*



*Average drops for publicly listed airports in countries/regions shown. Source: Nuveen.

In Europe, hotel occupancy levels recovered to the 40%-50% range during the summer of 2020, but RevPAR declines have crept back up toward 60% year-over-year amid renewed lockdowns. Just as in the U.S. and Asia, lodging has been Europe’s most-afflicted sector, with performance-based leases recording no rent in many cases, and many fixed rents deferred, leading to collection rates below 25% since the pandemic began.

In light of lodging’s pronounced struggles, perhaps no sector globally stands to benefit more from the positive news regarding the Pfizer-BioNTech, Moderna, Astra Zeneca-Oxford, and SinoVac vaccines. While distribution and prioritization of recipients are still in early days, the reported efficacy of these vaccines likely allows investors to look ahead to a time that more closely resembles the pre-pandemic environment. This would be very supportive of both hotel pricing in the private markets and equity prices of lodging-focused REITs.

Retail

While the retail real estate sector had already been facing secular headwinds, the COVID-19 pandemic shone a bright light on those challenges and accelerated difficult trends that were already well-established.

Open-air shopping centers versus enclosed malls

Coming into 2020, organic growth in U.S. open-air shopping centers (also known as retail “community centers”) was expected to be muted versus historical levels due to a rising number of closures and bankruptcies from 2019 that would take until 2020 to be released and rent-producing. When the virus first hit the U.S., many open-air retail properties were able to stay “open,” albeit at substantially reduced capacity. In the early spring, tenancy representing only 50%-60% of annual base rent was actually open for business across the REITs universe. This put pressure on retailers and their ability to pay rent.

In addition, many tenants who were financially able to pay rent chose not to for a variety of reasons — their own cash flow concerns, expectations around potential government measures (e.g., eviction moratoriums, loan program) or the belief that their lease contained a force majeure clause freeing them from their obligation to pay due to the unforeseen circumstances of the pandemic.

Landlords weren't new to negotiating with struggling lease holders during recessions, but few had ever been informed by "healthy" tenants that they would not be receiving contractual rent payments. Among all property types, rent collection was lowest in the retail sector at roughly 50% in April. Due to the uncertainty of cash flows for landlords, the vast majority of publicly traded community center REITs suspended their dividends. In addition, many drew down their credit facilities.

Like the community center space, the U.S. mall sector faced lackluster organic and earnings growth expectations heading into 2020. Virus-driven closures were worse for malls than for community centers, both as a percentage of assets and in the duration of closings. Often entire malls were closed for business, with some properties not reopening until the fall. Rent collections in the second quarter were even lower for malls than for open-air shopping centers, and this was true for all "grades" of enclosed malls.

As shown in Figure 2, from late February through early April 2020, negative returns for both shopping center and mall REITs were far more pronounced compared to REITs overall and the broad S&P 500 Index. Figure 2 also shows where both sectors stood in early April in terms of their implied capitalization rates, discounts to NAV and expected 2020 FFO (funds from operations) multiples.

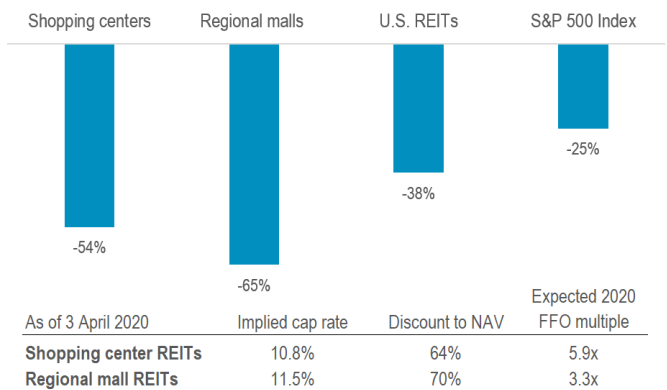
“Stresses on department stores that traditionally anchor malls have been exacerbated by the pandemic.”

As states began to ease restrictions and stores reopened, rental payments increased. By June, payment levels were up to about 60% for community centers, and in September they exceeded 80%.

The relatively less negative experience of community centers versus malls can be attributed in part to the open-air format, which typically features more essential tenancy, benefits from the potential for drive-through business, is able to offer dedicated parking to meet higher demand for curbside pickup and take-out and is often located closer to the consumer. At the same time, stresses on department stores that traditionally anchor malls have been exacerbated by the pandemic. This will likely result in more closures, although very high-quality, well-

Figure 2. Retail REIT performance has suffered

21 Feb 2020 – 3 April 2020



*Bloomberg Shopping Center REIT Index, Bloomberg Regional Mall REIT Index, MSCI US REIT Index. Sources: Bloomberg, Nuveen.

located malls are better-positioned than most to weather the current situation.

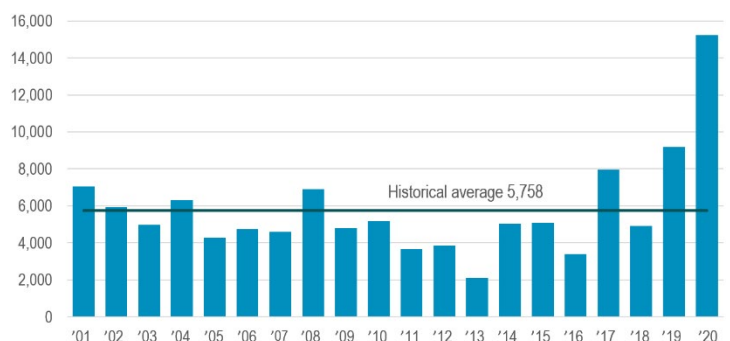
Meanwhile, retail categories that had been among the leaders in renting space prior to the pandemic — entertainment, fitness, restaurants and service businesses — were some of the hardest hit by COVID-19. Others, like grocery, thrived. Overall, brick-and-mortar retail store closures in 2020 far surpassed 2019 levels (see Figure 3). The secular headwinds affecting retailing and retail real estate before the pandemic — most notably, consumers' broad embrace of e-commerce trends — have accelerated.

The retail environment outside the U.S.

Internationally, COVID-19 lockdowns had material impacts on malls, although retail square footage per capita is much lower in most countries than in the U.S., which lessens the supply/demand imbalance to some degree. Rent collection across geographies has averaged about 40% during lockdowns and 85% post lockdowns.

Figure 3. U.S. retail store closures spike

Annual store closure announcements, 2001 – 2020*



*Through 31 October 2020. Sources: Citi Research, CreditIntell, ICSC, company releases, media reports.

In Australia, the government passed several stimulus measures and code of conduct mandates to keep jobs and provide rent relief. This has kept store counts stable and rationalization and bankruptcies low in the near term. Economic occupancy has remained steady throughout the pandemic at around 98%, while sales growth slowed to approximately -10%. Footfall counts and sales have not returned to pre-pandemic levels, however. Online sales growth even after restrictions were lifted is congruent with U.S. trends and will remain a headwind. Appraisal values have declined roughly 15%, but cap rates have increased by only 25 basis points (bps), to about 5.0% for premium malls, and by 50 bps to 5.5%-6% for lesser-quality malls — still low relative to U.S. mall peers, which demonstrates some relative strength.

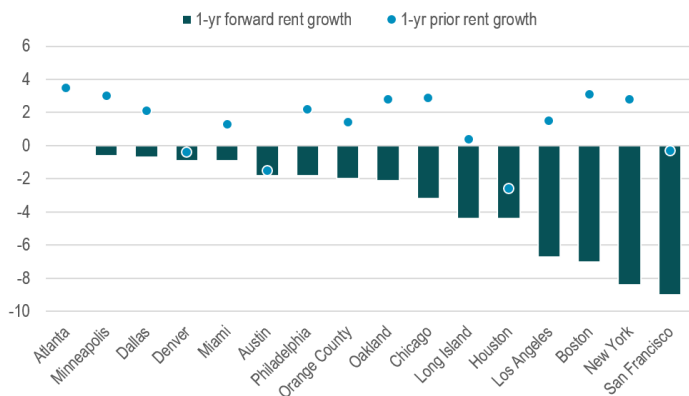
Across Asia, the situation is more nuanced as fundamentals in the region vary greatly. The health response to the crisis has been more effective than in the U.S., and local-led consumption has recovered substantially from COVID-19 lows. Still, tourist-led retail remains affected by international travel restrictions. This has been particularly hard on Hong Kong, where so much of the retail activity has served mainland Chinese tourists. Malls and shopping outlets located primarily in residential catchment areas in both Hong Kong and Singapore have proved more resilient, seeing footfall and sales recover to at least 80% of pre-pandemic levels. Many in Singapore are now even registering higher sales than they were prior to the outbreak.

Office

The impact of the virus on the U.S. office sector has been acute. While high rent collection levels and above-average lease lengths can offer some protection to near-term cash

Figure 4. Office rent growth projections slide

Largest projected declines (%) among major markets



Source: CBRE-EA as of 2Q 2020.

flows, these relative advantages have been outweighed in the short term by broader economic uncertainty, work-from-home (WFH) dynamics and social distancing practices. How these factors will ultimately affect sentiment and future demand for office space will likely remain unanswered until there is greater clarity on the health front.

WFH has clearly emerged as a dominant trend in the coronavirus era. Some employers, including many in the technology sector, had embraced flexible schedules and remote/alternate work locations well before the pandemic as a way to attract and retain talent. We expect to see further flexibility in work arrangements going forward, including rotational scheduling and the ability of some tenants to work both from a corporate office and from home.

Prior to the crisis, the trend toward densification was exerting a noticeable influence on office demand, as companies sought to gain efficiencies and reduce costs. Densification varies widely by industry and even among companies in the same industry, with some employers advocating open floor plans to inspire more collaboration and idea sharing, and others preferring more traditional office layouts. In recent years, shared workspaces and “hot desking” become popular, replacing individual cubicles and offices. One result was that the average space allocated per employee shrank from 250-300 square feet to as low as 100-120 square feet. However, we believe the densification trend had largely run its course before the outbreak, and we suspect many companies will now need to revisit and adapt their work environments for a post-COVID19 world. Allowing more space per worker should help mitigate the likely decrease in demand for office space brought about by WFH and other flexible work arrangements.

Economics for the sector are expected to weaken in the wake of lower demand and higher vacancy and sublease levels across the country, but it is too early to determine the extent of the impact so far. Most landlords are seeking to maintain face rents in lieu of offering more free rent and tenant improvement allowances. Meanwhile, utilization levels have remained extremely low (in the 10%-15% range) in many urban, gateway markets where employees may rely more on public transportation to get to work. Return-to-office timelines have been delayed because of health and safety concerns, spacing considerations, building qualifications and employee work/life balance needs, as many working parents have children

learning from home. In suburban and other top 25 markets, utilization has been modestly higher but again varies by market. New leasing demand has been modest over the past few quarters, and we do not expect this to change much until later in 2021, when more employees have returned to the office and businesses can better assess their future real estate requirements.

Given some of the near- and intermediate-term unknowns, valuations are currently difficult to pinpoint. To help investors get through the next few years of uncertainty, some real estate industry professionals have suggested 3%-5% price declines for core assets in primary and even some secondary markets if the property is leased to a highly creditworthy tenant with more than five years remaining on the lease. In contrast, core-plus price declines appear to be in the high single to low double digits in percentage terms, while value-add product is believed to be down by the mid to high teens to even the low 20s. We caution that such estimates are subject to wide variance by property and markets, depending on location, term, occupancy and tenant base.

The office environment outside the U.S.

Office valuations in Asia ex-Japan have remained broadly stable despite WFH initiatives, reflecting the prevailing view that such shifts will be mostly temporary due to smaller home sizes and the density of urban locations in the region. Although near-term leasing demand has slackened, occupancy levels remain broadly healthy at 90% or better, and transactions in Hong Kong and Singapore continue to be closed at yields of 3% or lower, suggesting confidence in the market's resilience.

Similar dynamics are in play in Australia. While leasing levels there have declined, we remain upbeat, given the country's social and cultural affinity for working from an office, future immigration-led growth and the appeal of increased investment in public urban infrastructure. We expect further momentum in workplace normalization to ease concerns about tenant office-space reductions.

In Japan, WFH practices have been implemented by some corporations (especially large multinationals), but it's not clear how well teleworking will be embraced. Japanese corporate culture values relationships, and relatively small living spaces pose a challenge to accommodate WFH. Nonetheless, we believe WFH will have some impact on office demand. Class A space is likely to be more negatively affected than Class B, where tenants are small- and mid-sized enterprises that may lack the property infrastructure to fully implement WFH.

In Europe, the office experience has been mixed. On the plus side, office rents have mostly been paid by corporate tenants, and investment yields haven't softened for long-leased assets. However, leasing volumes in the third quarter of 2020 were down almost 50% year-over-year in most gateway cities, making it hard to call the level of rent declines. Lease incentives are increasing, though, especially in the La Défense business district in Paris. Third-quarter office attendance rates varied significantly by country. France, Germany, Switzerland and Scandinavia led, with a range between 50% and normal usage, while the U.K. lagged significantly at around 30%.

FOR SOME SECTORS, A MIXED BAG OF STRUGGLE AND SUCCESS

Along the spectrum of responses to the impacts of COVID-19 are real estate sectors that have fared somewhat better than their more cyclical counterparts while still grappling with significant pandemic-fueled challenges. These sectors include residential, health care and self-storage.

Residential

In the U.S., the most prominent theme in the residential asset class has been the migration out of dense, urban core submarkets into less dense suburban areas. This trend has been spurred by residents seeking more space to accommodate their WFH needs and no longer being able to take advantage of the traditional social attributes and amenities of city living due to closures and lockdowns. Migration activity has varied depending on the metropolitan area, with some noteworthy movement away from the coasts and into Sunbelt markets.

Single-family rental businesses have been the most positively affected by this trend, and suburban apartments have benefited as well. Whether these moves prove to be permanent will likely depend on how quickly vaccines will be distributed, but some demand has probably shifted to suburban areas or the Sunbelt for the long term.

Apartment occupancy rates and rents in urban markets have thus far fallen by about 5% and 20%, respectively. Suburban markets have experienced smaller declines, but the number of job losses until recently has surpassed the peak of the 2007-09 recession, causing occupancy and rents in these markets to soften slightly.

The degree to which apartment rents have fallen also varies by the class of space. Figure 5 shows that rents in newly executed leases for Class A apartments have decreased more than for Class B apartments (based on new rents relative to rents paid by prior tenants in the same properties).

Figure 5. Apartment rents have been challenged

*% change in new rents vs. rents paid by prior tenants**



* This metric looks at rents from leases executed within the monthly relative to the rents paid by previous tenants. It is not a year-over-year comparison of rent growth. Source: RealPage, Inc as of 16 Oct 2020.

Meanwhile, apartment rent pay rates have been trending higher every month since the major dislocation seen early in the pandemic. This has been supported by increased unemployment income and recovered job losses. Going forward, national, state and local regulation of rent/eviction practices will play a much larger role for the industry — in part because of a continued lean in that direction over the past several years due to affordability concerns, and now also driven by the income instability caused by the pandemic.

Manufactured housing remains a very stable asset class in the residential sector. Residents in these properties are typically retired and therefore less directly impacted on a day-to-day basis by weakness in the economy. Changes in occupancy and rent pay rates have been minimal. Recreational vehicles, a core part of the manufactured home business, were initially hurt by economic shutdowns. Their fortunes reversed as the summer progressed, with a spike in RV sales and increased utilization.

The residential environment outside the U.S.

Residential sector dynamics in Australia have been similar to those in the U.S. Recently, the easing of credit, reduced disclosure requirements, lower interest rates

and first-time homebuyer stimulus have fueled a positive shift in sentiment and outlook. Currently, single-family, retirement living and suburban master planned communities are favored over urban high-rise apartments. This reflects uncertainty about increased immigration, especially student populations, and the return of foreign investors — key drivers of Australia’s pre-COVID-19 housing boom in multi-story structures.

Japan has been more universally resilient. Payment delinquency is not socially well received in Japanese culture, so the residential sector provides defensive cash flows amid the virus-induced economic slowdown. Residential market fundamentals remain strong here, continuing to benefit from limited new rental housing supply, as well as a tight labor market with increasing participation by women. As with the office sector, WFH trends will likely take more time to play out in Japan due to cultural dynamics and smaller residences.

Residential demand in much of Asia ex-Japan has remained stable to firm, benefiting from sustained local demand amid substantially lower borrowing costs. While investor-led demand, primarily from Chinese buyers, has paused, the impact of that on primary residential market segments has remained muted thus far — with expectations of a future rebound once borders are reopened. This is particularly evident in Hong Kong, where a chronic housing shortage and relaxed mortgage requirements have spurred exceptional demand for lower-priced, smaller apartment offerings in particular.

Health care

The health care sector is extremely heterogeneous. As a result, it has been affected by COVID-19 in several different ways. For those at the center of the public health crisis, the virus has disrupted operations severely, while other areas have shown strength.

Skilled nursing facilities have suffered the most, with patient census rates falling about 10% and expenses rising amid the need for personal protective equipment (PPE) and testing. Substantial government support has kept the industry afloat in the near term, and that will likely continue well into 2021, with few tenant deferrals and defaults. However, we have concerns about the long-term success of the industry, because even in normal operating environments, profit margins are in the low single digits, and patient volume is unlikely to return to pre-pandemic levels quickly because of evolving hospital discharge policies.

Senior housing has also been severely disrupted. Occupancy rates have declined by 5%-10%, while expenses have increased. Given the lack of government support, rent pay rates have been lower than in skilled nursing facilities. Real estate owners with direct operating exposure to senior housing have therefore seen a substantial drop in cash flow. The outlook appears a bit brighter. Given its needs-based nature, the industry will likely recover relatively quickly, especially if multiple effective vaccines are widely distributed. Another plus is that new supply in the sector has been sharply curtailed due to COVID-19.

Medical office and life science real estate assets have had the most positive experience within health care. Occupancy remains stable, rent pay rates are north of 95% and leasing activity has already started to return to normalized levels. The critical nature of these categories of real estate augurs well for positive fundamentals for both on- and off-hospital campus locations.

Self-storage

Entering 2020, self-storage was expected to see decelerating organic growth amid several years of new supply in some markets and operating pressures from real estate taxes and marketing costs. Early in the year, the sector underperformed the MSCI US REIT Index, but as the pandemic hit, self-storage properties were able to stay open for business and quickly adopted a contactless reservation process. The sector then began to outperform. Deemed essential, self-storage facilities remained open during the spring, when much of the economy was shut down. The sector saw only minimal delays in rental payments and minor increases in receivables during the spring.

As state and local economies slowly began to reopen, the peak summer leasing season for self-storage got off to a late start. Still, the return of personal mobility and additional demand for storage benefited the industry through the summer and into the fall. In fact, the third quarter ended with record-high occupancy levels, and cash flows were resilient. Meanwhile, delays in the development of new capacity in the storage pipeline helped support rental rates in 2020. Although the delayed new supply will eventually be built, we expect to see lower deliveries in 2021 than in 2020, supporting our sector outlook for the next 12 months.

THESE PROPERTY SECTORS HAVE WEATHERED – OR EVEN BENEFITED FROM – THE PANDEMIC ENVIRONMENT

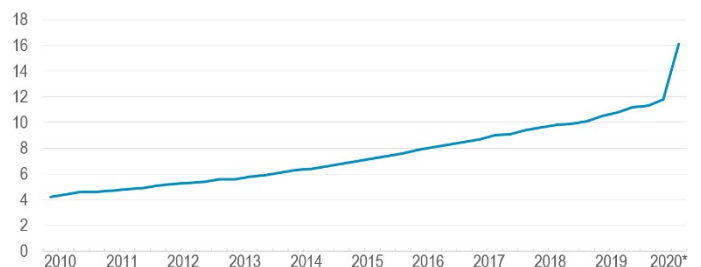
While the COVID-19 environment has clearly been more negative than positive for most parts of the commercial real estate market, three sectors stand out for their resilience: industrial, data centers and cellular towers. These property types have experienced the least damage, or in some cases, positive effects as the virus has continued to run its course.

Industrial

Industrial has been the best-positioned and most resilient real estate sector globally, benefiting from the acceleration of pre-pandemic tailwinds, the emergence of new positive influences and low overall vacancy levels. Landlords did need to provide relief to some tenants early on, as shelter-in-place orders took hold and businesses closed, but the total amount of assistance was relatively small, and requests for relief quickly subsided as economies reopened. Unlike sectors hurt by the stay-at-home economy, industrial has been a beneficiary of surging demand for e-commerce and related industries, such as third-party logistics providers. In fact, for industrial real estate, the steady growth in e-commerce sales as a percentage of total retail sales (Figure 6) has become the flip side of the retail sector's woes.

Figure 6. Online sales growth accelerated in 2020

E-commerce sales as % of total retail sales



*As of 2Q20. Source: Retail Indicators Branch, U.S. Census Bureau.

The industrial environment outside the U.S.

In Europe, industrial is the only traditional real estate sector that has benefited outright from the virus. Leasing bounced back strongly across the continent in the third quarter, driven by growing demand for space and logistical support from grocery and online retailers. Asset prices are up, too, climbing 3%-5% since the start of 2020.

“Industrial has been the best-positioned, most resilient real estate sector globally.”

Going forward, most of this accelerated penetration both in the U.S. and internationally is expected to last as many consumers permanently adopt these new shopping habits. Tenants who serve the e-commerce industry will likely require substantially more new space as a result. Evidence of this trend has already emerged: The share of new demand from e-commerce and related industries has grown from 30% in 2019 to 36.4% in 2020, according to JLL, a research firm.

This generally healthy backdrop for industrial real estate fundamentals has enabled the sector to not only maintain stable cash flows throughout the pandemic, but also to continue to grow organically in most cases. The result has been relatively strong total shareholder returns and an attractive cost of capital for industrial REITs and private market participants.

Data centers

Data centers globally have seen minimal impact from COVID-19. If anything, the secular tailwinds for greater connectivity, data usage and processing have grown stronger. Relatively few employees are required in the properties, and quick changes in security measures as the pandemic spread helped prevent operational issues. Moreover, the business community’s appreciation of the importance of data has increased during the WFH period, which is accelerating existing secular trends toward outsourcing. Rent collection issues were very modest, even at the heights of the crisis.

Since mid-February, data centers have gained, on average, about 10% on earnings growth of roughly 5% annually. The result is a slight absolute increase in valuation, underscoring the attractiveness and stability of data centers in the private market. We believe institutions will seek out these assets to further diversify their more traditional property portfolios, which should keep asset-level pricing firm for years to come.

Cellular towers

Like data centers, cell towers have been largely unscathed by the pandemic, especially in the U.S. and Europe. Some moderate operational challenges occurred in emerging markets, however. In the U.S., demand for wireless dipped at the peak of the outbreak but is essentially back to normal and did not hamper wireless network buildout.

Public-market returns for cell towers have been roughly flat since mid-February, against 10% annual earnings growth, causing a small decline in absolute valuation. Even so, like data centers, cellular towers have demonstrated resilience that emphasizes the attractiveness and stability of these assets in the private market.

The cellular towers environment outside the U.S.

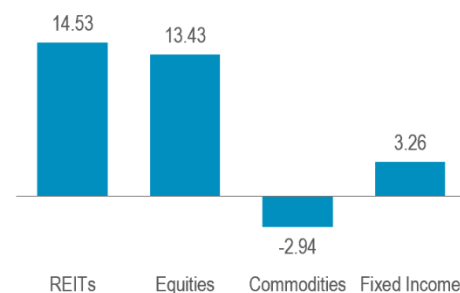
Underlying demand internationally was stronger due to the lack of wireline infrastructure in many places. However, there was some impact to supply chain and permit approvals resulting in slightly slower activity internationally.

Putting the virus-driven market downturn in perspective

The last time the commercial real estate market was disrupted as much as it has been during the COVID-19 pandemic was in the global financial crisis of 2008-09. During and shortly after that period, investors asked themselves the same questions they’re asking today about whether to stay invested in commercial real estate. What those who maintained their allocations then learned as the global economy rebounded was that real estate could deliver long-term total returns that bested almost all others.

Figure 7. Global asset class returns

Average annual returns (%) since the end of 2008-09 financial crisis through year-end 2019



Representative indexes: REITs (FTSE EPRA Nareit Developed Markets); Equities (MSCI World); Commodities (S&P GSCI); Fixed income: Bloomberg Barclays Global Aggregate. Source: Morningstar from April 2009 through 31 December 2019, the last year-end before the onset of the COVID-19 pandemic.

Every downturn is different, of course, and there are no guarantees about what the commercial real estate landscape will ultimately look like in a post-coronavirus world. Nonetheless, how the asset class responded in 2008-09 gives us confidence in our expectations for 2021.

CONCLUSION: THE CASE FOR COMMERCIAL REAL ESTATE REMAINS INTACT

All asset classes have borne the impact of the global COVID-19 health crisis, but perhaps none more so than commercial real estate. Historically, investors have chosen to allocate to real estate for its diversification benefits, the income it produces and its attractive long-term total return potential. As the availability of effective vaccines begin to light the way toward a post-pandemic world, the question now is whether those reasons for investing in the real estate space still apply. The answer is unequivocally yes.

“Do the reasons for investing in commercial real estate still apply? The answer is unequivocally yes.”

While many property types have come under considerable strain during the outbreak, others have been less affected. In fact, the outlook for some categories has actually improved. Even the hardest-hit areas of the market include well-located, institutional-quality properties that will continue to be utilized, likely meaning that any disruptions to their cash flow dynamics will be temporary.

Low correlations between real estate and other asset classes — the key to strong diversification benefits — have remained intact, as highlighted in Figure 8. Investors in both publicly listed and private real estate markets can diversify further, taking advantage of geographic nuances by property type and macroeconomic considerations such as country-specific growth, inflation, interest rates and regulatory policies. The correlation levels shown in Figure 9, for example, indicate that allocating REITs exposure across the U.S., Asia and Europe may provide additional diversification benefits. Such opportunities underscore the potential to add value through active management — an approach we strongly favor, given the many diverse impacts of COVID-19.

We remain steadfast in our commitment to the asset class. For clients who are able to do so, we advocate taking a holistic approach that includes both private and publicly listed real estate ownership. We also view current dislocations in the market as potential sources of opportunity. Lastly, we look forward to what we hope will be continued progress in administering vaccines over the coming months as the world seeks a return to normalcy.

Figure 8. Diversification: real estate’s low correlations remain intact

10-year correlations among various asset classes

	Developed market REITs	Private real estate	Global equities	Global commodities	Global bonds
Developed market REITs	1.00				
Private real estate	0.10	1.00			
Global equities	0.81	-0.08	1.00		
Global commodities	0.57	-0.01	0.73	1.00	
Global bonds	0.26	-0.15	0.14	0.15	1.00

Representative indexes: REITs (FTSE EPRA Nareit Developed Markets); Private real estate (NCREIF Property); Global equities (MSCI World); Global commodities (S&P GSCI); Global bonds: Bloomberg Barclays Global Aggregate. Source: Morningstar, correlations of returns for 10-year period ended 30 September 2020.

Figure 9. Further diversification potential within the asset class

10-year correlations among REITs across regions

	U.S. REITs	Asia REITs	Europe REITs
U.S. REITs	1.00		
Asia REITs	0.69	1.00	
Europe REITs	0.73	0.71	1.00

Representative indexes: U.S. REITs (FTSE Nareit All Equity); Asia REITs: FTSE EPRA Nareit Developed Asia; Europe REITs: FTSE EPRA Nareit Developed Europe. Source: Morningstar, correlations of returns for 10-year period ended 31 October 2020.

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A word on risk

All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Equity investments are subject to market risk or the risk that stocks will decline in response to such factors as adverse company news or industry developments or a general economic decline. Investments in smaller companies are subject to greater volatility than those of larger companies. Diversification does not insure against market loss. It is important to review investment objectives, risk tolerance, tax liability and liquidity needs before choosing an investment style or manager.

Real estate investments are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability. Please consider all risks carefully prior to investing in any particular strategy. A portfolio's concentration in the real estate sector makes it subject to greater risk and volatility than other portfolios that are more diversified and its value may be substantially affected by economic events in the real estate industry. International investing involves risks, including risks related to foreign currency, limited liquidity particularly where the underlying asset comprises real estate, less government regulation in some jurisdictions, and the possibility of substantial volatility due to adverse political, economic or other developments.

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