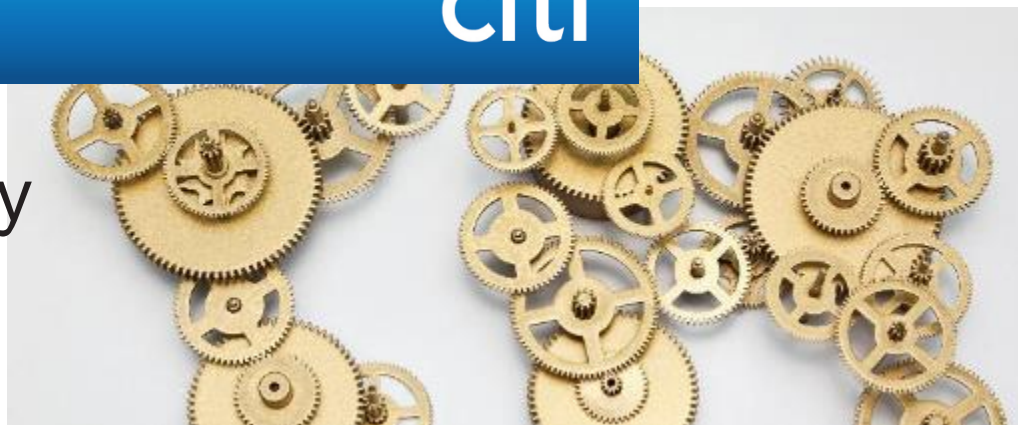


# CIO Strategy Bulletin

July 5th, 2020



## Opportunities and Risks from An Evolving Pandemic

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### Summary

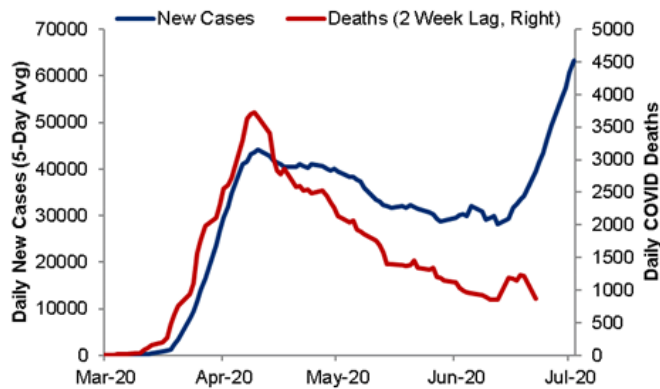
- The duration, impact and course of the pandemic may be changing. It appears that the spread of the disease is accelerating in the US. Nonetheless, it is also possible that the disease is becoming less fatal overall. While there are many explanations for the data presented herein, in an interview with Dr. Philip Barie, we heard that COVID is less fatal in Texas and California. (See [The Coronavirus Conundrum](#).)
- Last Thursday, US employment continued rebounding, rising 4.8 million, significantly above expectations. While public fear over the spread of COVID is likely to inhibit growth rates, the economic rebound has enough strength to continue through a spike in the disease (See [Jobs and Markets](#).)
- During this 2020 COVID recession, we have seen real estate become a highly cyclical investment asset. Overall equity REIT yields are at the highest spread above US Treasury yields since the Global Financial Crisis. We think a closer analysis of the public markets for real estate can identify areas of potential value for client portfolios. (See [Gimme Shelter: Real Estate Post-COVID](#).)

### The Coronavirus Conundrum

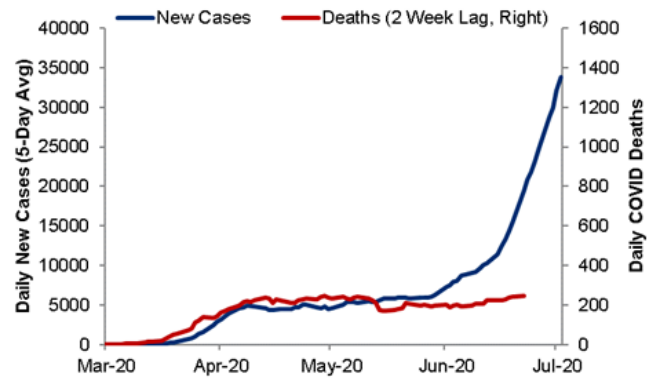
While headlines shout the grim news about the rapid spread of infections across the US and Latin America, there may be a different narrative playing out in the data associated with the disease itself. If the trends we are seeing continue to materialize, the duration, impact and course of the pandemic may be changing.

Looking at the 5-day average of daily new cases, the rate of infections in the US is rising markedly. But looking at the US mortality rate with a 2-week lag (**Figure 1**), it would initially appear that the disease is becoming less fatal overall. Looking at just the four “hot spot” states, Florida, Texas, California and Arizona, the same trend seems to be in play (**Figure 2**).

**Figure 1: US new cases vs mortality with 2 week lag**



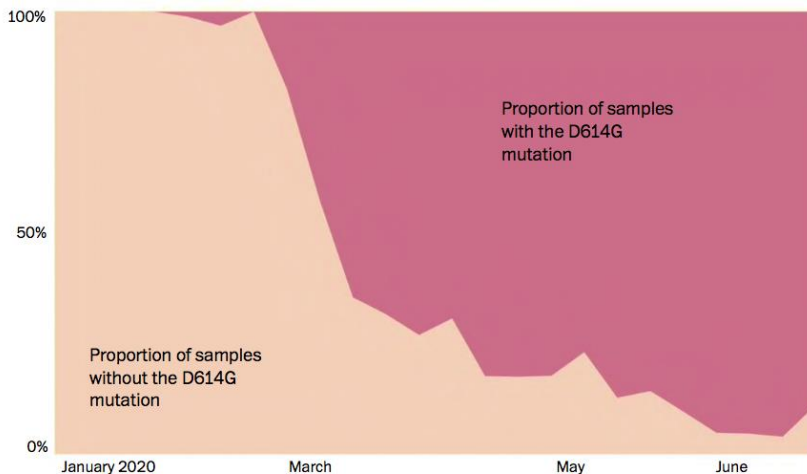
**Figure 2: Four hot spot states - Florida, Texas, California and Arizona**



Sources: Haver Analytics as of July 3, 2020.

The growing rate of infection may be explained by the fact that COVID-19 is mutating. [According to a comprehensive scientific review in the Washington Post](#) on June 29, "The coronavirus is mutating", the switch of genetic instructions for one of the virus's 1,300 amino acids from a "D" (shorthand for aspartic acid) to a "G" (short for glycine) "might make the spike protein more effective, enhancing the virus's infectiousness." The review states that "the mutation doesn't appear to make people sicker, but a growing number of scientists worry that it has made the virus more contagious." As **Figure 3** shows, the rise of the COVID-19 "G strain" looks like this:

**Figure 3: Growing rate of infection may be explained by the fact that COVID-19 is mutating**

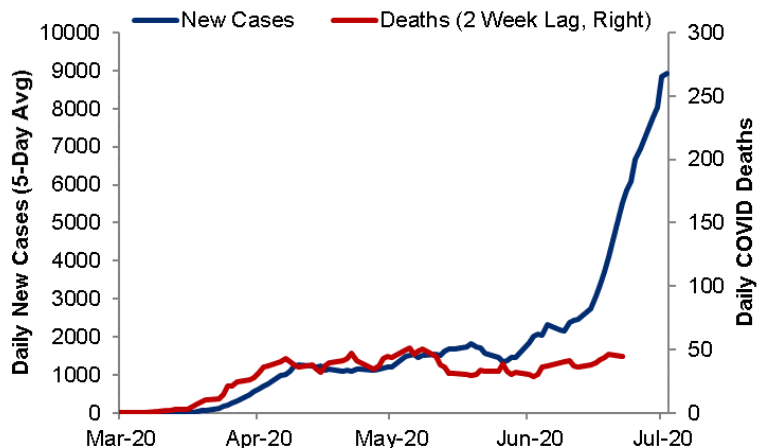


Source: The Washington Post, Nextstrain.org, GISAID as of June 24, 2020.

Looking at the two data sets in parallel, it appears that the spread of the disease is accelerating in the US, interrupted by the "shelter in place instructions" issued by various state governors during March through early May. As major parts of the economy reopened, a re-acceleration began again leading Anthony Fauci to state on June 30, "I would not be surprised if we go up to 100,000 a day if this does not turn around."

Texas will provide a test case for this new hypothesis. At present, its data looks like this:

**Figure 4: Texas – New COVID Cases and Lagged COVID-Related Deaths**



Source: Haver as of July 5, 2020

To be clear, it is **not** possible to determine a “cause and effect” from this limited set of observations. For example, following the reopening, many have speculated that more young people, who take fewer precautions, are getting sick as they go back to work; that is why there are fewer deaths as a percent of infections. Older patients may be protecting themselves better. Summer weather may make the disease less lethal. Treatments provided by doctors may be more effective in reducing the length of hospitalizations and use of ventilators. But there is also the possibility that the disease is, over time, weakening to a degree.

We spoke with Dr. Philip Barie, Professor of Surgery and of Public Health at Weill Cornell (MBA, Master CCM, FIDSA, FACS) an acute care surgeon who managed their front line response in New York in a 700 bed intensive care unit. There are about 2,000 front line surgeons like Dr. Barie in the United States. He made the following comments on 7/4/2020:

**“There are a lot of cases, a lot more every day. People are very concerned about that because we know how hard the Northeast got hit, but there's a potent argument to be made that the disease is different now and a lot of people are going to catch it, but not very many people are going to get sick.”**

**“The reports from Texas, the reports from California are that despite the alarming headline numbers of 50,000 new cases a day for the first time ever, these people are not stressing the intensive care units in those locales.”**

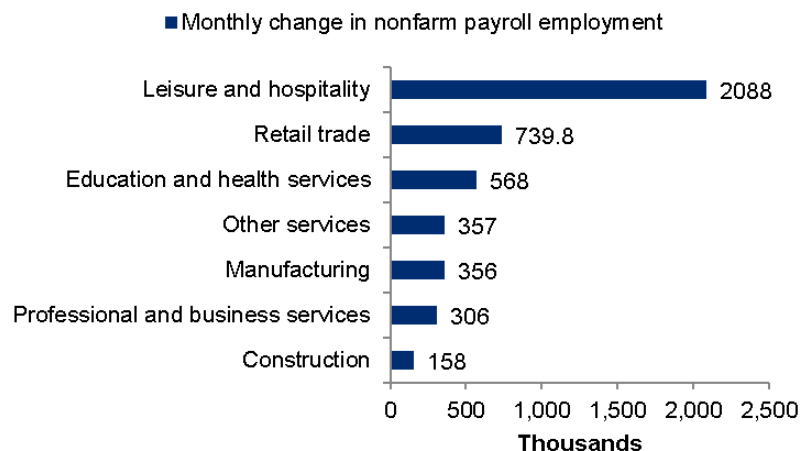
**“What is not clear at all is whether more cases are going to come back to the areas that are on the down slope. We're not seeing more cases in New York City. In fact we haven't admitted a new critically ill COVID patient to our intensive care unit in more than a month. What will happen in the South I think at this point is you're going to see the same kind of long tailed bell shaped curve that we've seen in New York and some of the Northeastern states with respect to cases dropping and the disease kind of going away, always being in the background. And people have to be sensible and safe about things. I don't think there's anything that I've seen so far that suggest that the cities have already been through it and are repairing themselves are going to have to go through it again unless people start getting stupid and 70,000 people show up for a football game without wearing masks or something like that.”**

What does it mean for health policy and the economy if the virus spreads more rapidly and becomes less fatal over time? If COVID “burns out” naturally over time, the disease will similarly lose potency in driving financial markets. Overall, we see the acceleration in viral infections exceeding the economic implications of the spread. This is because we believe we are unlikely to see indiscriminate shutdowns across the world economy again as the response to the threat.

## Jobs and Markets

On Thursday last, US employment continued rebounding, rising 4.8 million, significantly above expectations. With some upward revisions, 7.5 million workers have been re-employed in May and June following a record collapse of 22.2 million jobs in March and April. As indicated in **Figure 5**, the hardest hit industries saw material gains. With June's job gains, the unemployment rate fell to 11.1% from 14.7% two months ago.

**Figure 5: US Re-employment in Leisure, Hospitality and Retail (thousands)**



Source: Bureau of Labor Statistics, June 30, 2020; Statista

With 10.6 million still on furlough, there is further potential for net job gains. This is even with a high level of new unemployment insurance claims that remain elevated at 1.4 million per week through June 27 and with permanent job losses rising by 588,000 in June, comparable to the worst months of the global financial crisis.

That was not the only positive data. Purchasing managers data showed the strongest growth rates for orders and production since late 2018. This is consistent with the jump in manufacturing employment of 356,000 in June after the shuttering of factories in March and April, with some industries forced down to record low output levels. Data on employment across the world are not comprehensive or timely, but purchasing managers data across the world as a whole are following the US and Chinese pattern of sharp improvements (see **Figure 6**).

Furthermore, the anecdotal, short term data continues to suggest progress is on the horizon even with greater outbreaks in some regions of the US. While public fear over the spread of COVID is likely to inhibit growth rates, the economic rebound has enough strength to continue through a spike in the disease ([CIO Strategy Bulletin | Please Keep Your Seatbelts Fastened and Your Masks On](#) and [Data Watch: Tracking the Economic Disruption of Covid 19](#)).

**Figure 6: US and Global Purchasing Managers Manufacturing Composite**



Source: Citi Private Bank (OCIS) and Haver Analytics as of July 4, 2020

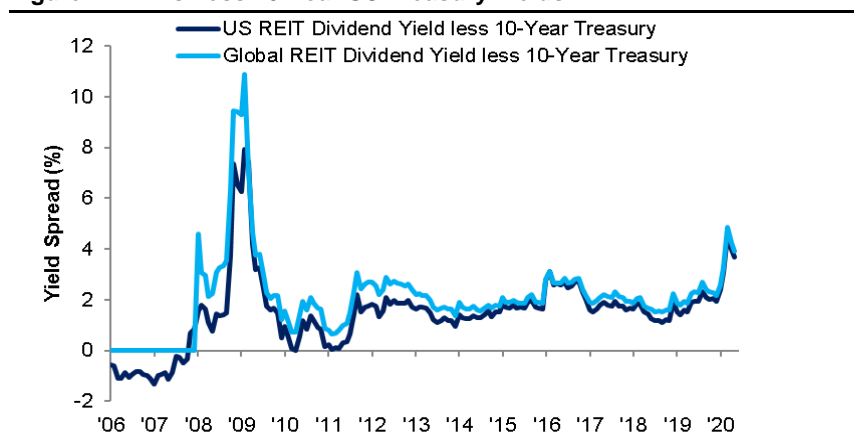
## Gimme Shelter: Real Estate Post-COVID

The economic impacts of the global economic shutdown and reopening are starkly evident in the real estate industry. There have been notable winners and losers buffeted by the profound short-term economic impacts of the pandemic and accelerated longer-term changes in consumer behavior. We think a closer analysis of the public markets for real estate can identify areas of value for portfolios presently.

Through most prior recessions, real estate has been a relatively defensive asset, exhibiting less volatility and more market resilience. In contrast, during this 2020 COVID recession, we have seen real estate become a highly cyclical investment asset. REITs have not performed as traditional bond proxies, due to concerns about the sustainability of REIT dividends and uncertainty about their Net Asset Values. Given this backdrop, the REIT market, on average, now boasts over 6% implied cap rates and a 3-4% dividend yield, including announced and expected dividend cuts.

Overall equity REIT yields are at the highest spread above US Treasury yields since the Global Financial Crisis – **Figure 7**, a period of true, broad-based financial distress and the unwinding of fundamental real estate bubble. This includes the powerful outperformers in the cell tower, data center and e-commerce logistics REIT groups. Just as we expect a recovery in small and medium-sized company share prices, we expect that REITs are unlikely to stay so depressed when the pandemic is no longer prevalent.

**Figure 7: REITs Less 10-Year US Treasury Yields**



Source: Citi Private Bank (OCIS) and Factset as of June 19, 2020 Indices are unmanged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

E-commerce (an Unstoppable Trend see [Outlook 2019](#)) has boosted demand for industrial real estate. We see opportunities growing in “last-mile”, urban logistics, cold storage and high-density industrial space (augmented with robotics) due to the increased use of online ordering and rapid delivery. Modern warehouses have also seen increased rental pricing and occupancy. Given concerns with supply chains and geopolitical risks, “on-shoring” will create new demand for industrial and manufacturing facilities, especially those for strategic assets in pharmaceuticals and technology.

In sharp contrast, all consumer-facing property assets – retail, hospitality, leisure and entertainment – have faced complete shutdowns and will experience slow recoveries. The immediate impairment of tenant credit in these sectors is material, resulting in significant requests for rent abatements and numerous bankruptcies. At the same time, the impact of e-commerce has accelerated such that the majority of commodity items are delivered to consumers. Therefore, retailers will be valued to the extent they offer true convenience and value, access to unique goods (high-end fashion, for example) or destination experiences. Just as airlines face declines in business travel due to the viability and effectiveness of digital conferencing, so too will business hotels and convention centers. As a result, the value of these real estate sectors is now under significant stress.

In the commercial sector, the pandemic has created unusual strains given that higher occupancy, greater density and co-working office designs were becoming more prevalent. Companies have found that their workers can be effective from home. According to McKinsey research from June 8<sup>th</sup>, “Reimagining the office and work life after COVID-19”, 80 percent of people surveyed said that they

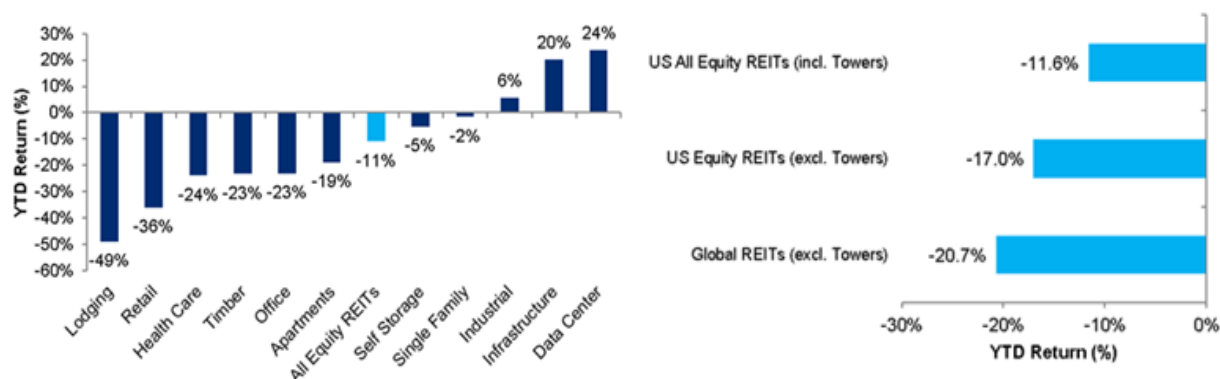
enjoy working from home and 41 percent said they were more productive. Liberated from both business travel and the need to commute to work, there are strategic questions about “how much” real estate businesses will need in the future and whether the real estate they lease/own should be closer to where employees live. For the near term, however, tenants in less affected industries have been able to maintain their rent payments meaning that these changes will evolve slowly. One can expect that tenants and landlords will need to work collaboratively to boost the overall productivity of business and mix digital and office collaboration to drive stronger business cultures even as businesses reduce their total real estate costs.

Finally, in the residential space, apartment rent payments have been more resilient than expected. With government intervention, many renters have received substantial support and delinquencies have been less severe. In the US, residential rent payments in full are now tracking just 1% below a year ago, when the economy was operating with unemployment below 4%. Working from home has also benefited apartment owners because the “home” is now the office. As a result, occupancies have remained high. Indicators look strong for the future of single-family home ownership, after a decade of decline. But the 20% drop in multi-family apartment REITs looks too large even with that shift.

## REIT Valuations Reflect Near Term Concerns...

It is easy to see the losers and winners in the real estate space by looking at the impact on REIT prices across sectors – **Figure 8**. US digital infrastructure and data centers have been standout performers (+20% and +24%) versus the average REIT performance of -11%. (Globally, REITs have fallen more than 20% this year). This parallels the general stock market performance where technology growth shares have outperformed market indices (US IT +15% vs S&P 500 -3% YTD). The most impacted elements of the global economy, retail and leisure, show similar negative impacts in REIT pricing in those sectors.

**Figure 8: US REIT Sub-Sector Returns Year-to-Date: US -11%, Ex-Cell Towers, -17%; Global -21% (Ex-Towers)**



Sources: Bloomberg as of June 18, 2020. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results.

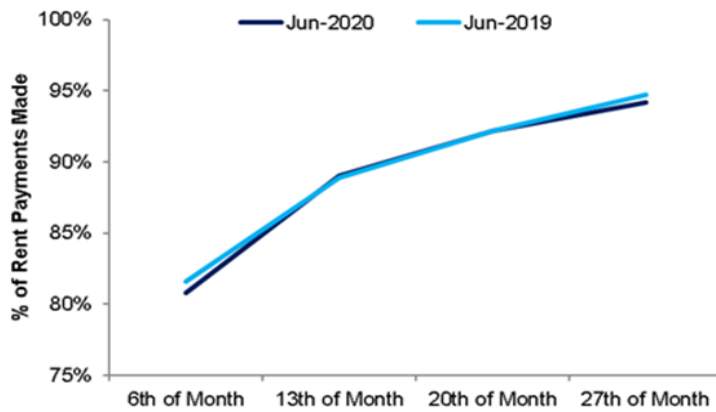
From our point of view, looking out 12-18 months, we do not think present valuations reflect proper pricing for certain real estate assets.

In April, the US lost nearly 21 million jobs. Reflecting the initial economic shock, US residential rent payments were tracking near 80%-85% of normal levels at the start of April. Compliance with rental agreements improved further in May. By June, rent collections were tracking around 94%, less than 1% below the same period in 2019 according to the National Multi-Family Housing Council – **figure 9**. So does something other than the continuity of residential rent account for the near 20% drop in values for apartment REITs from the same time a year ago? And if investors are bearish on the return of workers to their office space on COVID-fears, then why have multi-family apartment REITs fallen about as much as office REITs?

Since 2015, we have been writing about the impact of the rise in e-commerce on real estate ([Outlook 2015 - Transforming Commerce](#)). Acknowledging that technological threats to commercial and retail real estate have only grown, we believe that real estate-related assets have suffered disproportionately to broader economic recovery prospects.



**Figure 9: US Apartment Rent Payments June 2020 vs June 2019 by Week**



Sources: National Residential Housing Council through June 2020

## When the Home is the Office: Apartment REITs

A significant rise in unemployment typically leads to a drop in disposable income and therefore an inability to make mortgage or rent payments. Despite this year's historic fall in employment, fiscal support for individuals has been similarly unprecedented, with personal income including federal transfers rising significantly in April. This dynamic should be supportive for single and multi-family rental cash flows.

Local government ordinances restricting rent increases and modest de-urbanization could slow the pace of property value growth in the short-run, likely contributing to the Residential REIT sub-sector's 16% decline YTD. However, relatively strong household finances should reduce severe delinquencies, keeping property values relatively stable and enabling these REITs to sustain 4-5% dividend yields.

Certainly, the intent to purchase a home has been barely impacted by the pandemic – **Figure 10**. While that's a "negative" for rental real estate, it also demonstrates the resilience of the real estate market in general. Meanwhile, falling rates benefit homeowners and rental real estate owners alike.

**Figure 10: New US Home Sales Per Household vs Consumer Buying Plans (Conference Board Survey 6-Month Average).**



Sources: Haver Analytics through June 30, 2020

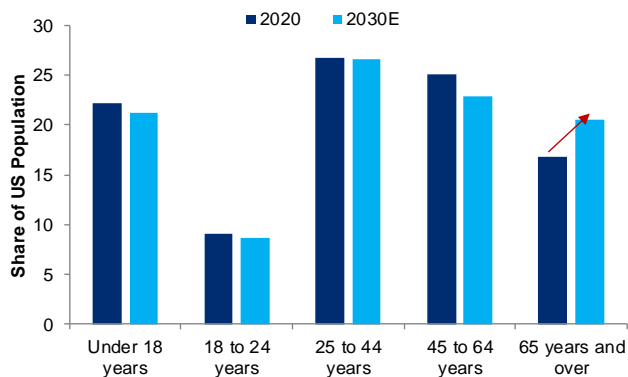
## Unstoppable Trends within the REIT World

Starting with longevity and health care, a significant component of Health Care REITs include nursing homes, skilled nursing centers and hospitals. These properties, unlike more buoyant pharmaceutical, biotech, and insurance companies, have struggled to sustain rental and net operating income while managing some of the most serious COVID-related effects. Over 40% of US deaths related to COVID-19 have occurred in nursing homes, while hospitals have been forced to delay higher-margin elective procedures amid a surge in demand for beds to serve virus-stricken patients.

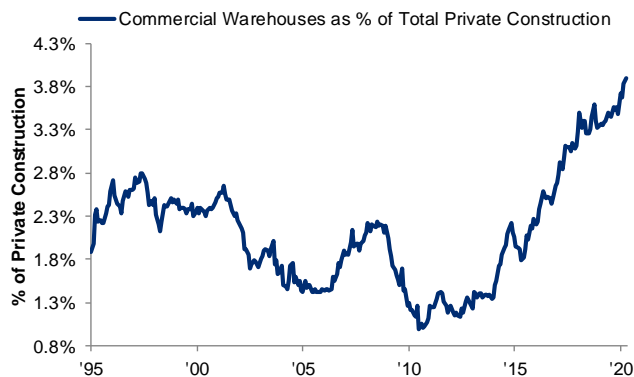
While the short-term situation is tragic, long-term demographic trends likely necessitate the importance of medical centers once the world moves beyond COVID-19. According to US Census estimates, roughly 20 million more people will be over 65 years of age in the next 10-15 years, given a combination of an aging baby boomer generation as well as increasing longevity – **Figure 11**. These inevitable trends will only increase demand for specialized care centers like nursing homes, especially after COVID abates.

While the growth of ecommerce has wreaked havoc on traditional retail over the last decade, one beneficiary is the real estate associated with the complex supply chain that transports your package from the retailer to your front door. Industrial REITs play an important role in that process, with many of these firms focusing on development and management of distribution centers and warehouses. Such properties have seen robust growth in the last decade as demand for logistics centers and regional distribution facilities has skyrocketed – **figure 12**. The dramatic shift to online purchases has helped keep industrial REITs afloat YTD, while reshoring and continued growth in ecommerce are likely to be strong tailwinds for these types of investments going forward.

**Figure 11: US demographic trends point to continued need for senior living facilities**



**Figure 12: E-commerce driving a boom in Distribution Centers and Warehousing**

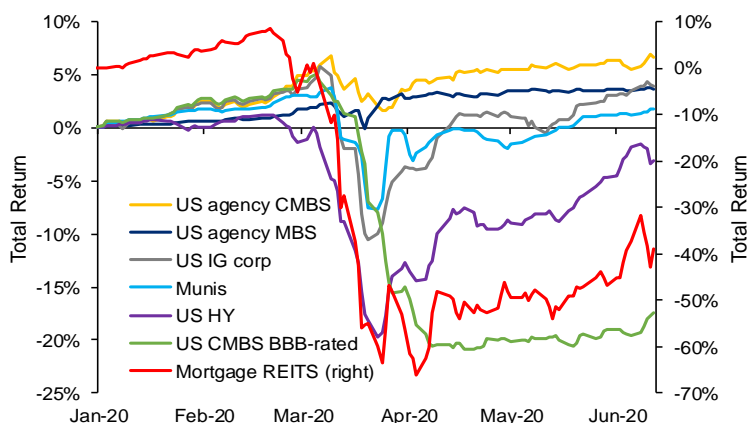


Source: Factset as of June 18, 2020. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

## Mortgage REITS Present Compelling Fixed-Income Opportunities

Sector by sector in fixed income markets, credit valuations have risen, beginning with Agency Mortgage Backed Securities, Investment Grade Corporates and US Municipal Bonds. Valuations then improved in US High Yield. Overall, however, this has just begun to influence borrowing costs in non-agency commercial mortgage backed securities - **Figure 13**. Commercial and residential mortgage REITS have only begun to improve in value despite plunging carry costs for borrowing and improving signs for activity in property markets as economies reopen.

**Figure 13. YTD performance across FI markets**



Sources: Bloomberg as of June 15, 2020. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.



Mortgage REITS, with their variety of income drivers, and conventional global equity REITS – covering property types of every sort - have fallen 40% and 20% respectively this year. Bought in equal measure, their prospective yield appears to be about 7%. This is 5-7X the yield of investment grade corporate securities of intermediate duration.

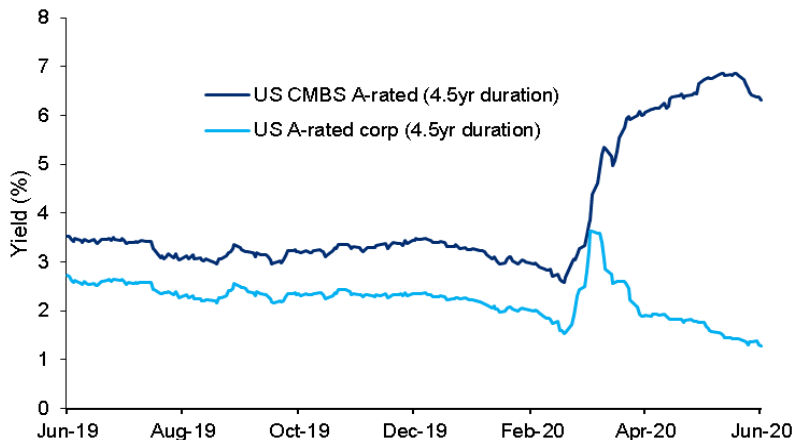
Mortgage backed real-estate investment trusts (MBS REITS) are companies that base their real estate investments in the mortgage backed security market. Some of these companies specialize in agency MBS debt like Fannie Mae and Freddie Mac, while others invest in non-agency residential MBS or commercial mortgage-backed securities (CMBS) of various ratings and structures. Due to the high percentage of leverage used to fund their mortgage investments, dividend yields and the associated volatility tend to be high.

Mortgage backed REITS collapsed following a weakening in credit markets in both 2008 and 2020. MBS REITS recovered sharply when credit rebounded in 2009, despite a serve, fundamental real estate bubble in the preceding period. Now that the world is reopening and real estate assets have fallen so much in value relative to other income generating assets, we believe they are poised for recovery.

It is important to understand the differentiation between agency MBS REITs and CMBS or non-agency RMBS REITs. At times, their performance behaves vastly different. In the agency MBS REIT market, underlying credit quality is not an issue. Indeed, the Fed is outright buying \$40 billion of agency MBS every month through their quantitative easing program. With the Fed Funds rate at the zero bound, and likely to stay there for the next few years, leveraged financing will stay cheap. A steeper US yield curve may also increase the value proposition for carry trades, supporting dividends. Similar to the type of recovery we saw post-Global Financial Crisis, it is quite possible that the better longer-term total return opportunities will actually reside in the CMBS REIT market as economies recover

– Figure 14.

**Figure 14: Investment Grade (A-rated) CMBS Yield and Comparable A-Rated US Corporate**



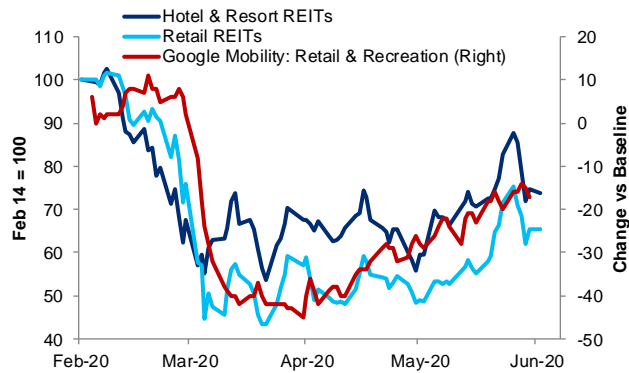
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## Green Shoots among the Hardest-Hit REITs

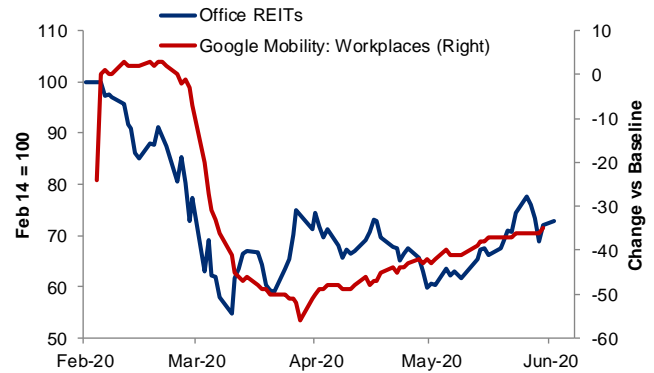
The most beaten-up areas of the REIT market have been directly impacted by the rapid shift of people spending significantly more time at home. A lack of mobility and concerns about activities that happen in groups has hobbled Retail, Office, and Lodging REITs, which remain down 20-50% YTD – **Figures 15 and 16**. Over the short-to-medium term, their share price recovery is likely to track the pace and breadth of re-openings globally and any regional setbacks.

Looking beyond this immediate crisis, those landlords that survive and even thrive following the COVID reckoning are likely to be the ones who are creative in reinventing their now-vacant spaces. Even before COVID-19, a reorientation of malls towards building “experiences” that tie together activities, dining, and shopping has been one strategy for attracting people to stores following a structural decline in brick-and-mortar retail sales. Other operators are re-developing their assets to include residential components. In a post-virus world, one could see a surge in such activities that would provide a reprieve for malls, entertainment venues, and hotels in 2021 and 2022.

**Figure 15: Retail & Lodging Recovering Slowly with Re-openings**



**Figure 16: As is the Return to the Office**



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