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Peak Uncertainty: The Possible Effect of COVID-19 on US Multifamily and Commercial Real Estate

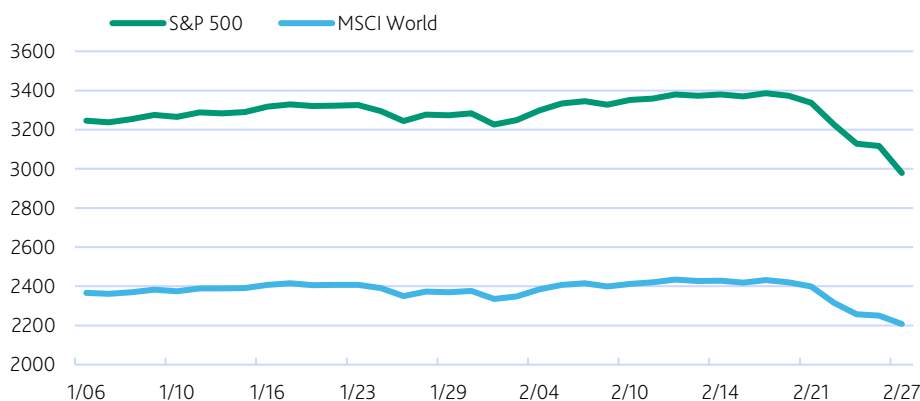
What started as a respiratory illness from the Hubei province in China has now roiled financial markets and occupied headlines throughout the month of February. COVID-19 is now present in over 70 countries, with escalating infection numbers from South Korea, Japan, and Italy prompting wide-scale quarantine efforts. The World Health Organization, the US Centers for Disease Control and Prevention, and several national governments have issued guidelines and precautionary measures, suggesting that we may still be at the early stages of understanding the disease.

Given the uncertainty surrounding COVID-19, how should we think properly and carefully about its effect on US multifamily and commercial real estate?

First, Second, and Third Order Effects

How are the effects of epidemics like COVID-19 transmitted through an economic system? The *first order effect* will be through the financial economy: people and institutions placing bets on future asset prices will make decisions to buy and sell, given updated expectations. With large companies like Apple, Microsoft, and Mastercard issuing warnings about declining earnings because of COVID-19, and continuing uncertainty about how the epidemic will play out (and for how long), it is no surprise that global stock markets have been in the red (see Chart 1).

Chart 1. Equity Market Indices



Source: FRED, Finance Portals (Yahoo/Google)

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Equity Markets Are Not The Economy, But...

However much equity market gyrations grab headlines, it is important to note that the *financial economy* is *not* the *real economy*.¹ The two are intertwined and affect each other, but the financial economy tends to change and react more quickly. Yes, global stock markets have been in the red, but have individuals and households begun to change their behavior and consume *less*, on a systematic scale? Have businesses begun to lay off people en masse, or are the job losses more from specific companies who have been directly affected like the airlines?

It also generally takes time to collect data on the real economy. The latest national employment numbers from the Bureau of Labor Statistics covered January 2020 figures, and was released last February 7. The unemployment rate remained at 3.6%, its lowest level since the late 1960s. Total nonfarm employment rose by 225,000, a very healthy rate of job creation. What would the February 2020 figures look like? We will find out only on Friday, March 6.

The impact of COVID-19 on the real economy is the *second order effect*, and is what will directly impact US multifamily and commercial real estate depending on how the epidemic progresses (or is contained). Moody's Analytics Chief Economist Mark Zandi predicts that the US real economy will not escape unscathed:

*"The U.S. economy will not be able to avoid the fallout from COVID-19. Real GDP growth is likely to be 1.5% this year, below the economy's 2% potential growth rate."*²

Institutions like businesses, governments, and health officials in the World Health Organization are caught in a classic Prisoner's Dilemma: they are aware that restrictions on economic activity poses a severe risk to the world economy, but each institution needs to take precautions to prevent the spread of COVID-19 and to contain the cost in terms of human lives.

All these are general estimates for the US real economy. How exactly would a reduction in US GDP growth from an expected 2.0% to 1.5% affect US multifamily and commercial real estate markets? What is the COVID-19's transmission mechanism from the financial markets (first order) to the real economy (second order) to US multifamily and commercial real estate property performance?

Third Order Effect: Multifamily and CRE Markets at Risk

One useful way to think about where slowdowns in the real economy will affect US multifamily and CRE markets would be thinking in terms of *lease structure*: Where leases are closer to *short-term*, the risk is greater given that leases can be canceled or renegotiated much more quickly, directly influencing drivers of income like rents and vacancies. Where leases are more long-term, the effect will be blunted. Airlines may lay off workers in the short run (and hire them back if and when demand ramps up), but their head office will likely not renegotiate long-term office leases they occupy in central business districts.

Leisure & Hospitality Will Take A Hit: Hotels Will Be Affected. Hotels represent the shortest lease in the sector – reservations for space can be cancelled in the same day. Markets which will be directly affected are those that rely on Chinese tourism. According to the US Travel Association, close to 3 million Chinese visited the US in 2018. If the closest analogue to COVID-19 is the effect of SARS on Chinese tourism in the US in 2003, then expect at least a 50% decline in visitors during the peak of the outbreak (three months after onset). Moody's Analytics estimates that if "Chinese business travel and tourism is off by 75% at the peak this spring with a full recovery by year's end, the hit to US real GDP via weaker service exports (tourism is considered a service export) will reduce first-quarter real GDP by about 0.2 percentage point and 2020 real GDP by 5 basis points."³ This is roughly consistent with expectations that US GDP will grow only by 1.5% in 2020 based on current assumptions of how COVID-19 will play out.

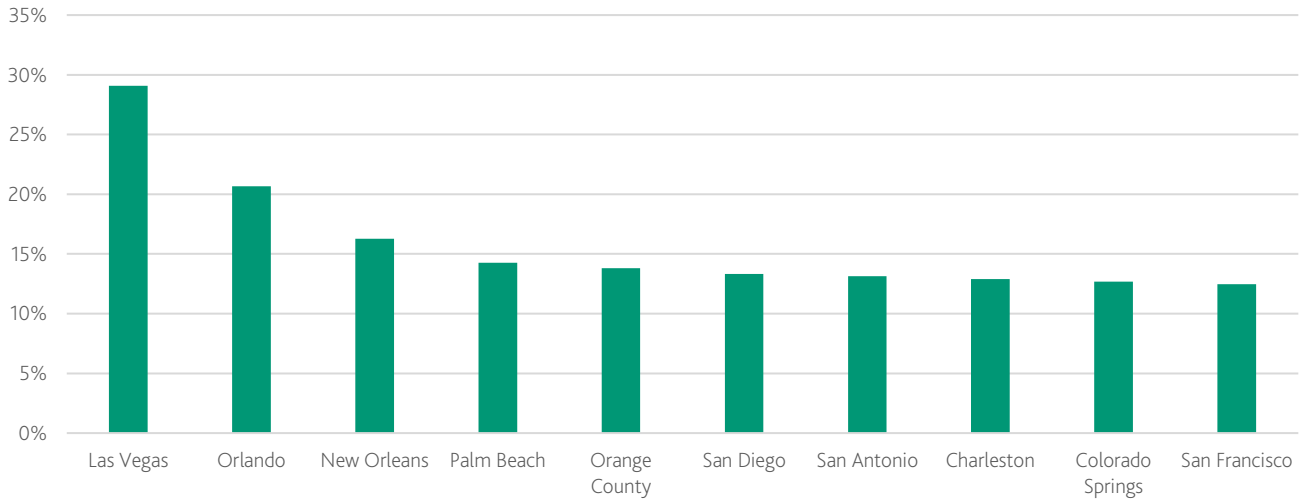
¹ These are terms precisely defined in economics. One simplified way of thinking about the difference is that the financial economy pertains to the price of economic assets and media of exchange: interest rates, foreign exchange rates, stock market prices. The real economy pertains to the quantity of goods and services being stocked or traded by individuals, households, businesses, and governments.

² Ongoing conversations with Mark Zandi and the Moody's Analytics research teams.

³ "Coronavirus: The Global Economic Threat" by Mark Zandi (published in February 2020 and available via Moody's Analytics at: <https://www.moodyanalytics.com/-/media/article/2020/china-coronavirus.pdf>), p. 3.

In line with this, geographic markets that rely on a greater relative basis on the leisure and hospitality industry will likely suffer more. In Table 1 we present the top ten markets in the US listed in order of share of employment in leisure and hospitality relative to total employment. These markets are likely to feel the immediate effect of a decline not just in Chinese tourism, but also business travel in general as conferences are cancelled, events are rescheduled, and supply chains are put on hold or disrupted in the short run.

Chart 2. Share of Leisure and Hospitality Employment



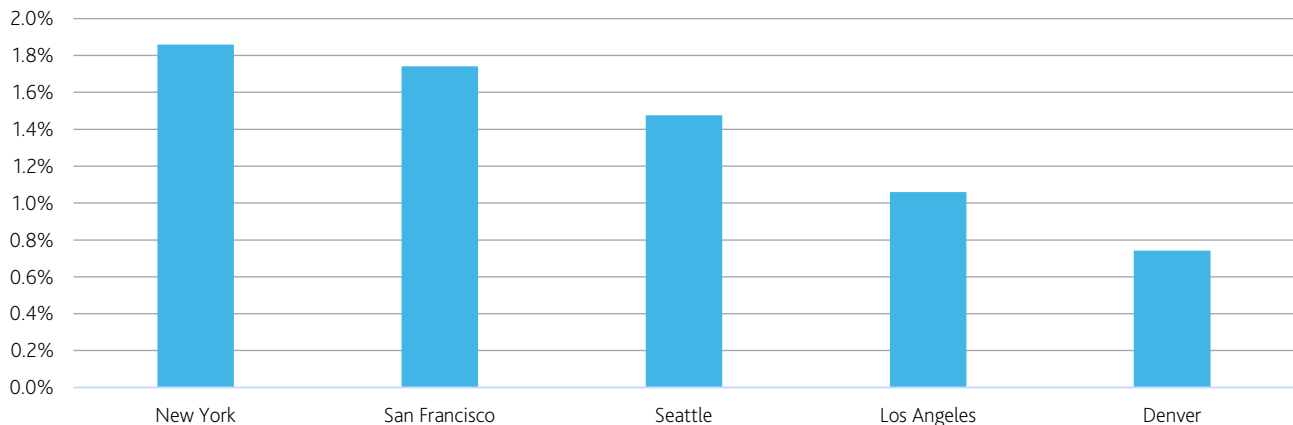
Source: Moody's Analytics

Office Leases are Longer-Term, But What About Co-Working?

Office leases generally have longer time horizons, with major leases signed for a range of five to more than ten years in large markets like New York City. However, co-working formats tend to have shorter lease arrangements, given the platform's promise of flexibility and its chosen target market of small to medium enterprises. These are also at risk of being disrupted because of COVID-19, both from small to medium enterprises going out of business because they do not have the financial wherewithal to weather the epidemic; and from shorter term leases being cancelled or renegotiated because it is simply easier to revise the relationship, versus a standard office lease.

As a proxy for geographic markets with greater relative presence of co-working facilities, Table 2 presents the top five markets for the share of WeWork leases relative to total office inventory. The direct effect here is more difficult to ascertain relative to hotels and leisure and hospitality, but market players would do well to monitor markets like this.

Chart 3. Largest WeWork Leases Relative to Metro Inventory



Source: Moody's Analytics REIS; CompStak.

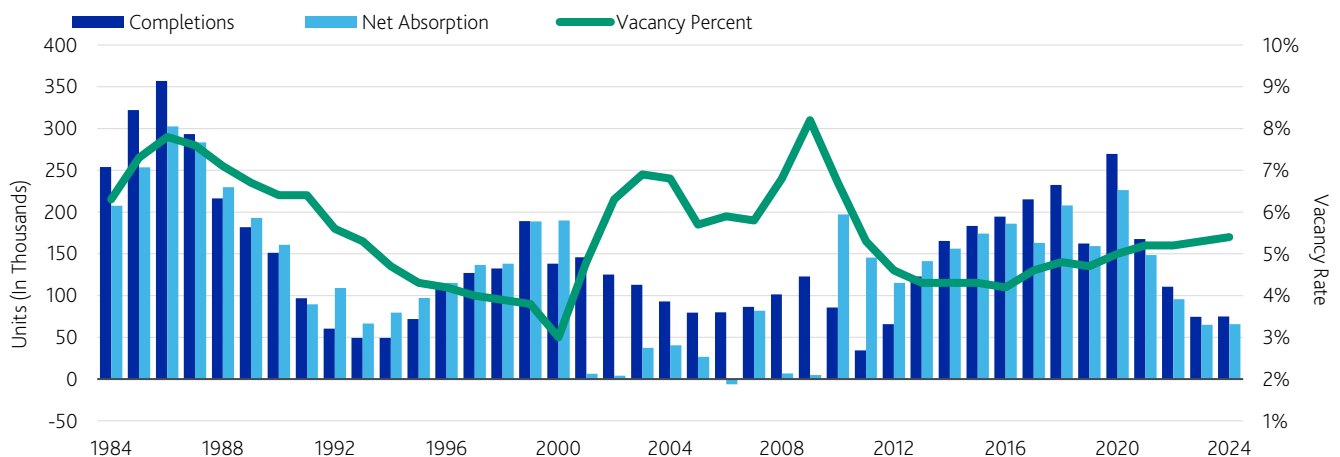
If COVID-19 Plays Out Over A Longer Time Period...

Given the recent outbreak of COVID-19 in countries which did not have identifiable major ties to Chinese travelers, there is concern that we are still in the early stages of the epidemic. If COVID-19 is not contained within the next three to six months and plays out over a longer time period (there is also uncertainty in terms of how quickly an acceptable cure or vaccine will be developed), then supply chains are likely to be disrupted as businesses remain closed and households remain in quarantine.

At risk would be industrial properties that directly participate in this disrupted supply chain, but the dynamic is more complicated. The delivery of goods and services may be delayed, but it is unlikely that long-term leases of industrial buildings (with some stretching to 20 years) will be renegotiated (unless a wide-scale rash of business bankruptcies and a major global recession ensues). If households are forced to stay home, warehouse/distribution facilities purposed for last-mile deliveries may in fact experience a surge in interest and demand, as long as online delivery services are not disrupted as well. Some retail properties, already under fire from the threat of online commerce, may actually experience a boost in local demand if households are forced to stay close to home and/or have to limit their activities to local establishments – assuming that supply chains aren't disrupted so much that grocery shelves run out of stock for an extended period of time.

It is uncertain how COVID-19 will affect the multifamily market given that housing is a basic good. There may well be positive externalities from companies adopting a more flexible work arrangement allowing employees to work from home. Unless there are wide-scale deaths resulting from COVID-19 resulting in mass population movements or declines, multifamily fundamentals will likely follow its current projected trajectory.

Chart 4. Multifamily Supply & Demand Trends



Source: Moody's Analytics REIS; Top 50 Primary Apartment Markets

With supply chain disruptions, this may result in construction delays for both warehouse/distribution and multifamily projects that are planned or have recently broken ground, but consider *countervailing effects*: this may in fact *benefit* rents and vacancies for some geographic markets that are experiencing some short-run oversupply issues.

Back to Financial Markets. We have focused on the impact of COVID-19 on the real economy of US multifamily and commercial real estate, but it is likely that we will see more of an impact or inflection point in US commercial real estate capital markets. With some CRE investors already dealing with how to digest the impact of rent regulation in several US states, the uncertainty created by COVID-19 may prompt investors to hold back, leading to declines in transaction volume.

The policy response by monetary authorities, however, will further complicate matters. The ensuing panic in financial markets have pushed both ten- and thirty-year Treasuries to historic lows. The Federal Reserve and other central banks may decide that further easing of monetary policy is warranted, and rate cuts in 2020 may once again be on the table (though for some countries in negative interest territory they will need to employ other monetary policy instruments). A lowering of the overnight borrowing rate will lower borrowing costs for CRE players, which – assuming COVID-19 is contained at some point this year – represents an opportunity for lenders who may need to accommodate a spike in refinancing deals later in the year. The Mortgage Bankers

Association recently reported that 2019 issuances for multifamily and commercial loans reached a new high of \$628 billion, a rise of 9.4% over 2018 volumes. The MBA projects that 2020 will break that even more, with an estimated figure of \$685 billion (another increase of about 9%). They have yet to revise their projections given developments with COVID-19, but they may well end up revising the \$685 billion *upwards*.⁴

An Uncertain Conclusion: What Will Happen in the Long Run?

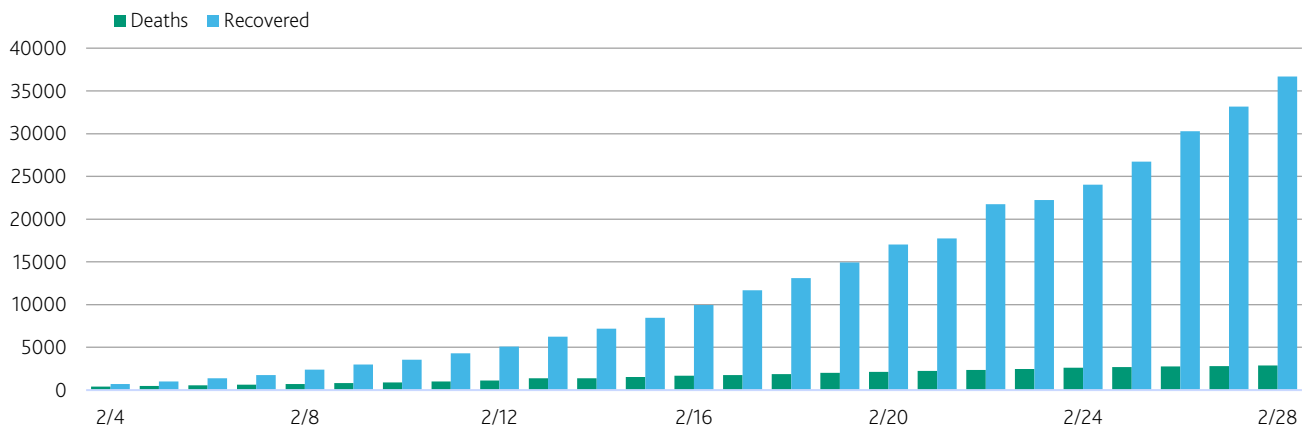
Given the uncertainty surrounding COVID-19, it is difficult to make definitive long-term projections. Will COVID-19 be contained, only for new threats and pandemics to emerge and will this become the new normal, given our connected, global economy?

Notes of Hope

Hidden amidst the headlines of continuing infections in other countries and the rate of death is the fact that COVID-19 appears to be somewhat under control in China, where businesses are restarting operations.⁵ Although the data is murky and is subject to revisions – perfectly normal for epidemiology given the early stages of an epidemic - the number of confirmed recoveries, which rarely makes the headlines, is also growing at a far higher rate than the number of confirmed deaths.

Chart 5. COVID-19 Deaths and Recoveries

2/4 through 2/28



Source: Johns Hopkins University; Worldometer

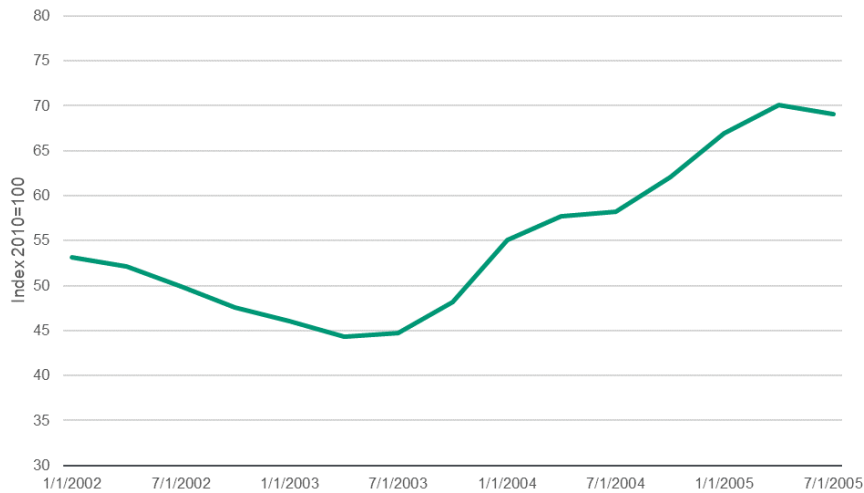
How are epidemics and their containment reflected in property price trends? The year 2003 offers the closest comparable situation: despite some differences between what is known as Severe Acute Respiratory Syndrome (SARS) and COVID-19, we can take the experience of Hong Kong – the epicenter at the time, where about 300 people died from the disease (one-third of worldwide deaths from SARS) – to study the effect on property prices. The definitive study on residential real estate prices, authored by Grace Wong Bucchianeri (now head of research for Singapore GIC's New York office), found an average price decline of 1.6% for residential estates directly affected by the disease.⁶ Declines obviously varied by neighborhood, with some of the worst hit areas experiencing declines of up to 8%. But data from the St Louis Federal Reserve's FRED suggests that Hong Kong residential property prices bounced back fairly quickly from the event.

⁴ Mortgage Bankers Association, "Annual Origination Volume Summation." Available via <https://www.mba.org/news-research-and-resources/research-and-economics/commercial/-multifamily-research/annual-origination-volume-summation>

⁵ "With Its Epidemic Slowing, China Tries to Get Back to Work." The Economist, February 27th, 2020 edition. Available via <https://www.economist.com/finance-and-economics/2020/02/27/with-its-epidemic-slowing-china-tries-to-get-back-to-work>

⁶ Wong, Grace. "Has Sars Infected the Property Market? Evidence from Hong Kong." Journal of Urban Economics, Volume 63, Issue 1, January 2008, pp. 74-95.

Chart 6. Real Residential Prices in Hong Kong (January 2002 to July 2005).



Source: St Louis Federal Reserve (FRED)

The problem of course is that COVID-19 appears different in important ways to SARS or the common flu. And the global situation was favorable in 2003 and 2004 to Hong Kong's recovery, given that we were in the midst of a recovery. The situation is different today, with global GDP growth of 2.9% in 2019 having been the slowest growth rate for the world economy in a decade. The IMF was projecting an upswing this year to 3.3% in early January. Just last February 23, the IMF downgraded China's projected 2020 growth rate by 40 basis points, from 6.0% to 5.6% - driven by COVID-19. Given that China contributes close to 30% of the global growth figure, global GDP growth was also lowered by 0.1% - for now. IMF Chief Kristalina Georgieva noted that "uncertainties are too great to permit reliable forecasting" and that they currently expect China's economy to "return to normal" between April and June.⁷

As COVID-19 makes its way across other countries and policy environments change, Moody's Analytics REIS will continue to monitor multifamily and commercial property trends, and update this report on a periodic basis.

⁷ Statement from the International Monetary Fund, released during a meeting of finance officials of G-20 economies in Riyadh, Saudi Arabia (February 21-22, 2020). Coverage from the Nikkei Asian Review here: <https://asia.nikkei.com/Spotlight/Coronavirus/IMF-downgrades-China-GDP-growth-outlook-to-5.6>

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