

APRIL 2020

MARKET ANALYSIS SUMMARY





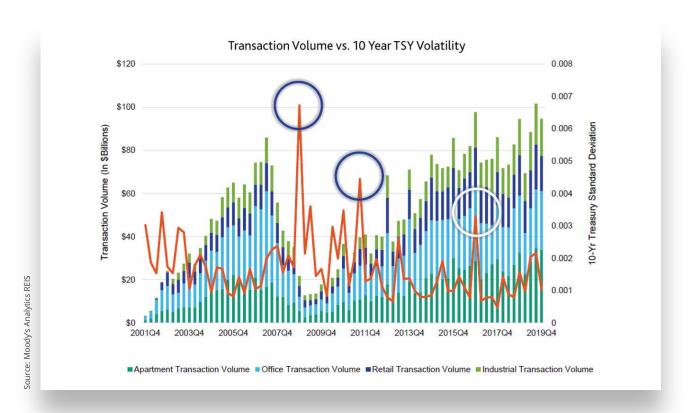
Financial markets are seeing dramatic impacts due to the novel coronavirus pandemic, and while the pandemic continues to be fought, no metric will be reliable to predict with certainty what value impacts will be. However, using trusted analytics resources we can better understand the ways in which past economic shocks have progressed which will help us better assess true risk associated with a particular CRE asset.

This economic crisis is unique from others in that there are shocks to both the supply and demand side. This is exacerbated by record corporate debt in place. According to the Federal Reserve, American non-financial corporate debt has risen to 47% of GDP. In 2009 it was 43%. Two-thirds of non-financial corporate bonds in the US are rated "BBB" or lower.

The United States has posted a 4.8% decrease in GDP for the first quarter of 2020. China's Q1 GDP contracted 6.8% year over year. Drops are likely again in Q2.

CRE markets are already reporting drops in transaction volumes due to travel restriction, quarantines and "stay at home" orders. Movements in the stock market and interest rates, as well as stimulus packages and legislation, are causing many deals in progress to be put on hold while participants try to orient in the new reality. The end date of this period of volatility is impossible to foresee, but a historical picture of the relationship between volatility (as measured by deviations in the 10-Yr Treasury prices) and the transaction volume of commercial real estate from the end of 2001 to the end of 2019 may provide some insight.

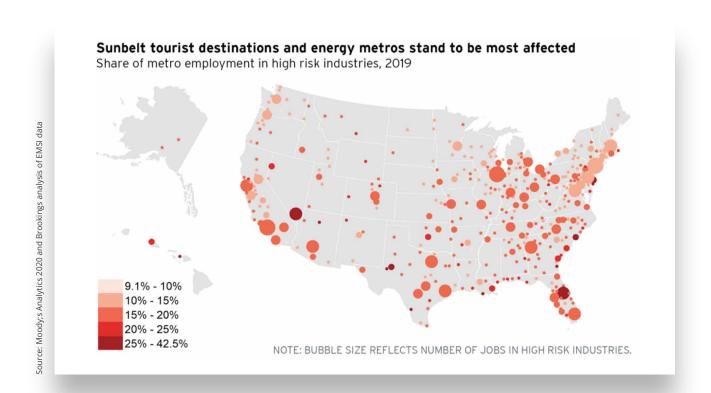
The following graph shows that transactional volume may drop anywhere from 20 to 40% during periods of extreme volatility.





The National Council of Real Estate Investment Fiduciaries (NCREIF) tracks the values and returns for institutionally owned commercial real estate. NCREIF compared the recession in the early 1990s to the financial crisis that began in 2007-08. They found a 27% decline in values across 40,000 individual office, industrial, retail, multi-family and hotel properties for the 2007-08 period. While this was slightly higher than the 25% value drop during the recession of the early 1990s, the recovery was much quicker. The NCREIF study attributes the faster recovery in values to better data for valuation being available and a desire by investment managers to get the properties in their funds marked to market quickly. The addition of more frequent outside appraisals likely also helped. In the current crisis, we have even more data available (now nearly in real-time), as well as stronger analytic models and the benefit of a financial stimulus playbook from which to act more quickly to respond to systemic shocks. This all bodes well for a swift recovery if properly deployed.

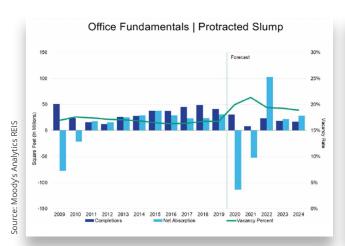
Impacts to values will not be consistent across sectors, asset classes and markets. Study and analysis on micro levels is critical. Moreover, the analysis of markets and properties prior to the downturn is important as is the market's vulnerability to a recession. The Brookings Institution used Moody's Analytics to identify "most at risk" industry groups, from which it compiled a list of five particularly vulnerable sectors: mining/oil and gas, transportation, employment services, travel arrangements, and leisure/hospitality. The following map illustrates areas most affected by employment in these sectors.

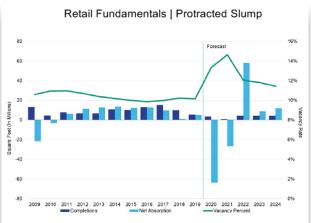




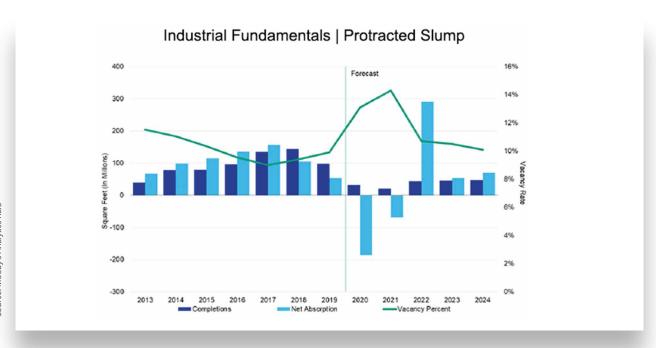
Property types will also be asymmetrically affected. In the multi-family sector, markets that are oversupplied, or which have a history of rising vacancy or low to flat rent growth are indications of areas that may be harder hit by the new crisis. Markets with volatility in rent growth are still vulnerable, even if vacancy was stable in the past 12 months.

For office and retail properties, Moody's predicts a protracted slump.





Moody's expects office vacancy to peak at 21% in 2021 and remain close to 20% through 2024. Retail, according to the models, will top out in 2021 at just under 15% vacancy and gradually improve to 11.5% by 2024. Net absorption drops precipitously in 2020 and 2021 in both sectors and begins to recover after that. It's important to note that rents and vacancies in both office and retail are expected to track with GDP performance, so the model is sensitive to future changes in that metric.

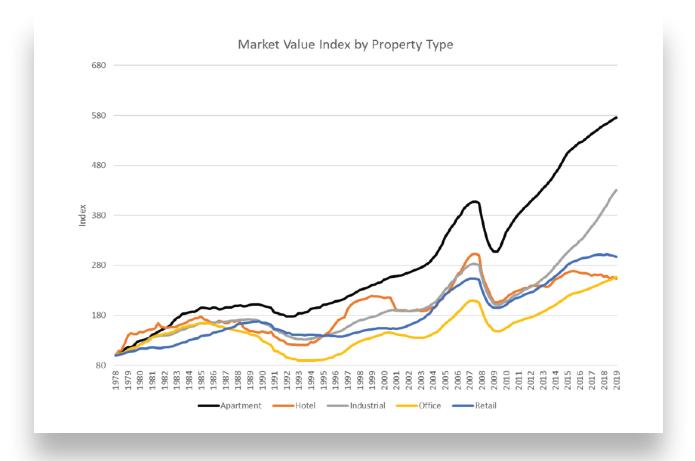


Source: Moody's Analytics REIS



Industrial follows the same pattern. Absorption drops in the next 24 months, through 2021, vacancy peaks at just over 14%, and improves to 10% by 2024.

To complement the Moody's predictive modeling, NCREIF published a breakdown of impact on market value by property sector, tracking from 1978 to the end of Q4 2019.



As the previous graph illustrates, multi-family saw one of the largest value drops in 2007-09. It was also the first to recover and had the largest and fastest recovery.

Industrial followed the curve, even surging in recent years.

Hotels never returned to their pre-recession peak, even as the economy as a whole was growing.

Office and retail both recovered around seven years after the low point. Office, however, had the second most dramatic drop in value and was last to recover (after hotels). This is likely to repeat in the recovery from this crisis as firms may discover that their employees and clients can be served by work-from-home models, allowing them to consolidate square footage.