REAL ESTATE

Open for Business: Our Summer 2021 Commercial Real Estate Outlook

April 21, 2021

Executive Summary

- The economic recovery has not been evenly distributed; a “K-shaped” recovery.
- Cap rates may compress during the second half of 2021, despite rising Treasury yields.
- Office leasing was weak in New York, San Francisco, and Seattle, but strong in Las Vegas, Orlando, and Pittsburgh, in recent quarters.
- Industrial demand growth may be dependent on faster e-commerce delivery speeds, not e-commerce sales growth.
- E-grocery doubled over the last year, and grocers without a strong omni-channel strategy may struggle in 2021 and beyond.

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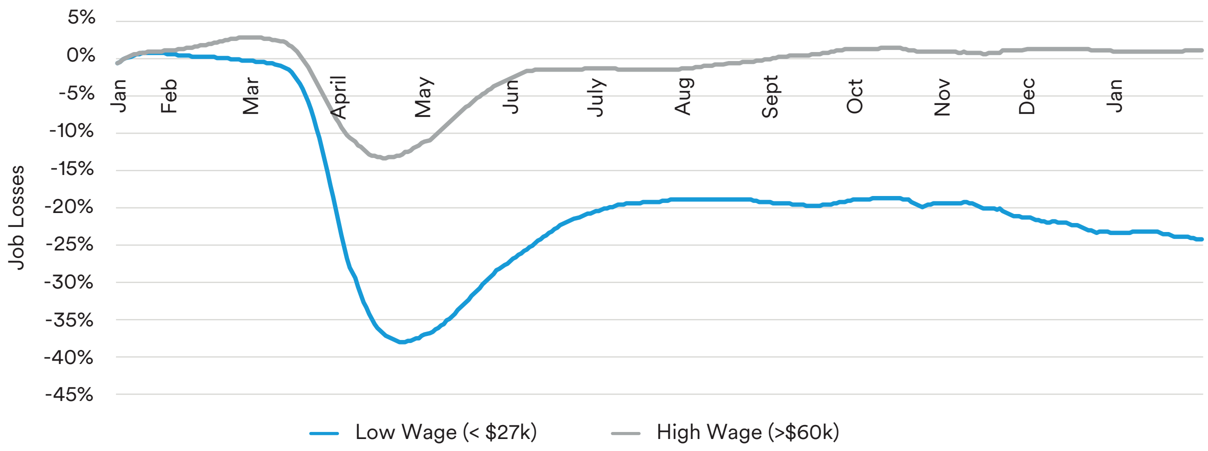
Economy

The outlook for the U.S. economy and commercial real estate continued to improve in the first quarter of 2021. Vaccine effectiveness has been as strong as expected[1], and should be available to the general public in the U.S. in a matter of weeks. This helps alleviate one of the primary risks (vaccine distribution) that we outlined in our 2021 Outlook report, The Winding Path to Recovery.

The unemployment rate is less than half of peak unemployment from the early months of the outbreak, and we expect it to reach 5.0% by the end of the year. The recently passed $1.9 trillion economic stimulus package, and potential $3 trillion infrastructure package that is still being worked on in Washington, suggests GDP growth could be at least 5.5% this year[2].

Exhibit 1. Job Losses Persist for Low-Income Workers

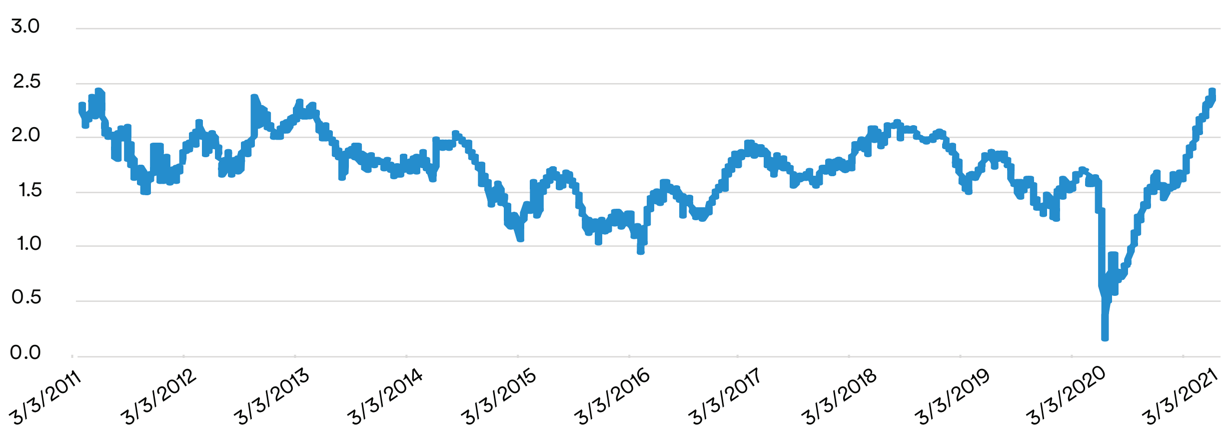


Source: MIM, Opportunity Insights, as of January 2021.

Real Estate & Reflation

A recovering economy and multiple rounds of fiscal stimulus have stoked inflation fears and sent treasuries sharply higher in recent months. Shown in Exhibit 2, the U.S. 5-yr inflation breakeven rate – an indicator of where the market believes inflation will be in five years – recently reached its highest level (2.45%) since the wake of the Global Financial Crisis.

Exhibit 2. 5-Year Break Even



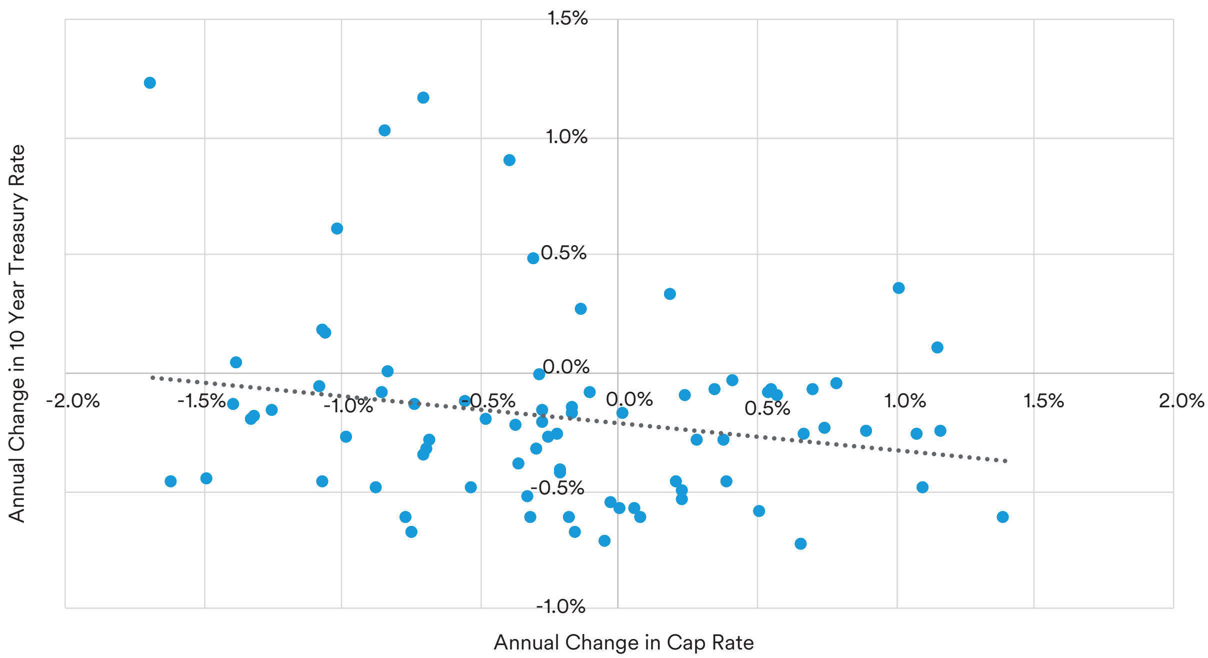
Source: MIM, St. Louis Fed, as of March 2021.

While we anticipate a modest pickup in inflation during 2021, we suspect it will be more transitory, and a function of the volatility in price levels exhibited during 2020. We do not believe inflation is likely to remain high until slack from the labor market is removed, however. Although this may occur in 2022 or beyond, for now we do not believe sustained inflation is likely to occur while the unemployment rate remains above 4%.

Still, inflation fears have begun impacting interest rates, and the bellwether 10-year treasury rate could end the year at 1.75% (from 0.92% in 2020), and the CPI-U could rise to 2.0% in 2021 (1.4% in 2020).[3]

Although rising interest rates tend to translate into fears of rising cap rates, history suggests that they are rarely correlated. In fact, because real estate is pro-cyclical, the trend between interest rates and cap rates can be negatively correlated during times when the economy is expanding or contracting (Exhibit 3). As an example, from 2003 – 2007 when the economy was improving, treasury rates rose from 3.3% to 5.1%, while cap rates compressed from 8.0% to 5.7%. From 2008 – 2012, when economic conditions were depressed, treasury rates declined from 4.1% to 2.6%, while cap rates rose from 5.1% to 6.6%.

Exhibit 3. Annual Changes in Cap Rates & 10-Year Treasury; Correlation = -21% (2001Q1 – 2020Q4)*



*U.S. cap rates. Treasury yield is lagged 4 quarters to account for appraisal effect.

Source: MIM, Moody's, as of January 2021.

Looking forward, we expect an improving economy to drive down risk premiums across the investment spectrum, including commercial real estate. We believe this will translate to a compressing cap rate spread to the 10-year treasury, and declining cap rates, even as treasury rates rise off their COVID lows. If treasuries rise to the mid-2% range, and U.S. GDP growth remains in the 5% to 7% range, then we would begin to be concerned about potential cap rate expansion.

Office Sector Update

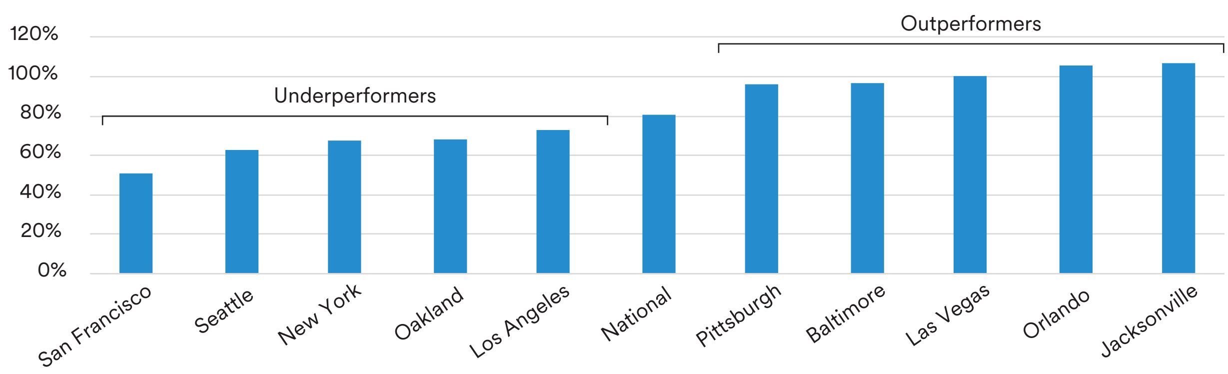
So far, it's been challenging to make sense of how firms are planning to adjust their office footprint today, and even more so in the future. Almost every week a Fortune 500 company is announcing a large new office lease renewal or expansion, while another is announcing they are making work-from-home permanent. We've also noticed these types of mixed trends in the MIM office portfolio, and from the leasing brokers and corporate real estate professionals that we work with.

That said, when we cut beyond headlines to aggregated leasing statistics, we find that the average U.S. office vacancy rate rose from 12.8% to 15.0% over the last year[5], slightly less of an increase than we were expecting when we wrote Back to Work: Office Demand in a Post Pandemic World in May of 2020. Looking forward, we continue to expect vacancy to rise modestly above the peak levels realized during the Global Financial Crisis (16.7%)[6] later this year or in early 2022. By 2023, however, and as we also detailed in Back to Work, we believe many firms will be reversing their decisions to work remotely permanently.

One issue with using an aggregate vacancy statistic is that it is a lagging indicator, and to some extent the increases in vacancy will be limited by the pace at which typical 5- or 10-year office leases are maturing. To potentially help answer the question of what companies have been doing, we developed a tool that estimates the percent of expiring office space being renewed across markets . Although only a rough approximation, we believe it has historically been a useful barometer of market-level office performance in the past.

In Exhibit 4, we modeled renewals for both 3Q20 and 4Q20. Markets such as San Francisco, New York, and Seattle have experienced some of the lowest average rates of office space renewal, compared to the rest of the U.S., which averaged an 80% renewal rate. On the flip side, of the total office space that was up for renewal during the second half of 2020, more than all of it was absorbed / renewed in markets such as Orlando and Jacksonville (each over 100%). The standard vacancy statistics also confirm this trend, with markets like San Francisco rising from 5.2% to 11.7%, and markets like Minneapolis only rising from 18.5% to 18.9%.

Exhibit 4. Estimated Average Office Space Renewed



Source: MIM, CBRE-EA. As of March 2021.

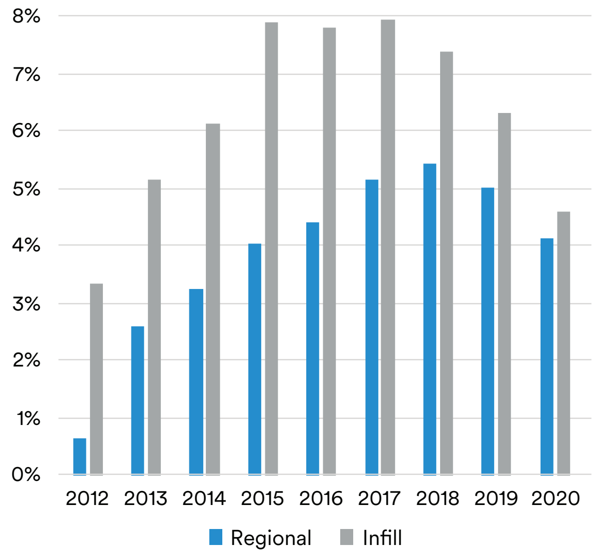
In our most recent office whitepaper, The Pandemic Pitfall, we outline how this office work-from-home adoption could vary by city based on factors such as public transit usage, household income levels, the concentration of tech workers, and the age of the office using workforce. We expected weakness in San Francisco, Seattle, and Denver[7], although also said that we believe those markets could offer some of the best tactical/pricing opportunities in the near-term. We continue to believe that to be the case, although acknowledge that none of these markets are yet pricing office assets at meaningful discounts to pre-Covid levels, in our view.

Industrial

The industrial sector continues to shine relative to other core property types as the pandemic has accelerated preexisting demand growth (Exhibit 5). Stay-at-home orders related to the pandemic accelerated e-commerce adoption as we estimate the number of people regularly buying goods online jumped from 55% pre-Covid to around 75% today[8]. That said, rather than just the absolute level of e-commerce sales growth, we believe the continued push for faster delivery times is driving the outperformance.

Industrial occupiers are more willing to absorb large rent increases in assets that are located in densely populated areas, also referred to as “infill” assets. These buildings enable third party logistics providers to satisfy the burgeoning demand for faster delivery times, and have notably outperformed their regional counterparts over the last cycle. Since the GFC, infill industrial rent growth has averaged 6.3% annually, while regional assets averaged 3.9% annually (Exhibit 5).

Exhibit 5. Industrial Rent Growth



Source: MIM, CoStar, as of February 2021.

We believe infill industrial demand will remain strong until four-hour delivery is available in most markets, down from 1 to 2-day delivery speeds that are typical today. As a result, we believe it is appropriate to expect 5% to 10% in cumulative additional rent growth from 2021-2024 for infill assets as compared to rural/regional distribution assets. At the national level, we therefore expect around 3.3% annual rent growth 2021-2024 for regional assets, and 5.3% annual rent growth for infill assets.

Retail

Retail assets – particularly those with non-essential tenants – have generally struggled throughout the pandemic as stores temporarily closed and foot traffic fell dramatically. Additionally, leading up to the pandemic, the retail sector was already experiencing secular challenges as consumers increasingly shopped online, and we believe the pandemic has likely accelerated this trend of e-commerce adoption.

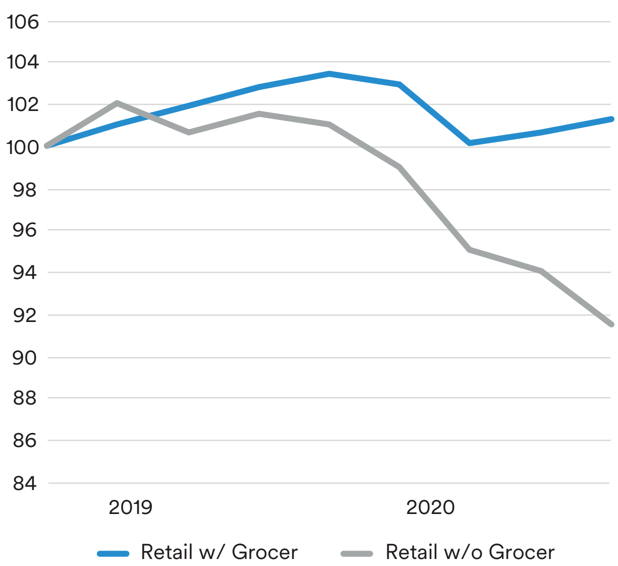
> Shopping centers anchored by essential retailers such as grocery stores have remained open, and rent collections remain strong at nearly 100%.

Around 25,000 retail stores were closed last year[9], although the challenges were not evenly distributed. Malls, for instance, make up less than 10% of total existing retail space, yet they accounted for roughly 35% of the existing retail footprints of all of the retailers that announced closures in 2020.[10] On the flip side, shopping centers anchored by essential retailers such as grocery stores have remained open, and rent collections remain strong at nearly 100%.[11]

This outperformance in grocery anchored retail is not a new trend for real estate investors as the sector is widely regarded for being more resilient e-commerce spending (Exhibit 6). However, we believe e-grocery spending patterns – also accelerated by the pandemic – could be worth monitoring. In 2019, only around 5% of groceries were purchased online; that figure rose to 10% in 2020 and could reach 12% by 2025.[12] In our view, similar to the retail sector as a whole, grocers who are unable to enhance their omnichannel strategies going forward (ex: curbside pickup) could be at risk to rising online grocery trends.

Zooming out more broadly, we believe there could be select opportunities in the retail sector going forward, particularly those offering experiential elements. Over the past several decades, consumers across all generations have been spending more on experiences and less on goods, and

Exhibit 6. Grocery Retail Centers Outperformance (Total Rate of Return; 2018Q4 = 100)



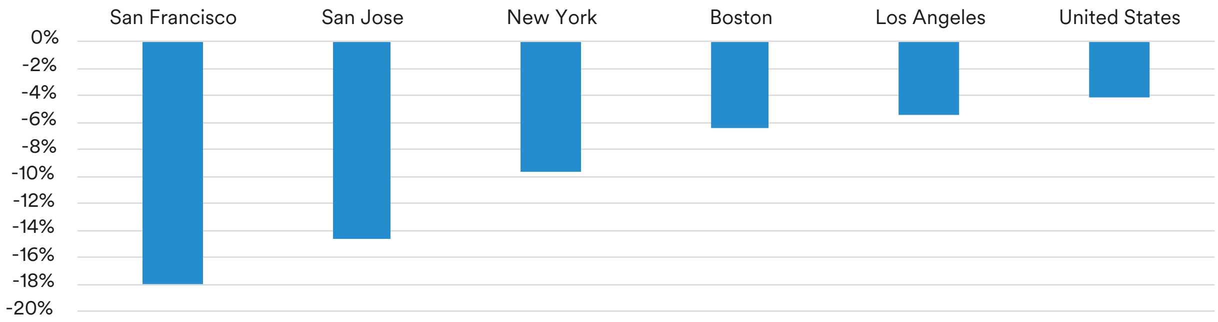
Source: MIM, NCREIF, as of March 2021.

we expect this trend to continue. Although these experience-based retailers such as gyms, restaurants, etc. are struggling with social distancing measures today, we believe these types of tenants could outperform in the long-term.

Apartment

Demand growth moderated only slightly for the apartment sector in 2020 as vacancies ticked up from 4.1% to 4.5%.[13] That said, assets located in central business districts (CBD) have struggled more than their suburban counterparts, and rents in CBD locations remain below their pre-pandemic peaks[14]. With employees no longer commuting to the office and working from home, the appeal of living in high-cost urban areas has temporarily shown signs of deterioration; as such, densely populated gateway markets such as San Francisco and New York have struggled over the last 12 months (Exhibit 7).

Exhibit 7. 2020 Rent Declines: Laggards Concentrated in Densely Populated Gateway Markets (Market-Level)



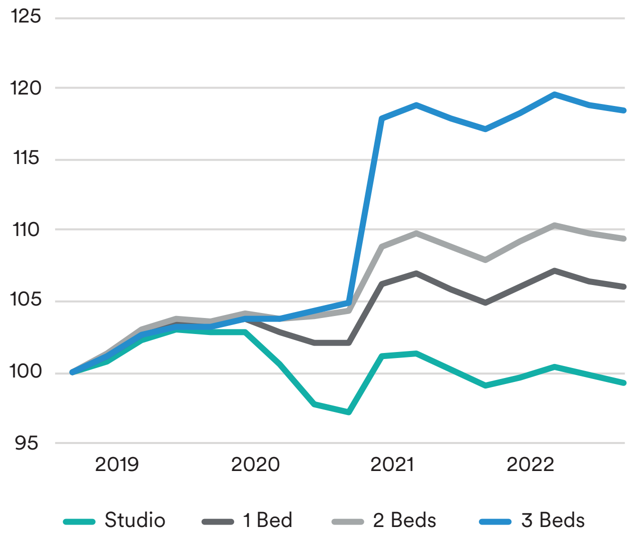
Source: MIM, CBRE-EA, as of March 2021.

We believe fundamentals in densely populated urban areas will remain soft during the remainder of 2021. However, given we expect workforces to largely return to an office environment, employees who migrated out of city-centers could return to the "live, work, play" dynamic that they enjoyed prior to Covid-19.

One additional important and sometimes overlooked dynamic of apartment leasing over the last year has been the demand for larger vs smaller units. As illustrated in Exhibit 8, three-bedroom apartment rents never skipped a beat throughout the pandemic, and have been growing at a faster clip relative to other unit types.

In our view, the higher rent growth for larger unit types could be attributable to the need for employees to enhance their remote working accommodations, as well as the Millennial generation due to the cohort aging into their 30s and forming households, a trend that we identified in a 2016 whitepaper Echoing the Boom. When considering only 12% of apartment units in the U.S. have three or more bedrooms[15], we expect fundamentals to remain healthy for assets with a higher concentration 2 and 3 bedroom units.

Exhibit 8. Burgeoning Demand for Space (Effective Rent Growth)



Source: MIM, CoStar, as of March 2021.

Hotel

The hotel sector has been the most directly and severely impacted by Covid-19. Virtually overnight, leisure and business travel came to a halt, and many hotels were forced to temporarily close their doors. As we detail in our recent whitepaper, A Stigmatized Sector – Our Outlook for U.S. Hotel Investments – the hotel sector is currently in a liquidity and capital markets crisis, but we believe there's light at the end of the tunnel.

> Wide bid-ask spreads persist in the equity investment market, but we believe there could be attractive opportunities in the near-term.

Given the steady progress with the vaccine distribution in the U.S., we believe hotel occupancies have likely reached a trough and will steadily recovery until reaching pre-Covid demand by 2022 or 2023. That said, the recovery will likely be uneven across hotel subtypes. On one hand, the K-shaped downturn and recovery suggests leisure hotel demand could recover even quicker, a thesis that is already supported by summer reservation data within the MIM portfolio. On the other hand, we expect segments reliant on group and business travel to recover at a much slower rate due to the increased adoption of virtual meetings.

Wide bid-ask spreads persist in the equity investment market, but we believe there could be attractive opportunities in the near-term. In the mortgage space, we believe both senior and subordinate pricing is attractive, and readily available at scale.

Conclusion

Economic downturns can often create attractive investment opportunities, and while they are more challenging to find today than was the case after the 2008 global financial crisis, we feel they are still abundant in commercial real estate. In our view, the hotel debt sector presents some of the most compelling, and scalable, opportunities available today. We believe fundamentals remain positive for apartment and industrial assets, and select opportunities remain available for careful investors in the office and retail space. The cap rate to 10-year treasury spread continues to suggest strong value in the real estate sector, in our view, and we expect flat to modestly compressing cap rates during the remainder of 2021.

Endnotes

[1] John's Hopkins OpEd in WSJ, as of February 2021.
[2] MIM Forecast, as of February 2021.
[3] MIM Forecast, as of February 2021.
[4] MIM, Moody's, NCREIF, as of March 2021.
[5] CBRE-EA, as of February 2021.
[6] Ibid.
[7] Ibid.
[8] MIM, Axciom, as of 3Q20.
[9] Coresight Research, as of January 2020.
[10] CoStar, as of February 2021.
[11] Green Street, as of 3Q20.
[12] Bain & Co. forecast, as of March 2021.
[13] CBRE-EA, as of February 2021.
[14] CoStar, as of January 2020.
[15] Census Bureau, as of June 2020.

MetLife Investment Management Real Estate Research and Strategy

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MetLife Investment Management Real Estate Research and Strategy (con't)

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2 As of December 31, 2020. At estimated fair value. Represents the value of all commercial mortgage loans and real estate equity managed by MIM, presented on the basis of gross market value (inclusive of encumbering debt). At estimated fair value. Includes MetLife general account and separate account assets and unaffiliated/third party assets.

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Appendix

This appendix contains details for the preceding charts and provides additional information for greater accessibility.

Job Losses Persist for Low-Income Workers

Note:

- All values are approximate
- The “Low Wage” line has the following characteristics:
    - January to Late-April: Slight rise, then gradual decline to -1.5%, then sharp decline to about -38.0%.
    - Late-April to the Following February: Moderate rise to -20.3% in July, then gradual rise to -18.7 in August, then gradual variations of about 1.5%, then gradual to moderate decline to about 24.0%.
- The “High Wage” line has the following characteristics:
    - January to Mid-April: Gradual to moderate rise to 2.8% in March, then moderate to sharp decline to about -13.0%.
    - Mid-April to the Following February: Moderate rise to about -1.5% in early-June, then level to August, then gradual rise to about 1.5 in mid-October, then level with small variations of about 0.8% over relatively long periods.
- Source: MIM, Opportunity Insights, as of January 2021

Month	Low Wage (< $27k)	High Wage (> $60k)
Jan	-0.5%	-0.5%
Feb	0.5%	1.0%
Mar	-0.3%	2.8%
April	-22.3%	-8.7%
May	-36.9%	-11.0%
Jun	-26.7%	-2.6%
July	-20.3%	-1.3%
Aug	-18.7%	-1.3%
Sept	-19.2%	0.0%
Oct	-18.7%	1.3%
Nov	-19.2%	1.0%
Dec	-21.3%	1.3%
Jan	-23.3%	1.0%

<u>5-Year Break Even</u>

Note:

- All values are approximate
- The line has the following characteristics:
  - 3/3/2011 to 3/3/2016: Gradual to moderate decline to about 0.98, with variations of about 0.75 over relatively long periods.
  - 3/3/2016 to 3/3/2018: Gradual to moderate rise to about 2.15, with variations of about 0.65 over relatively long periods.
  - 3/3/2018 to 3/3/2021: Gradual to moderate decline to about 1.60, with variations of about 0.55 over relatively long periods, then sharp decline to 0.19 just after 3/3/2020, then moderate to sharp rise to 2.44, with one short, small decline and rise in between 3/3/2020 and 3/3/2021.
- Source: MIM, St. Louis Fed, as of March 2021

Month/Day/Year	Value
3/3/2011	2.29
3/3/2012	1.99
3/3/2013	2.26
3/3/2014	1.80
3/3/2015	1.57
3/3/2016	1.39
3/3/2017	1.91
3/3/2018	2.03
3/3/2019	1.85
3/3/2020	0.64
3/3/2021	2.44

Annual Changes in Cap Rates & 10-Year Treasury; Correlation = -21% (2001Q1 – 2020Q4)

Note:

- * U.S. cap rates. Treasury yield is lagged 4 quarters to account for appraisal effect.
- All values are approximate
- The 80 data Points in the table are read from the graph from left to right and top to bottom.
- A best-fit line goes from -1.67, -0.02 to 1.40, -0.37 (format: x1, y1 to x2, y2)
- Source: MIM, Moody's, as of January 2021

Data Point	Annual Change in Cap Rate	Annual Change in 10 Year Treasury Rate
1	-1.70%	1.24%
2	-1.61%	-0.47%
3	-1.49%	-0.45%
4	-1.38%	-0.13%
5	-1.38%	0.05%
6	-1.32%	-0.20%
7	-1.31%	-0.18%
8	-1.25%	-0.16%
9	-1.07%	-0.06%
10	-1.06%	0.19%
11	-1.06%	-0.47%
12	-1.05%	0.17%
13	-1.01%	0.61%
14	-0.99%	-0.27%
15	-0.87%	-0.49%
16	-0.86%	-0.08%
17	-0.84%	1.03%
18	-0.83%	0.01%
19	-0.77%	-0.61%
20	-0.74%	-0.67%
21	-0.73%	-0.13%
22	-0.71%	1.18%
23	-0.71%	-0.35%
24	-0.69%	-0.32%
25	-0.68%	-0.29%
26	-0.55%	-0.12%
27	-0.53%	-0.48%
28	-0.48%	-0.19%
29	-0.39%	0.09%
30	-0.37%	-0.22%
31	-0.36%	-0.38%
32	-0.33%	-0.52%
33	-0.31%	-0.60%
34	-0.31%	0.49%
35	-0.30%	-0.32%

Data Point	Annual Change in Cap Rate	Annual Change in 10 Year Treasury Rate
36	-0.28%	0.00%
37	-0.27%	-0.16%
38	-0.27%	-0.20%
39	-0.26%	-0.27%
40	-0.21%	-0.26%
41	-0.21%	-0.41%
42	-0.21%	-0.42%
43	-0.18%	-0.60%
44	-0.17%	-0.14%
45	-0.17%	-0.16%
46	-0.15%	-0.67%
47	-0.13%	0.27%
48	-0.10%	-0.08%
49	-0.05%	-0.71%
50	-0.03%	-0.55%
51	0.01%	-0.57%
52	0.01%	-0.17%
53	0.06%	-0.57%
54	0.08%	-0.61%
55	0.19%	0.33%
56	0.21%	-0.46%
57	0.23%	-0.50%
58	0.23%	-0.54%
59	0.24%	-0.09%
60	0.28%	-0.29%
61	0.35%	-0.07%
62	0.38%	-0.29%
63	0.39%	-0.46%
64	0.42%	-0.02%
65	0.51%	-0.58%
66	0.54%	-0.08%
67	0.55%	-0.07%
68	0.57%	-0.09%
69	0.66%	-0.72%
70	0.67%	-0.26%
71	0.71%	-0.07%
72	0.75%	-0.24%
73	0.79%	-0.04%
74	0.89%	-0.25%
75	1.01%	0.37%
76	1.08%	-0.25%
77	1.10%	-0.48%
78	1.15%	0.11%
79	1.16%	-0.25%
80	1.38%	-0.61%

Estimated Average Office Space Renewed

Note:

- All values are approximate
- Source: MIM, CBRE-EA. As of March 2021

City	Average Office Space Renewed	Performance
San Francisco	51%	Underperformer
Seattle	62%	Underperformer
New York	67%	Underperformer
Oakland	68%	Underperformer
Los Angeles	72%	Underperformer
National	80%	n/a
Pittsburgh	96%	Outperformer
Baltimore	97%	Outperformer
Las Vegas	100%	Outperformer
Orlando	105%	Outperformer
Jacksonville	106%	Outperformer

Industrial Rent Growth

Note:

- All values are approximate
- Source: MIM, CoStar, as of February 2021

Year	Regional	Infill
2012	0.64%	3.31%
2013	2.58%	5.12%
2014	3.21%	6.09%
2015	4.00%	7.87%
2016	4.38%	7.77%
2017	5.12%	7.93%
2018	5.39%	7.33%
2019	5.00%	6.29%
2020	4.12%	4.59%

Burgeoning Demand for Space (Effective Rent Growth)

Note:

- All values are approximate
- Part of the “1 Bed” line is hidden by other lines on the graph. In this case, an approximate range is given in the table.
- All the lines track one another relatively closely until mid to late 2019. Before that point, the lines rise moderately to roughly the 103 area and then decline slightly through mid-2019.
- From mid-2019 to mid to late 2020 the lines diverge, with the following characteristics:
    - Studio Line: Declines gradually to late 2019, then declines moderately and then gradually to about 97 in mid to late 2020.
    - 1 Bed Line: Rises slightly to late 2019, then declines gradually to about 102 in mid-2020.
    - 2 Bed Line: Rises gradually to late 2019, then declines gradually to early 2020, then rises gradually to mid to late 2020.
    - 3 Bed Line: Rises gradually to mid to late 2020.
- After mid to late 2020, the lines track one another relatively closely but are widely separated. Here are the characteristics:
    - All lines except “3 Beds” rise moderately to sharply and then moderately to early 2021. “3 Beds” rises sharply and then moderately to early 2021. From highest to lowest, the peak values are: “3 Beds”: 118.9, “2 Beds”: 109.8, “1 Bed”: 106.9, and “Studio”: 101.2.
    - All lines decline moderately by about 97 at mid to late 2021.
    - All lines rise moderately by about 97 at early 2022.
    - All lines decline by about 96 at late 2022.
- Source: MIM, CoStar, as of March 2021

Year	Studio	1 Bed	2 Beds	3 Beds
2019	101.2	101.2 to 102.1	102.1	101.7
2020	102.2	103.6	104.1	103.8
2021	101.2	106.5	109.3	118.3
2022	99.9	106.4	109.7	118.8