

Quarterly Economic Briefing

Q4 2020

Agenda

1. How has the evolving policy environment shifted our economic outlook (this year, and the near term)?
2. Discussion of how drivers of income fundamentals like rents and vacancies fared in the fourth quarter and 2020 as a whole.
3. A significant (positive) shift in our outlook on the transaction and pricing side (and why).

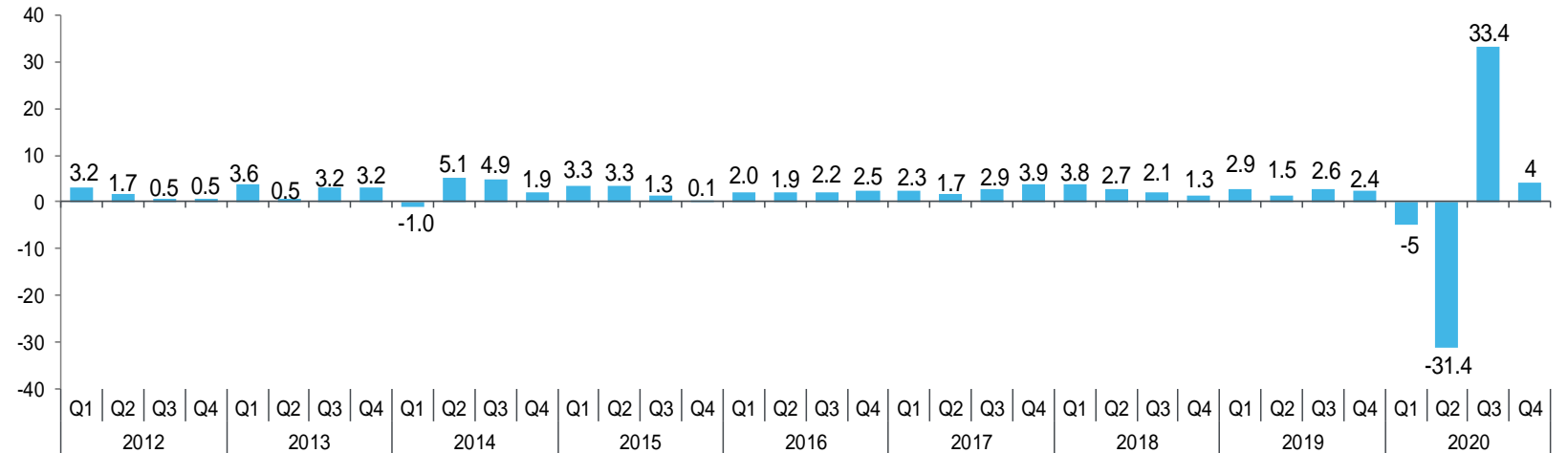
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A Tumultuous Year – With
Some End in Sight

Quarterly GDP Growth & Components

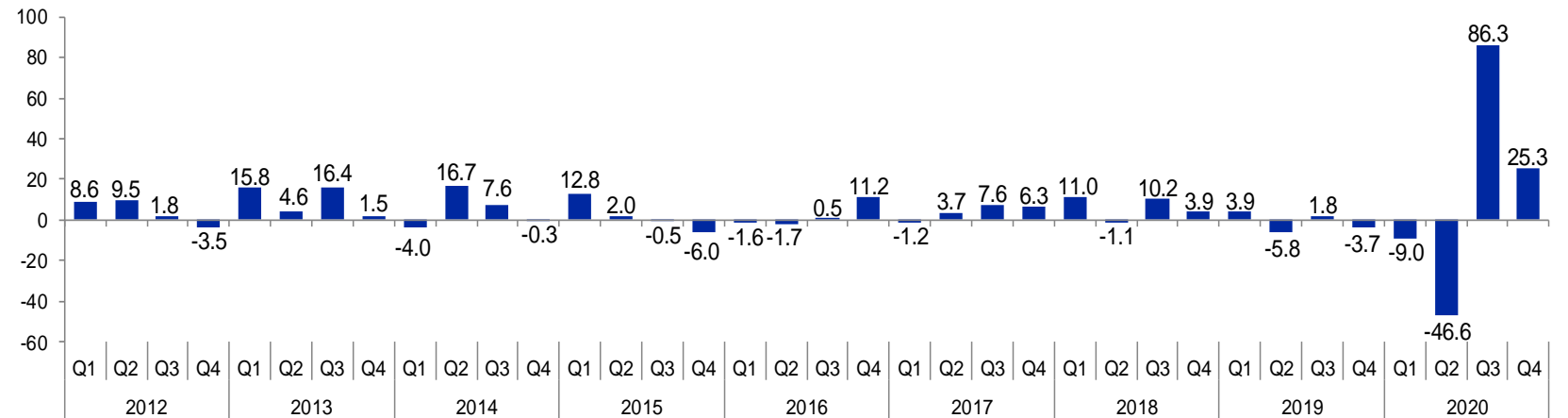
GDP

Percentage Change at Annual Rate



Business Investment

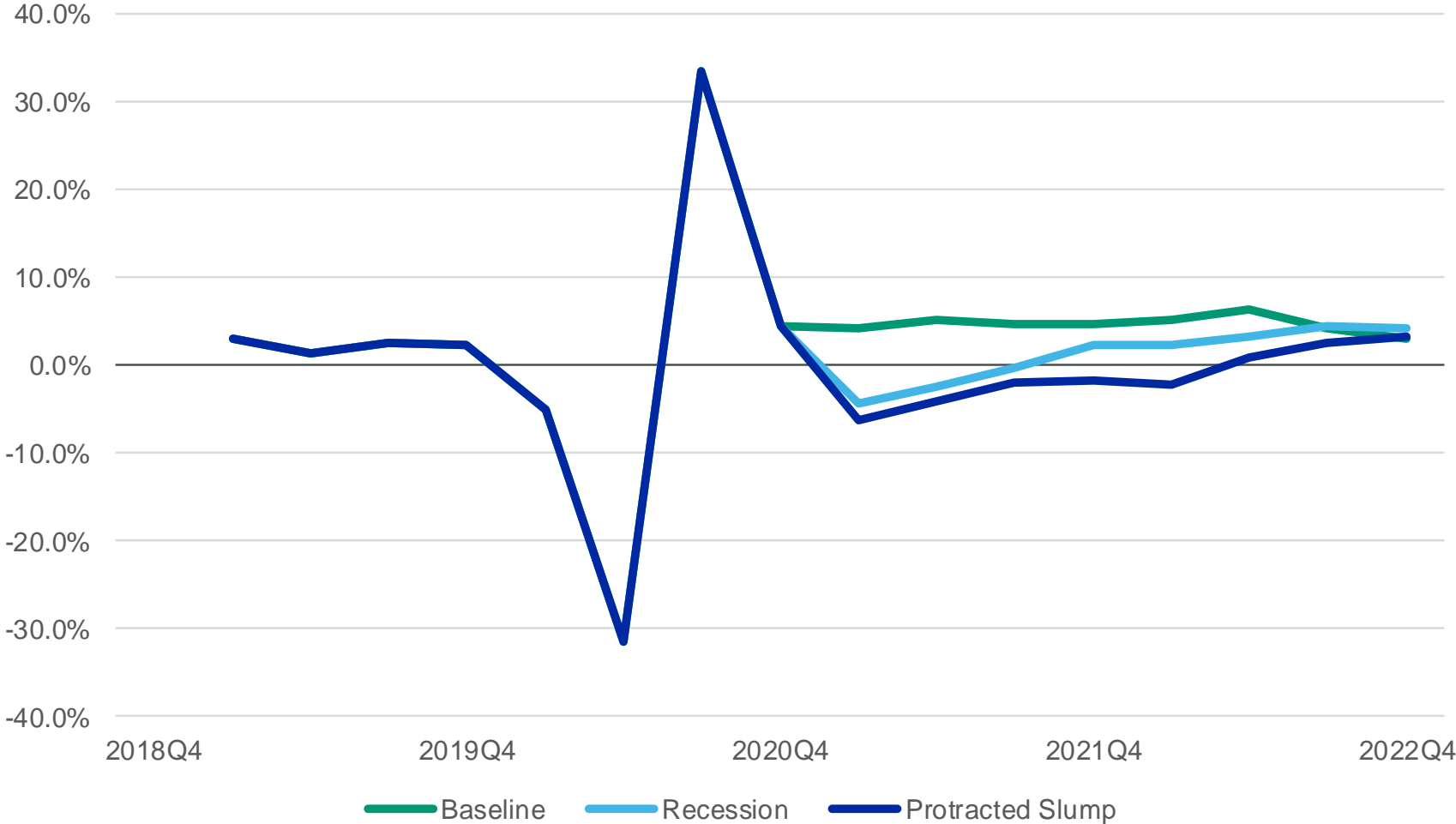
Percentage Change at Annual Rate



Source: Bureau of Economic Analysis

Updated GDP Forecasts & Scenarios

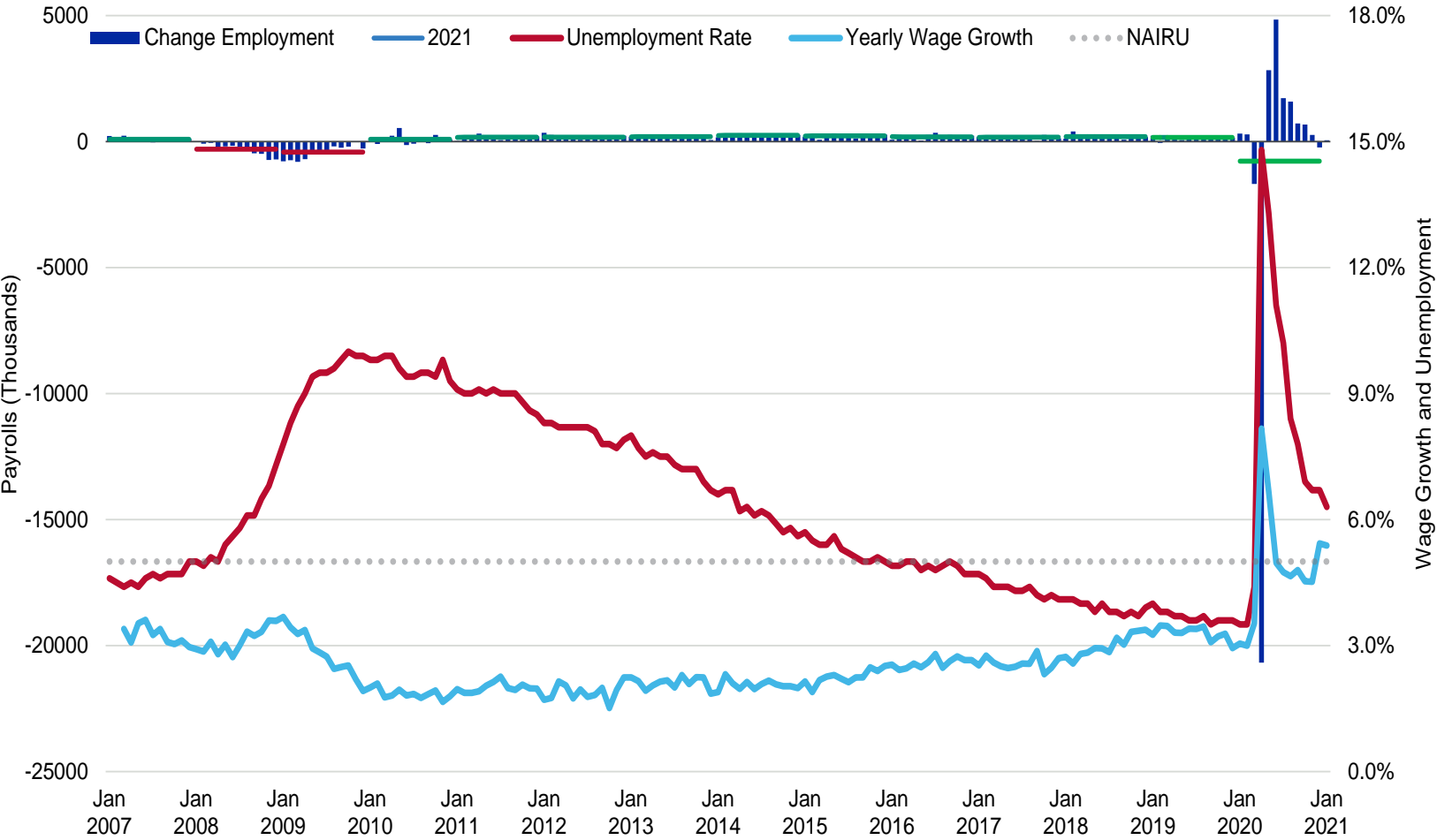
Real GDP, annualized quarter/quarter growth rate



Sources: BEA; Moody's Analytics

The Labor Markets Through February 2021

Job Creation and the Unemployment Rate



Sources: Bureau of Labor Statistics; FRED

The Economic Outlook & Policy Environment

Key Takeaways

- » Baseline forecasts of 5% real GDP growth for 2021 and 2022 are a (significant) net positive for our change in outlook.
- » <What does this mean for CRE performance metrics?>
- » Solid (positive) shift in sentiment for CRE industry participants.
- » Uncertainties remain: COVID variants; the realities of vaccine rollouts (and efficacy); how will this all affect actual economic activity throughout the year?
- » Continue to plan for downsides but cannot rule out significant increase in economic activity from suppressed demand.

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National Market Updates

National Apartment Market

Quarterly & Annual Market Conditions

- » Vacancy rates ended the year at 5.2%, just breaching long-term average levels.
- » The sector is taking hits on the asking and effective rent side, with record declines for both annual and quarterly periods registered in 2020.

Quarterly

Year	Qtr	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2013	4	\$1,146	0.9%	\$1,100	1.0%	4.4%
2014	1	\$1,155	0.8%	\$1,110	0.9%	4.3%
2014	2	\$1,169	1.2%	\$1,123	1.2%	4.3%
2014	3	\$1,183	1.3%	\$1,137	1.3%	4.4%
2014	4	\$1,193	0.8%	\$1,147	0.8%	4.4%
2015	1	\$1,205	1.0%	\$1,159	1.1%	4.3%
2015	2	\$1,226	1.8%	\$1,179	1.7%	4.2%
2015	3	\$1,248	1.8%	\$1,200	1.8%	4.2%
2015	4	\$1,262	1.1%	\$1,213	1.1%	4.3%
2016	1	\$1,274	0.9%	\$1,224	0.9%	4.3%
2016	2	\$1,291	1.4%	\$1,240	1.3%	4.2%
2016	3	\$1,308	1.3%	\$1,255	1.2%	4.1%
2016	4	\$1,313	0.4%	\$1,260	0.4%	4.2%
2017	1	\$1,325	0.9%	\$1,268	0.6%	4.4%
2017	2	\$1,345	1.6%	\$1,285	1.3%	4.4%
2017	3	\$1,364	1.4%	\$1,301	1.3%	4.5%
2017	4	\$1,373	0.7%	\$1,310	0.6%	4.6%
2018	1	\$1,389	1.2%	\$1,324	1.1%	4.7%
2018	2	\$1,411	1.5%	\$1,344	1.5%	4.7%
2018	3	\$1,432	1.5%	\$1,363	1.4%	4.7%
2018	4	\$1,446	1.0%	\$1,376	1.0%	4.8%
2019	1	\$1,455	0.6%	\$1,384	0.6%	4.7%
2019	2	\$1,475	1.4%	\$1,404	1.5%	4.6%
2019	3	\$1,490	1.0%	\$1,419	1.1%	4.6%
2019	4	\$1,498	0.5%	\$1,426	0.5%	4.7%
2020	1	\$1,505	0.4%	\$1,433	0.5%	4.8%
2020	2	\$1,499	-0.4%	\$1,428	-0.3%	4.9%
2020	3	\$1,473	-1.8%	\$1,403	-1.8%	5.1%
2020	4	\$1,453	-1.4%	\$1,383	-1.4%	5.2%

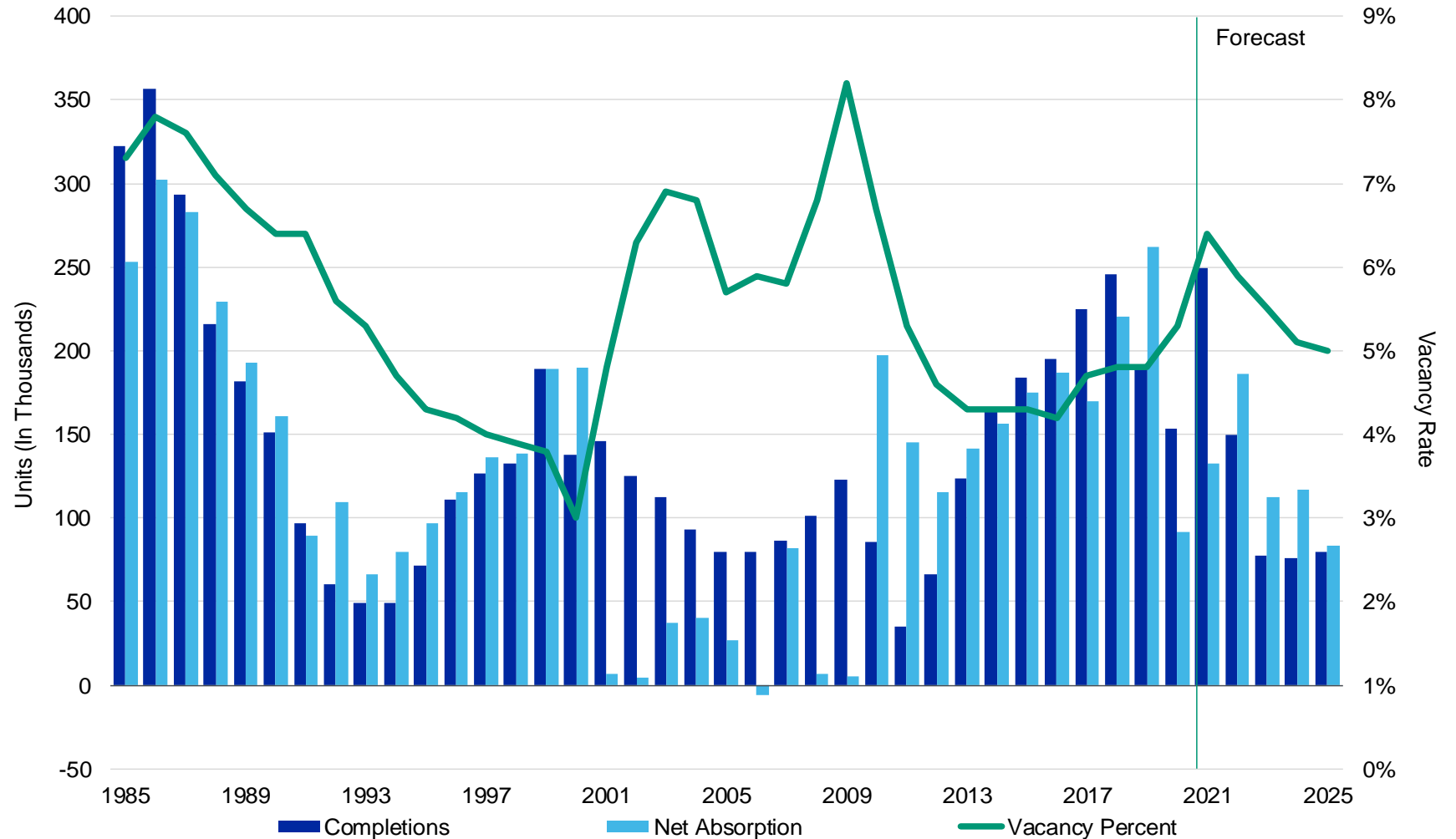
Annual

Year	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2011	\$1,070	2.4%	\$1,019	2.7%	5.3%
2012	\$1,107	3.5%	\$1,061	4.2%	4.7%
2013	\$1,146	3.5%	\$1,100	3.7%	4.4%
2014	\$1,193	4.1%	\$1,147	4.2%	4.4%
2015	\$1,262	5.8%	\$1,213	5.8%	4.3%
2016	\$1,313	4.0%	\$1,260	3.9%	4.2%
2017	\$1,373	4.6%	\$1,310	3.9%	4.6%
2018	\$1,446	5.3%	\$1,376	5.1%	4.8%
2019	\$1,498	3.6%	\$1,426	3.7%	4.7%
2020	\$1,453	-3.0%	\$1,383	-3.0%	5.2%
2021	\$1,431	-1.5%	\$1,358	-1.8%	6.3%
2022	\$1,454	1.6%	\$1,382	1.7%	5.8%
2023	\$1,488	2.4%	\$1,415	2.4%	5.5%
2024	\$1,529	2.7%	\$1,456	2.9%	5.0%
2025	\$1,573	2.9%	\$1,500	3.0%	5.0%

Source: Moody's Analytics REIS;
79 of 275 Apartment Markets

National Apartment Market

Supply & Demand Trends



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

National Office Market

Quarterly & Annual Market Conditions

- » Office vacancies rose by 90 basis points in 2020, ending the fourth quarter at 17.7%.
- » Despite strengthening GDP growth projections, still a lot of uncertainty regarding the future of office space post-COVID. Expect rent declines in 2021 and a continued slide in occupancy for the next couple of years.

Quarterly

Year	Qtr	Net Absorption	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2013	4	6.4	\$29.32	0.7%	\$23.69	0.8%	17.0%
2014	1	10.1	\$29.54	0.8%	\$23.87	0.8%	17.0%
2014	2	1.9	\$29.77	0.8%	\$24.06	0.8%	17.1%
2014	3	7.3	\$29.92	0.5%	\$24.18	0.5%	17.0%
2014	4	9.9	\$30.24	1.1%	\$24.45	1.1%	16.9%
2015	1	4.8	\$30.54	1.0%	\$24.70	1.0%	16.8%
2015	2	8.3	\$30.78	0.8%	\$24.90	0.8%	16.7%
2015	3	12.2	\$31.01	0.7%	\$25.10	0.8%	16.6%
2015	4	12.7	\$31.28	0.9%	\$25.32	0.9%	16.5%
2016	1	8.2	\$31.57	0.9%	\$25.58	1.0%	16.4%
2016	2	5.1	\$31.76	0.6%	\$25.74	0.6%	16.4%
2016	3	2.9	\$31.89	0.4%	\$25.85	0.4%	16.4%
2016	4	12.9	\$32.00	0.3%	\$25.95	0.4%	16.3%
2017	1	5.7	\$32.16	0.5%	\$26.08	0.5%	16.3%
2017	2	4.9	\$32.26	0.3%	\$26.16	0.3%	16.4%
2017	3	5.6	\$32.38	0.4%	\$26.25	0.3%	16.4%
2017	4	7.7	\$32.57	0.6%	\$26.42	0.6%	16.4%
2018	1	6.2	\$32.84	0.8%	\$26.65	0.9%	16.5%
2018	2	2.4	\$33.08	0.7%	\$26.84	0.7%	16.6%
2018	3	5.1	\$33.22	0.4%	\$26.95	0.4%	16.7%
2018	4	9.6	\$33.45	0.7%	\$27.14	0.7%	16.7%
2019	1	8.4	\$33.59	0.4%	\$27.27	0.5%	16.7%
2019	2	4.4	\$33.86	0.8%	\$27.49	0.8%	16.8%
2019	3	10.1	\$34.13	0.8%	\$27.71	0.8%	16.8%
2019	4	15.0	\$34.33	0.6%	\$27.89	0.6%	16.8%
2020	1	-0.1	\$34.48	0.4%	\$28.01	0.4%	17.0%
2020	2	2.6	\$34.47	0.0%	\$27.91	-0.4%	17.1%
2020	3	-5.0	\$34.53	0.2%	\$27.87	-0.1%	17.4%
2020	4	-9.8	\$34.47	-0.2%	\$27.70	-0.6%	17.7%

Annual

Year	Net Absorption	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2011	17.7	\$28.02	1.7%	\$22.58	2.2%	17.4%
2012	15.5	\$28.60	2.1%	\$23.09	2.3%	17.2%
2013	25.1	\$29.32	2.5%	\$23.69	2.6%	17.0%
2014	29.2	\$30.24	3.1%	\$24.45	3.2%	16.9%
2015	38.0	\$31.28	3.4%	\$25.32	3.6%	16.5%
2016	29.1	\$32.00	2.3%	\$25.95	2.5%	16.3%
2017	23.9	\$32.57	1.8%	\$26.42	1.8%	16.4%
2018	23.3	\$33.45	2.7%	\$27.14	2.7%	16.7%
2019	37.9	\$34.33	2.6%	\$27.89	2.8%	16.8%
2020	-12.3	\$34.47	0.4%	\$27.70	-0.7%	17.7%
2021	-26.6	\$32.77	-4.9%	\$25.62	-7.5%	19.4%
2022	23.7	\$32.85	0.2%	\$25.72	0.4%	19.5%
2023	17.2	\$33.38	1.6%	\$26.24	2.0%	19.6%
2024	46.7	\$33.96	1.7%	\$26.89	2.5%	19.0%
2025	44.6	\$34.59	1.9%	\$27.58	2.6%	18.5%

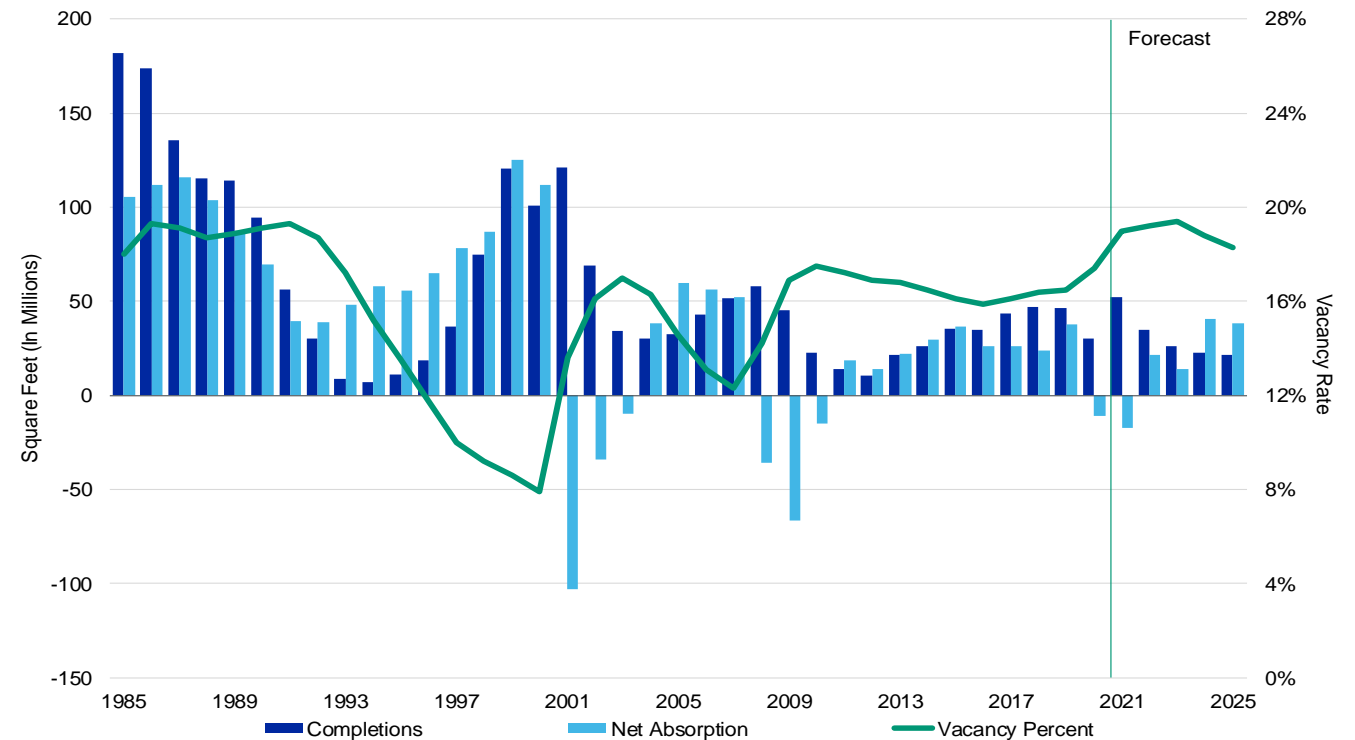
Source: Moody's Analytics REIS;
79 of 190 Office Markets

Net absorption figures are in millions of square feet.

National Office Market

Supply & Demand Trends

- » Office vacancies expected to approach record highs in late 2021 or 2022, depending on the geographic market.
- » As some offices reopen, future demand for office space remains decidedly uncertain. Others are realizing that working from home does not work for their situation; some employers are evaluating their overall space needs to reduce costs. As of yet, however, there is little evidence that firms are investing in completely restructuring their office spaces as a response to COVID-19.



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

National Retail Market

Quarterly & Annual Market Conditions

Quarterly

Year	Qtr	Net Absorption	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2013	4	4.6	\$19.35	0.5%	\$16.83	0.5%	10.4%
2014	1	1.2	\$19.43	0.4%	\$16.91	0.5%	10.4%
2014	2	3.4	\$19.52	0.5%	\$16.99	0.5%	10.3%
2014	3	4.1	\$19.60	0.4%	\$17.07	0.5%	10.3%
2014	4	4.8	\$19.70	0.5%	\$17.17	0.6%	10.2%
2015	1	3.6	\$19.80	0.5%	\$17.27	0.6%	10.1%
2015	2	2.5	\$19.90	0.5%	\$17.36	0.5%	10.1%
2015	3	3.7	\$20.01	0.6%	\$17.46	0.6%	10.0%
2015	4	2.6	\$20.11	0.5%	\$17.55	0.5%	10.0%
2016	1	3.1	\$20.22	0.5%	\$17.66	0.6%	9.9%
2016	2	4.0	\$20.30	0.4%	\$17.73	0.4%	9.8%
2016	3	1.1	\$20.39	0.4%	\$17.81	0.5%	9.9%
2016	4	4.5	\$20.48	0.4%	\$17.90	0.5%	9.9%
2017	1	3.0	\$20.56	0.4%	\$17.98	0.4%	9.9%
2017	2	1.2	\$20.66	0.5%	\$18.06	0.4%	10.0%
2017	3	2.2	\$20.76	0.5%	\$18.16	0.6%	10.0%
2017	4	3.3	\$20.88	0.6%	\$18.27	0.6%	10.0%
2018	1	1.0	\$20.97	0.4%	\$18.36	0.5%	10.0%
2018	2	-4.0	\$21.03	0.3%	\$18.41	0.3%	10.2%
2018	3	2.7	\$21.13	0.5%	\$18.49	0.4%	10.2%
2018	4	1.5	\$21.22	0.4%	\$18.58	0.5%	10.2%
2019	1	17.1	\$21.34	0.6%	\$18.69	0.6%	10.2%
2019	2	2.6	\$21.42	0.4%	\$18.76	0.4%	10.2%
2019	3	2.3	\$21.49	0.3%	\$18.82	0.3%	10.2%
2019	4	0.6	\$21.50	0.0%	\$18.84	0.1%	10.2%
2020	1	1.4	\$21.54	0.2%	\$18.88	0.2%	10.2%
2020	2	-0.7	\$21.44	-0.5%	\$18.75	-0.7%	10.2%
2020	3	-2.5	\$21.40	-0.2%	\$18.69	-0.3%	10.4%
2020	4	-2.1	\$21.34	-0.3%	\$18.61	-0.4%	10.5%

Neighborhood & Community Shopping Centers

Annual

Year	Net Absorption	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2011	6.3	\$18.99	0.0%	\$16.50	-0.1%	11.0%
2012	11.3	\$19.08	0.5%	\$16.59	0.5%	10.7%
2013	12.7	\$19.35	1.4%	\$16.83	1.4%	10.4%
2014	13.5	\$19.70	1.8%	\$17.17	2.0%	10.2%
2015	12.3	\$20.11	2.1%	\$17.55	2.2%	10.0%
2016	12.7	\$20.48	1.8%	\$17.90	2.0%	9.9%
2017	9.7	\$20.88	2.0%	\$18.27	2.1%	10.0%
2018	1.1	\$21.22	1.6%	\$18.58	1.7%	10.2%
2019	22.6	\$21.50	1.3%	\$18.84	1.4%	10.2%
2020	-3.9	\$21.34	-0.7%	\$18.61	-1.2%	10.5%
2021	-41.8	\$20.04	-6.1%	\$17.16	-7.8%	12.7%
2022	11.4	\$19.85	-0.9%	\$17.16	0.0%	12.4%
2023	8.9	\$20.01	0.8%	\$17.48	1.9%	12.2%
2024	21.3	\$20.30	1.4%	\$17.79	1.8%	11.5%
2025	17.5	\$20.64	1.7%	\$18.10	1.7%	10.9%

Neighborhood & Community Shopping Centers

Year	Quarter	Asking Rent	Percent Change	Vacancy Rate
2010	Y	\$38.79	-0.6%	8.7%
2011	Y	\$38.92	0.3%	9.2%
2012	Y	\$39.31	1.0%	8.6%
2013	Y	\$39.95	1.6%	7.9%
2014	Y	\$40.66	1.8%	8.0%
2015	Y	\$41.54	2.2%	7.8%
2016	Y	\$42.38	2.0%	7.8%
2017	Y	\$43.00	1.5%	8.3%
2018	Y	\$43.35	0.8%	9.0%
2019	Y	\$43.84	1.1%	9.7%
2020	4	\$43.05	-0.8%	10.5%

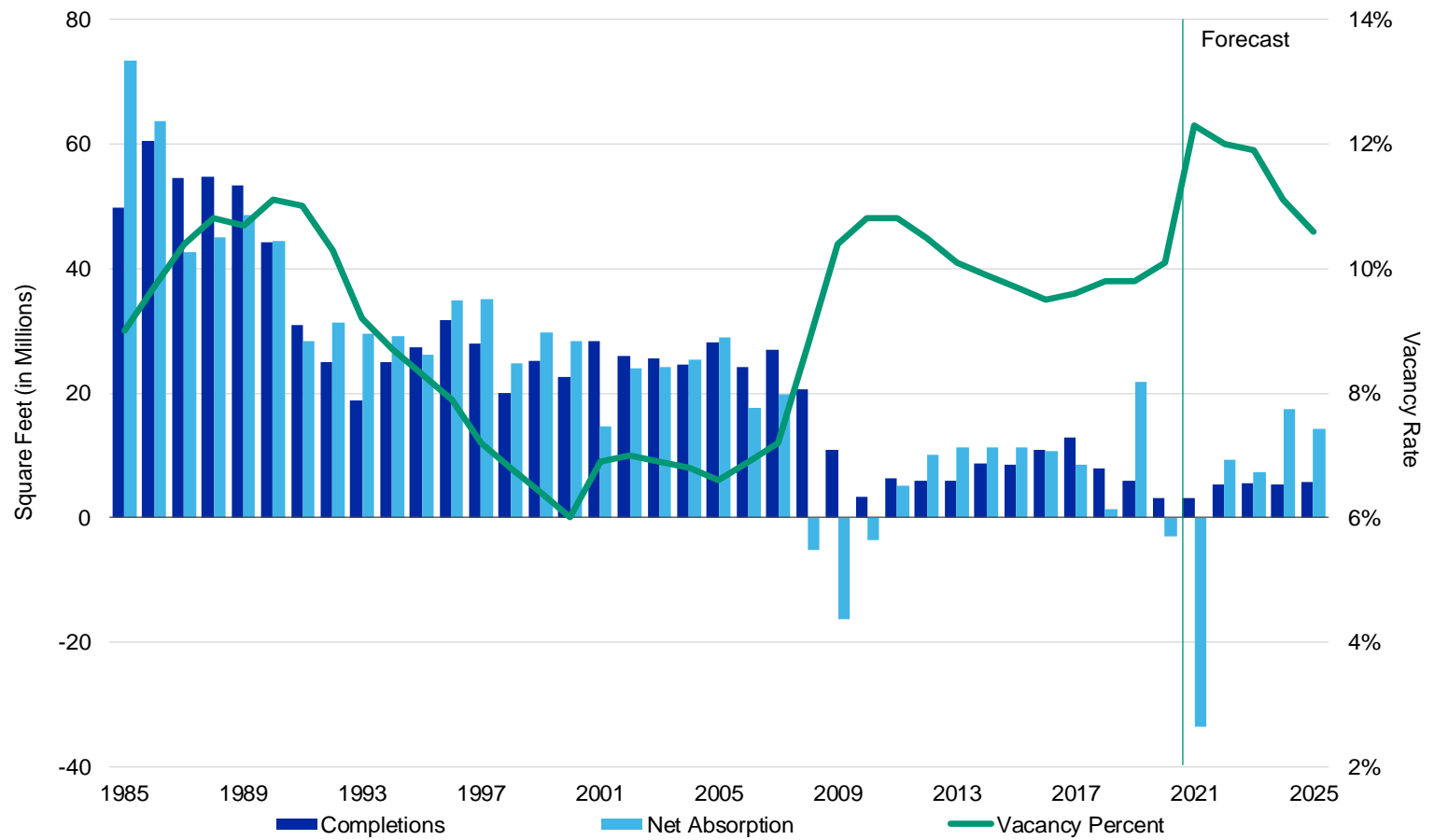
Regional/Super Regional Malls

Source: Moody's Analytics REIS;
77 of 190 Retail Markets
Net absorption figures are in millions of square feet.

National Retail Market

Supply & Demand Trends

- » Retail vacancies expected to break historic highs – up to 12.7% by 2021, and remain elevated through 2022 before declining somewhat.
- » Rent forecasts are expected to be almost double the magnitude of declines in '08-'09 – but more of the brunt is expected this year.
- » There are some proactive measures being enacted to repurpose fallow retail space into mass vaccination centers – but definitive answers about what will bring customers back to physical stores post-COVID have yet to be formulated.

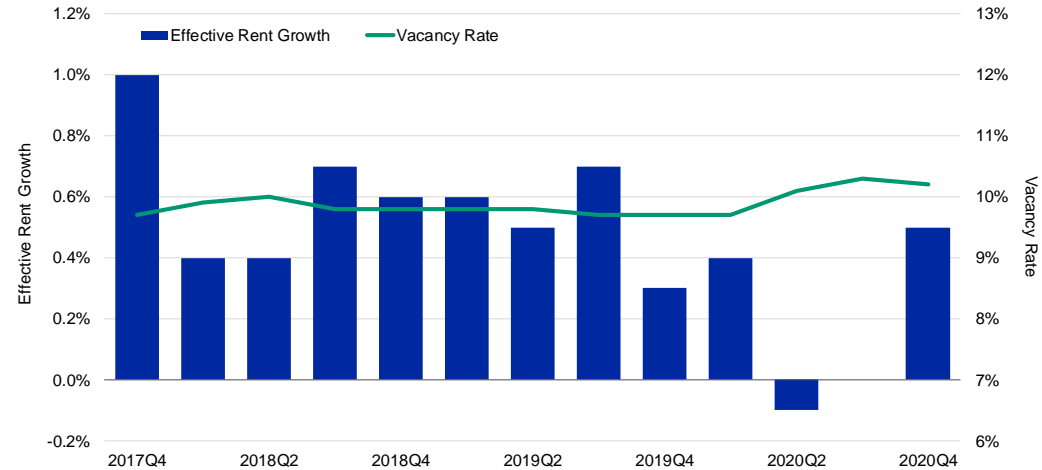


Source: Moody's Analytics REIS;
Top 50 Primary Retail Markets

Industrial: Holding Steady in the Fourth Quarter

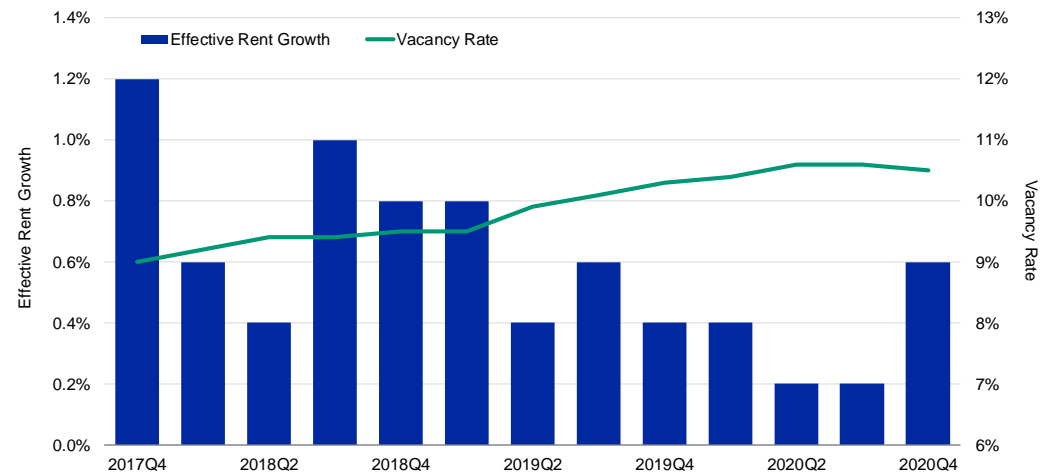
Flex/R&D

- » Flex/R&D vacancies *down* by 10 basis points in the fourth quarter to 10.2%.
- » Effective rents rose by 0.5% in the fourth quarter.



Warehouse/ Distribution

- » Warehouse/distribution vacancies *down* by 10 basis points in the fourth quarter to 10.5% - despite close to 140 million SF of new space delivered in 2020.
- » Effective rents rose by 0.6% in the quarter.



Source: Moody's Analytics REIS

National Hotel Market

Quarterly Market Conditions

- Outsized effect of pandemic on hotel performance metrics – unsurprising, given the effect of COVID-19 on travel and economic activity.
- Occupancies continue to recover, and ended the year at 35.7% - still significantly below the 66% level as of end-2019.
- ADR and RevPar posted increases in the latter half of 2020 but are still anywhere from a quarter to just over half of pre-COVID levels.

Year	Qtr	ADR	Percent Change	Occupancy Rate	Percent Change	RevPAR	Percent Change
2016	1	\$120	0.8%	64.3%	-0.5%	\$77	0.1%
2016	2	\$120	0.0%	65.0%	0.7%	\$78	1.1%
2016	3	\$122	1.7%	65.8%	0.8%	\$80	3.0%
2016	4	\$122	0.0%	64.8%	-1.0%	\$79	-1.5%
2017	1	\$122	0.0%	66.0%	1.2%	\$81	1.8%
2017	2	\$123	0.8%	65.3%	-0.7%	\$80	-0.3%
2017	3	\$124	0.8%	66.7%	1.4%	\$83	3.0%
2017	4	\$125	0.8%	65.4%	-1.3%	\$82	-1.1%
2018	1	\$127	1.6%	65.6%	0.1%	\$83	1.8%
2018	2	\$127	0.0%	65.7%	0.1%	\$83	0.2%
2018	3	\$127	0.0%	64.0%	-1.7%	\$81	-2.6%
2018	4	\$127	0.0%	65.5%	1.5%	\$83	2.4%
2019	1	\$127	0.0%	65.2%	-0.3%	\$83	-0.4%
2019	2	\$128	0.8%	65.3%	0.0%	\$84	0.8%
2019	3	\$127	-0.8%	65.1%	-0.2%	\$83	-1.1%
2019	4	\$128	0.8%	66.0%	0.9%	\$84	2.2%
2020	1	\$106	-17.2%	42.5%	-23.5%	\$45	-46.7%
2020	2	\$88	-17.0%	38.4%	-4.1%	\$34	-25.0%
2020	3	\$94	6.8%	43.2%	4.8%	\$41	20.3%
2020	4	\$107	13.8%	35.7%	-7.5%	\$38	-6.0%
2021	1	\$111	3.7%	38.3%	2.6%	\$43	11.4%
2021	2	\$114	2.7%	41.1%	2.8%	\$47	10.2%
2021	3	\$117	2.6%	43.9%	2.8%	\$51	9.6%
2021	4	\$119	1.7%	46.6%	2.7%	\$56	8.1%

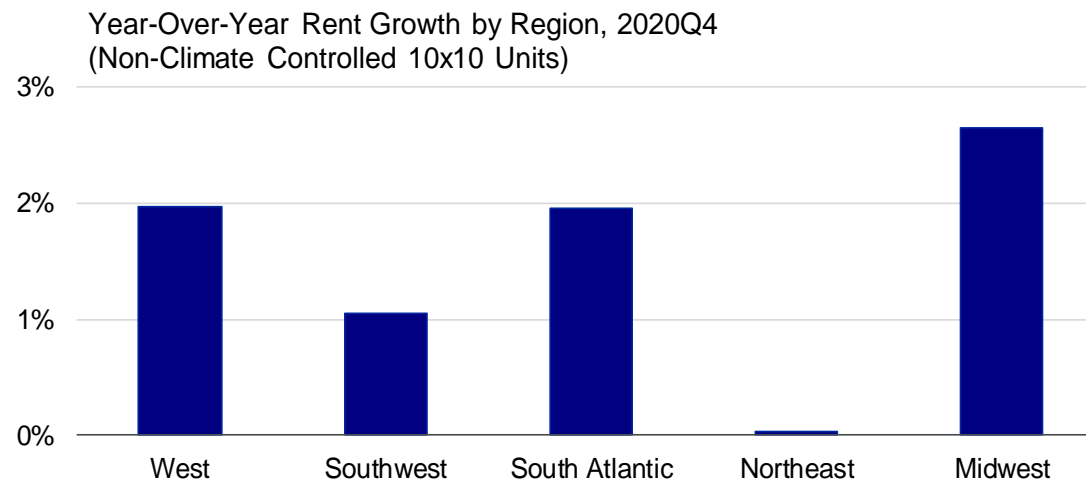
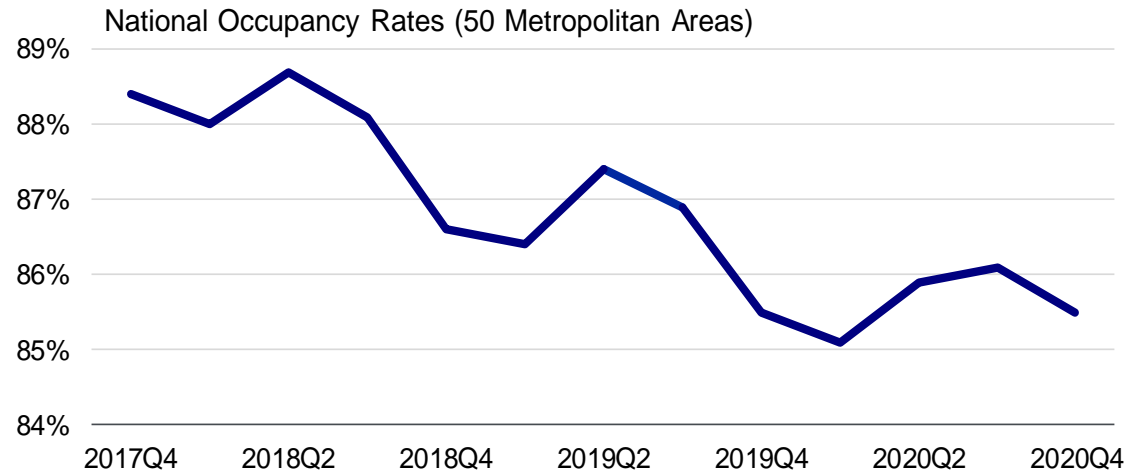
Source: Moody's Analytics REIS

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Specialty Sector Updates

Self Storage in the Fourth Quarter

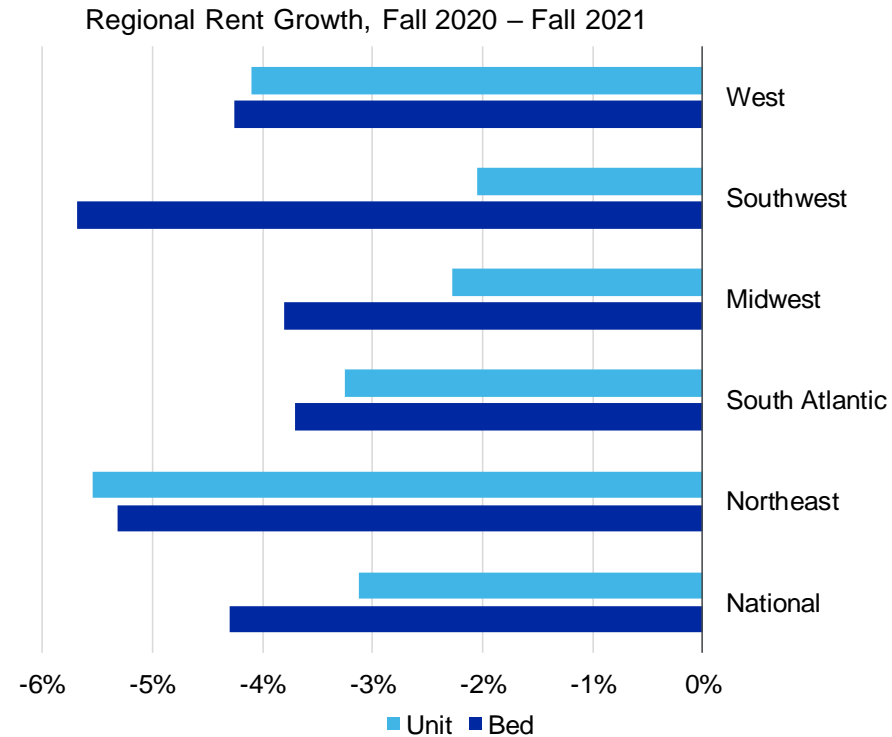
- » Occupancies essentially remained stable and flat throughout 2020, notwithstanding seasonality: we are at 85.5% at the fourth quarter of 2020 – the same level relative to the fourth quarter of 2019.
- » CC 10x10 rent growth was at 1.8% and NCC 10x10 rent growth was at 1.7% for all of 2020.



Source: Moody's Analytics REIS

Student Housing in the Fourth Quarter

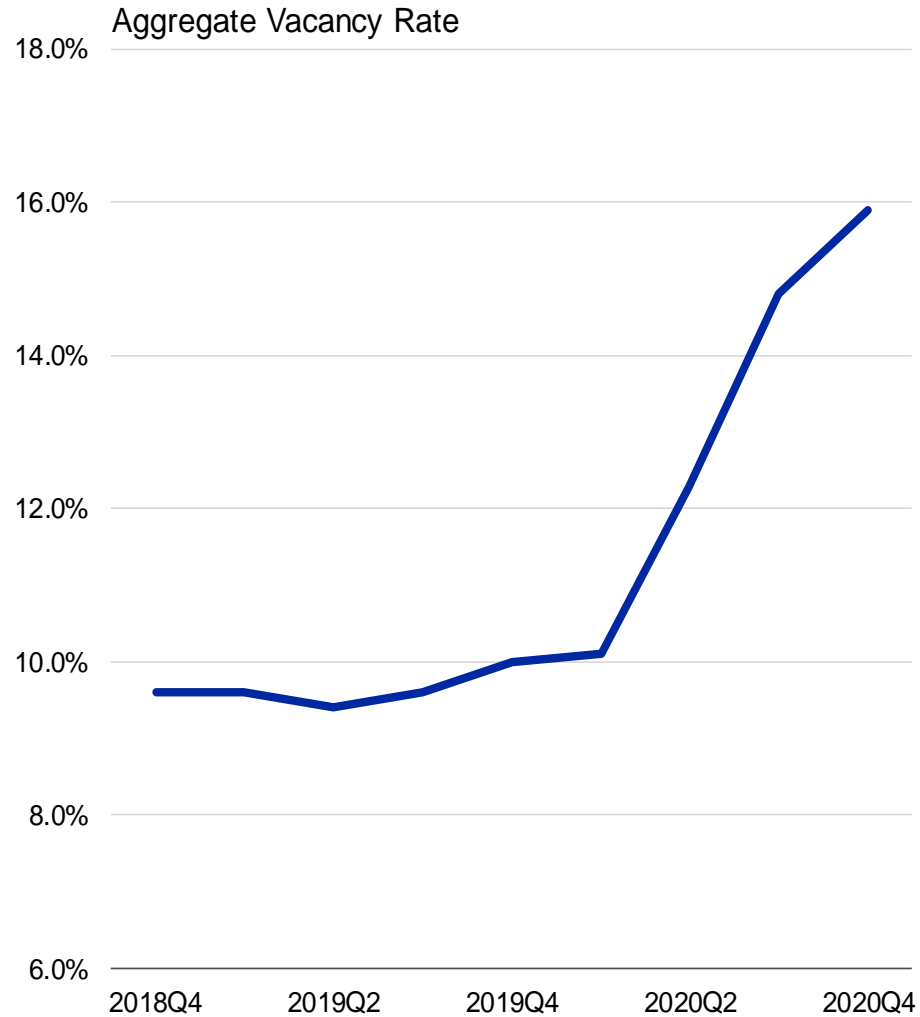
- » Tables present Fall 2020 to Fall 2021 forecasted changes in vacancies and rents across subtypes.
- » Given continuing uncertainty about how higher education as a service is to be delivered, expect vacancy increases and negative rent growth in Student Housing markets – more pronounced for properties that rent by the Bed.
- » Also more pronounced distress in geographies with relative oversupply and higher rent levels.



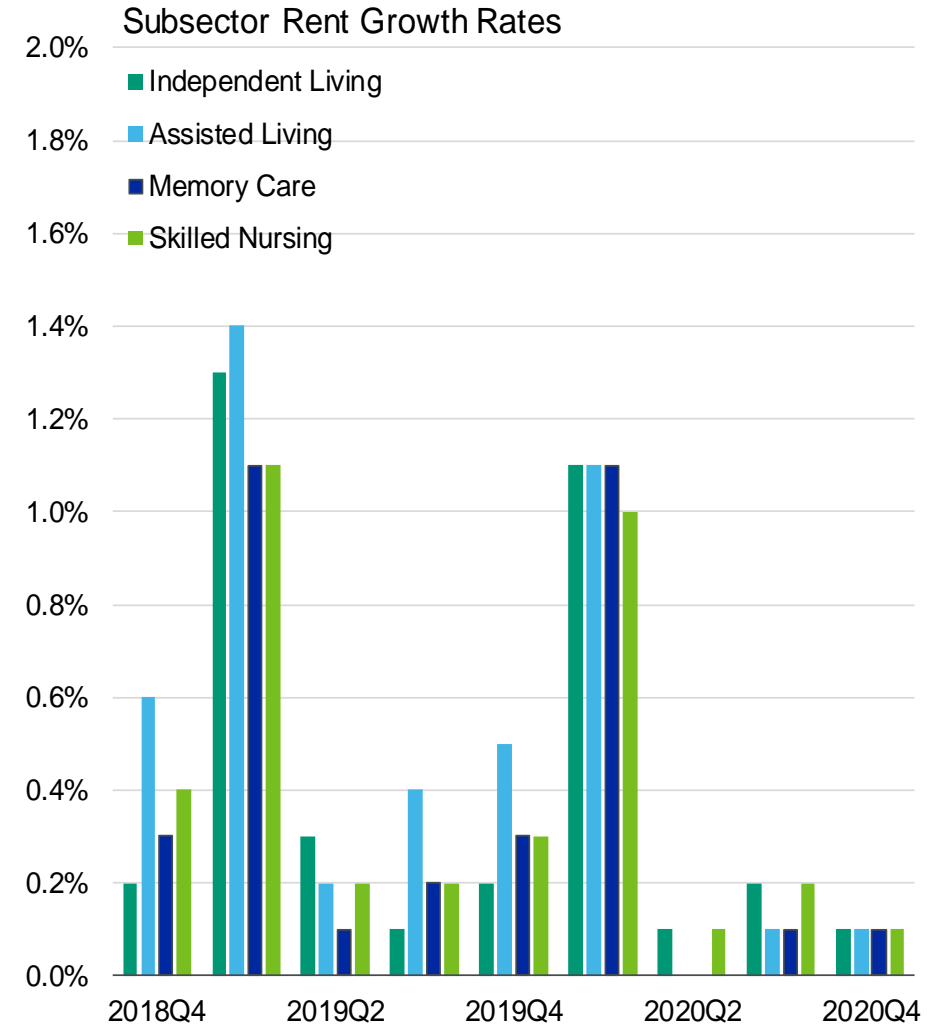
National Student Housing Market, Fall 2020 – Fall 2021				
	Vacancy Rate	Vacancy Chg, BPS	Rent Growth	Inventory Growth
Bed	8.8%	90	-4.3%	2.9%
Unit	3.6%	10	-3.1%	1.7%

Source: Moody's Analytics REIS

Senior Housing in the Fourth Quarter

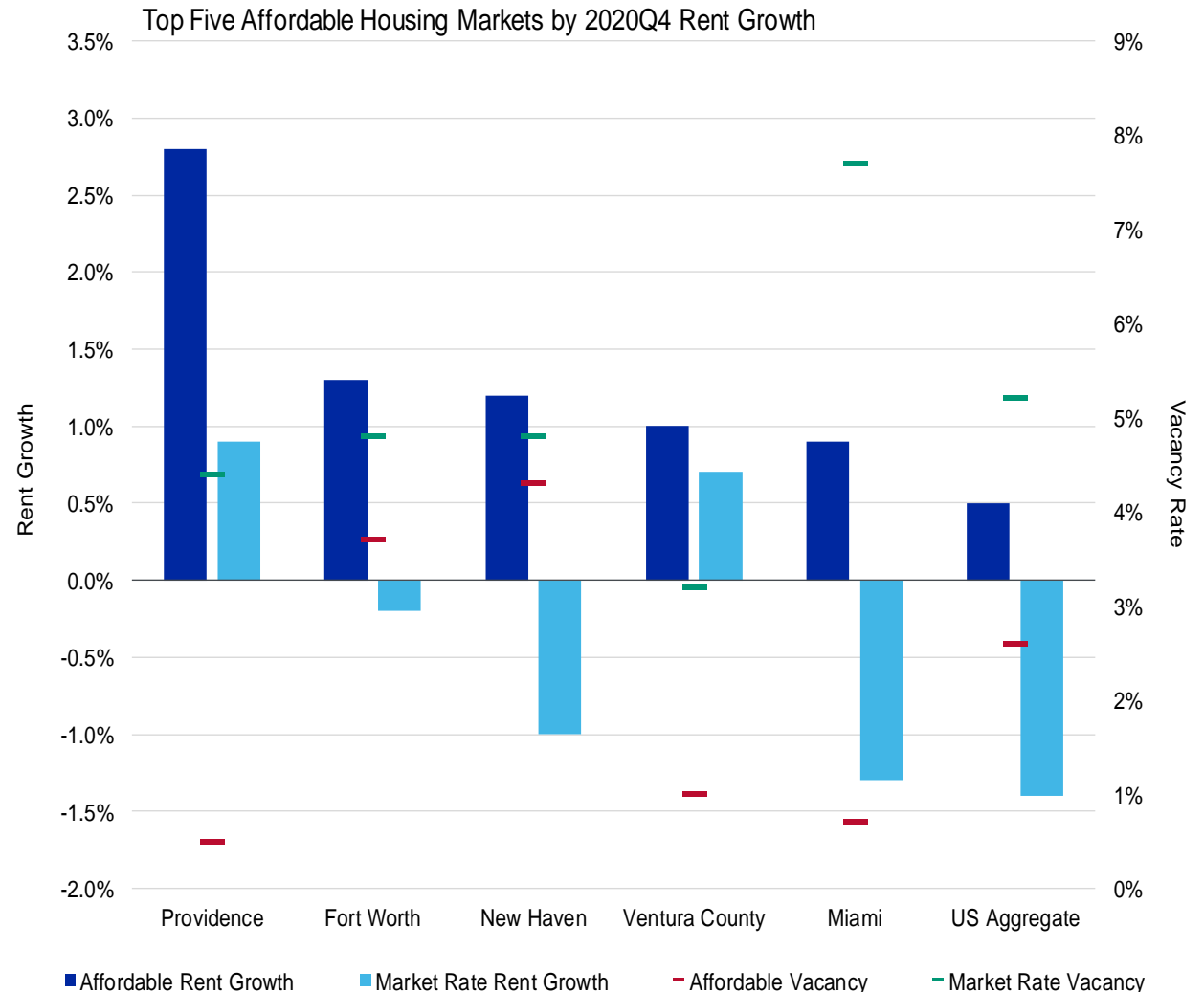


Source: Moody's Analytics REIS



LIHTC in the Fourth Quarter

- » Vacancies ended 2020 at a very tight 2.6% - and all this despite inventory growing by a relatively robust 2.5% for the year.
- » National level asking rents rose by 1.8% for the year, underscoring continued demand for affordable units.
- » Most LIHTC markets registered a consistently positive rise in rents every quarter in 2020.



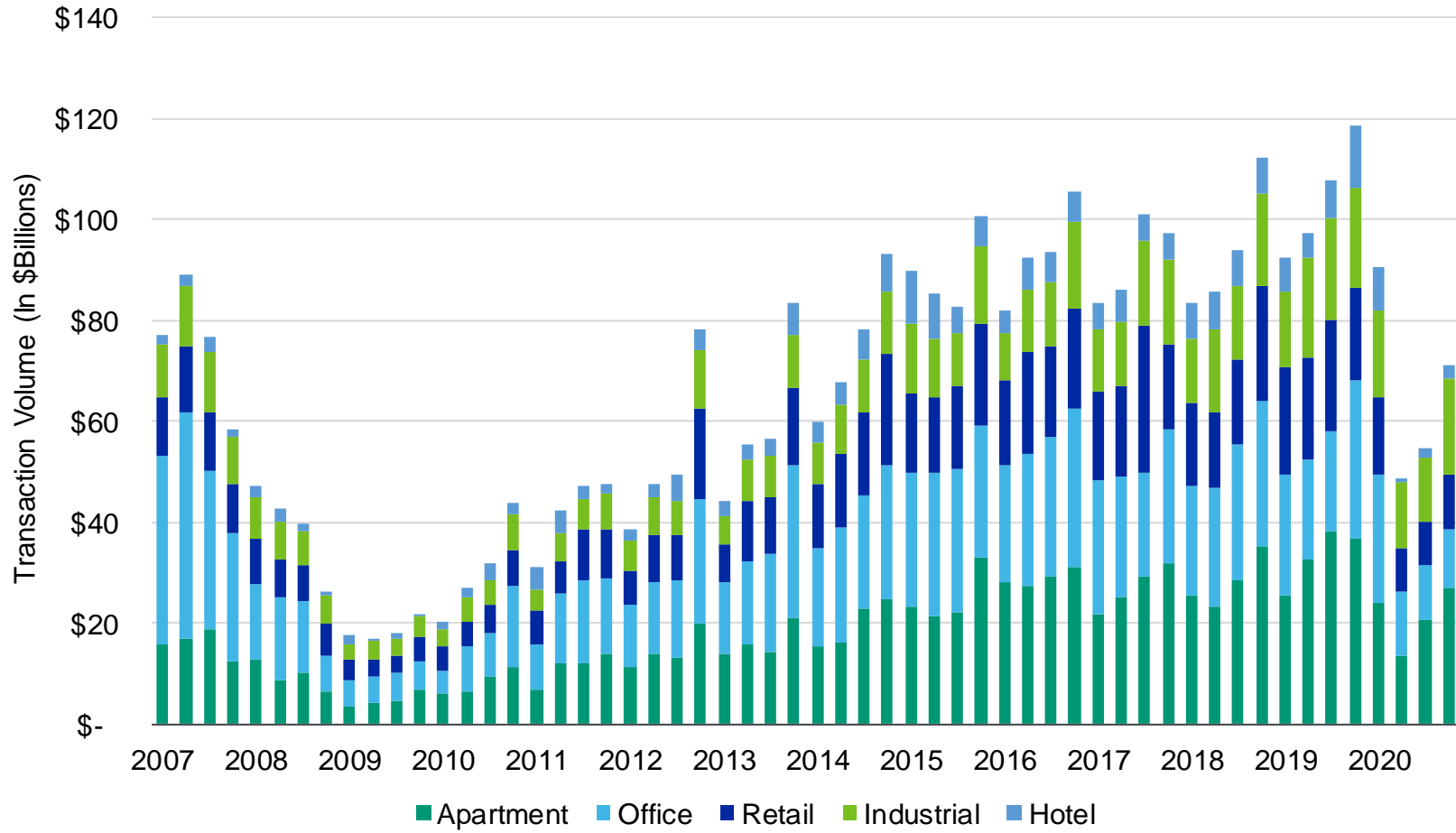
Source: Moody's Analytics REIS

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CRE Capital Markets

Transaction Activity Throughout 2020

Compare and contrast this with 2008-2009

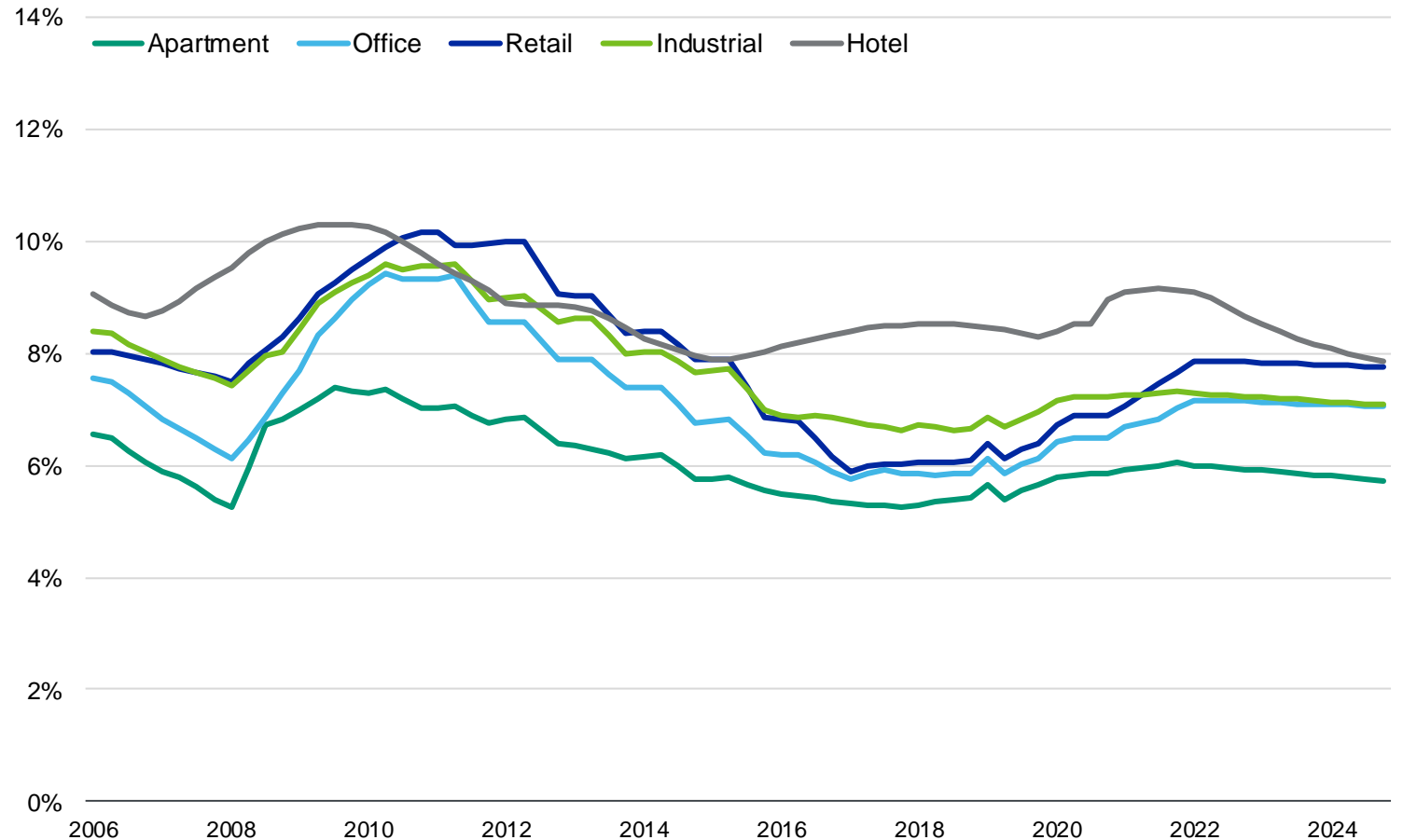


Source: Moody's Analytics REIS

Cap Rate Forecasts

Implied Peak-to-Trough Declines Significantly Lower

- » Cap rate increases are still forecasted for 2021 through 2022, but at a trajectory much less steep than before. Price declines are therefore expected to be much less severe.
- » Peak-to-trough declines for industrial (5%) and multifamily (6.4%) still reflect relative resilience versus office (12.6%) and retail (16.5%) – the latter two being subject to medium- to long-term evolutionary risk.



Source: Moody's Analytics REIS

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Questions from Participants and Closing Remarks

Questions from Participants

- » “You didn’t change much of what you were projecting for income drivers like rents and vacancies given predicted distress and long-term change – but you’ve revised your price decline forecasts towards a significantly more positive outlook. Why the divergence?”
- » “Earlier, you mentioned some policy-related risk related to higher taxes and more regulations. What was that about?”
- » “You sound almost optimistic about your projections for 2021. Am I hearing you right, or did I misinterpret the views you’re expressing in this call?”

Summary & Parting Thoughts

- » Fourth quarter GDP figures and job market signals suggest the need for continued fiscal and monetary support – which appears to be forthcoming.
- » 2020 was a tough year: record declines in rents posted for some property types; vacancies rising at a relatively fast clip for office and malls. Other property types like industrial and even Self Storage have held steady and proven relatively resilient.
- » Expect continuing distress on the income side of performance metrics, but less distressed sales given how the industry entered the downturn with less overreach.
- » Uncertainties remain, so let's continue the conversation to ensure that we can anticipate and plan for what's around the corner.

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