

The Post-COVID CRE World: Has the Apocalypse Been Cancelled?

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Agenda

1. Multifamily and CRE Update
2. Transaction Activity and Pricing Forecasts
3. Has the Apocalypse Been Cancelled? Explaining the Wedge

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Multifamily & CRE Update

National Apartment Market

Quarterly & annual market conditions

- » Vacancy rates ended the year at 5.3%, 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 |
|------|-----|-------------|----------------|----------------|----------------|--------------|
| 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 | \$1,184 | 1.3% | \$1,138 | 1.3% | 4.4% |
| 2014 | 4 | \$1,193 | 0.8% | \$1,147 | 0.8% | 4.4% |
| 2015 | 1 | \$1,205 | 1.0% | \$1,159 | 1.0% | 4.3% |
| 2015 | 2 | \$1,227 | 1.8% | \$1,179 | 1.7% | 4.2% |
| 2015 | 3 | \$1,249 | 1.8% | \$1,200 | 1.8% | 4.2% |
| 2015 | 4 | \$1,263 | 1.1% | \$1,213 | 1.1% | 4.3% |
| 2016 | 1 | \$1,274 | 0.9% | \$1,224 | 0.9% | 4.3% |
| 2016 | 2 | \$1,292 | 1.4% | \$1,240 | 1.3% | 4.2% |
| 2016 | 3 | \$1,308 | 1.2% | \$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% | 4.3% |
| 2017 | 2 | \$1,345 | 1.5% | \$1,285 | 1.3% | 4.4% |
| 2017 | 3 | \$1,363 | 1.3% | \$1,301 | 1.2% | 4.4% |
| 2017 | 4 | \$1,374 | 0.8% | \$1,310 | 0.7% | 4.6% |
| 2018 | 1 | \$1,390 | 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 | 1.4% | 4.6% |
| 2019 | 3 | \$1,490 | 1.0% | \$1,418 | 1.0% | 4.6% |
| 2019 | 4 | \$1,498 | 0.5% | \$1,425 | 0.5% | 4.7% |
| 2020 | 1 | \$1,504 | 0.4% | \$1,432 | 0.5% | 4.8% |
| 2020 | 2 | \$1,498 | -0.4% | \$1,427 | -0.3% | 4.9% |
| 2020 | 3 | \$1,474 | -1.6% | \$1,404 | -1.6% | 5.1% |
| 2020 | 4 | \$1,457 | -1.2% | \$1,387 | -1.2% | 5.3% |
| 2021 | 1 | \$1,454 | -0.2% | \$1,384 | -0.2% | 5.3% |

Annual

| Year | Asking Rent | Percent Change | Effective Rent | Percent Change | Vacancy Rate |
|------|-------------|----------------|----------------|----------------|--------------|
| 2011 | \$1,070 | 2.5% | \$1,019 | 2.8% | 5.3% |
| 2012 | \$1,107 | 3.5% | \$1,061 | 4.1% | 4.7% |
| 2013 | \$1,146 | 3.5% | \$1,100 | 3.7% | 4.4% |
| 2014 | \$1,193 | 4.1% | \$1,147 | 4.3% | 4.4% |
| 2015 | \$1,263 | 5.9% | \$1,213 | 5.8% | 4.3% |
| 2016 | \$1,313 | 4.0% | \$1,260 | 3.9% | 4.2% |
| 2017 | \$1,374 | 4.6% | \$1,310 | 4.0% | 4.6% |
| 2018 | \$1,446 | 5.2% | \$1,376 | 5.0% | 4.8% |
| 2019 | \$1,498 | 3.6% | \$1,425 | 3.6% | 4.7% |
| 2020 | \$1,457 | -2.7% | \$1,387 | -2.7% | 5.3% |
| 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 Office Market

Quarterly & annual market conditions

- » Office vacancies rose by 100 basis points in 2020, ending the fourth quarter at 17.8%.
- » 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 |
|------|-----|----------------|-------------|----------------|----------------|----------------|--------------|
| 2014 | 1 | 10.1 | \$29.54 | 0.8% | \$23.87 | 0.8% | 17.0% |
| 2014 | 2 | 2.0 | \$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 | 4.9 | \$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% | \$26.26 | 0.4% | 16.4% |
| 2017 | 4 | 7.7 | \$32.57 | 0.6% | \$26.42 | 0.6% | 16.4% |
| 2018 | 1 | 6.2 | \$32.85 | 0.9% | \$26.65 | 0.9% | 16.5% |
| 2018 | 2 | 2.8 | \$33.08 | 0.7% | \$26.84 | 0.7% | 16.6% |
| 2018 | 3 | 5.2 | \$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 | 5.1 | \$33.59 | 0.4% | \$27.27 | 0.5% | 16.7% |
| 2019 | 2 | 5.3 | \$33.87 | 0.8% | \$27.50 | 0.8% | 16.8% |
| 2019 | 3 | 10.0 | \$34.14 | 0.8% | \$27.72 | 0.8% | 16.8% |
| 2019 | 4 | 15.2 | \$34.35 | 0.6% | \$27.90 | 0.6% | 16.8% |
| 2020 | 1 | 0.0 | \$34.49 | 0.4% | \$28.02 | 0.4% | 17.0% |
| 2020 | 2 | 3.1 | \$34.48 | 0.0% | \$27.93 | -0.3% | 17.1% |
| 2020 | 3 | -4.5 | \$34.54 | 0.2% | \$27.88 | -0.2% | 17.4% |
| 2020 | 4 | -7.8 | \$34.51 | -0.1% | \$27.73 | -0.5% | 17.8% |
| 2021 | 1 | -15.8 | \$34.40 | -0.3% | \$27.51 | -0.8% | 18.2% |

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 | 29.3 | \$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 | 23.8 | \$33.45 | 2.7% | \$27.14 | 2.7% | 16.7% |
| 2019 | 35.4 | \$34.35 | 2.7% | \$27.90 | 2.8% | 16.8% |
| 2020 | -9.2 | \$34.51 | 0.5% | \$27.73 | -0.6% | 17.8% |
| 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% |

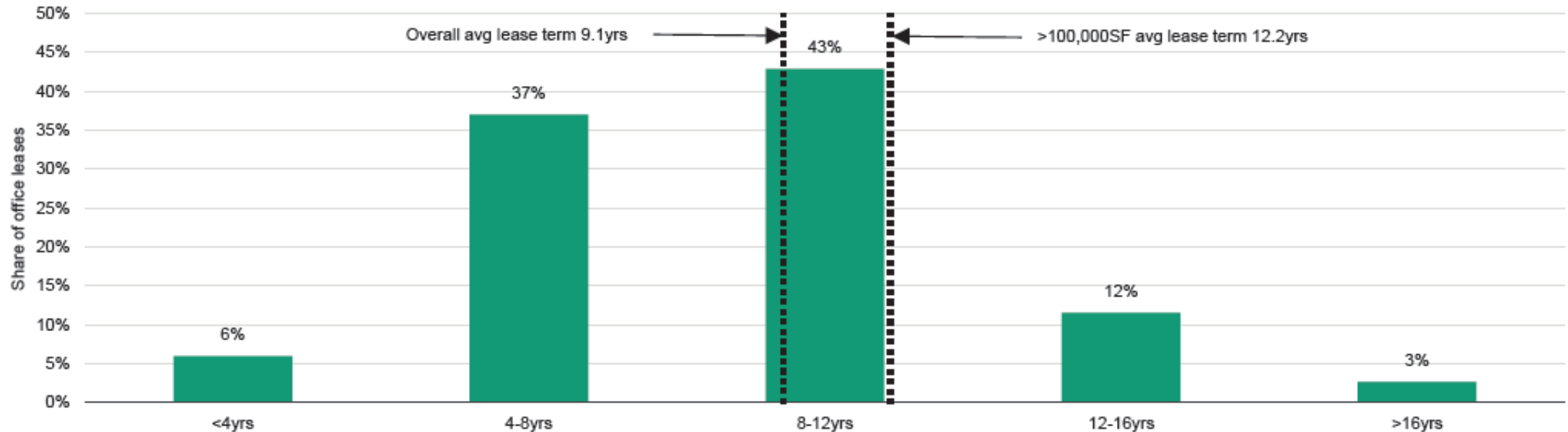
Source: Moody's Analytics REIS;
79 of 190 Office Markets

Net absorption figures are in millions of square feet.

But Why Hasn't the Other Shoe Dropped?

The evolution of the office sector will take time

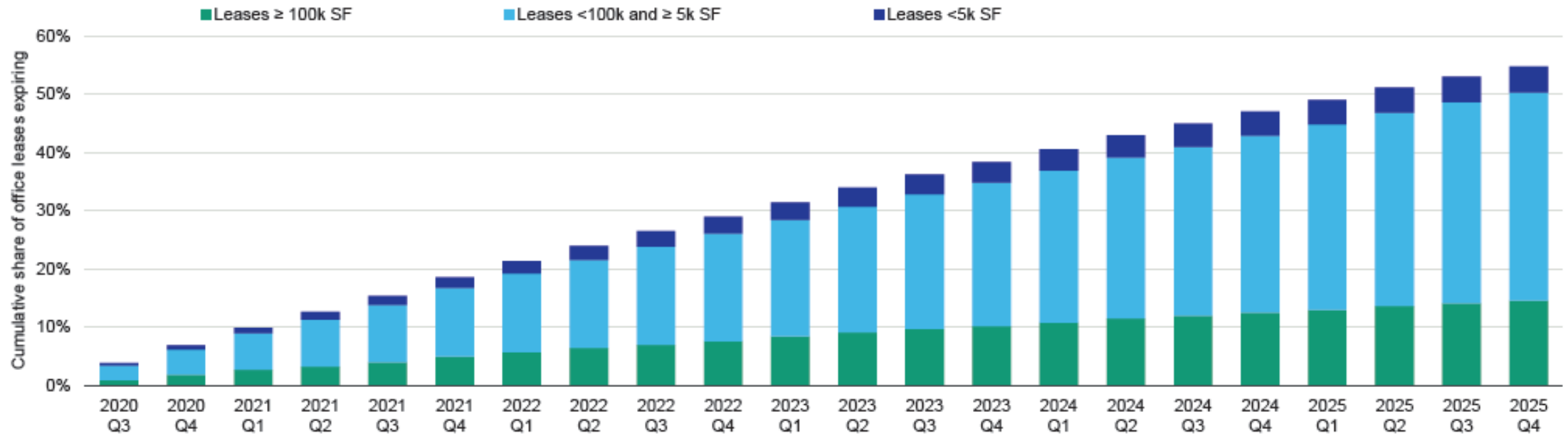
The majority of office lease terms are greater than eight years
Distribution lease terms for US offices of 10,000 SF or more



Sources: Moody's Investor Service, Moody's Analytics, Compstak

How Much Time, Exactly?

Office leases expire slowly over many years
Quarterly share of office leases expiring in the six major markets*



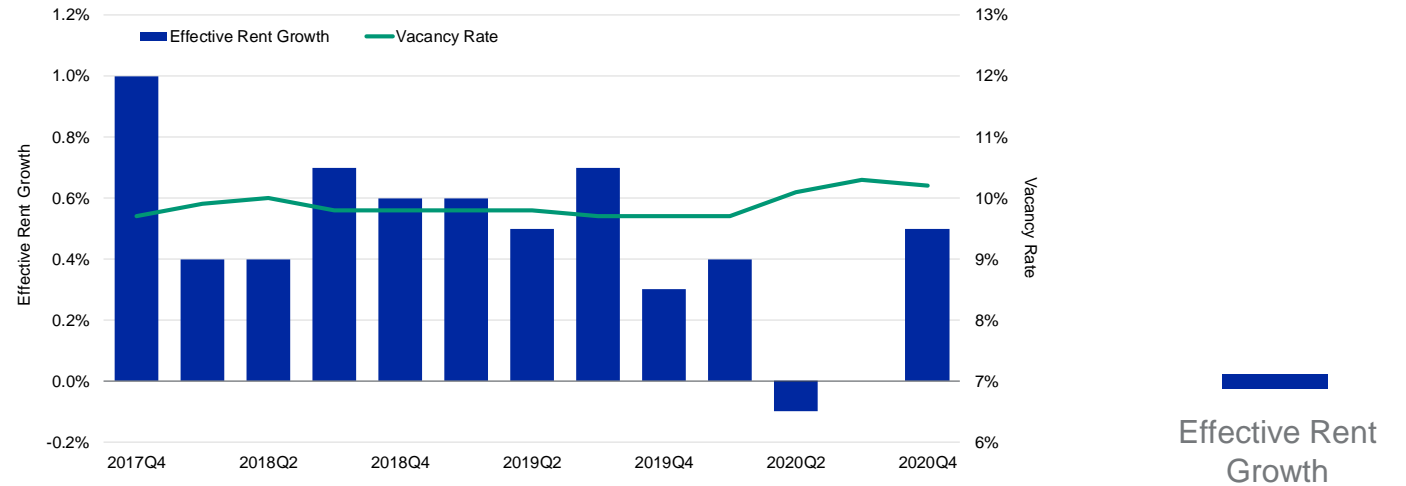
*The six markets in this chart are New York, San Francisco, Chicago, Boston, Los Angeles, and Washington DC.

Sources: Moody's Investor Service, Moody's Analytics, Compstak

Industrial: Holding Steady in the Fourth Quarter

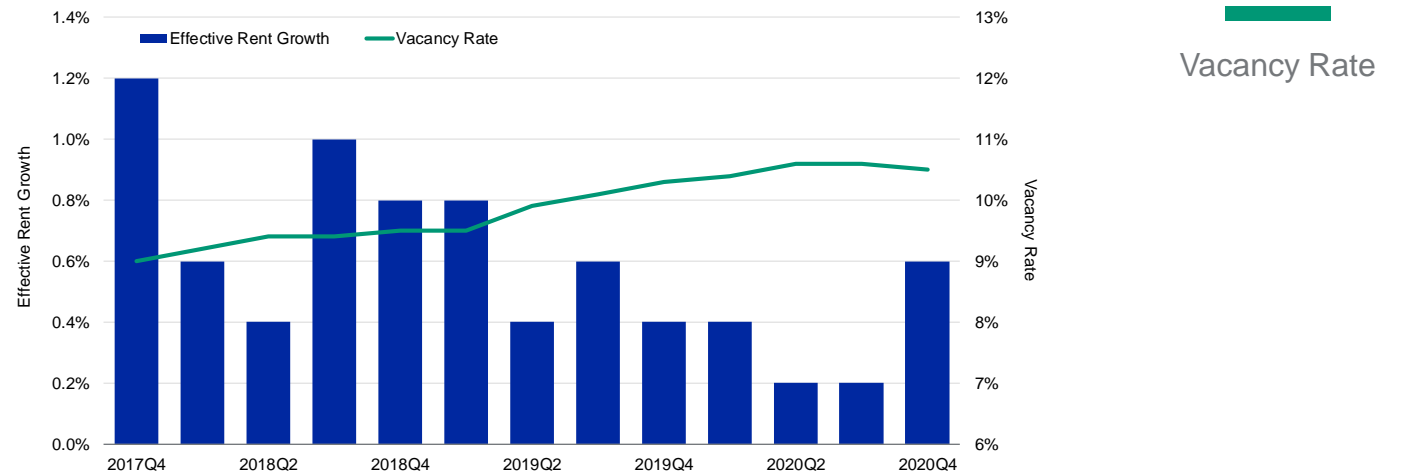
Flex/R&D

- » 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

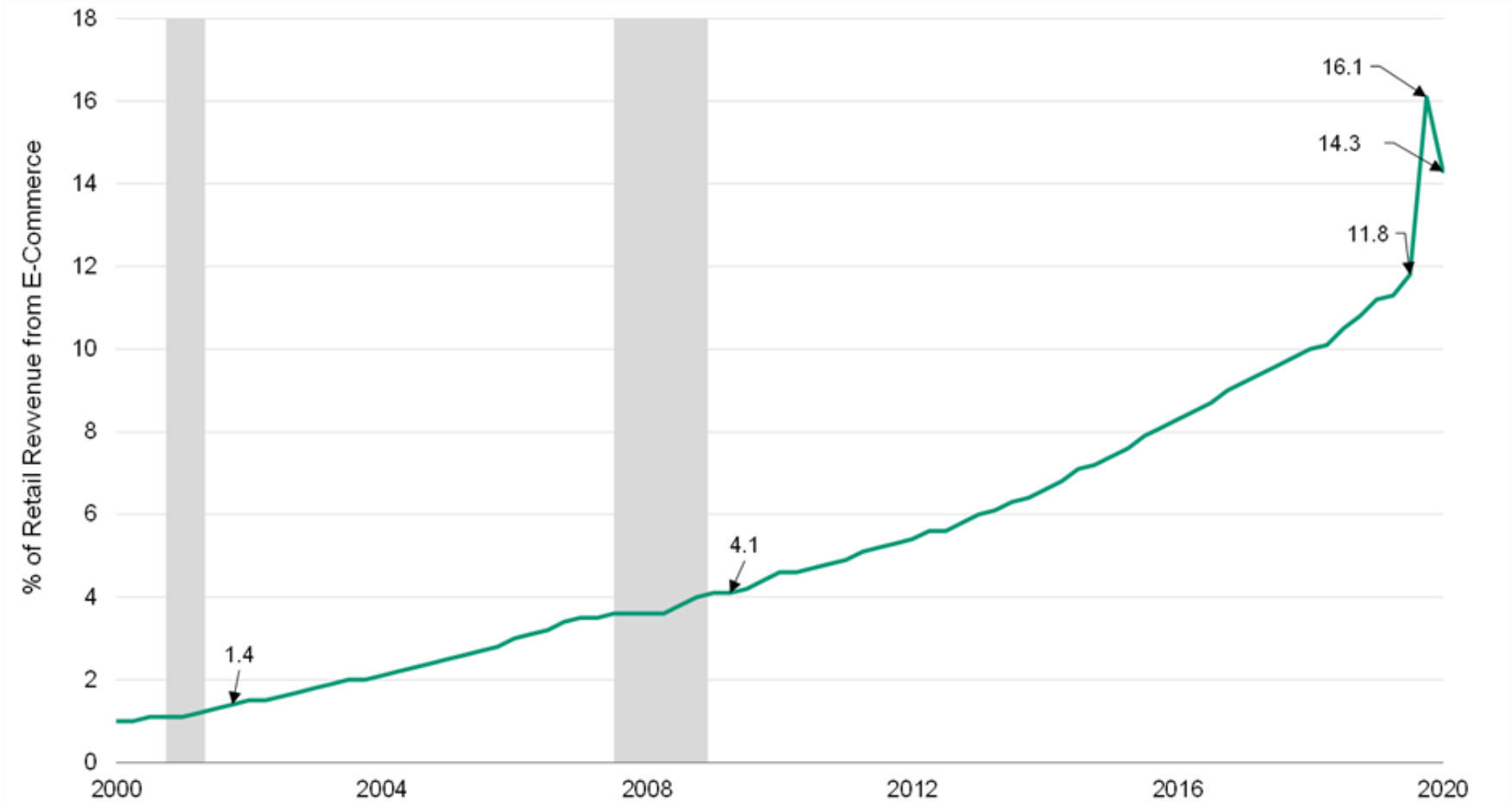
- » Warehouse/distribution vacancies *down* by 10 basis points in the fourth quarter to 10.5% - despite close to 140 million SF of new space delivered in 2020.
- » Effective rents rose by 0.6% in the quarter.



Source: Moody's Analytics REIS

The Transition to E-Commerce

Will the pendulum swing back fully?



Sources: US Department of Commerce, Moody's Analytics

The Reality of Retail Repurposing

How much fallow retail space do industrial developers really want?

- » Retail conversions to logistics could amount to 5-10 million SF per year, which represents:
 - » < 5% of Last Touch facilities
 - » < 1% of existing logistics real estate facilities
 - » < 2% of typical annual logistics real estate new construction deliveries
 - » < 10% of the logistics space needed to meet projected incremental demand due to an acceleration of structural trends related to COVID-19.

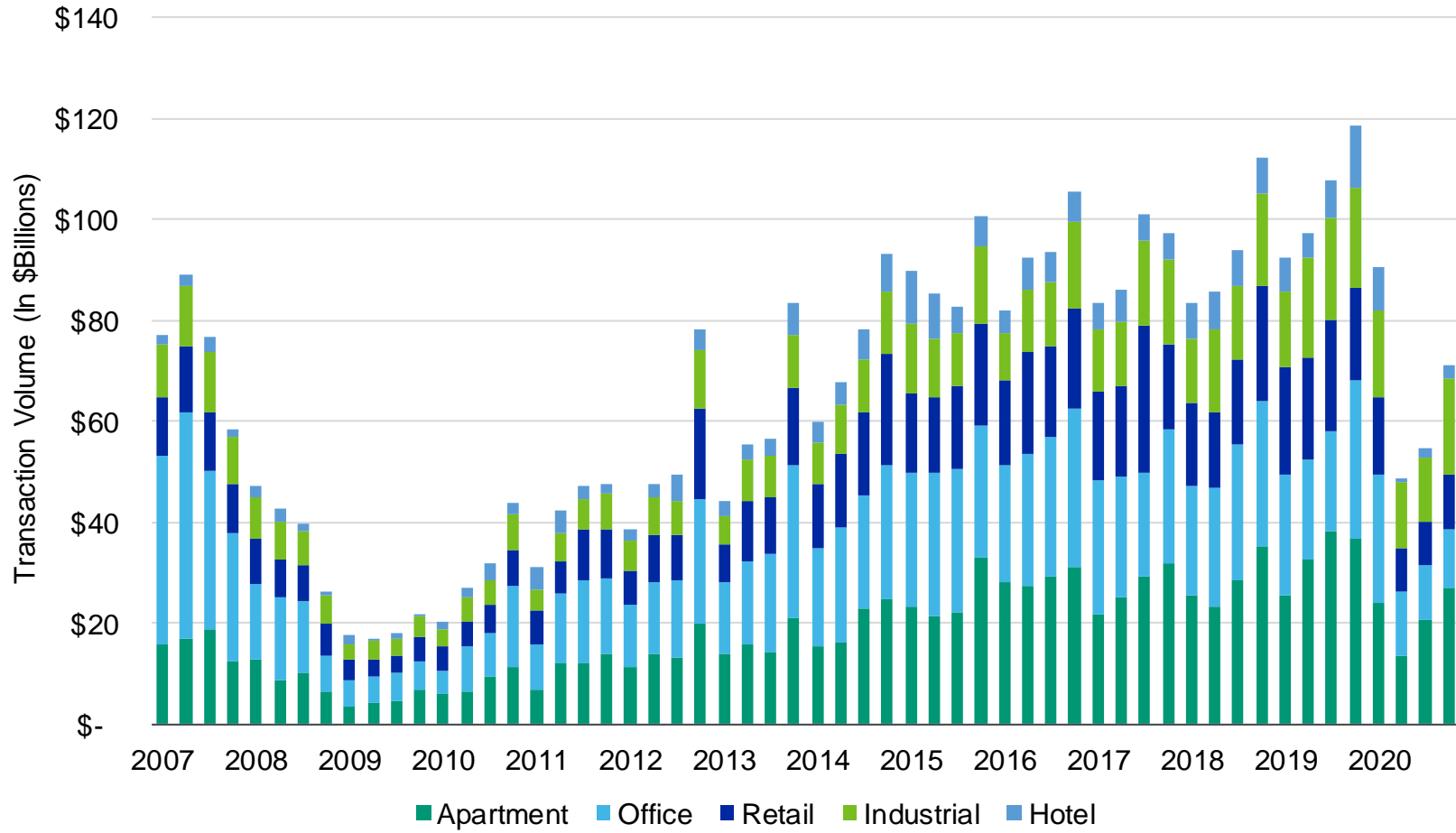
Sources: Prologis, Moody's Analytics

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CRE Pricing and Transaction Markets

Transaction Activity Throughout 2020

Compare and contrast this with 2008-2009

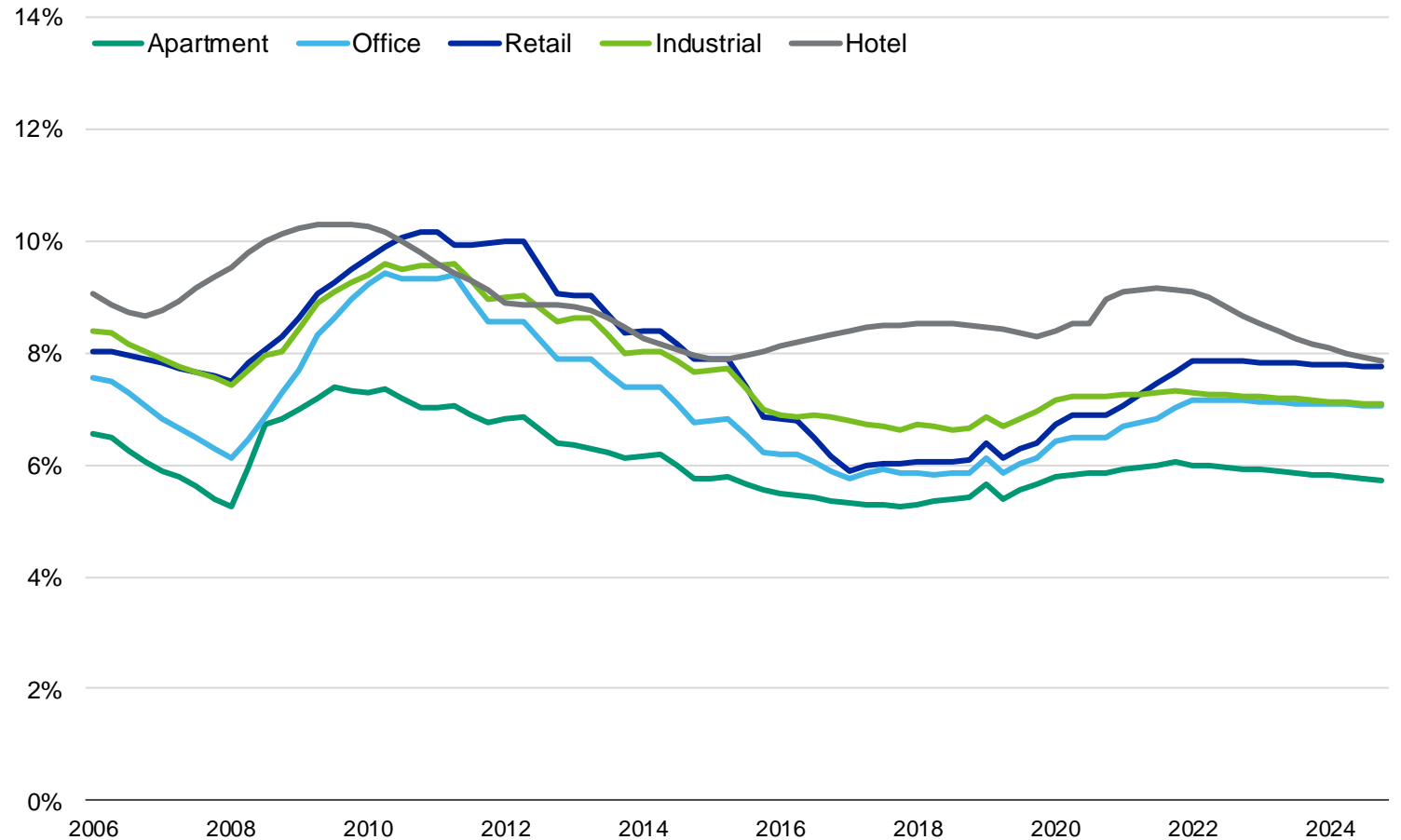


Source: Moody's Analytics REIS

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.



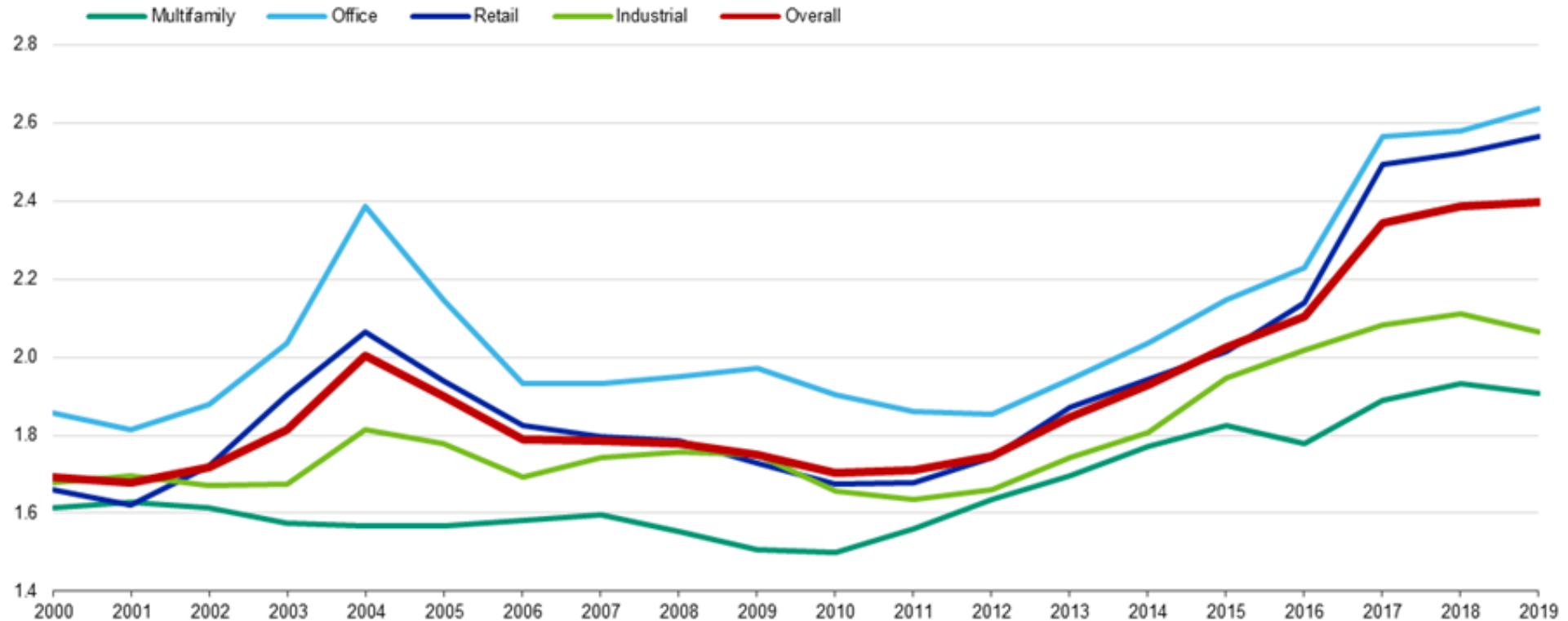
Source: Moody's Analytics REIS

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Explaining the Wedge

You Were Well Behaved: Part 1

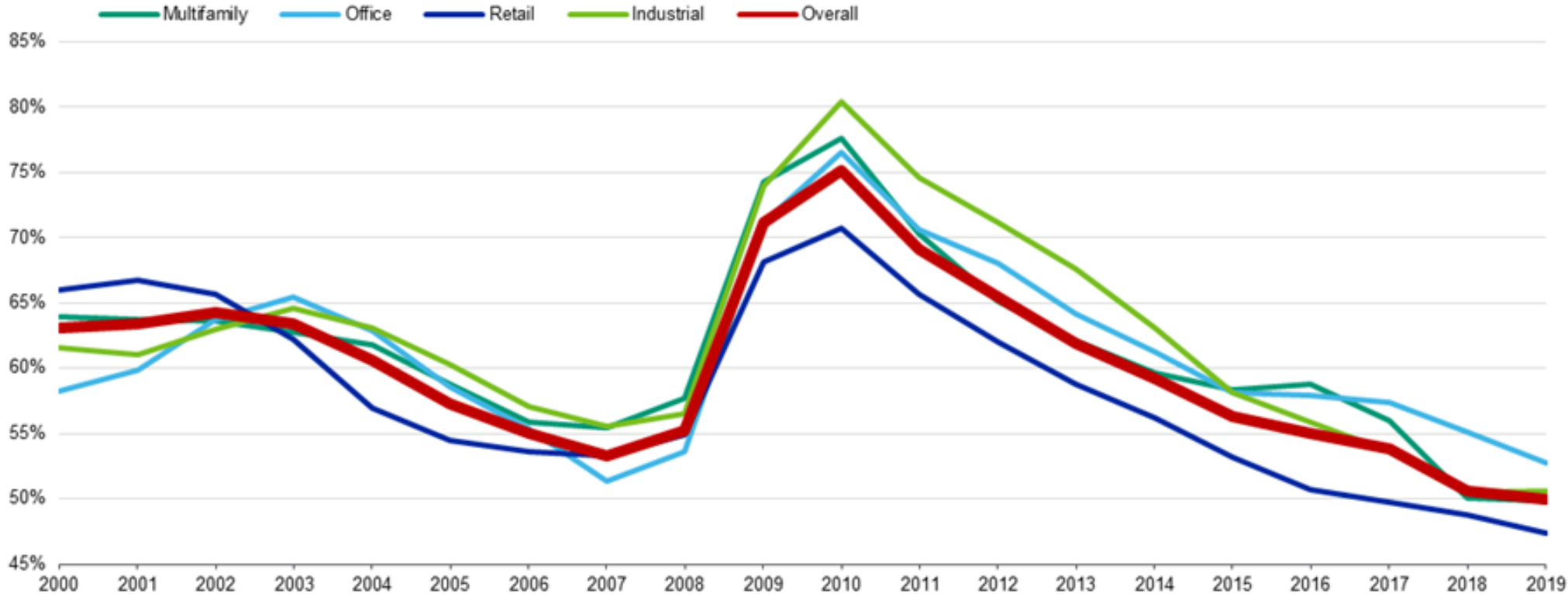
Historical trends in DSCR, 2000-2019



Source: Moody's Analytics

You Were Well Behaved: Part 2

Historical trends in LTV, 2000-2019



Source: Moody's Analytics



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