

The Future of Multifamily and CRE in Energy Markets

Victor Calanog PhD

Agenda

1. Welcoming Remarks
2. COVID-19 – Thinking Through Economic Scenarios
3. COVID-19 – Property Types and Geographic Markets
4. What's Next, and What Can We Really Know?
5. Questions & Answers

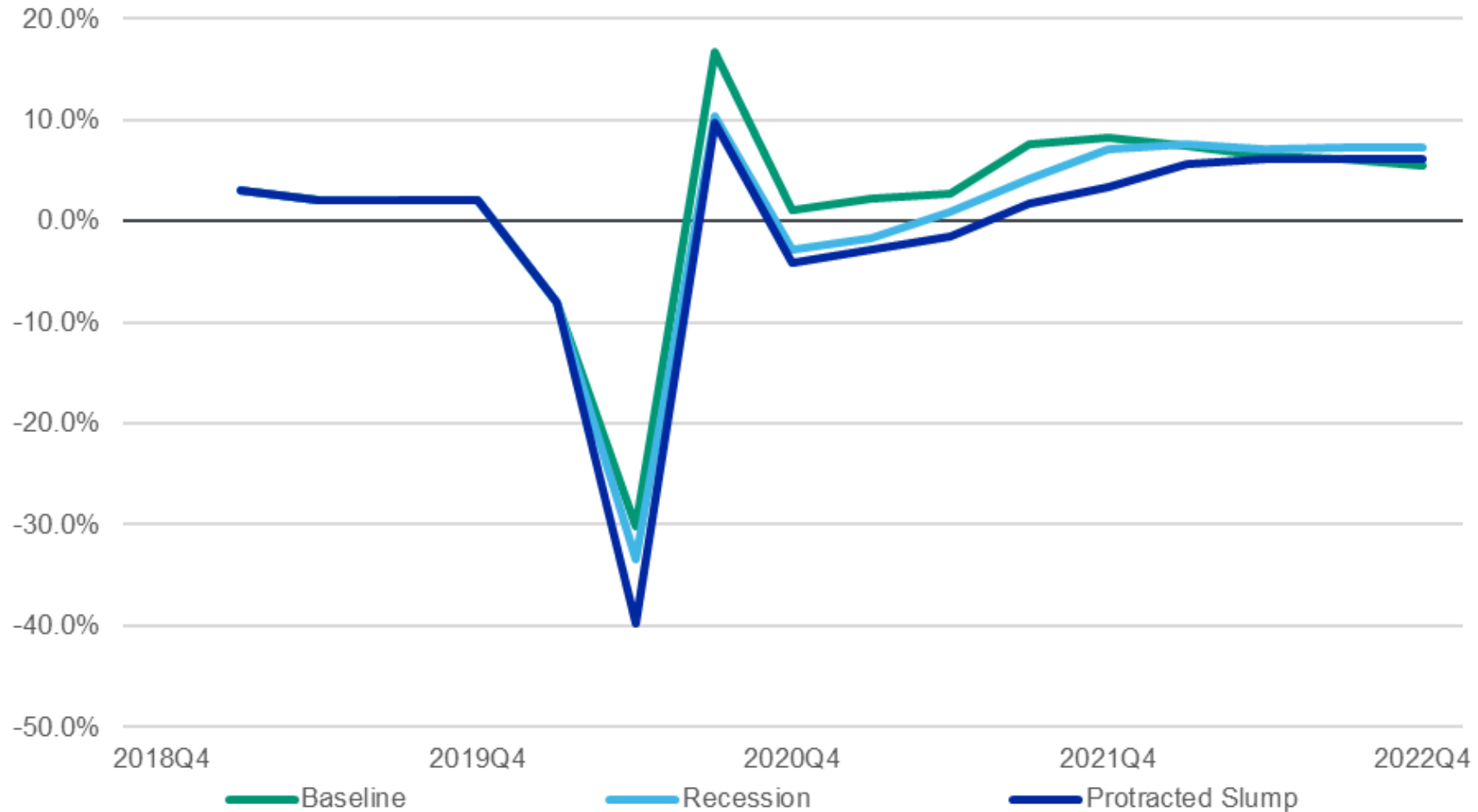
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COVID-19 – Thinking Through Economic Scenarios

Victor Calanog PhD, *Head of CRE Economics*
Moody's Analytics

What Does the Crystal Ball Say (Today?)

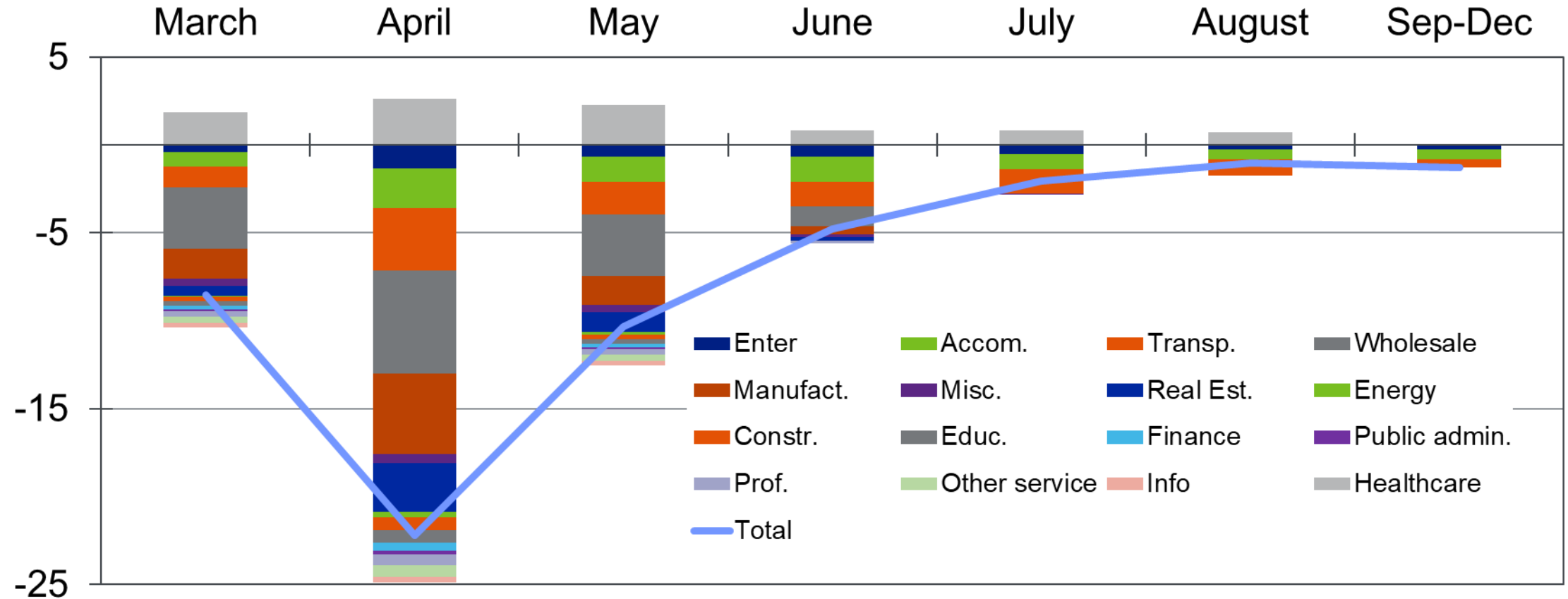
Real GDP, annualized quarter/quarter growth rate



Sources: BEA; Moody's Analytics

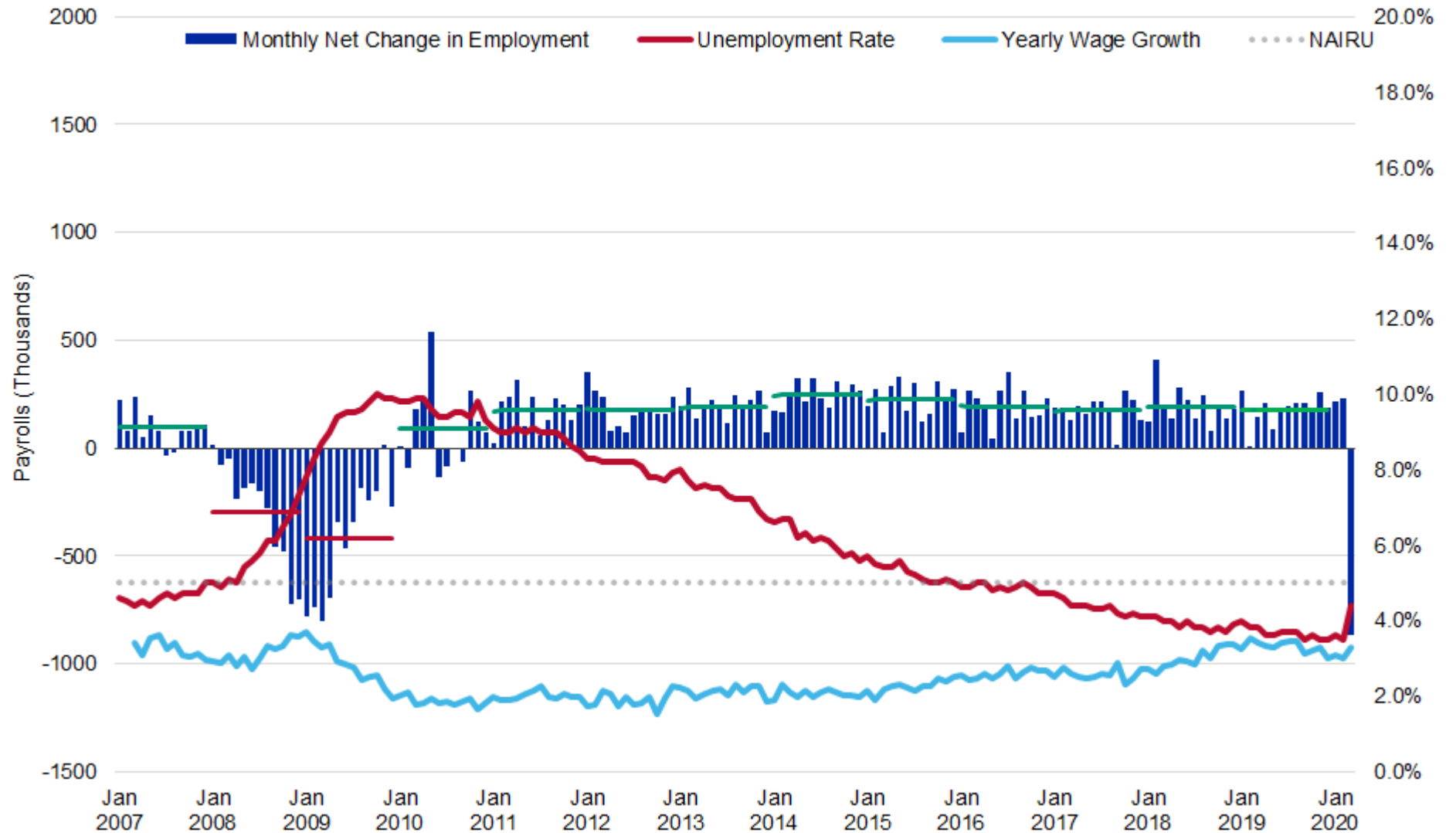
Business Lockdowns Hit Hard

Deviation from typical U.S. GDP, annual comparisons by industry 2020



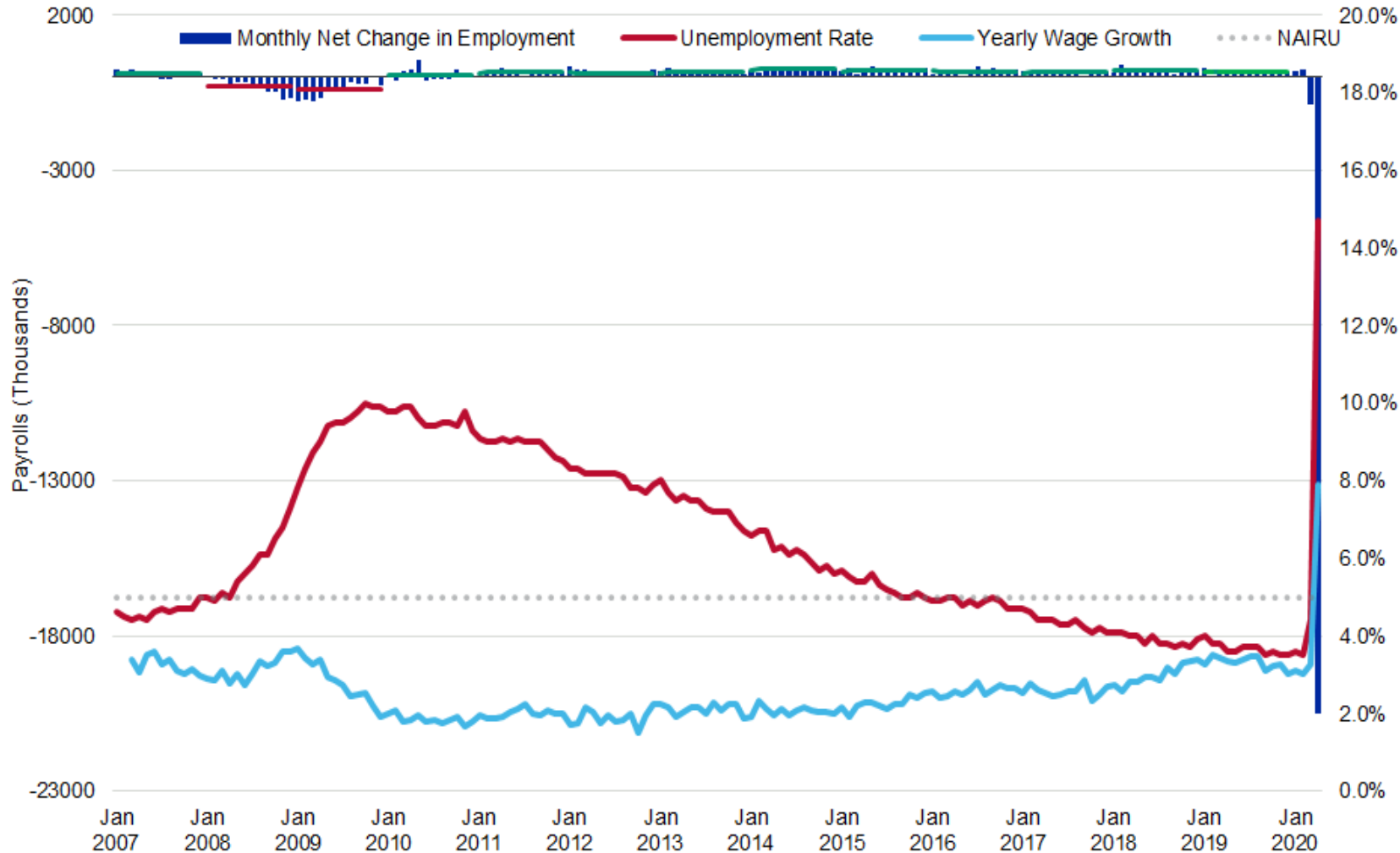
Source: Moody's Analytics

Job Losses in March



Source: BLS

Job Losses in April



Source: BLS; New York Times

The New York Times
 VOL. CLXIX ... No. 58,688 ... SATURDAY, MAY 9, 2020

U.S. UNEMPLOYMENT IS WORST SINCE DEPRESSION

MONTHLY CHANGE IN JOBS SINCE THE END OF WORLD WAR II

Georgia Killing Puts Spotlight on a Police Force's Troubled History

The article by Rick Ross, Rick and Pamela and Jerry B. Reynolds, BRUNSWICK, Ga. — When the Glynn County Police Department arrived at the scene of a fatal shooting in February in south-eastern Georgia, officers escorted a former colleague with the victim's blood on his hands. They took down his version of events and let him and his adult son, who had fired the shots, go home. Later that day, Wanda Cooper, the mother of the 25-year-old victim, Alton Arbery, received a call from a police investigator that recounted later that the investigation...

April's Rate of 14.7% Touches All Parts of Economy

By NELSON D. SCHWARTZ and BEN CASSELLAW
 The American economy plunged deeper into crisis last month, losing 20.3 million jobs as the unemployment rate jumped to 14.7 percent, the worst downturn since the Great Depression. The Labor Department's monthly report on Friday provided the clearest picture yet of the breadth and depth of the economic damage — and how swiftly it spread — as the coronavirus pandemic swept the country. Job losses have encompassed the entire economy, affecting every major industry. Areas like leisure and hospitality had the biggest losses in April, but even health care shed more than a million jobs. One sign of the war, including many women and members of racial and ethnic minorities, have been hit especially hard.

As Official Toll Ignores Reality, Mexico's Hospitals Are Overrun

By AMAN SHEKH
 MEXICO CITY — The Mexican government is not reporting hundreds, possibly thousands, of deaths from the coronavirus in Mexico City, dismissing accusations officials who have tallied more than three times as many fatalities as the capital than the government publicly acknowledges, according to officials and confidential data reviewed by The New York Times. The omission has come as a lead to recent weeks, with Mexico City alone reporting the government to the deaths repeatedly, hoping it will ease panic in the public about the toll of the virus in their state's biggest city and, by extension, the country at large. But that has not happened. Doctors in overwhelmed hospitals in Mexico City say the reality of the epidemic is being hidden from the country. In some hospitals, patients lie on the floor, splashed on mattresses. Elderly people are propped up on gurneys that are closer to 20 percent full. It is not possible that the recovery, too, will be swift, and that, as the pandemic rages, health-care workers will be exhausted, and that many will be fundamentally healthy before the virus will be beaten. The report was that nearly 90 percent of the country's hospitals had been temporarily shut all over the country in the coming months. President Trump indicated his view in an interview Friday morning on Fox News. "These jobs will be lost."

In Flynn Case, Russia Inquiry Is Barr's Target

By MARK HAZZETH
 WASHINGTON — Shortly after admitting guilt to a federal judge in December 2017 for lying to the F.B.I., Michael T. Flynn issued a statement saying what he did was wrong, and "through my faith in God, I am working to set things right." It turns out that the only higher power that Mr. Flynn needed was Attorney General William P. Barr. Mr. Barr's extraordinary decision to drop the criminal case against Mr. Flynn shocked legal experts, won President Trump's praise and prompted a career prosecutor to quit the case. It was the latest in Mr. Barr's steady effort to undo the results of the investigations by Robert S. Mueller III, the special counsel. Mr. Barr has repeatedly said as acting justice, and the president more bluntly as an executive in political payback. In his decision and public comments over the past year, Mr. Barr has said an "independent" to the one that Mr. Mueller had led in the investigation. Where the special counsel had come on Russia's campaign effort to interfere in the 2016 election, the Trump campaign's openness to it and the president's determination to impede the inquiry, Mr. Barr has become central to the investigations. He has suggested that they were undertaken by law enforcement and intelligence officials long as bringing political harm to Mr. Trump.

Long Path to Arrests of Ex-Officer and Son in Black Man's Death

By PETER BAKER and MICHAEL CROWLEY
 WASHINGTON — In his charge to respect the Constitution, President Trump faces the challenge of what he said to be getting back to the workplace. But the past few days have demonstrated that even his own workplace may not be safe from the coronavirus. Vice President Mike Pence's press secretary tested positive for the virus in Florida, forcing a delay in the departure of Air Force One while a half-dozen other members of his staff were taken off the plane for further testing. That came only a day after word that one of the president's own military aides had been infected. All of which raised an obvious question: If it is hard to maintain a healthy environment at 1600 Pennsylvania Avenue, the most famous office address in the world, where staff members are tested regularly, some every day, how can the president travel across the country without anyone getting sick? The answer, it seems, is that the same resources established to investigate the virus in the White House, any way you look at it, said Justice Ketanji L. Brown, a former assistant secretary of homeland security under President Barack Obama. "Whether it's contained or not, we will know soon enough. But the fact that a place that is so heavily guarded as the White House is not able to stop the virus has not been a surprise."

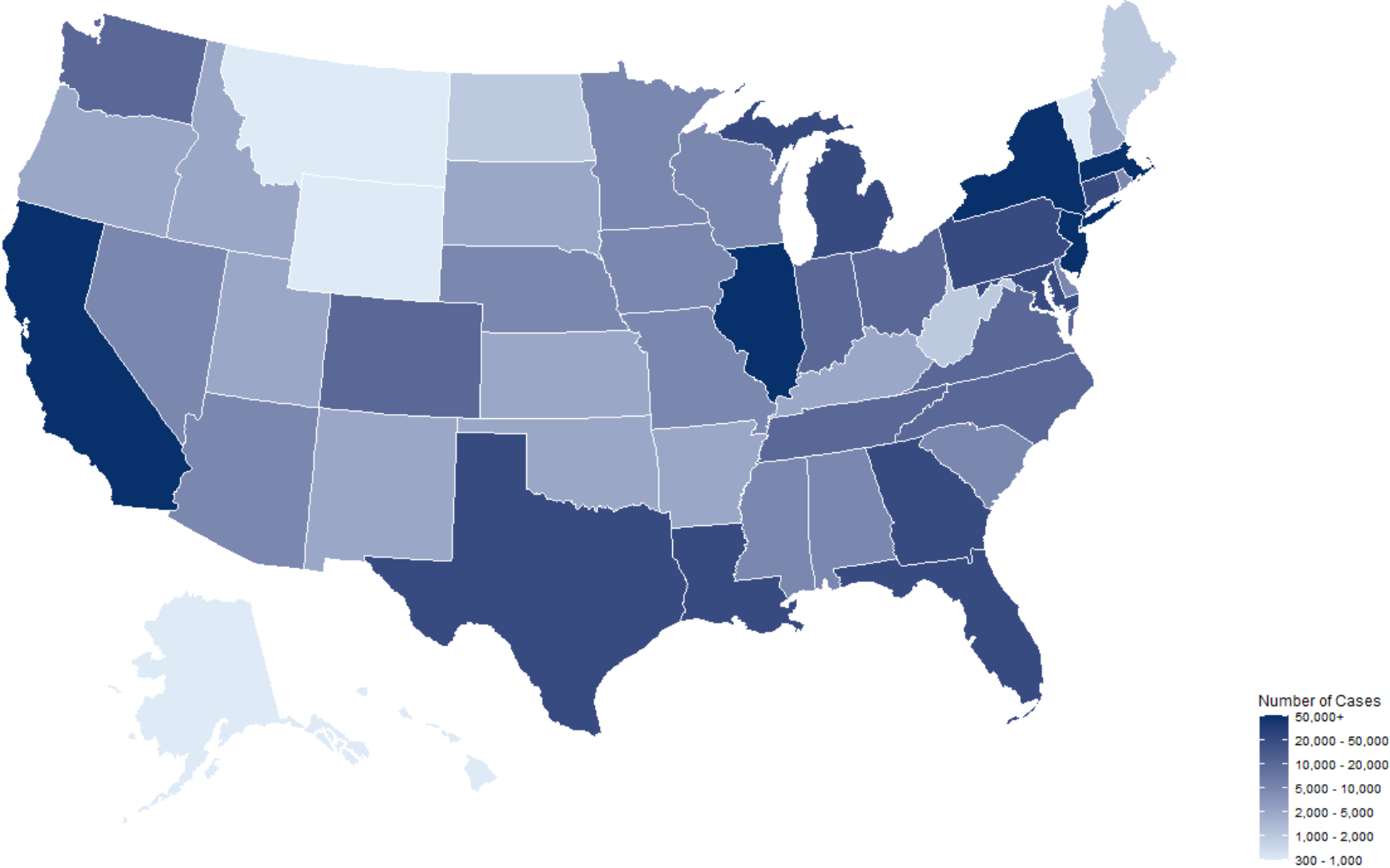
Anyone Up to Shoot Hoop?

Good courts are open nationwide, pending a reprieve from the clarion call of stay-at-home orders.

A Good Walk, Unspilled

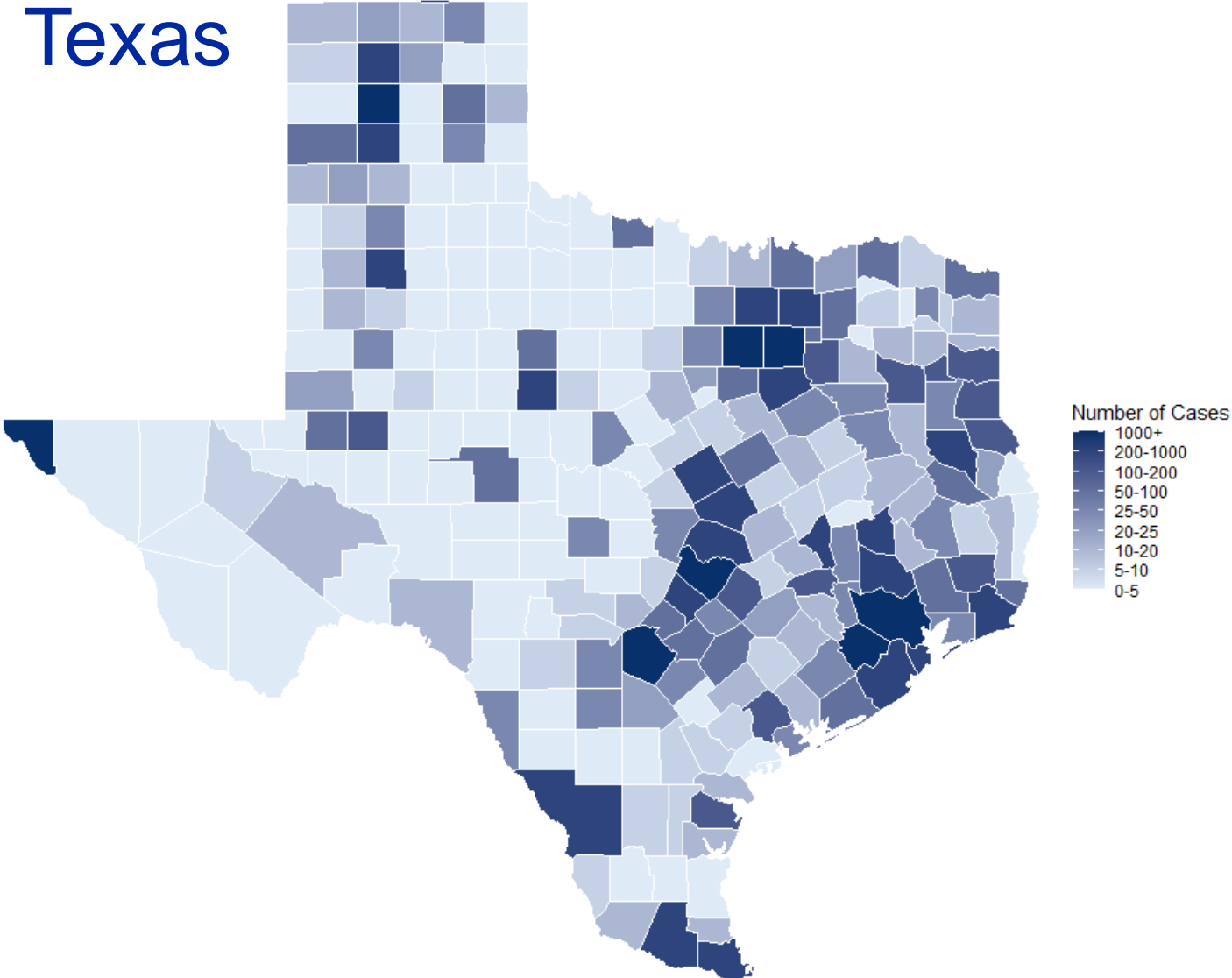
Timothy Egan

Concentration Risk Apparent Given Identified Cases



Source: US CDC, as of May 11, 2020

Concentration Risk: Texas



Source: US CDC, county and state departments of health, data as of May 11, 2020.

2

Property Types & Geographic Markets

Recession & Protracted Slump | Multifamily

- Pre-pandemic, we expected a record high in terms of deliveries for 2020: over 300,000 new units.
- Recession and protracted slump scenarios produce an increase in vacancies, but construction pullback is a countervailing effect.



Source: Moody's Analytics REIS

Protracted Slump | Major Texas Multifamily Markets

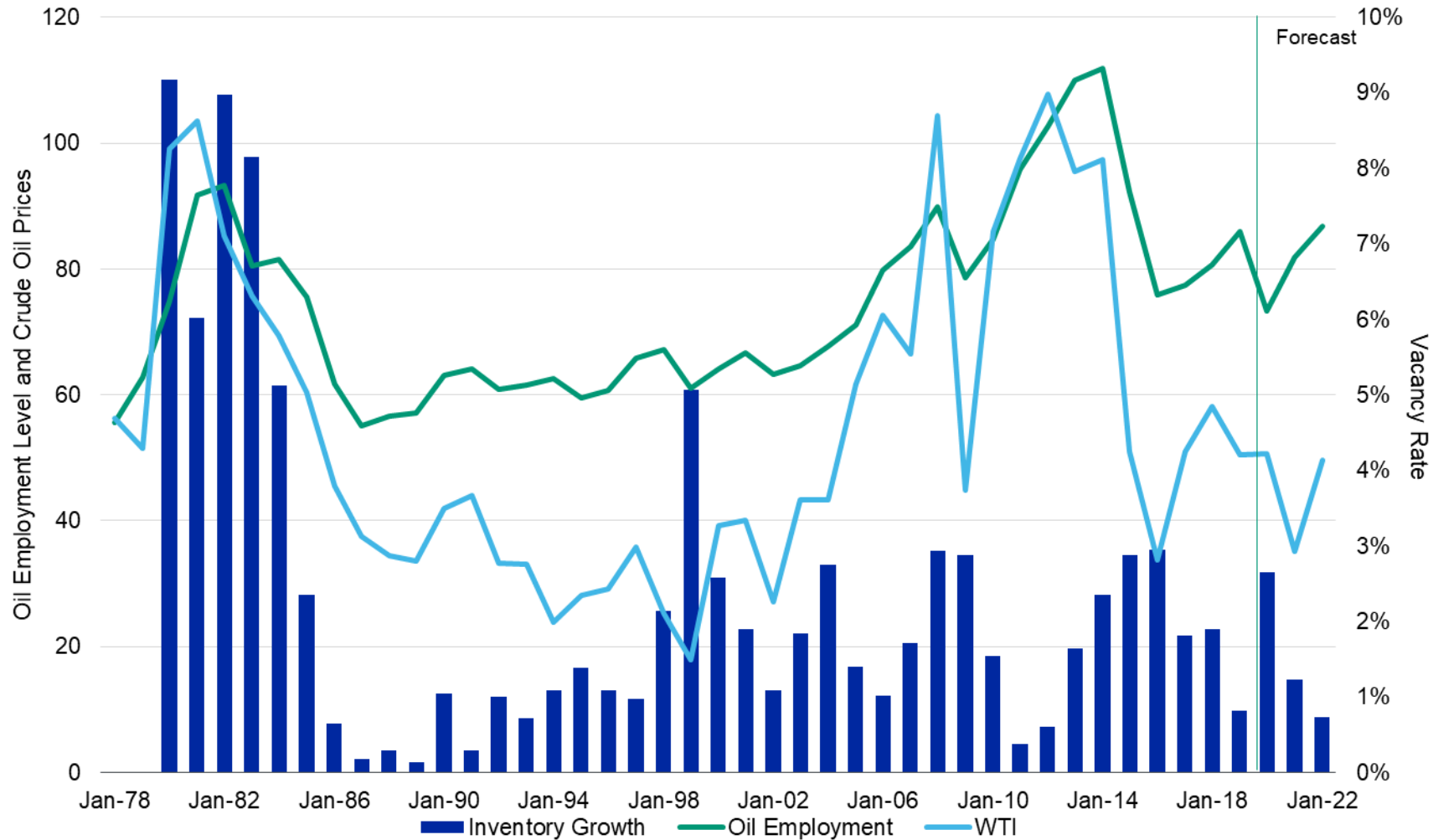
- Historical reaction functions to downturns determine the relative focus and magnitude of distress in various property types and geographic markets.
- Recent record of oversupply will position any geographic market for distress, if demand pulls back abruptly (as per a severe pandemic or protracted slump scenario).

MSA	Vacancy (2020)	Effective Rent (Projected, 2020)	Employment Decline (Projected, 2020)
Houston	7.5%	-3.9%	-5.8%
Fort Worth	6.2%	-2.7%	-5.7%
San Antonio	7.3%	-2.2%	-5.3%
Dallas	9.0%	-3.3%	-5.1%

- Recent record of poor performance, particularly when vacancies have been rising and/or rent growth has been moderating, suggests markets will not fare as well in a downturn.
- Houston takes the greatest hit in terms of effective rent declines, with Dallas a close second. Roughly correlated with employment declines, but all taking into account actual real estate performance.

Source: Moody's Analytics REIS

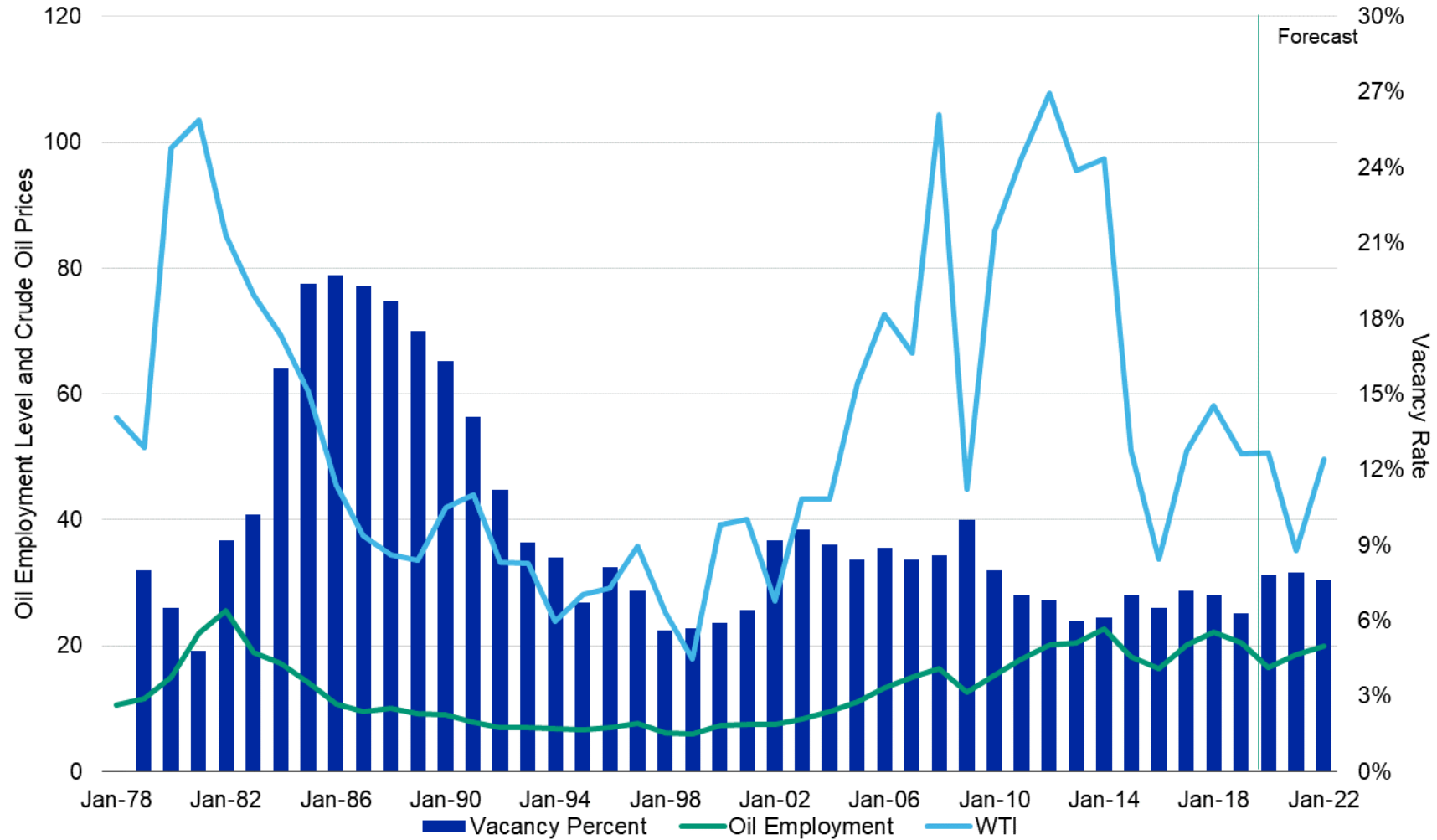
Apartment Market Trends: Houston



Source: Moody's Analytics REIS

- Inventory growth in Houston multifamily has been appreciable at 2.3% per year from 2012 to 2019, but nowhere near as strong as the 1980s or the late 1990s.
- As a result, vacancies will rise to 9.4% by the end of 2021, about a 400 bps increase versus pre-pandemic levels, but is unlikely to approach its recent highs above 12% in the 2008-2009 downturn.

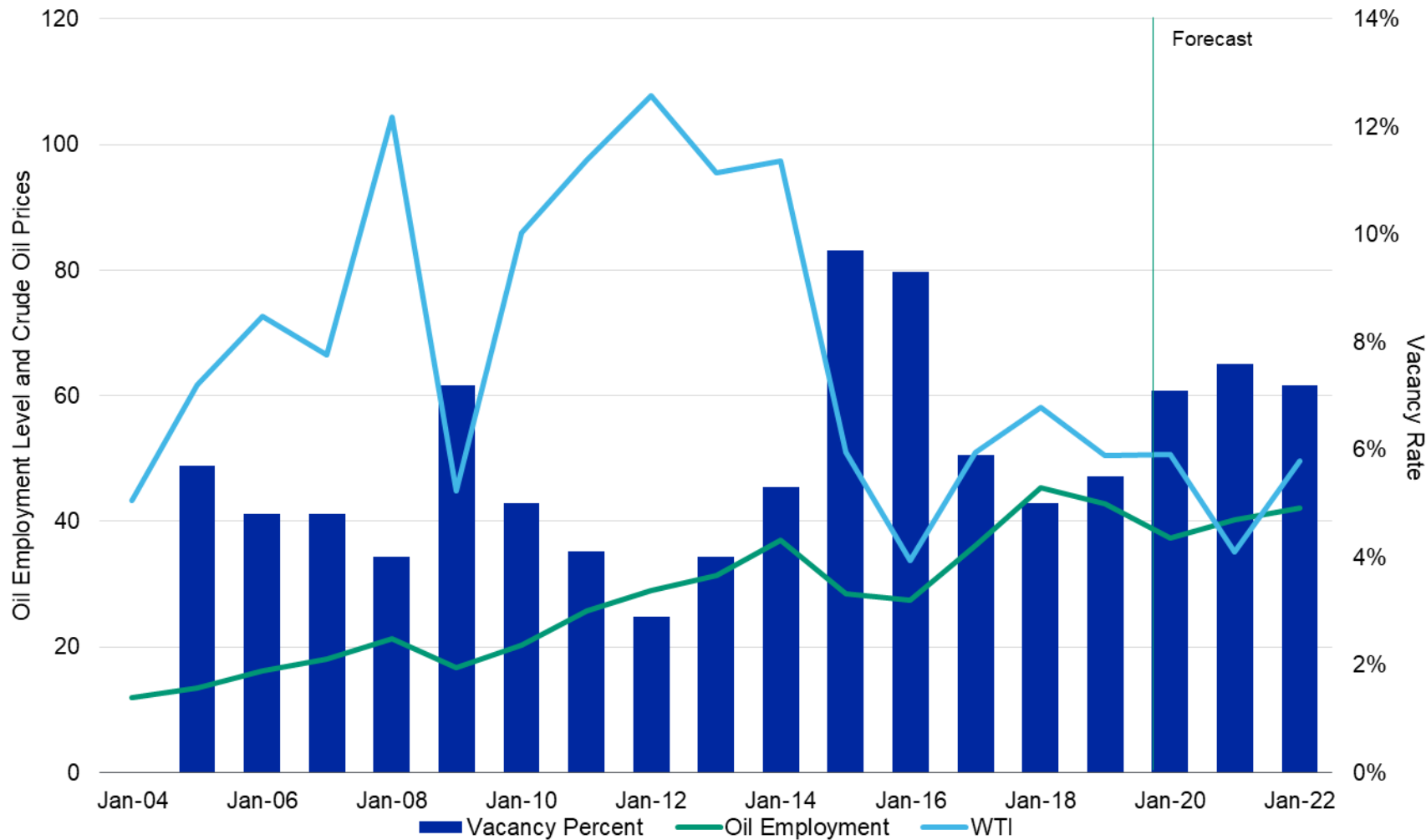
Apartment Market Trends: Oklahoma City



- There has been even less building of multifamily units in Oklahoma City (1.3% p.a. from 2012 to 2019).
- Vacancies have stayed relatively tight as a result, trending at 6% or below during this period. Worst case, REIS projects vacancies to rise to 9.0% through 2021 over the next year – lower than the 10% high from 2009.

Source: Moody's Analytics REIS

Apartment Market Trends: Odessa-Midland

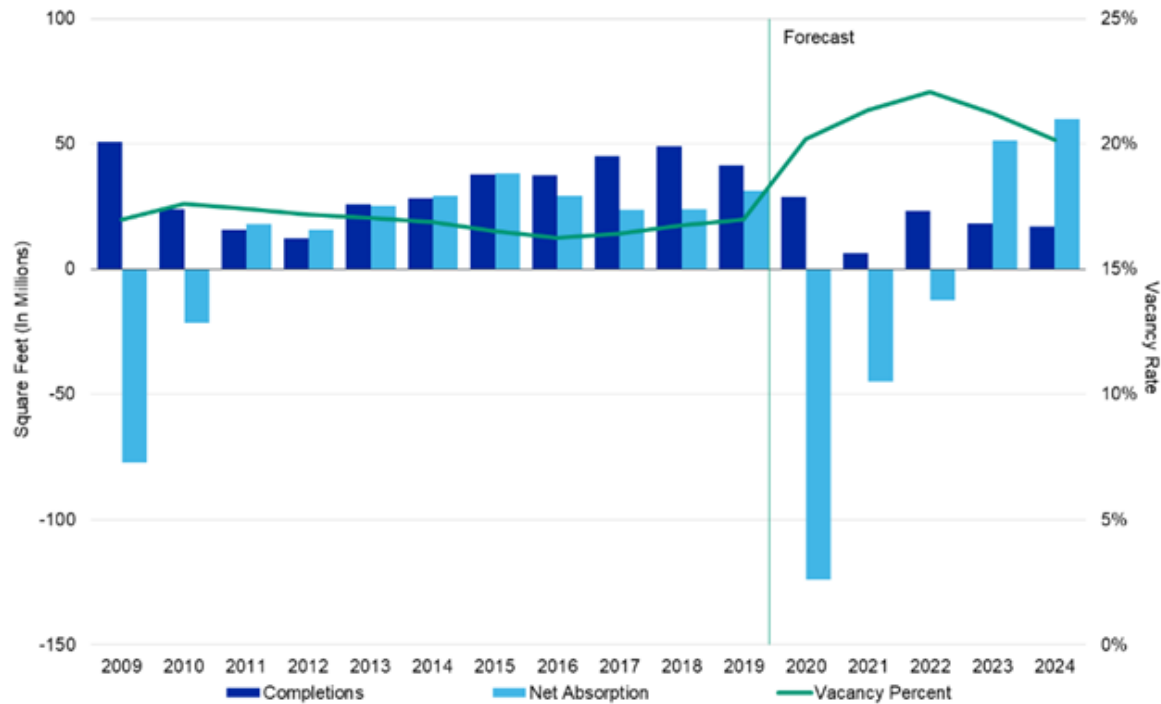


Source: Moody's Analytics REIS

- In Odessa-Midland, there were some spikes in multifamily building to house workers employed in the oil industry. Inventory growth averaged 4.1% p.a. from 2012 to 2019, with a 10% spike in 2015.
- Vacancies rose past 10% in 2015 but that was driven by the large amount of new supply that came online (that quickly leased). COVID-19 will push vacancies to 7.7%.

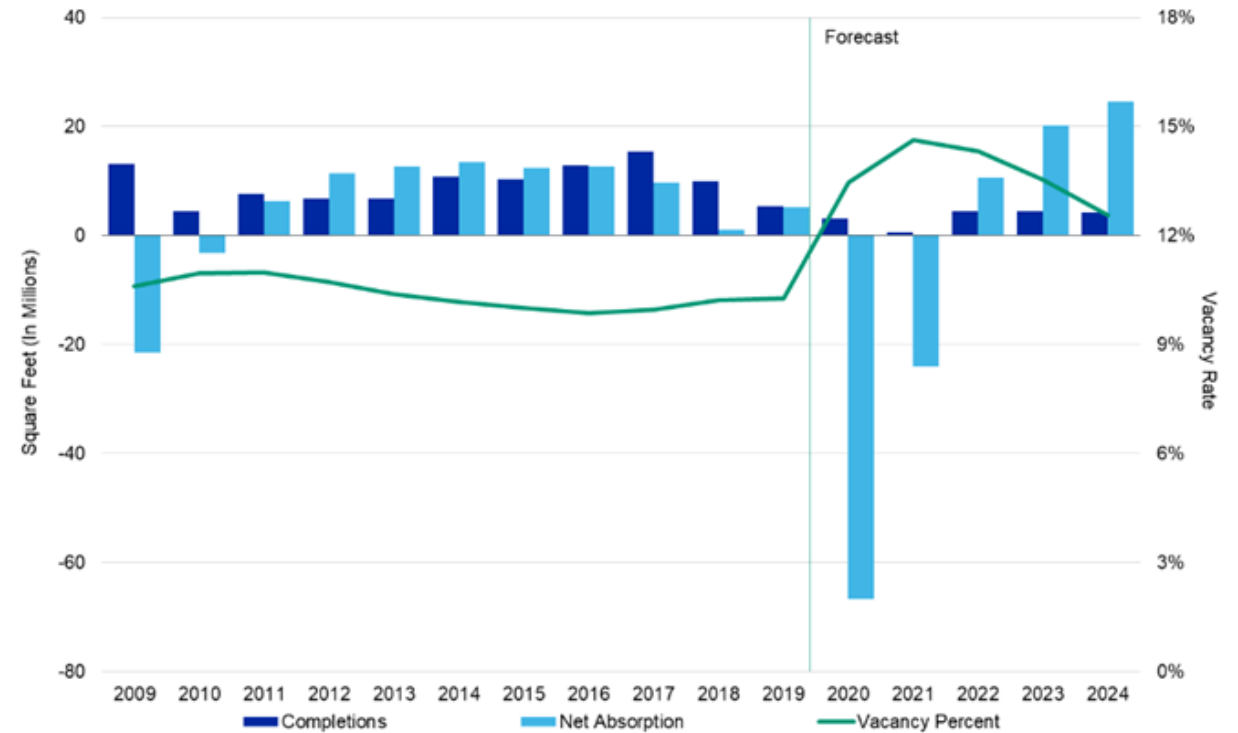
Office & Retail Do Not Fare as Well

Office Fundamentals | Protracted Slump



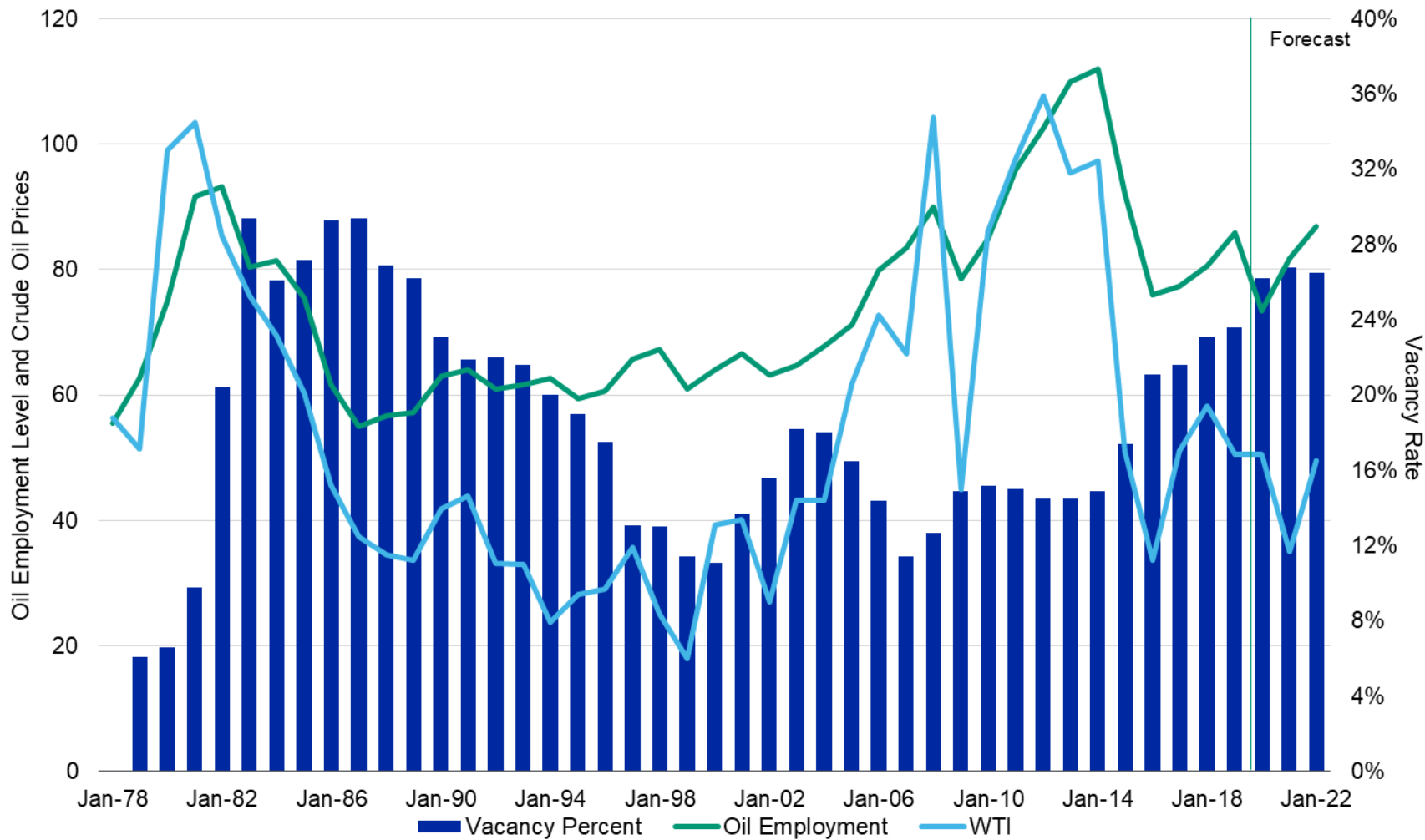
Source: Moody's Analytics REIS

Retail Fundamentals | Protracted Slump



Source: Moody's Analytics REIS

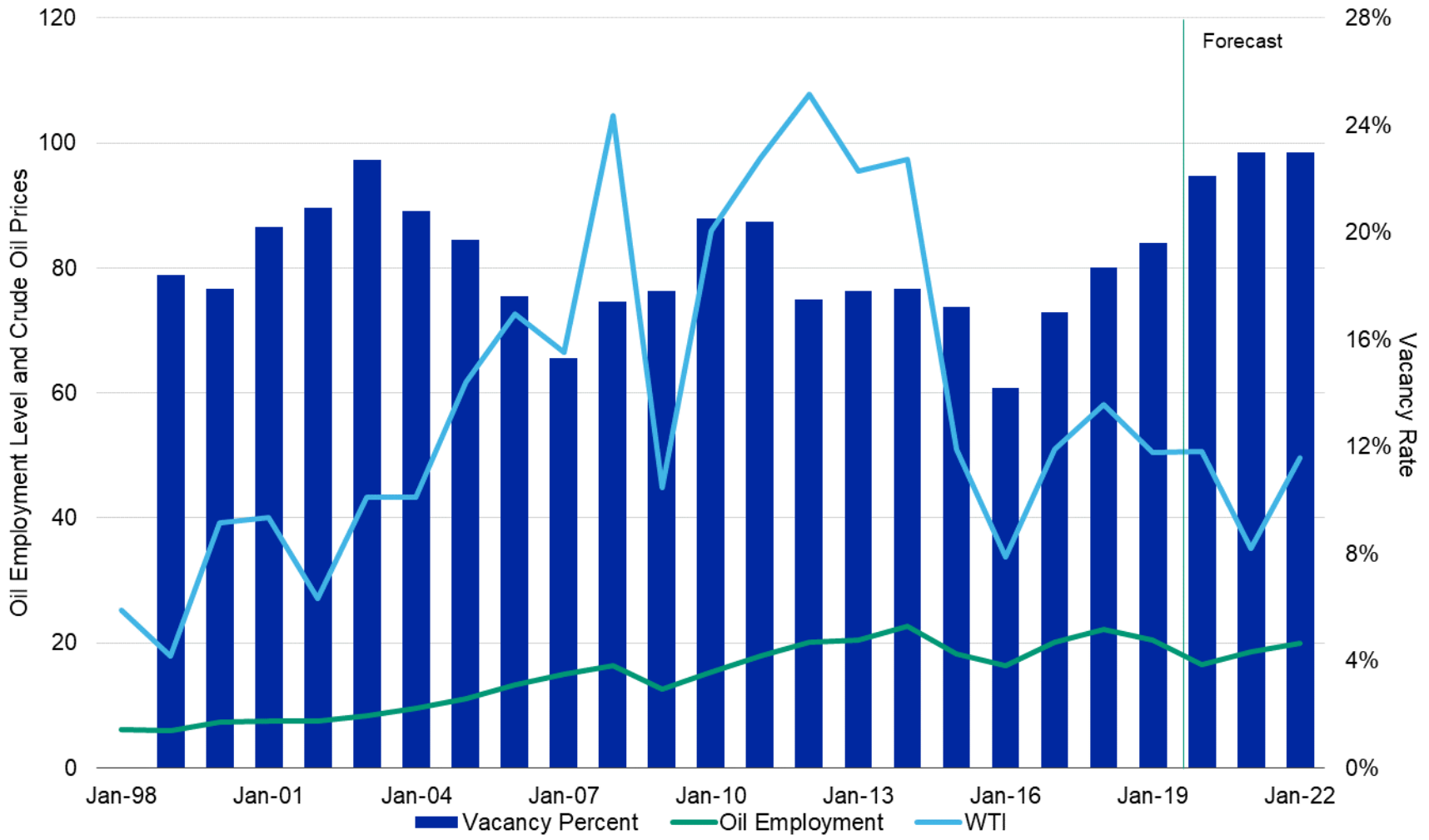
Office Market Trends: Houston



Source: Moody's Analytics REIS

- Houston has a large employment base, but only 2.9% of it is in the oil, natural gas, and petroleum industries. Oil-related jobs are expected to decline by over 15% in 2020, but total employment will “only” fall by 5.8%.
- Since office inventory has not increased as much in this last cycle, there is less of a supply glut to deal with. Vacancies will rise past 26% but will not break historic highs.

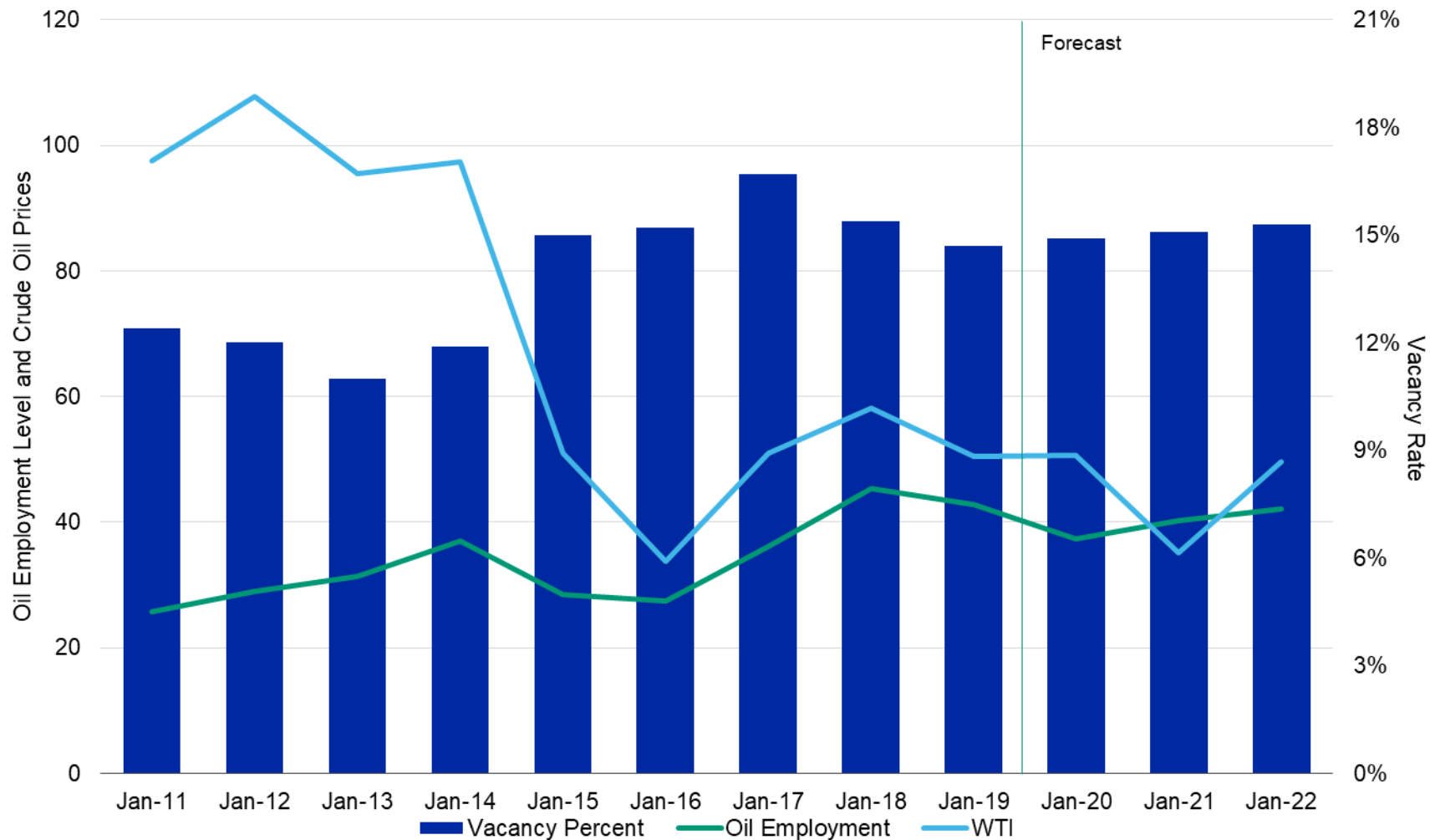
Office Market Trends: Oklahoma City



- 3.0% of Oklahoma City’s employment base is in the oil, natural gas, and petroleum industries. These oil-related jobs are expected to decline by 19.4% in 2020, but total employment will fall by only 5.5%.
- Inventory grew by only 0.3% per year from 2011 to 2019 – very moderate. Vacancies will rise past 25% in 2022.

Source: Moody’s Analytics REIS

Office Market Trends: Odessa-Midland



Source: Moody's Analytics REIS

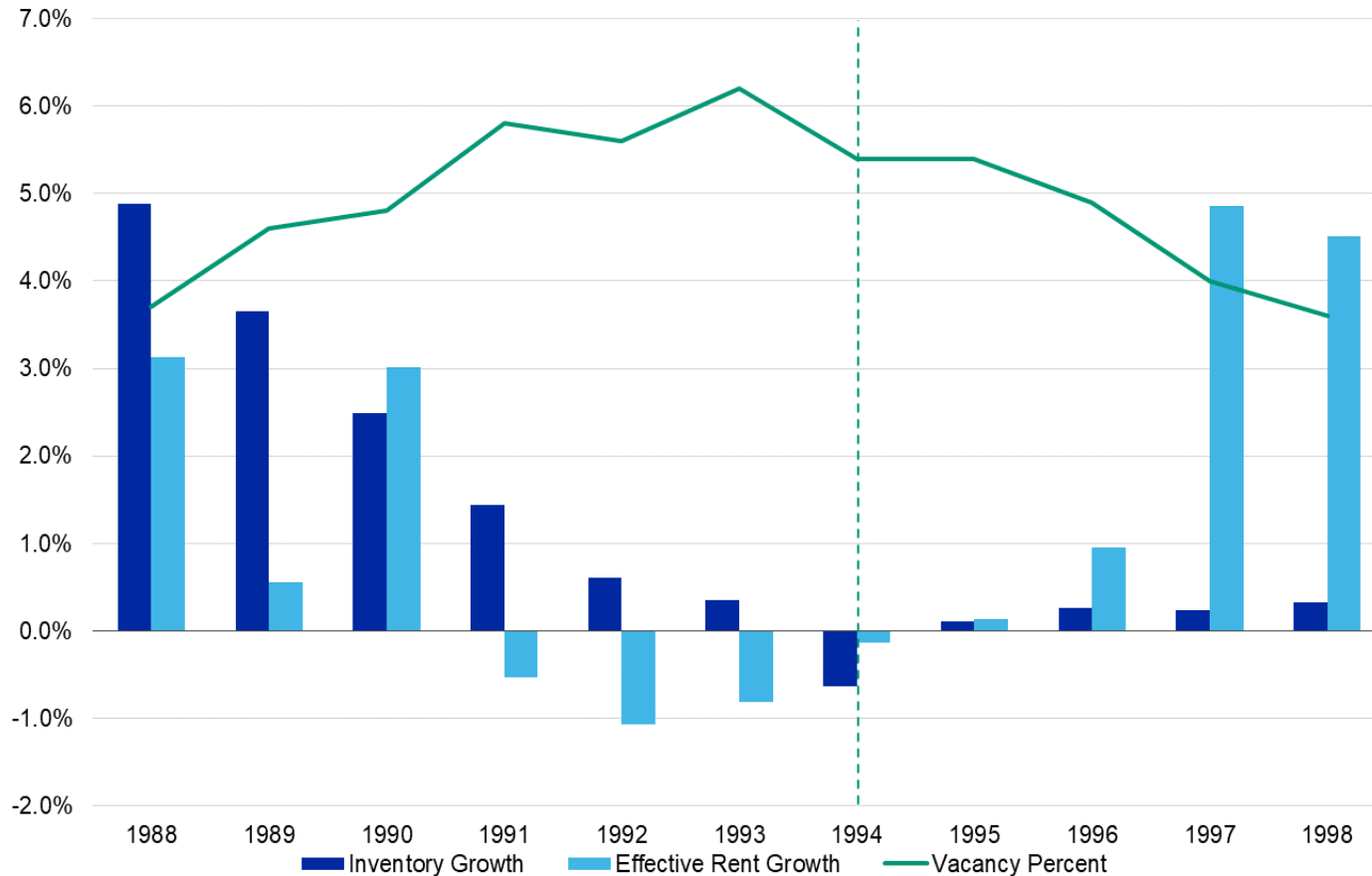
- Odessa-Midland's employment base is much smaller than Houston's, and 19.2% of its total employees are in oil-related industries. Jobs in oil will fall by close to 15% in 2020.
- Except for a spike in office construction in 2015, inventories only grew by an average of 1.4% from 2012 to 2019. Vacancies will rise past 1% but not as much as if there was an oversupply situation to deal with.

3

What's Next, and What Can We Really Know?

Idiosyncratic Shocks? Some Experience

Los Angeles Multifamily Fundamentals, 1988 to 1998

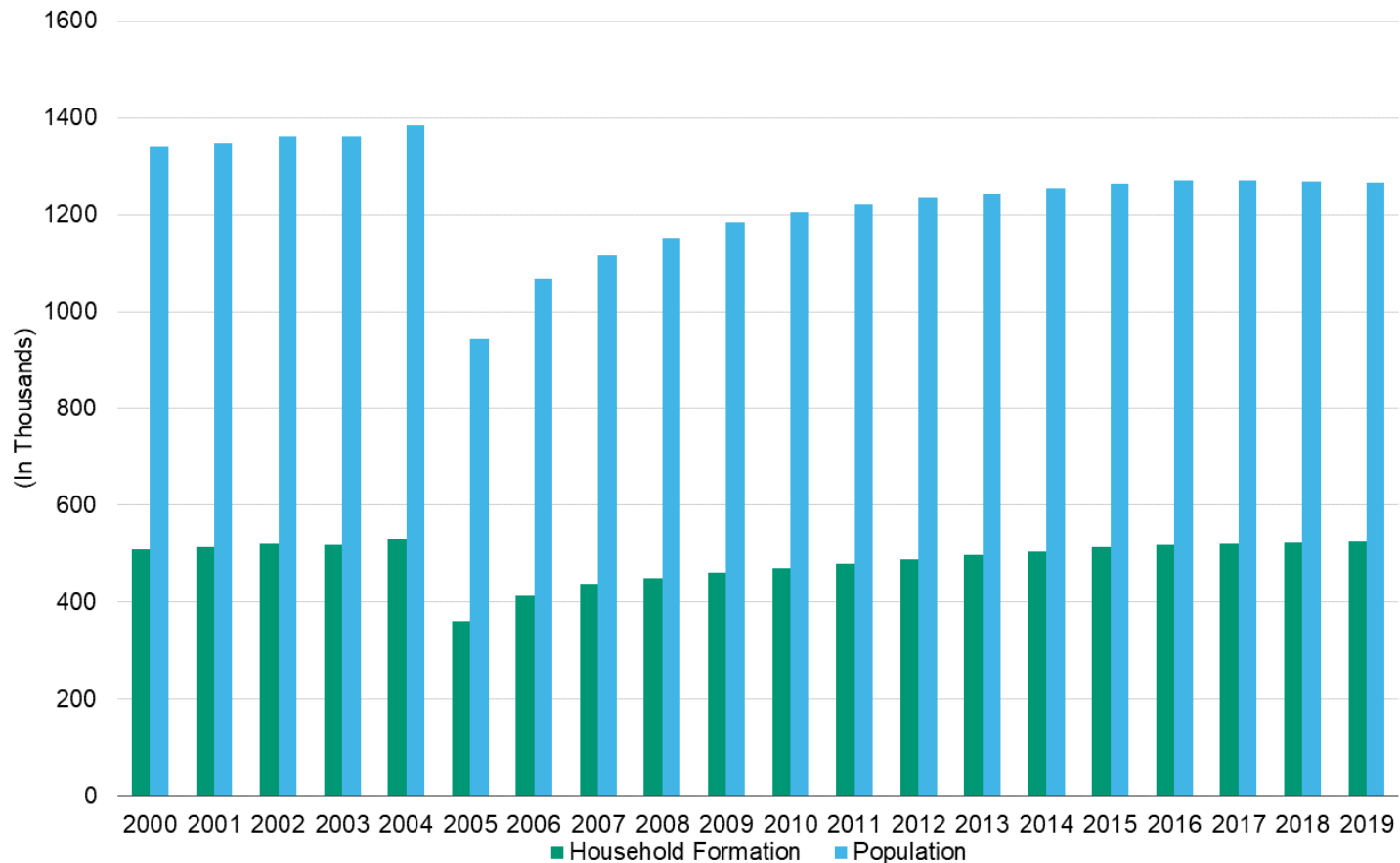


Source: Moody's Analytics REIS

- The Northridge Earthquake of 1994 remains the costliest earthquake on record in the US (\$26.4 billion in damages, 2018 dollars)
- *Net positive* for Los Angeles multifamily fundamentals – but *why?*
- This is the optimistic case: that demand remains strong in urban areas where multifamily properties tend to cluster.

Idiosyncratic Shocks? Potential Negatives

New Orleans Demographics, 2000 to 2019

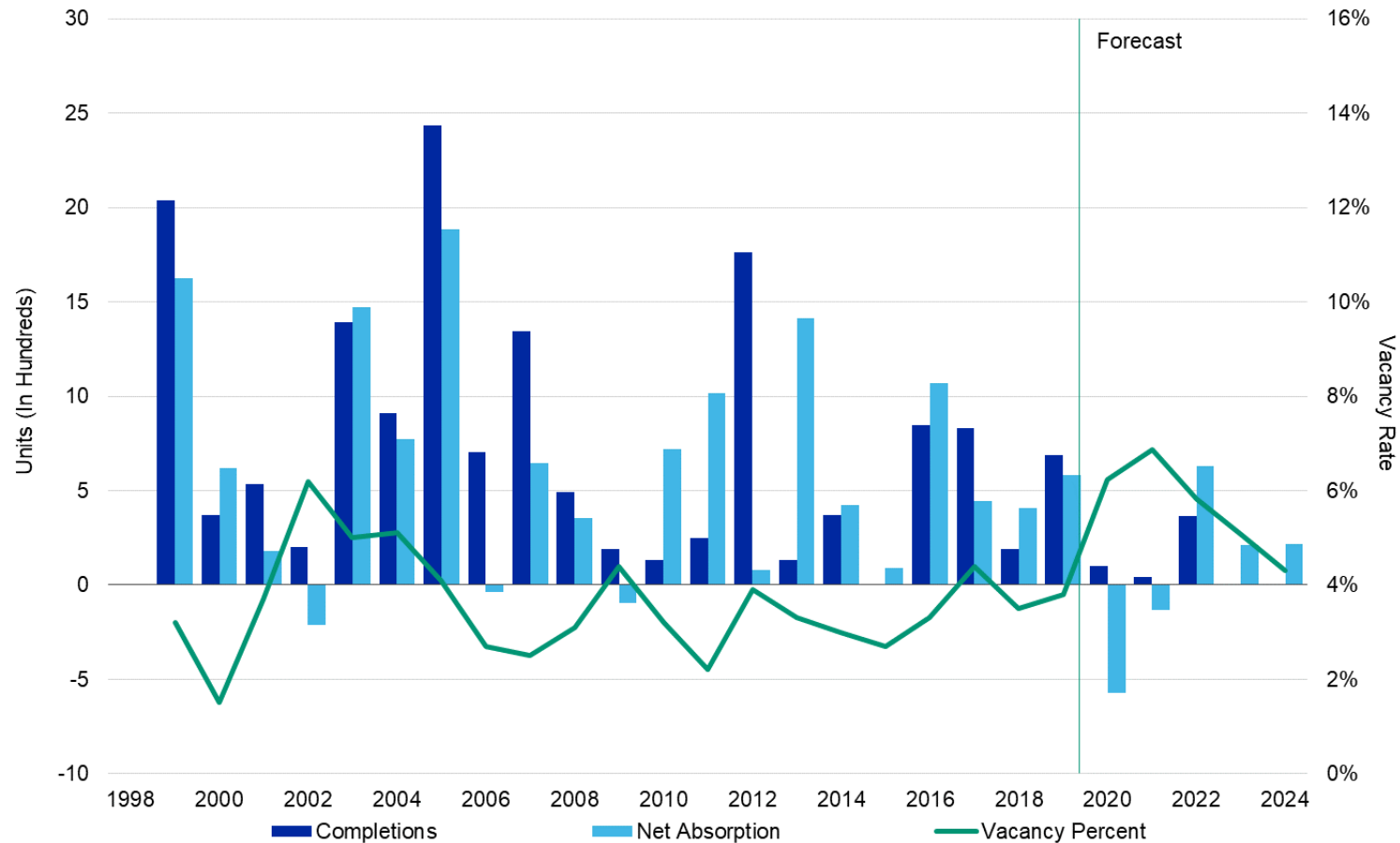


Source: Moody's Analytics

- Hurricane Katrina in 2005 devastated New Orleans and the area suffered a permanent shock to demand
- Multifamily fundamentals received a temporary boost because of destroyed units, but over the long run weaker demand did not sustain occupancies.
- What will happen post-COVID-19?

Downtown NYC: 9/11 and Its Aftermath

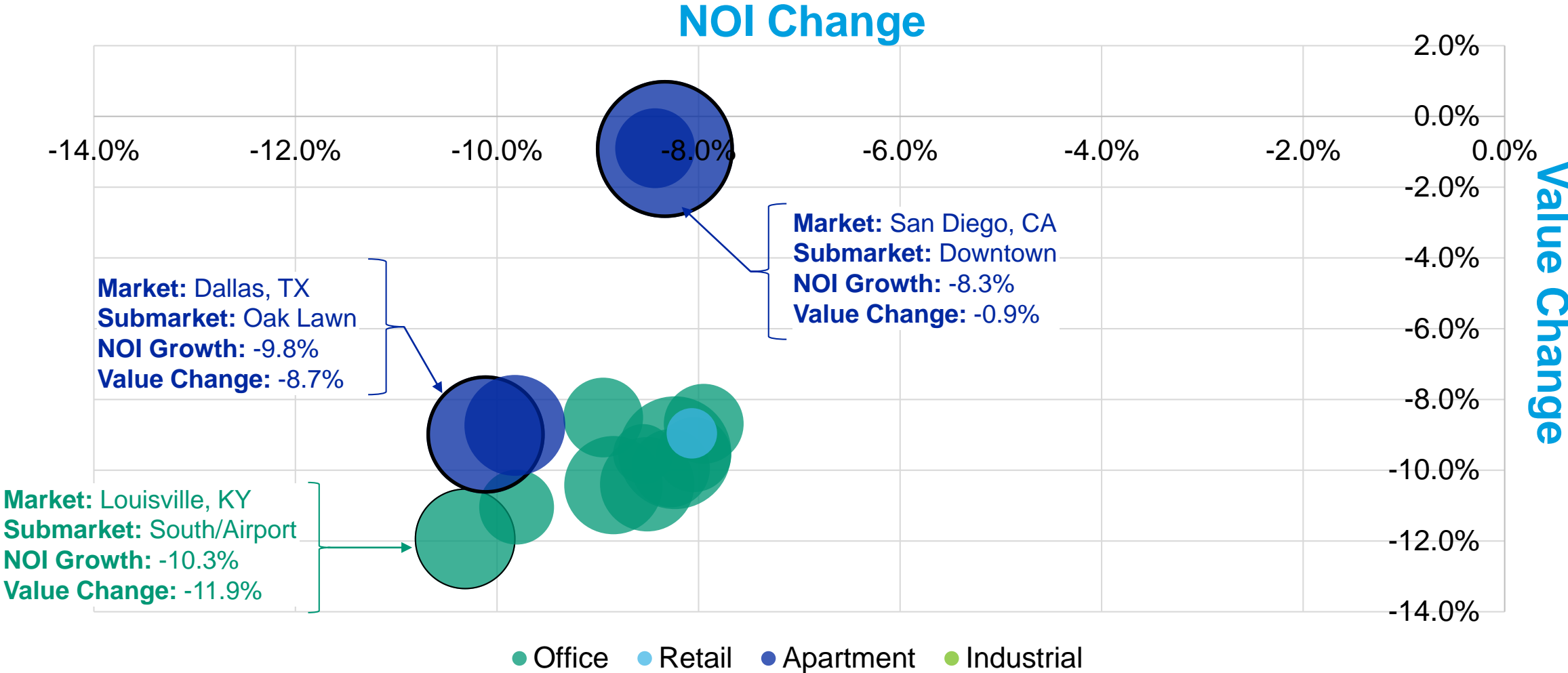
Downtown NYC Multifamily, 1999 to 2024



Source: Moody's Analytics

- Downtown NYC vacancies spiked in 2001 after 9/11 and took a few years to recover – but it did recover.
- Over 60,000 households moved to downtown NYC and helped transform it into a residential neighborhood (not just office).
- What will happen post-COVID-19?

Applications: Portfolio Analysis



Source: Moody's Analytics REIS | Baseline scenario as of EOM March 2020

Applications: COVID-19 Impact Assessment Tool

<https://cre.reis.com/covid-19>

COVID-19 Outbreak: Impact on CRE

Sign-up for our COVID Impact Newsletter [Resources](#) Search

New York Metro, NY

New York Metro, NY

Hudson County NJ

TOTAL COVID-19 CASES
11,150 ↑664

19.4% OF METRO CASES

CRE PROPERTIES

Office	Apartment
142	4,644
Retail	Flex/R&D
405	35
Warehouse/Distribution	

NEW YORK METRO, NY

Office

NEW CONSTRUCTION IMPACT - OFFICE

Construction: **STOPPED** SQ FT at Risk: **34M**

Declared Non-Essential: 03/27/2020

View data set →

EMPLOYMENT IMPACT

Impact: **LOW**

MARKET INSIGHT

Bracing for COVID-19 Fallout Despite Recent Balanced Growth

PUBLISHED ON 4/19/2020

COVID-19 Impact on New Construction - Office

Return to Map ↑

Metro	County	Construction Non-Essential?	Date Declared Non-Essential	Projects at Risk Under Construction	SF at Risk	Projects at Risk Planned	SF at Risk
New York Metro, NY	Kings County	Yes	03/27/2020	19	3,371,379	25	2,808,995

Questions & Answers

Thank You

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