

Coronavirus (COVID-19): Credit Risk Impact on Commercial Real Estate Loan Portfolios



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Agenda

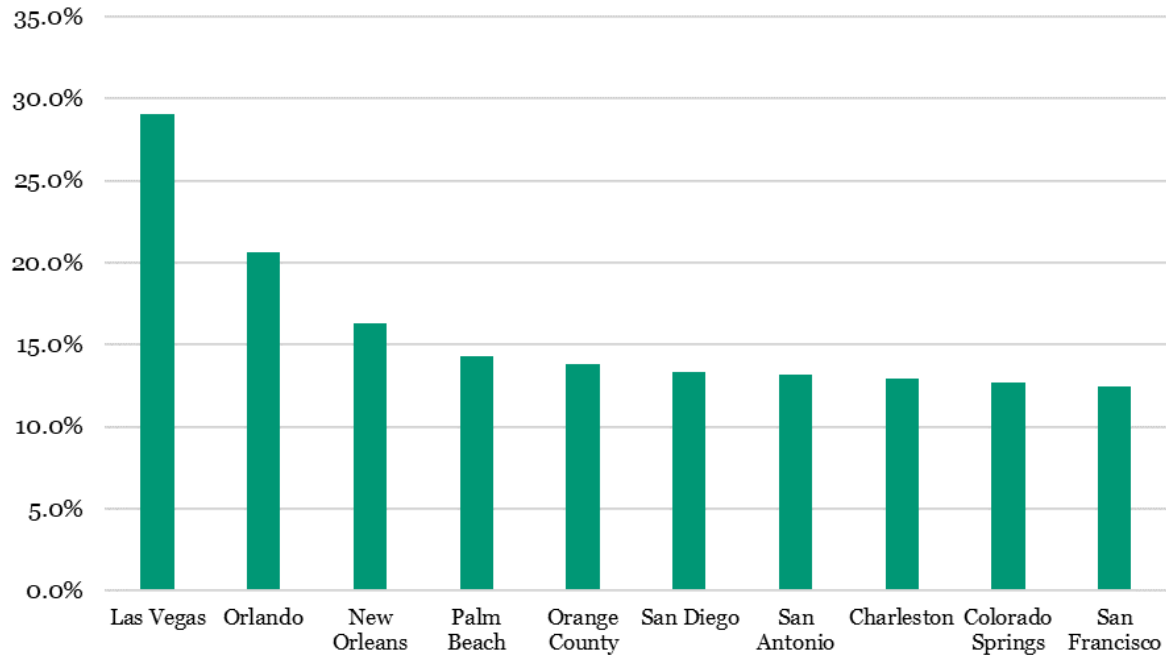
1. Property Types & Geographic Markets: Anticipating Distress
2. Historical Credit Cycles and Key Risk Drivers
3. CRE Portfolio Analysis: Customer Case Studies
4. Questions & Answers

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Property Types &
Geographic Markets:
Anticipating Distress

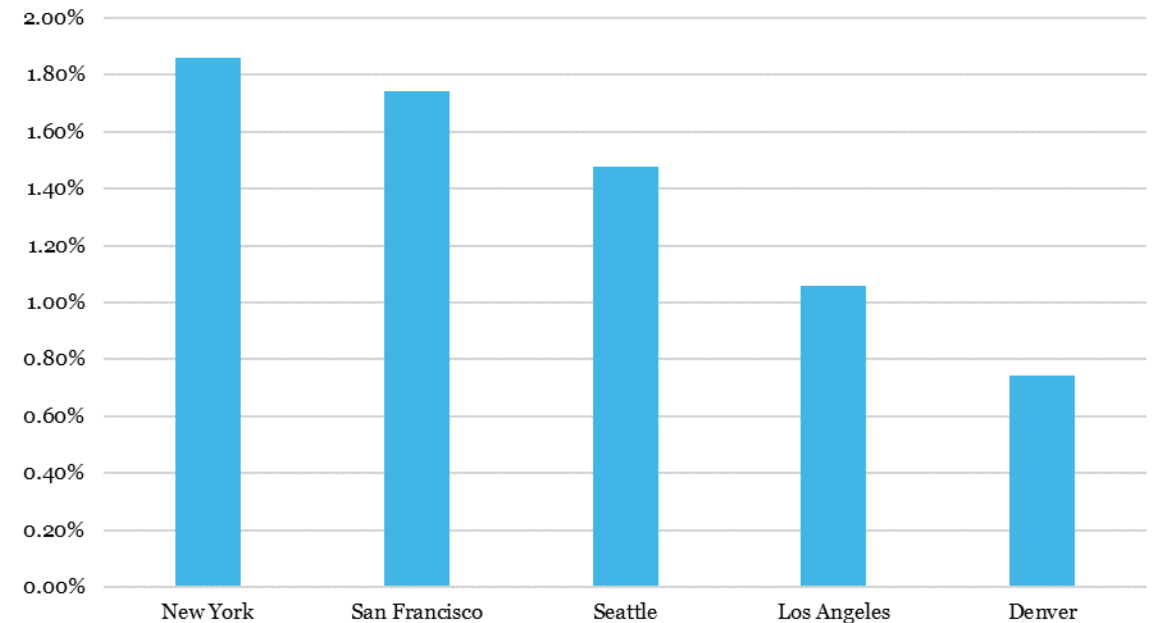
Shorter Lease Lengths = The Front Lines

Share of Leisure and Hospitality Employment



Source: Moody's Analytics

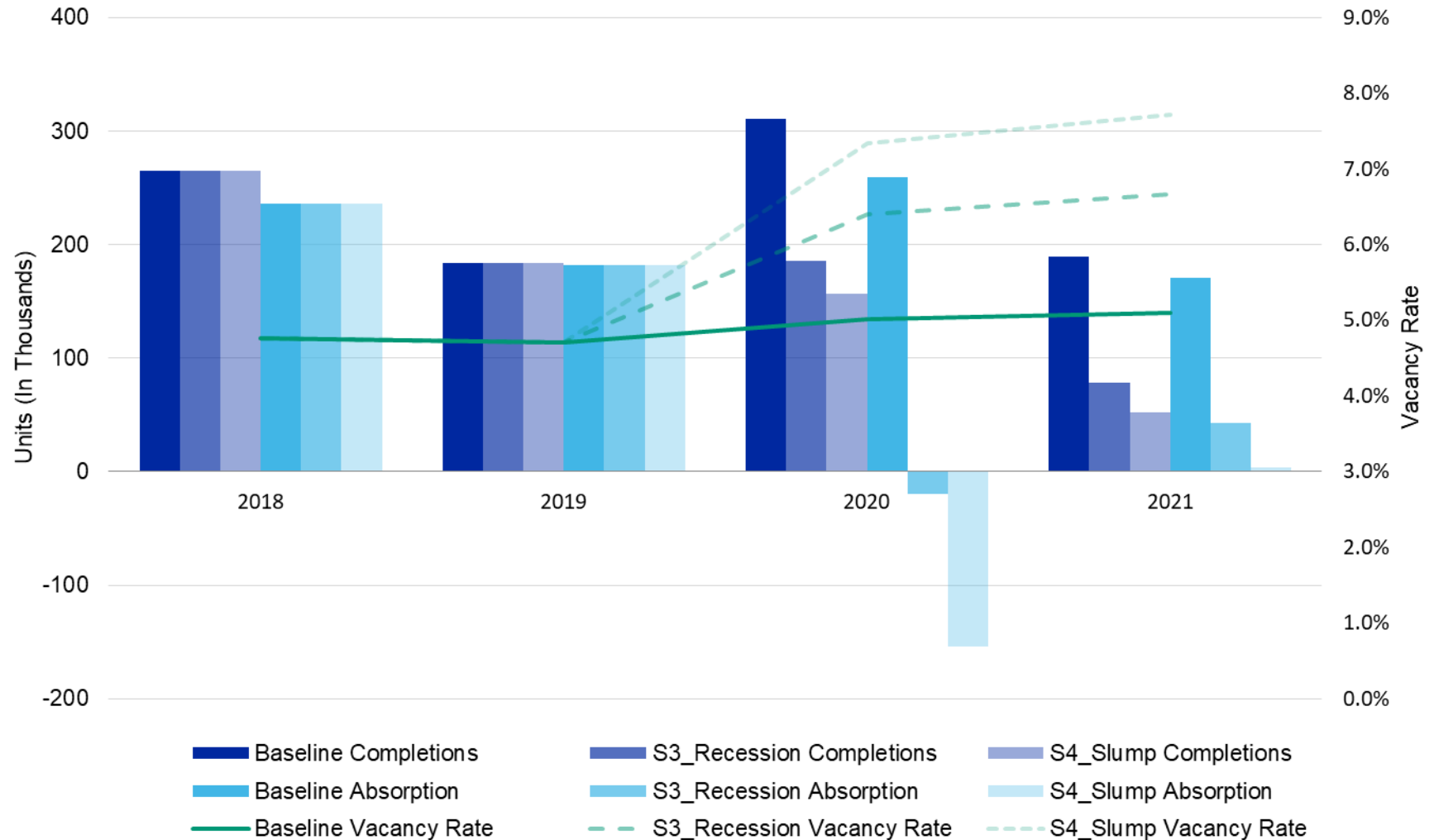
Largest WeWork Leases Relative to Metro Inventory



Source: Moody's Analytics REIS; CompStak

Recession & Protracted Slump | Multifamily

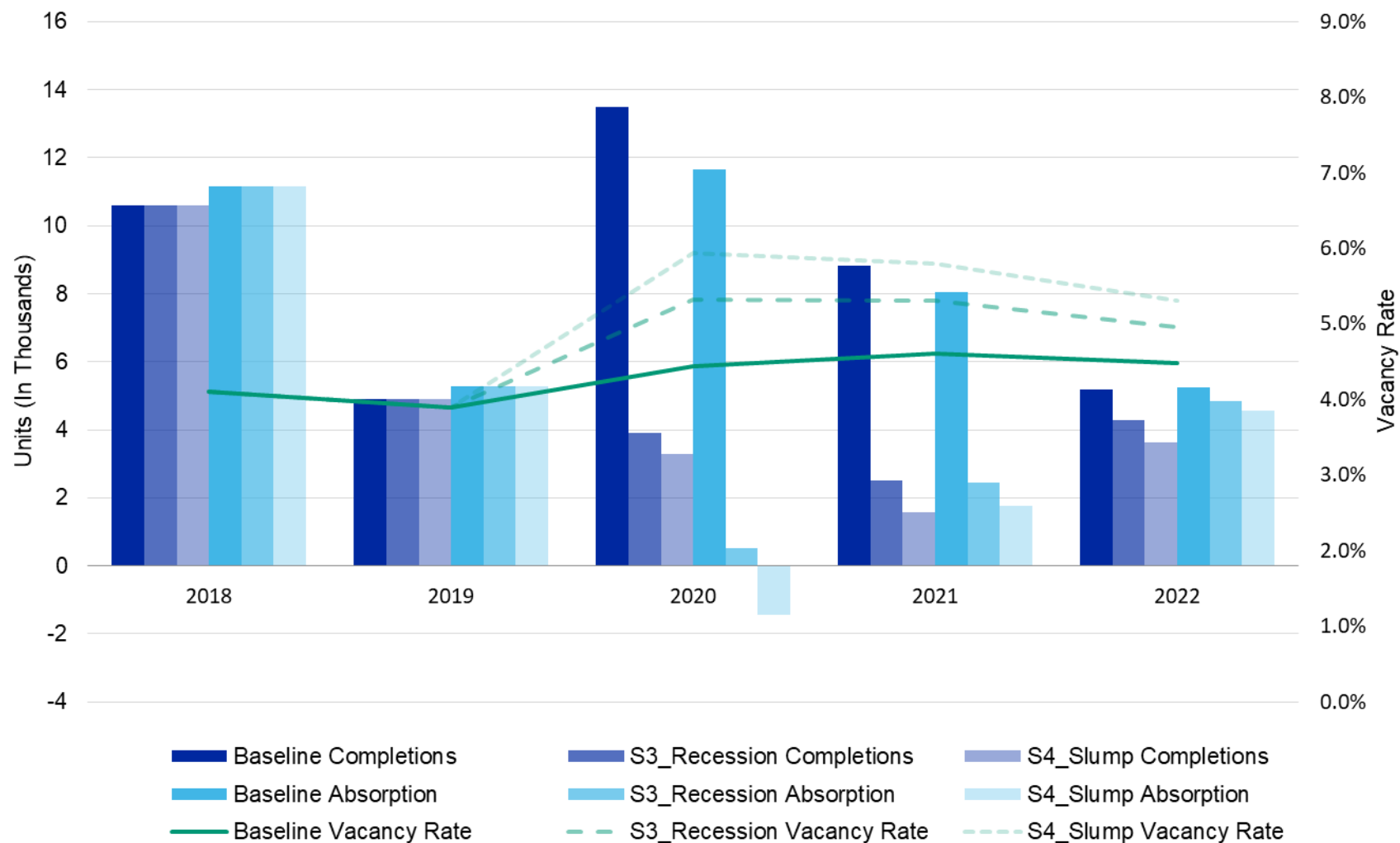
- Baseline expected a record high in terms of deliveries for 2020: over 300,000 new units.
- Recession and protracted slump scenarios produce an increase in vacancies, but construction pullback is a countervailing effect.



Source: Moody's Analytics REIS

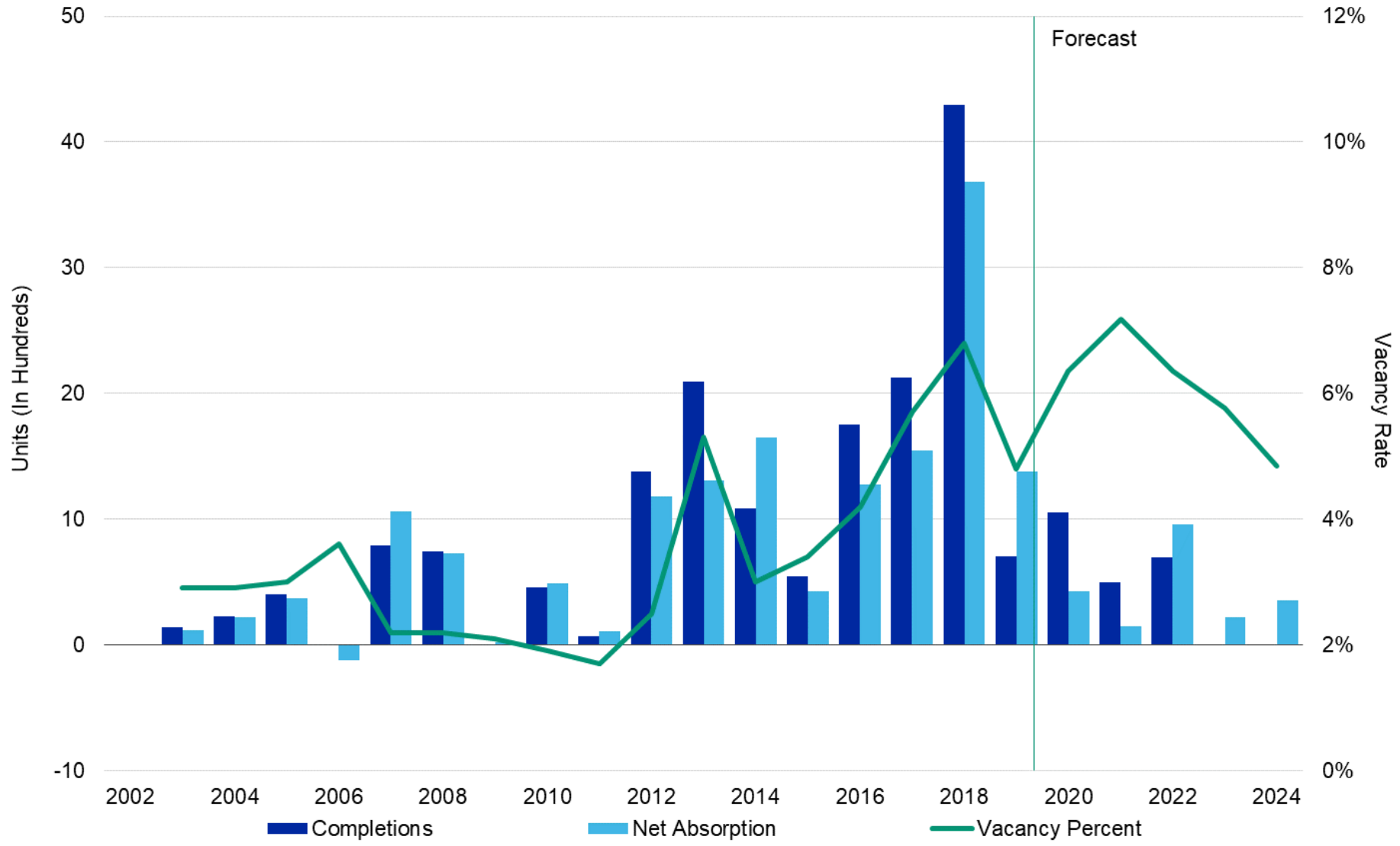
Recession & Protracted Slump | New York

- For New York, we were expecting about 13,500 new units to come online by year-end 2020 (some of the highest figures since the late 1980s)
- 71% supply growth pullback for Recession, and 76% pullback for Protracted Slump means vacancies still rise, but not as much.



Source: Moody's Analytics REIS

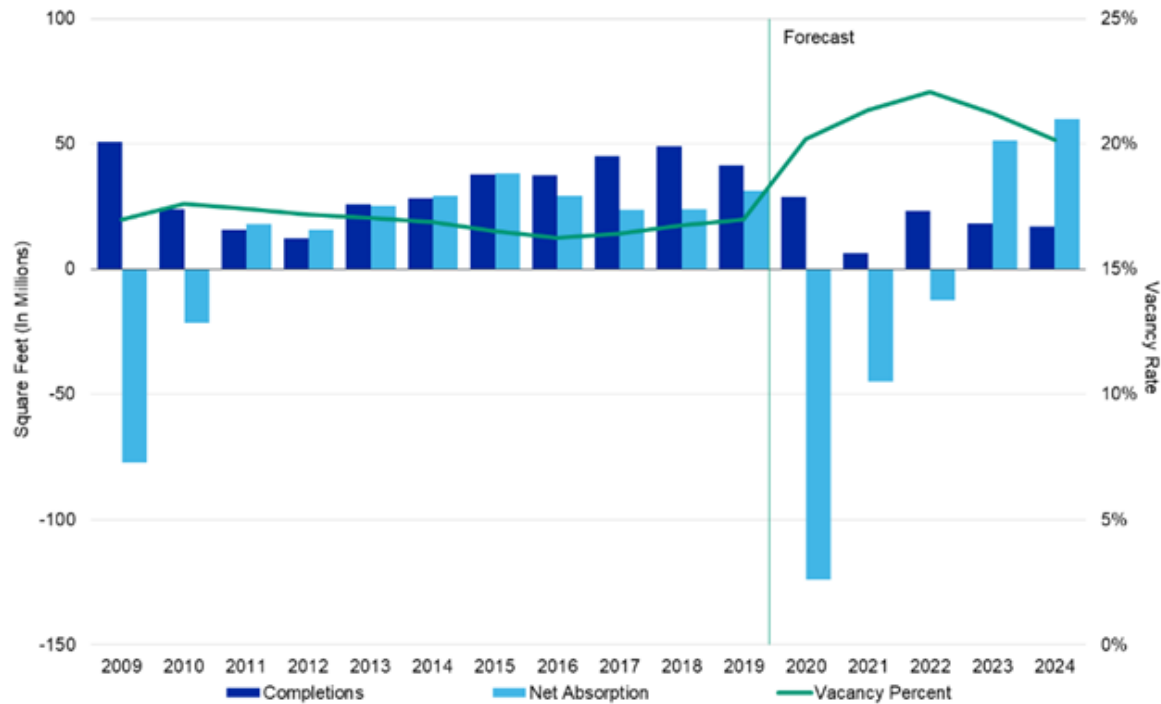
Protracted Slump | Queens County



Source: Moody's Analytics REIS

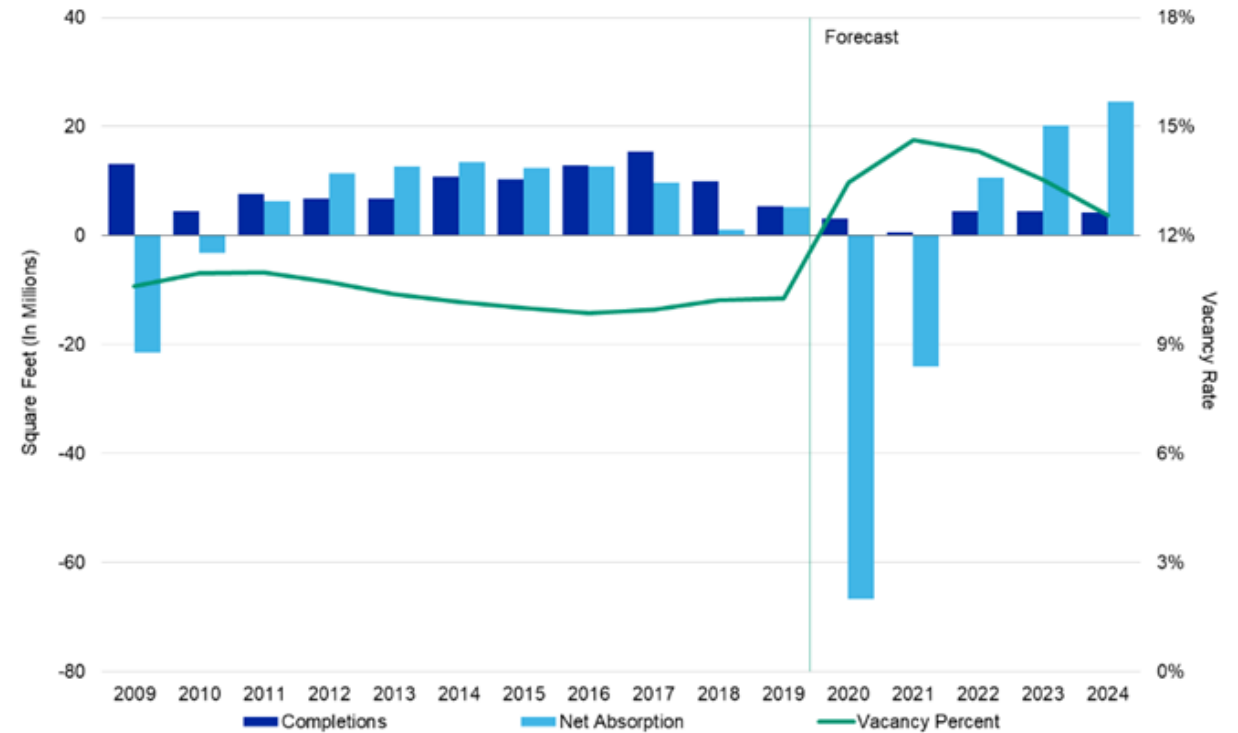
Office & Retail Do Not Fare as Well

Office Fundamentals | Protracted Slump



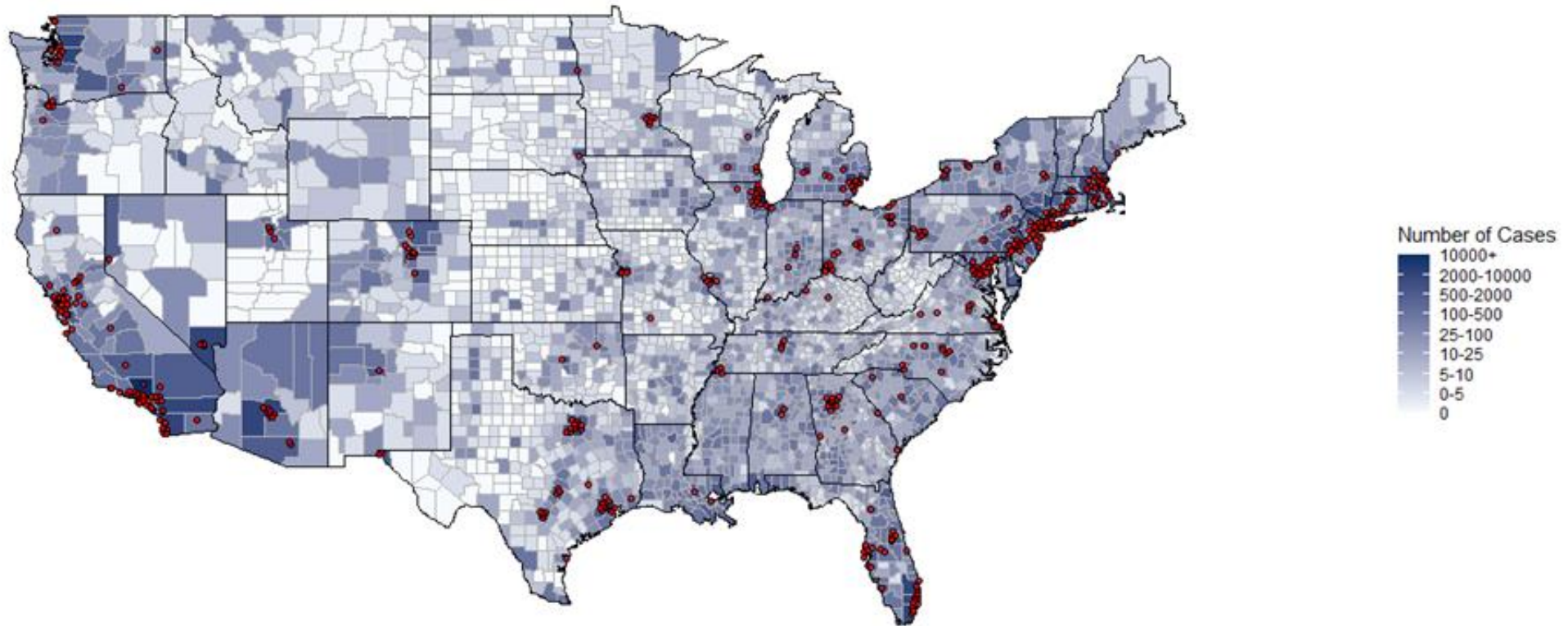
Source: Moody's Analytics REIS

Retail Fundamentals | Protracted Slump



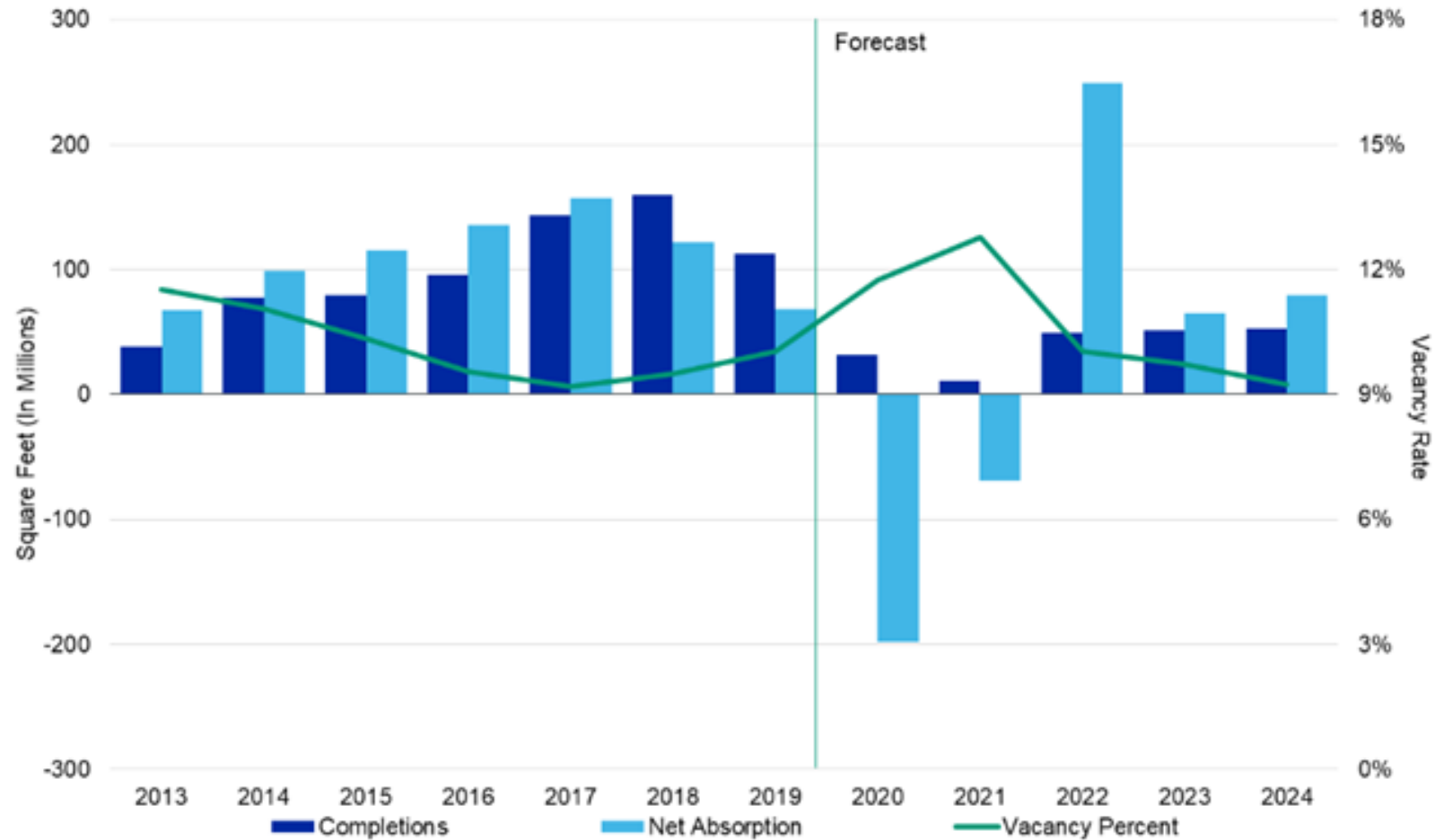
Source: Moody's Analytics REIS

Concentration and Idiosyncratic Risk for Business



Source: Moody's Analytics REIS

Industrial Warehouse/Distribution Markets



Source: Moody's Analytics REIS

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Historical Credit Cycles and Key Risk Drivers

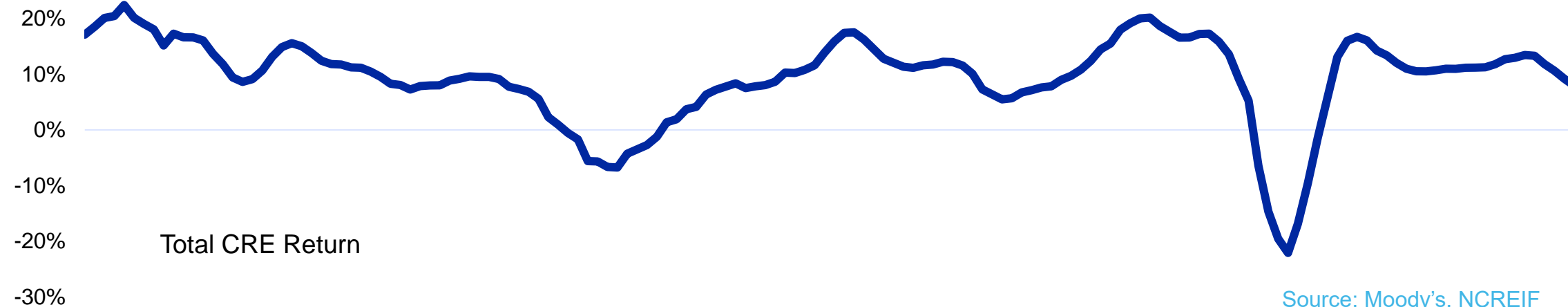
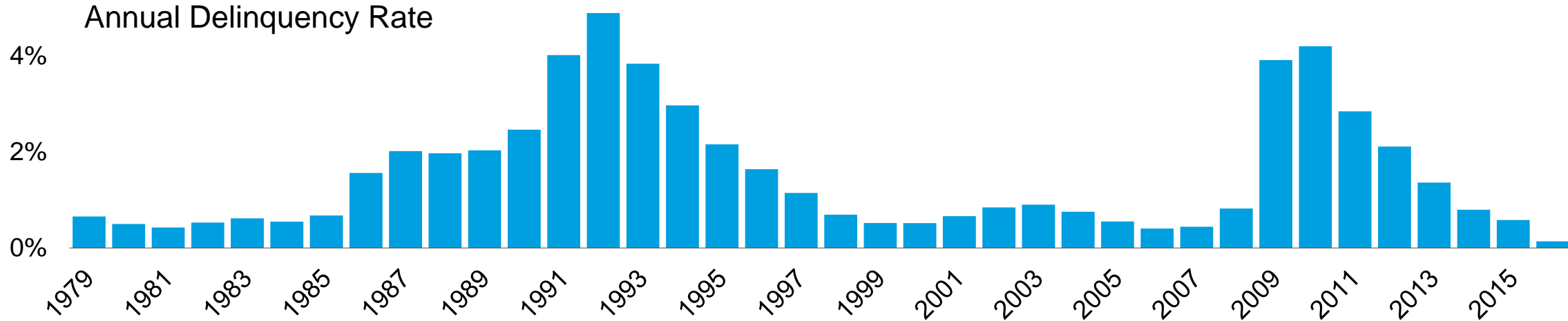
CRE Loan Loss in Recent Recessions

- » Credit losses always a derivative of macroeconomic and commercial real estate market cycles

Recession	Unemployment Rate Change	Real GDP Change	Commercial Property Price Index (CPPI) Change	FDIC Banks' 3-year Total CRE Loan Charge-off Rate
2001	+ 2.1%	< 1%	- 3.5%	0.5%
2008-2009	+ 5.3%	- 4.0%	- 37.9%	5.5%
2020-	+ 10% (?)	- 10% (?)	?	??

Source: Federal Reserve, FDIC

CRE Loan Performance Is Driven by the Market



Source: Moody's, NCREIF

Guiding Principles in Estimating Credit Losses

“History Repeats Itself”

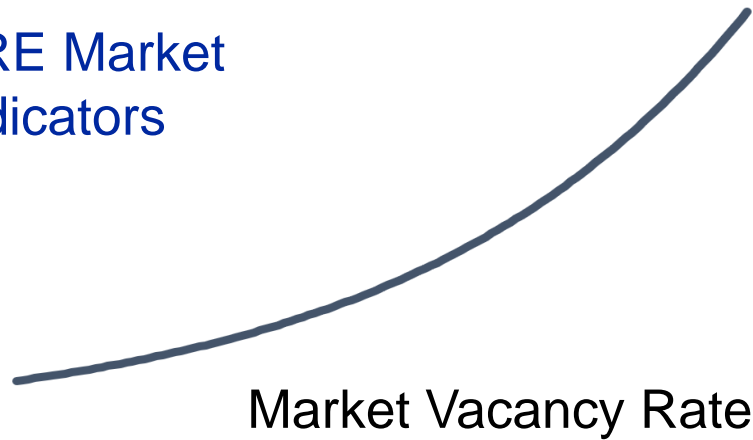
- » Historical episodes, data and facts
 - In particular, **relevant** data
- » **Models** based on casual relationships that are logical, statistically proven and long-lasting
 - Well tested robust models are the most useful

“This Time Is Different”

- » Unique nature of the downturn
- » Response from the society and government to the crisis
- » Changes of behavior and secular trends
- » Different meanings of economic data and measurements

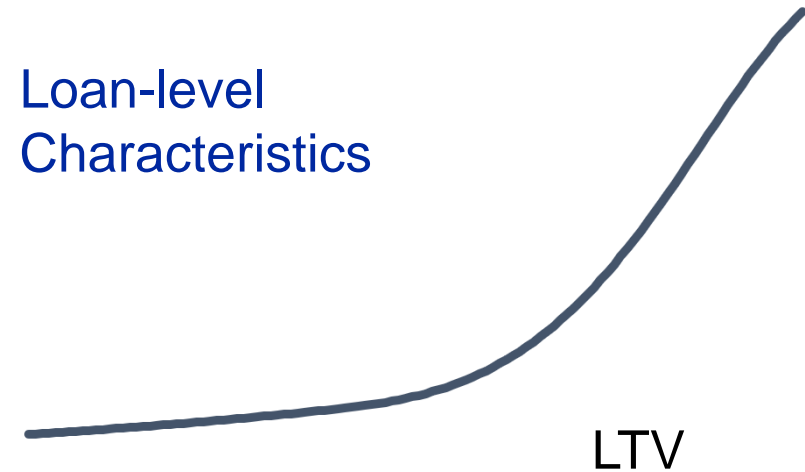
Key Credit Risk Drivers Proven by History

» CRE Market Indicators

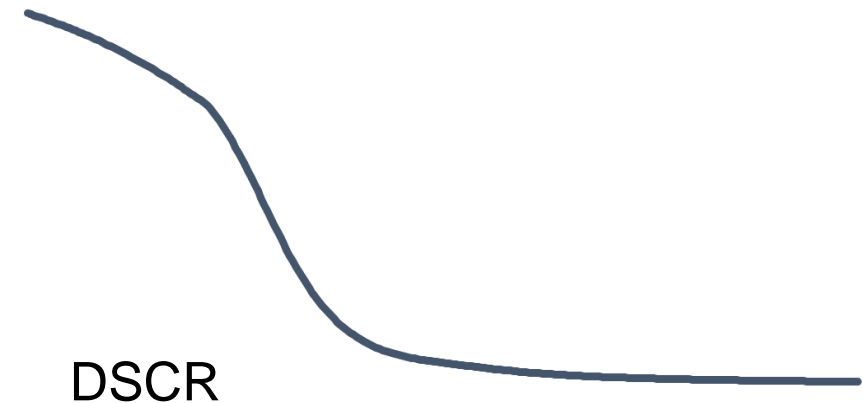


High
↑
Default Rate
↓
Low

» Loan-level Characteristics



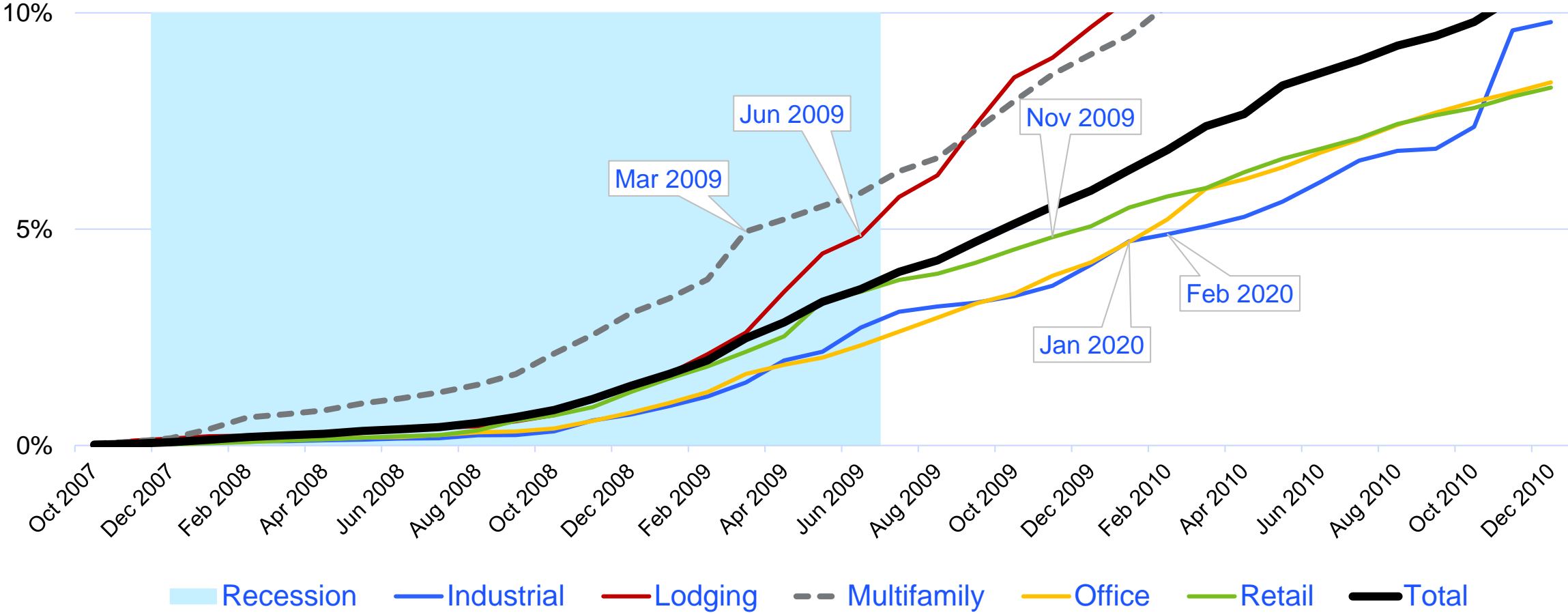
High
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Default Rate
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Low



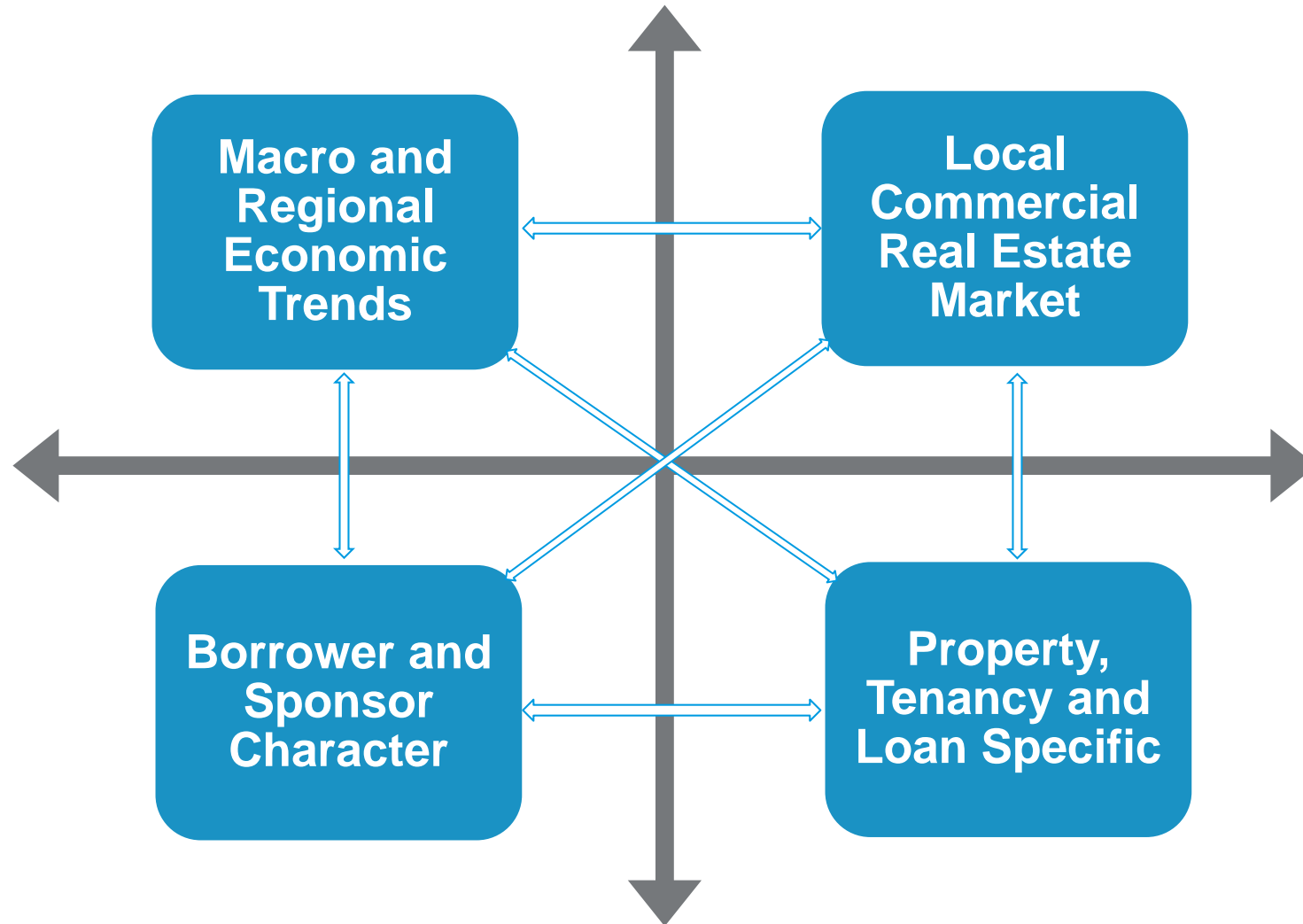
Source: Moody's

When Will Default Rates Show Up?

Cumulative Default Rates During the Last Cycle



A Holistic Approach to Risk Assessment



Qualitative Overlay

- » How relevant is the historical data?
- » What's truly different this time?
 - New factors to be considered

Scenario Analysis Is the Best Approach In Today's Uncharted World

- » The purpose here is to make informed and educated guesses, not a precise predication – appropriate given the high uncertainty today

Scenarios	Unemployment Rate Change	Real GDP Change	Commercial Property Price Index (CPPI) Change	3-year Total CRE Loan Expected Loss (EL) Rate
Base Case (Late March)	+ 5.1%	-5.5%	- 15.4%	1.7% *
S3	+ 9.5%	- 10.1%	- 26.2%	5.9% *
S4	+ 13.4%	- 14.1%	- 31.4%	8.8% *
Base (April)	+ 9.0%	- 10.5%	- 23.7%	4.7% *
CCAR/DFAST 2020 (Severely Adverse)	+ 6.5%	- 8.0%	- 35.0%	6.9%

* Incorporated part of the stimulus impact

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CRE Portfolio Analysis: Customer Case Studies

What We're Hearing

Frequently Asked Questions

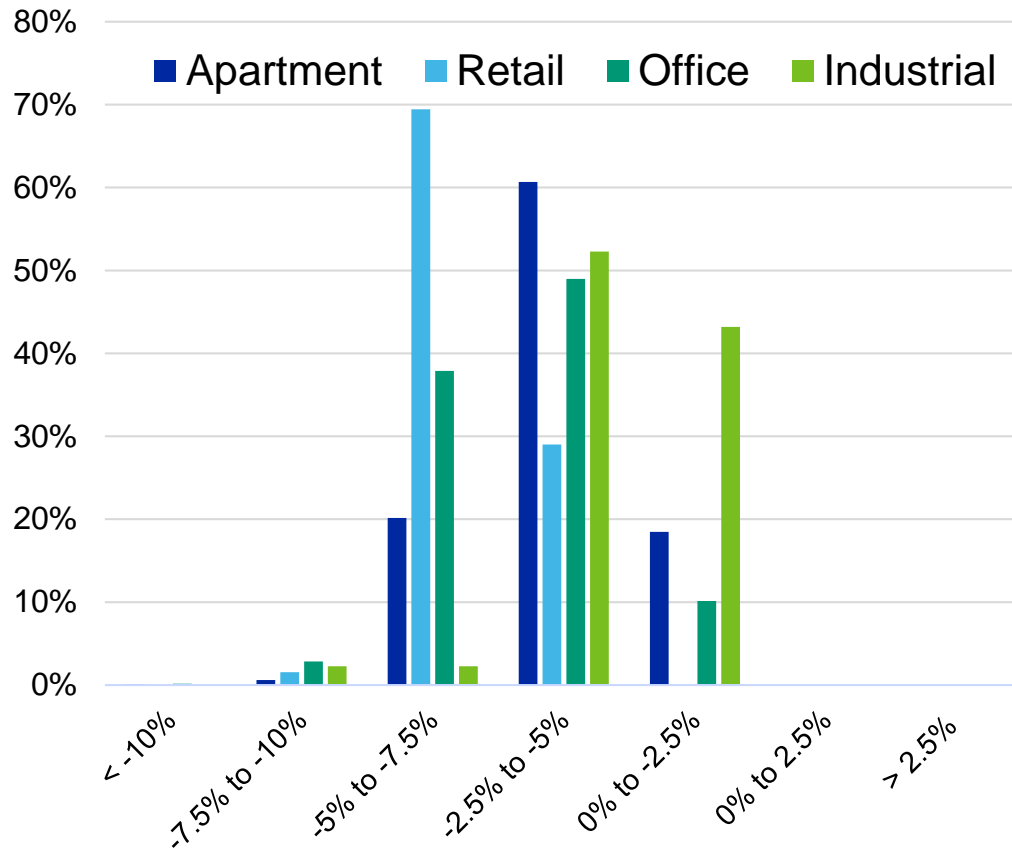
1. Where are the greatest risks and opportunities?
2. Where are things headed?
3. How bad could it get?

A Sensible Strategy

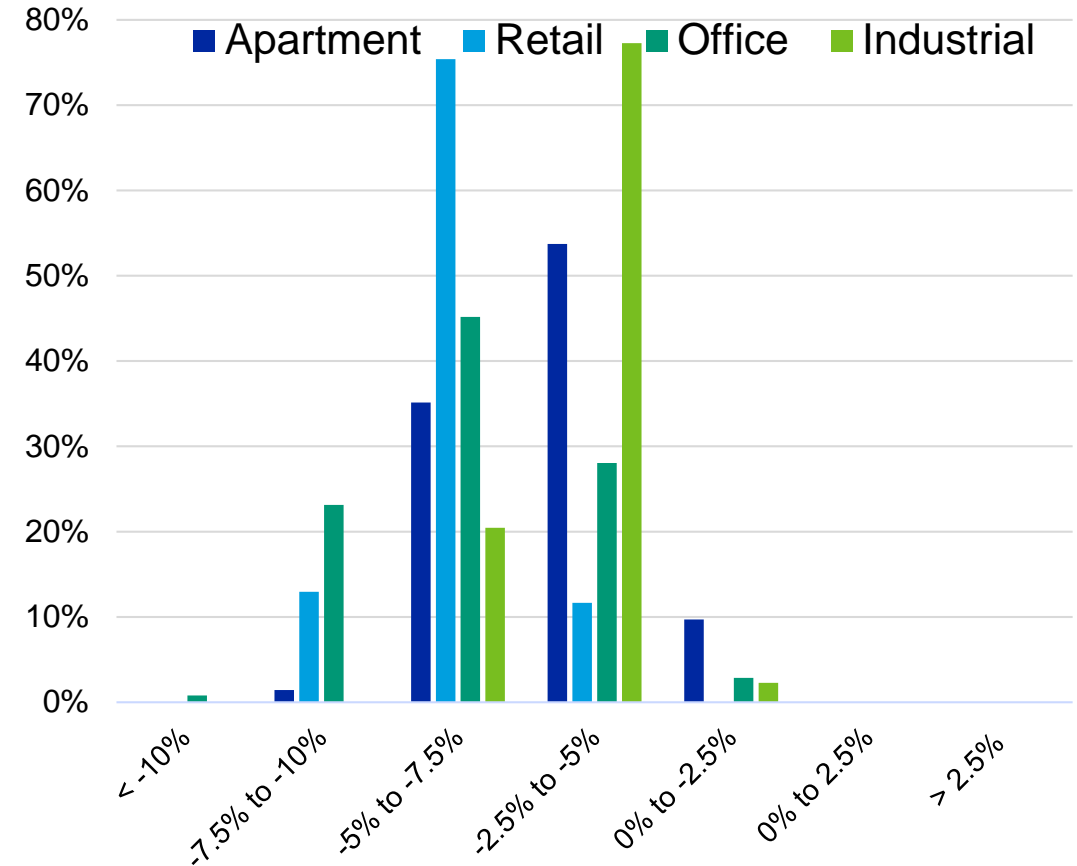
1. Quantify the “hot spots” with forward-looking estimates.
2. Translate forecasts into projections of credit risk measures.
3. Make adjustments. Look to non-traditional measures for support.

NOI & Value Growth Forecast (FY 2020)

NOI Growth Rate

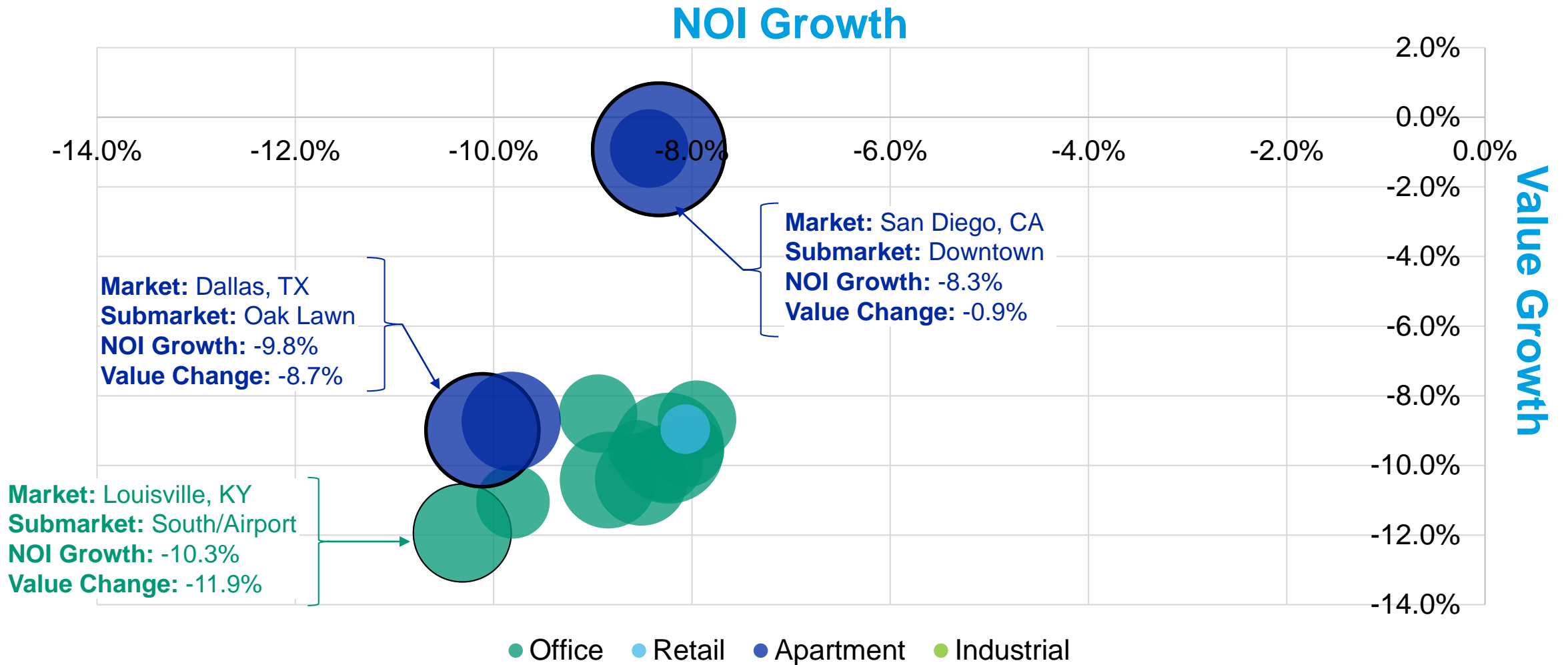


Value Change



Source: Moody's Analytics REIS | Baseline scenario as of EOM March 2020 | n=2,179 submarkets

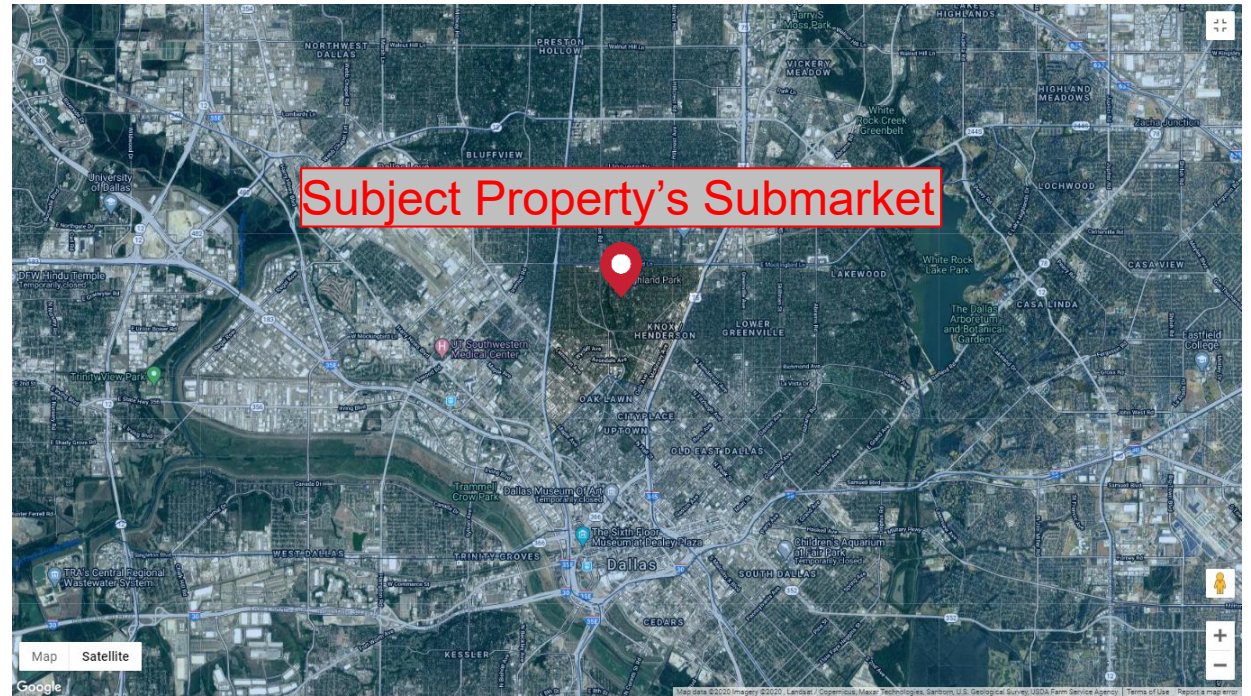
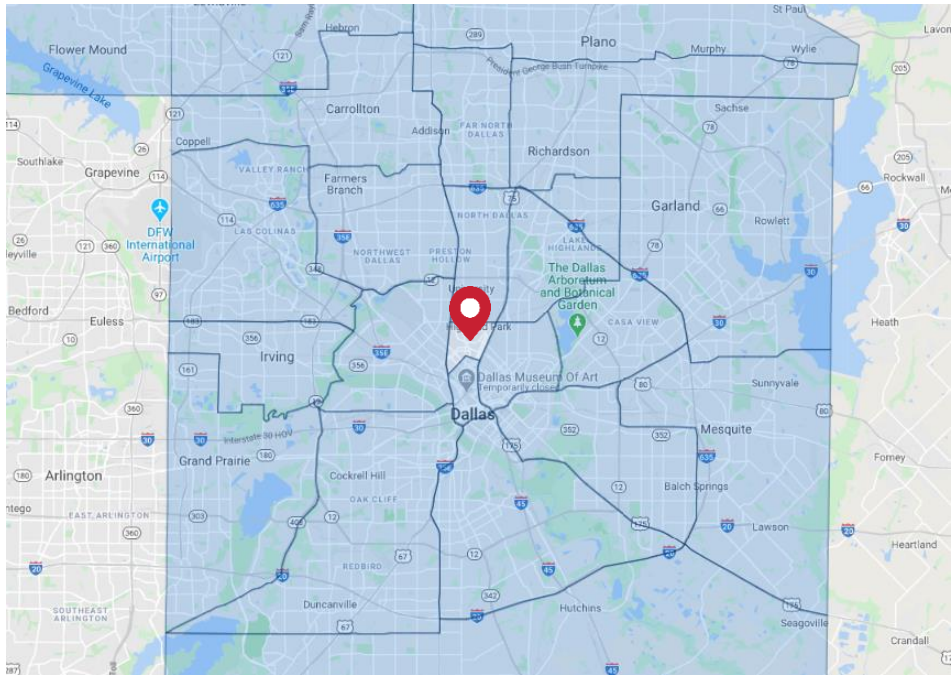
NOI & Value Growth Forecast (FY 2020)



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

Example: Multifamily Property

Oak Lawn Neighborhood in Dallas, TX



Example: Multifamily Property

Oak Lawn Neighborhood in Dallas, TX

Unit Mix

<u>Floorplan</u>	<u>Rent/Mo</u>	<u>No. Units</u>	<u>Monthly Income</u>	<u>Annual Income</u>
1 Bedroom	\$2,040	44	\$89,760	\$1,077,120
2 Bedroom	\$2,530	39	\$98,670	\$1,184,040
3 Bedroom	\$3,239	17	\$55,063	\$ 660,756

Property Income and Value:

Gross Scheduled Income: \$2.92 Million

Net Operating Income (NOI): \$1.57 Million

Property Value: \$26.14 Million

2020 Submarket Forecast (Baseline):

NOI Growth: - 9.8%

Value Change: - 8.9%

Forecast Trend: 

Loan Structure:

Outstanding Loan Amount: \$20.00 Million

Interest Rate: 5.00%

Amortization Speed: 360 Months

Annual Debt Service: \$1.29 Million

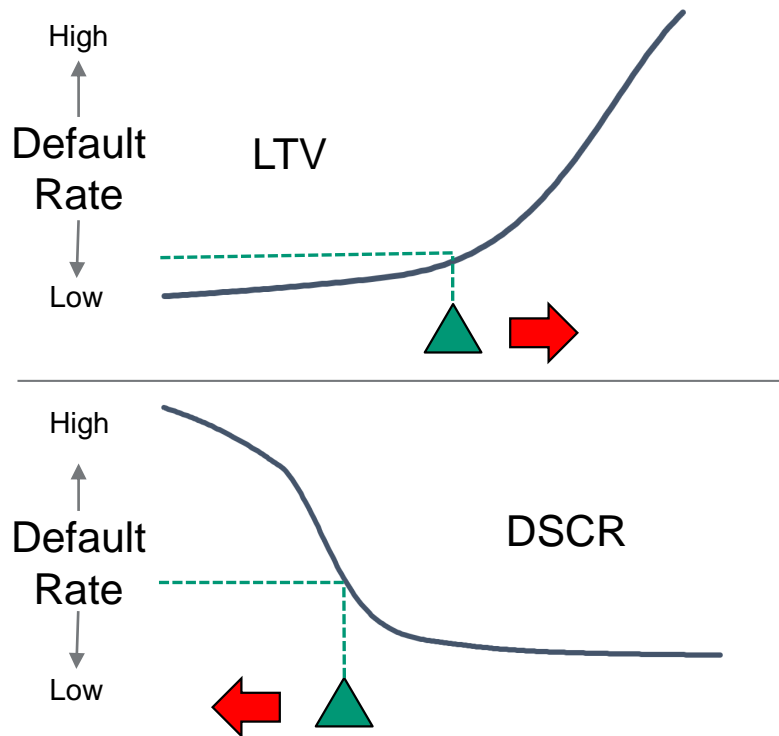
Mortgage Constant: 6.44%

Debt Service Coverage (DSCR): 1.22x

Loan-to-Value (LTV): 76.5%

Example: Multifamily Property

Oak Lawn Neighborhood in Dallas, TX



	Current	Baseline	Downside 1	Downside 2
NOI Growth	--	- 9.8%	- 12.5%	- 20.0%
DSCR	1.22	1.10	1.07	0.97
Value Change	--	- 8.9%	- 15.0%	- 20.0%
LTV	76.5%	84.0%	90.0%	95.6%

Forecast Process:

- » NOI Growth forecasts are derived using our data on occupancy, rents, expenses, new construction and absorption; coupled with scenario-based forecasts of national and local economic variables.
- » Value Change forecasts are derived from our NOI Growth predictions and cap rate models, which include (among other things) observed sales transactions.
- » During periods where a significant decline in transaction activity is expected, changes in value are more closely tied to income trends (which generally follow the direction of the overall economy).

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](#)

New York Metro, NY

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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