

MARCH 27, 2020



COVID-19

**ECONOMIC IMPACT
& SECTOR UPDATE**



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SPEAKERS | MARCH 27, 2020

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Opening Remarks

Global Economic Outlook

Metro and 'Big-Picture' Real Estate Overview

COVID-19 Implications for Lodging

COVID-19 Implications for Retail

COVID-19 Implications for Office

COVID-19 Implications for Multifamily

COVID-19 Implications for Industrial

Q&A and Closing Comments



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OPENING REMARKS

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GLOBAL ECONOMIC OUTLOOK

**DR. RICHARD BARKHAM, GLOBAL CHIEF
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RESEARCH**



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WHY HAVE WE CHANGED OUR FORECASTS

- Deteriorating data – weekly unemployment claims
- Anecdotal information on the scale of job losses
- The restrictions and lockdowns have proceeded more quickly than expected – both in the USA and elsewhere
- New data from China have revealed the impact of the lockdown and restrictions there on economic activity
- We aim not to be too far from the “consensus”. We were in line with the emerging consensus a week ago. The consensus view has deteriorated

KEY UNCERTAINTIES (CBRE ASSUMPTIONS IN RED)

1. What will the peak (assumed to be Q2) impact be? – how will it vary by industry?

It will reduce GDP by almost 7% relative to base in Q2. Retail, wholesale, transport, leisure worst affected

2. How long will the economic impact last? - will lockdowns get more severe or ease off?

Peak by end of Q2. Some restrictions may ease back before then

3. How quick will the recovery kick in? – how long will it take to get back to base? – what could turn a Nike-shaped tick into a U or an L?

The recovery will kick in from Q3 accelerating in Q4

If the peak is well into Q3 the recovery will be delayed and the recovery slower (the U-shape)

4. What impact will policy have? – mitigate the downturn, facilitate the recovery or both?

- Calms financial markets in Q1/2

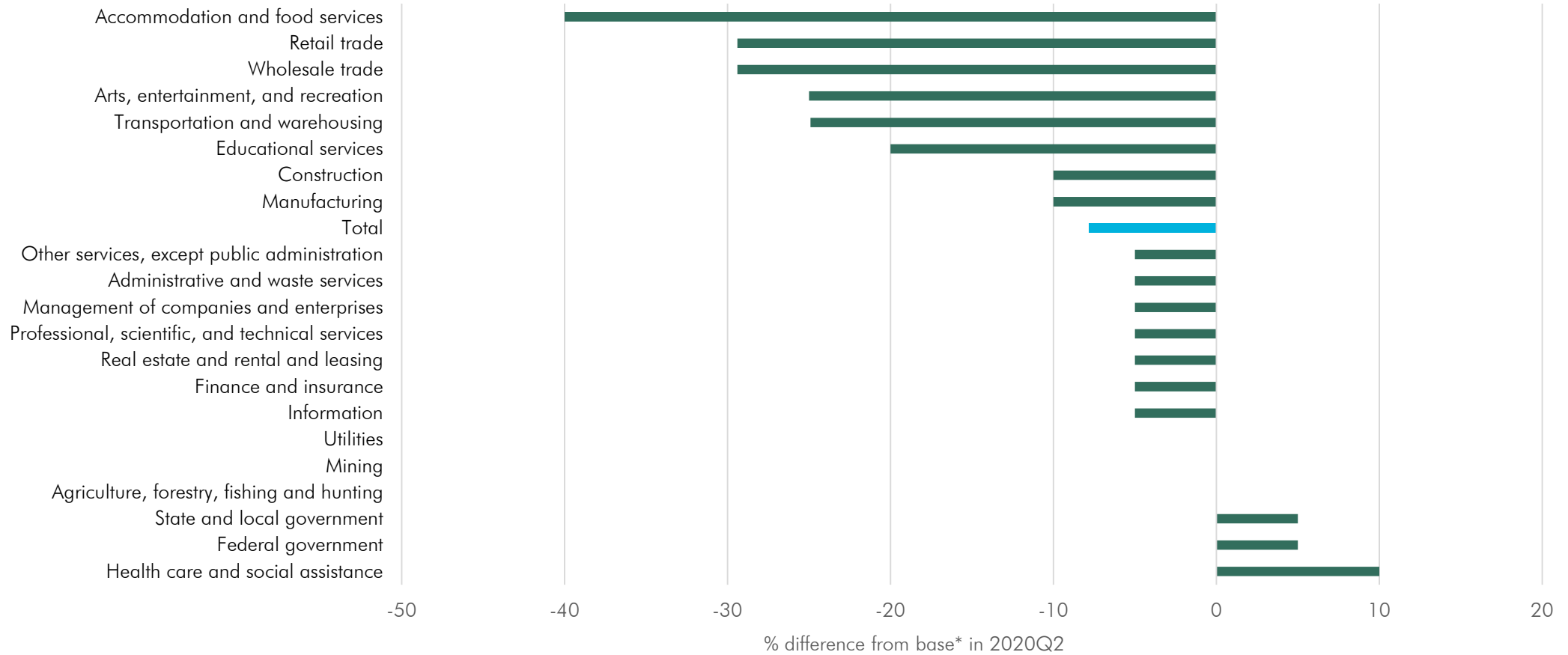
- Supports the supply side by stopping companies going bust allowing them to deliver the recovery in Q3

- Support the demand side in the recovery by maintaining personal incomes now

5. What is the impact on price inflation?

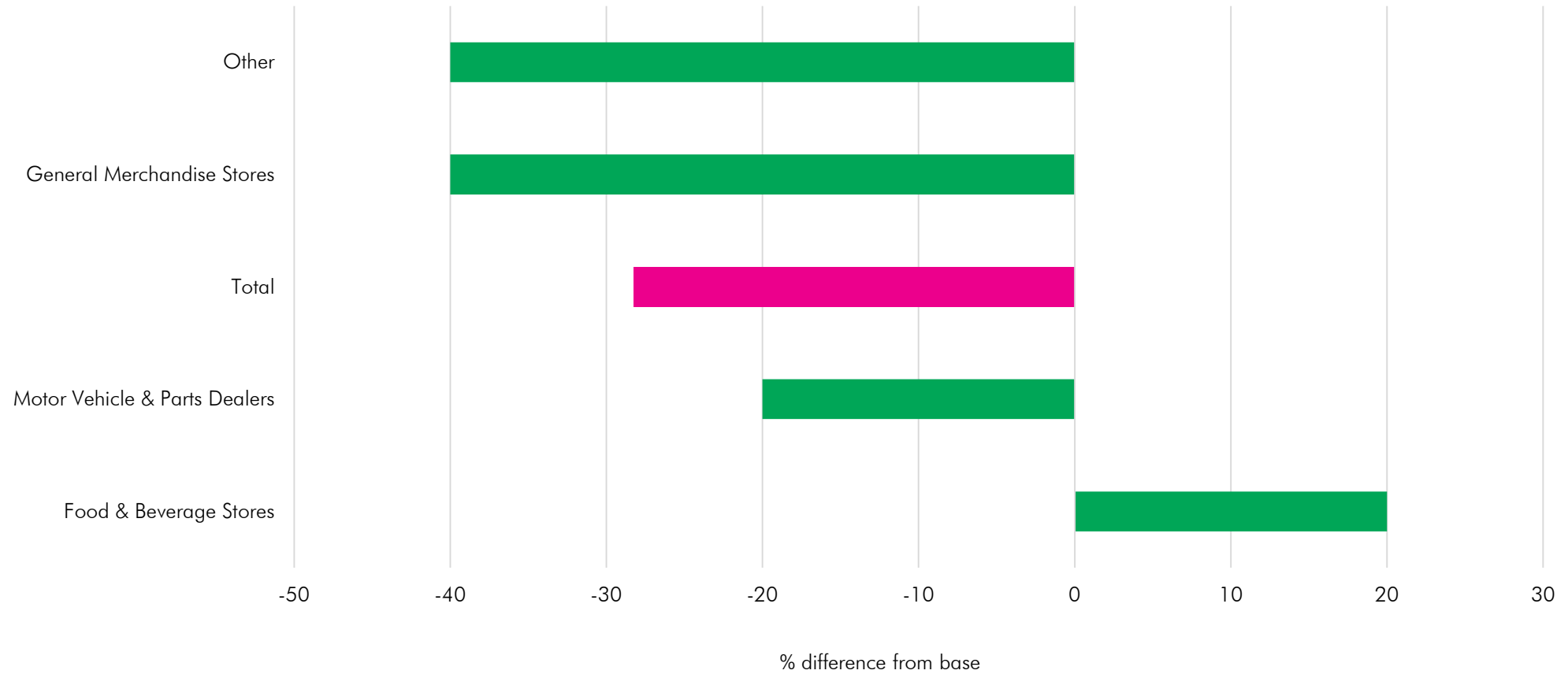
Short-term negative; may push inflation up during the recovery

ASSUMED IMPACT BY INDUSTRY



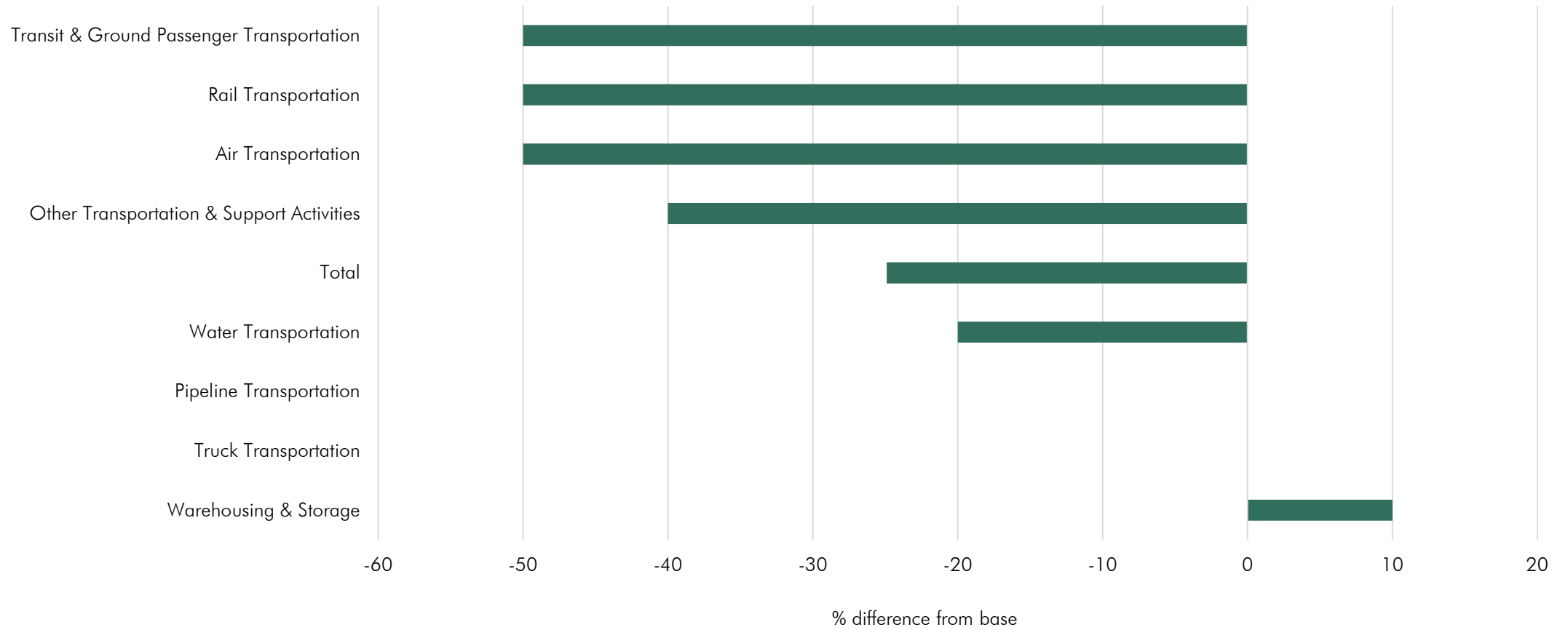
Source: CBRE Research, March 2020. *Base = February forecast.

ASSUMED IMPACT BY INDUSTRY: RETAIL DETAIL



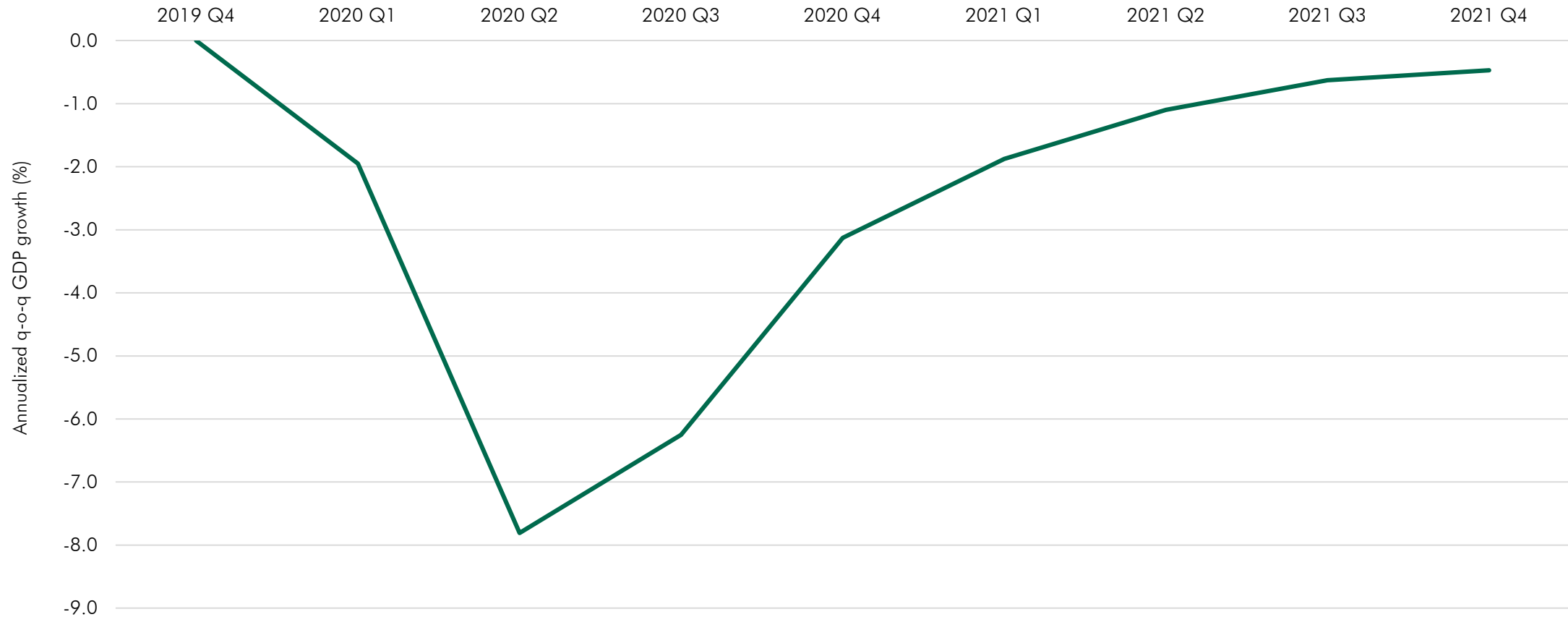
Source: CBRE Research, March 2020.

ASSUMED IMPACT BY INDUSTRY: TRANSPORT & WAREHOUSING



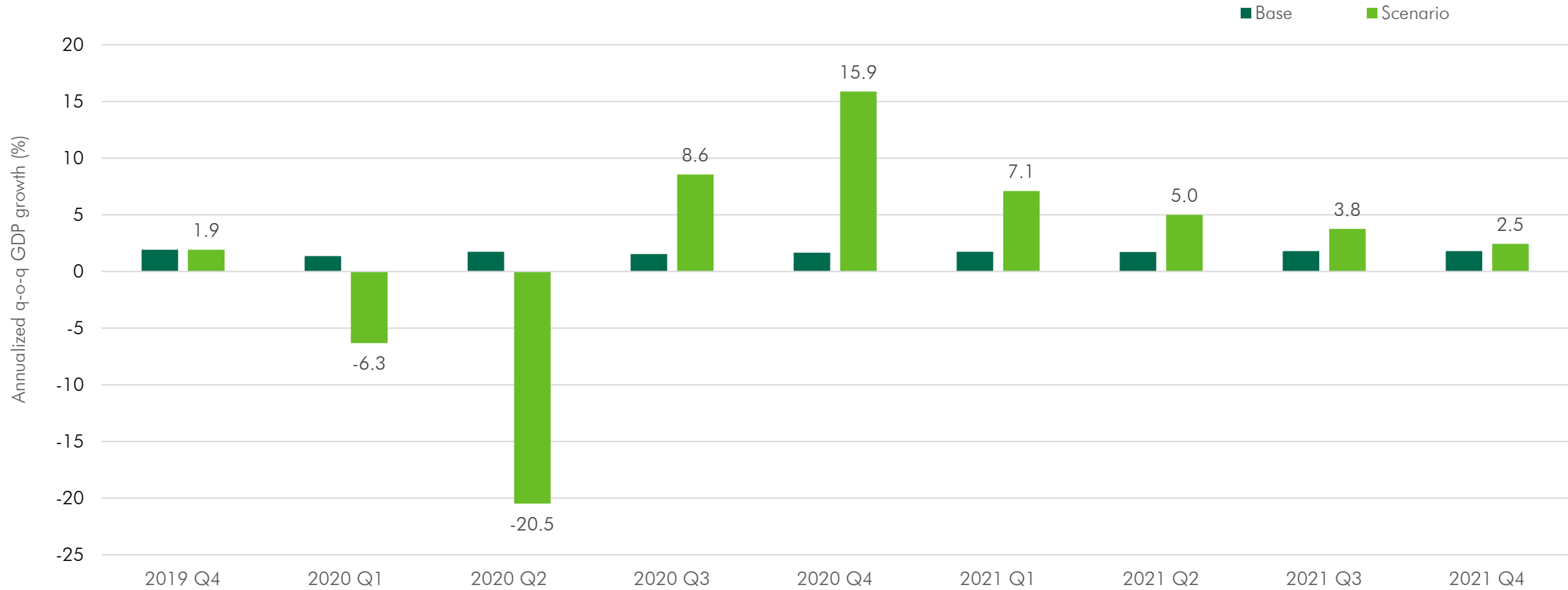
Source: CBRE Research, March 2020.

IMPACT ON GDP: RELATIVE TO BASE



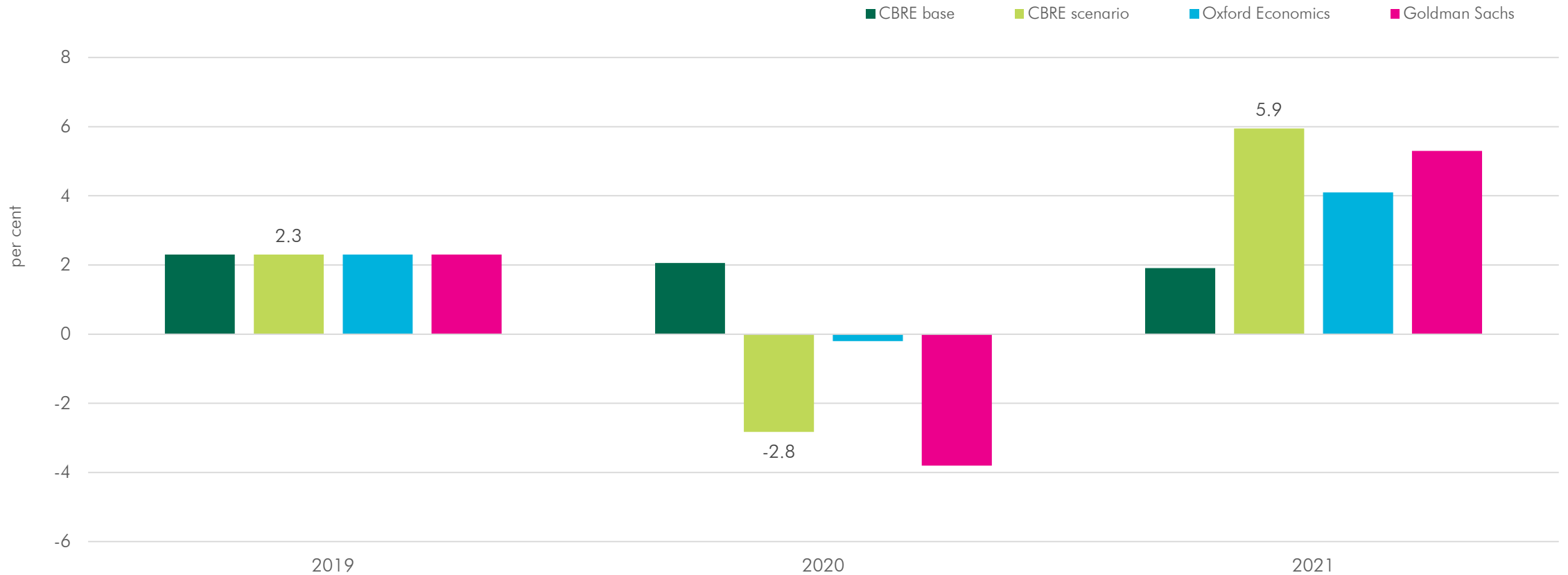
Source: CBRE Research, March 2020.

QUARTERLY GROWTH PROFILE: SAAR



Source: CBRE Research, March 2020.

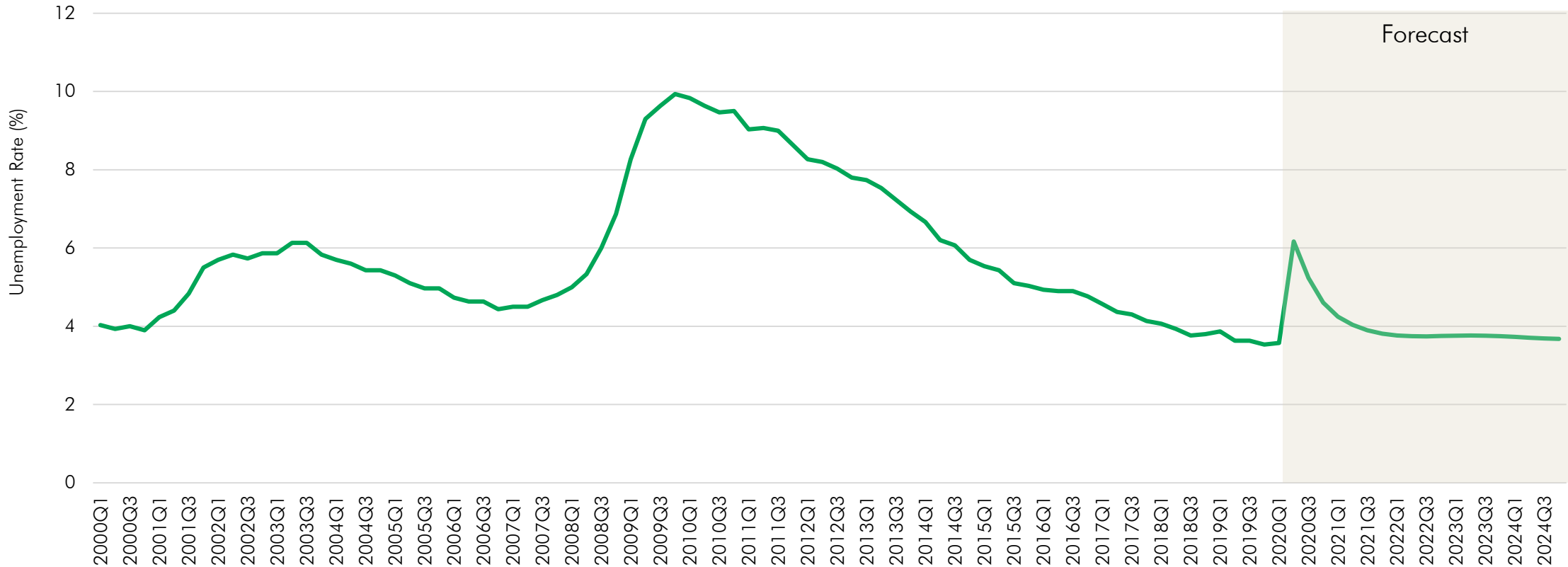
IMPACT ON ANNUAL US GDP GROWTH



Source: Oxford Economics, Goldman Sachs, CBRE Research, March 2020.

EMPLOYMENT TO FALL BY 8 MILLION

Unemployment rate to hit 6.1% but then to fall back rapidly from Q3



Source: BLS, CBRE Research, March 2020.

SUMMARY

- Big hit in Q2: -17.9% GDP growth
- Big bounce back, particularly in Q4
- -2.8% GDP growth in 2020; +5.9% in 2021
- Unemployment up to 6.1%; employment falls by 5.3% or 8m in Q2
- Policy responses:
 - Calms financial markets in Q1&2
 - Supports the supply side by stopping companies going bust allowing the recovery in Q3
 - Support the demand side for recovery by maintaining personal incomes now

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COVID-19 IMPLICATIONS FOR INDUSTRIES AND CITIES

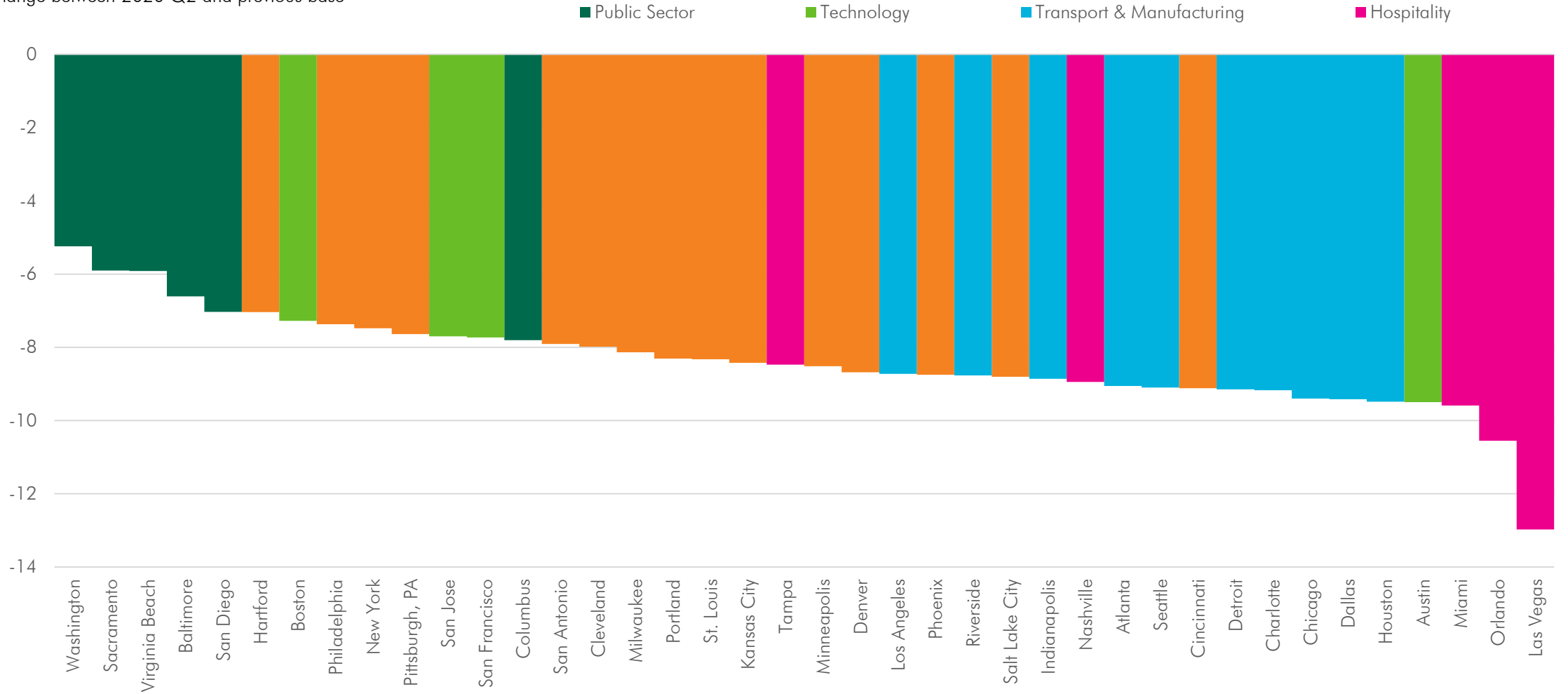
**MATT MOWELL, ECONOMIST, CBRE
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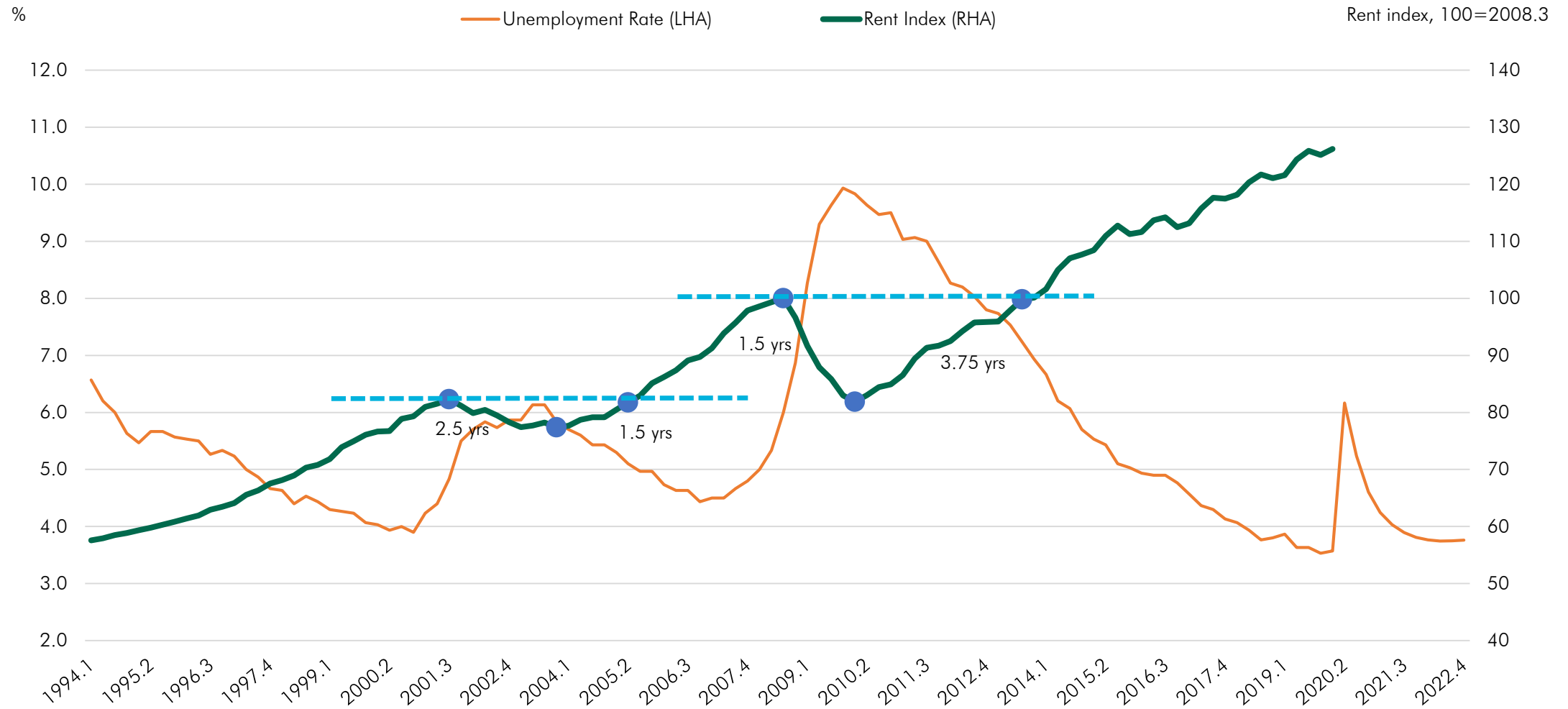
WHICH US CITIES COULD BE HARDEST HIT FROM COVID-19

% change between 2020 Q2 and previous base



Source: CBRE.

IMPACT ON THE PROPERTY MARKET WILL BE SHARP BUT ARGUABLY SHORT



Source: CBRE, Bureau of Labor Statistics.

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COVID-19 IMPLICATIONS FOR LODGING

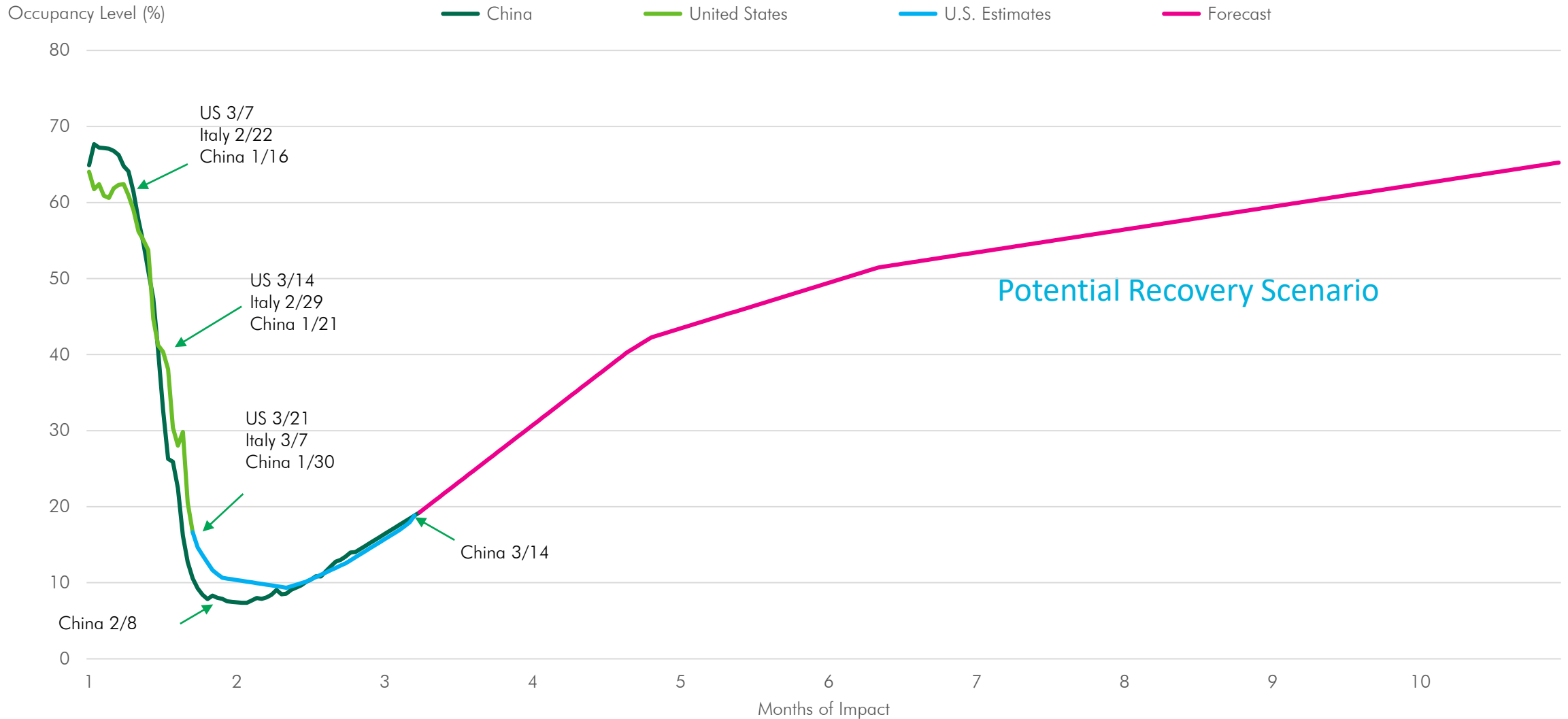
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DISRUPTION CURVE – HOTEL OCCUPANCY



Source: CBRE Hotels Research, STR, March 21, 2020.

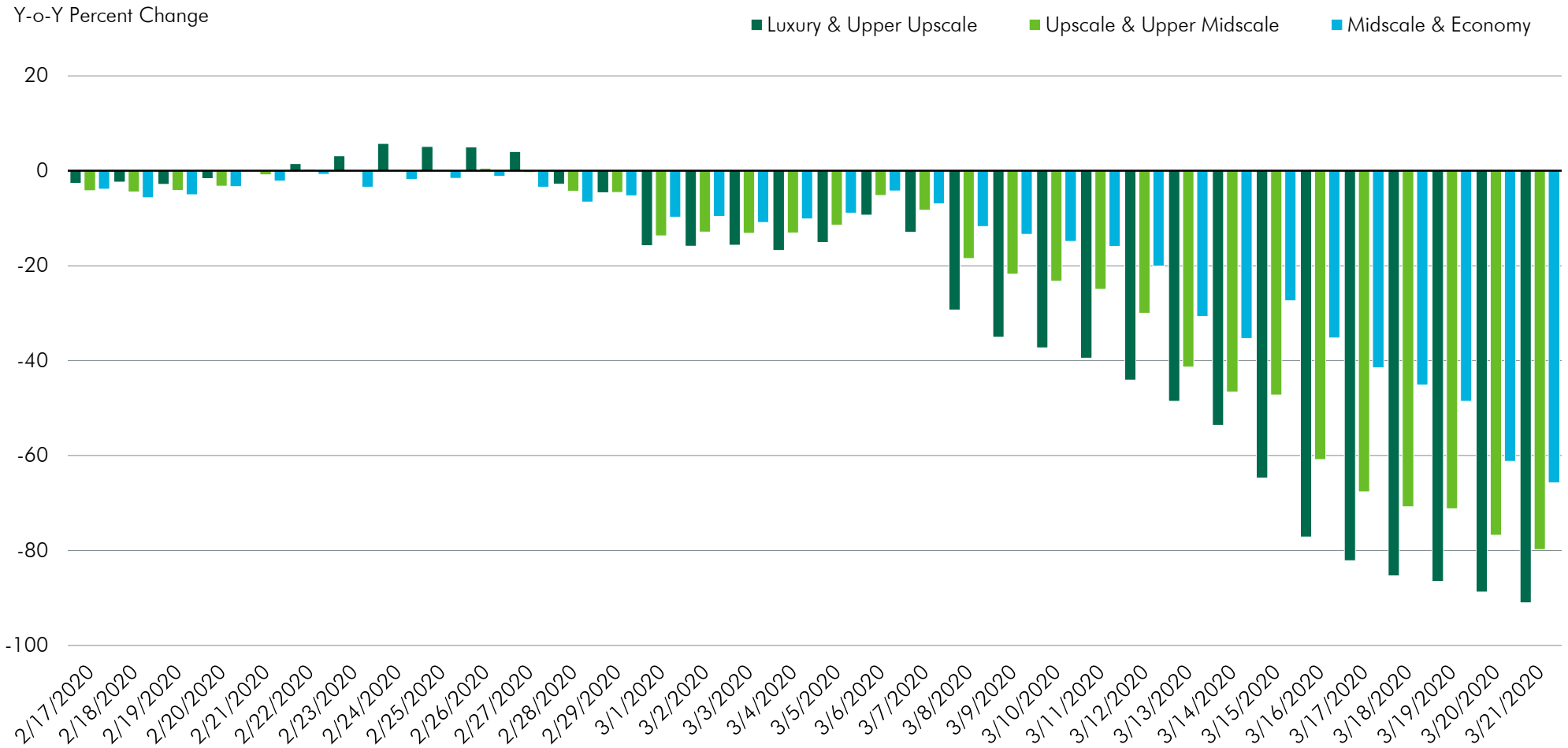
UPDATED DOWNSIDE FORECAST

Occupancy recovers faster than ADR

Year	Occ	ΔOcc	ADR	ΔADR	RevPAR	ΔRevPAR	Supply	ΔSupply	Demand	ΔDemand
2016	65.4%	0.1%	\$124.06	3.0%	\$81.14	3.1%	5,021,012	1.4%	3,283,828	1.5%
2017	65.9%	0.7%	\$126.81	2.2%	\$83.52	2.9%	5,106,199	1.7%	3,363,052	2.4%
2018	66.1%	0.4%	\$129.96	2.5%	\$85.94	2.9%	5,206,614	2.0%	3,442,727	2.4%
2019	66.1%	0.0%	\$131.20	1.0%	\$86.73	0.9%	5,311,653	2.0%	3,511,367	2.0%
2020	46.8%	-29.3%	\$117.09	-10.8%	\$54.76	-36.9%	5,411,741	1.9%	2,530,899	-27.9%
2021	60.2%	28.7%	\$125.78	7.4%	\$75.72	38.3%	5,495,484	1.5%	3,308,350	30.7%
2022	64.0%	6.4%	\$134.15	6.7%	\$85.89	13.4%	5,515,177	0.4%	3,531,190	6.7%
2023	65.1%	1.6%	\$138.46	3.2%	\$90.08	4.9%	5,569,023	1.0%	3,623,162	2.6%

Source: CBRE Hotels Research, STR, March 20, 2020.

HIGHER THE ADR, LARGER THE Y-O-Y PERCENT DECLINE



Source: CBRE Hotels Research, STR, March 21, 2020.

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COVID-19 IMPLICATIONS FOR RETAIL

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IMPACT ON CONSUMERS AND RETAILERS

Consumer

- Immediate impact – avoidance of physical stores
 - Top three venues people are avoiding: movie theaters, restaurants/bars/coffee shops, shopping malls
- Deferred impact – rising unemployment erodes consumer confidence
 - Consumers cut back non-essential spending which leads to a decline in demand

Retailer

- Liquidity
 - Some retailers started to draw down their line of credit
 - Retailers with strong balance sheets and omni channel strategies will outperform
- Will consumers come back to stores as before?

LENGTH OF THE IMPACT

Consumer		Short-term	Medium-term	Long-term
Immediate impact		Yes	0	0
Deferred impact		Yes	Partial	0

Retailer	Scenario	Short-term	Medium-term	Long-term
Liquidity		Credit lines	Scale back	Fully recovered
Foot traffic	Back to Normal	Zero or weak	Recovery	Fully recovered
Foot traffic	New Normal	Zero or weak	Slow recovery	Not fully recovered

WHAT CAN WE LEARN FROM THE PAST RECESSIONS

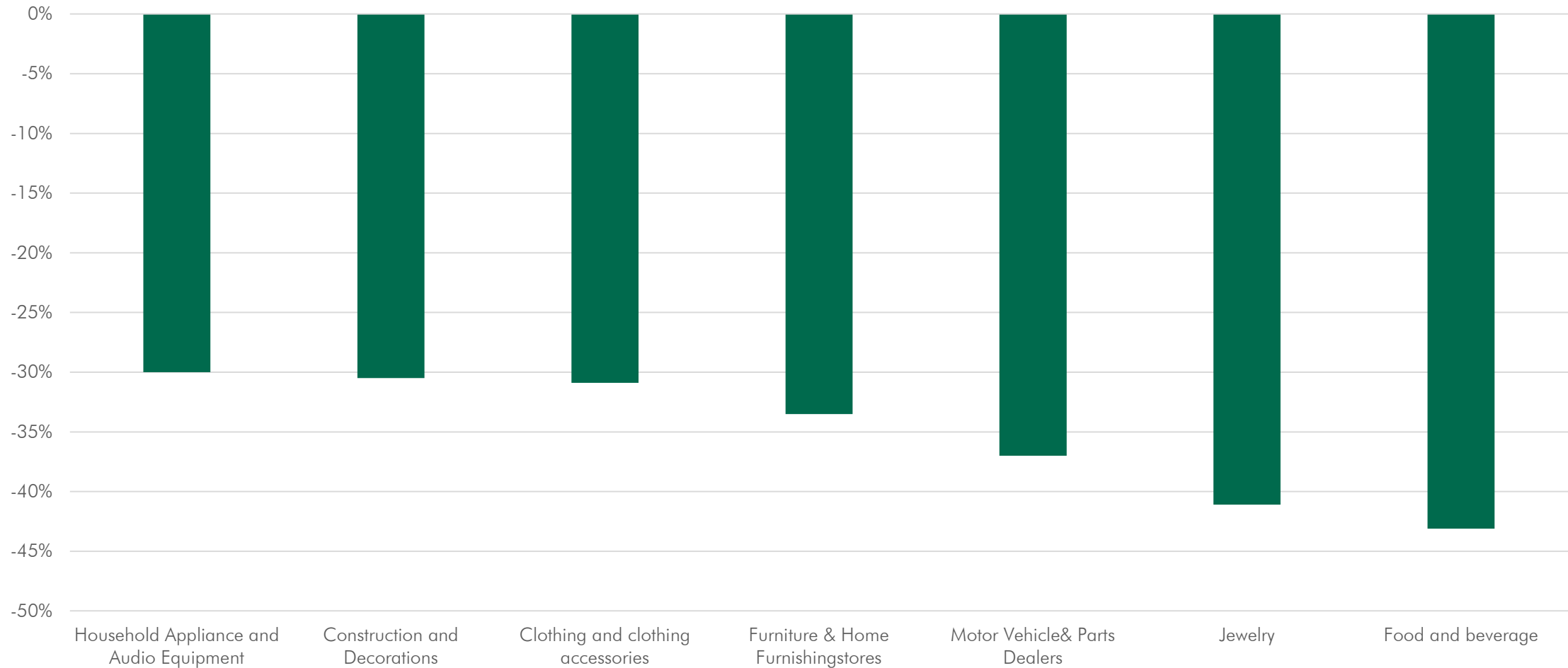


■ 1990 Recession
■ 2001 Recession
■ Great Recession

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WHICH RETAIL SECTORS WILL BE AFFECTED MOST?

Y-O-Y retail sales growth in China: January and February



Source: China National Bureau of Statistics.

OPEN TABLE SURVEY SHOWS HOW F&B ARE DOING NOW

	5-Mar	6-Mar	7-Mar	8-Mar	9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar
Atlanta	-9	-2	1	13	1	-14	-14	-26	-35	-34	-44	-78	-93	-96	-97	-99	-100	-100	-100	-100	-100
Austin	-6	0	-13	-23	-41	-31	-30	-27	-35	-36	-54	-71	-99	-100	-100	-100	-100	-100	-100	-100	-99
Baltimore	8	8	14	-4	-17	-34	-22	-30	-30	-39	-48	-75	-100	-100	-100	-100	-100	-100	-100	-100	-100
Boston	11	7	-1	10	-14	-29	-30	-47	-56	-64	-70	-81	-100	-100	-100	-100	-100	-100	-100	-100	-100
Calgary	-2	2	-10	-4	-11	-8	-7	-27	-48	-51	-54	-73	-96	-99	-99	-99	-100	-100	-100	-100	-100
Charlotte	-7	4	-5	-10	-8	-12	-18	-30	-35	-34	-36	-68	-97	-100	-100	-100	-100	-100	-100	-100	-100
Chicago	-11	-8	4	13	-25	-23	-27	-31	-37	-49	-53	-75	-100	-100	-100	-100	-100	-100	-100	-100	-100
Cincinnati	-6	-21	-14	-23	-18	-13	-20	-19	-37	-52	-53	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Columbus	-10	-9	-5	3	-26	-19	-19	-37	-38	-53	-49	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Dallas	0	3	-1	-2	-15	-10	-12	-25	-35	-35	-42	-61	-100	-100	-100	-100	-100	-100	-100	-100	-100
Denver	-10	-9	-6	2	-20	-19	-4	-17	-46	-46	-50	-56	-100	-100	-100	-100	-100	-100	-100	-100	-100
Fort Lauderdale	-11	-13	-3	-14	-15	-19	-15	-25	-28	-30	-44	-46	-88	-100	-100	-100	-100	-100	-100	-100	-100
Honolulu	-13	-12	-9	-18	-15	-16	-17	-20	-18	-22	-32	-40	-55	-75	-83	-99	-100	-100	-100	-100	-100
Houston	7	6	10	7	-14	-17	-8	-24	-33	-34	-40	-61	-100	-100	-100	-100	-100	-100	-100	-100	-100
Indianapolis	2	0	1	-1	-29	-20	-25	-35	-47	-58	-49	-71	-100	-100	-100	-100	-100	-100	-100	-100	-100
Las Vegas	-9	-8	-7	-8	-11	-19	-13	-20	-32	-36	-48	-58	-88	-100	-100	-100	-100	-100	-100	-100	-100
Los Angeles	-5	1	-2	-15	-27	-23	-26	-38	-48	-47	-57	-82	-100	-100	-100	-100	-100	-100	-100	-100	-100
Louisville	-7	-7	-5	3	-22	-21	-24	-30	-33	-52	-57	-75	-100	-100	-100	-100	-100	-100	-100	-100	-100
Miami	-2	-11	-2	10	-9	-15	-18	-22	-27	-30	-36	-46	-78	-100	-100	-100	-100	-100	-100	-100	-100
Miami Beach	-16	-8	-3	-10	-11	-17	-20	-22	-21	-24	-23	-43	-71	-100	-100	-100	-100	-100	-100	-100	-100
Minneapolis	-13	-6	61	23	-19	-14	-17	-28	-22	-35	-33	-76	-100	-100	-100	-100	-100	-100	-100	-100	-100
Nashville	-3	0	5	-4	-13	-7	-21	-30	-37	-40	-54	-70	-92	-97	-99	-100	-100	-100	-100	-100	-100
New Orleans	5	6	3	-3	-13	-13	-21	-28	-32	-39	-54	-63	-100	-100	-100	-100	-100	-100	-100	-100	-100
New York	-9	-15	-10	-4	-18	-30	-36	-52	-61	-64	-69	-77	-100	-100	-100	-100	-100	-100	-100	-100	-100
Orlando	-2	-1	1	-8	-34	-37	-30	-30	-33	-32	-47	-53	-85	-90	-93	-97	-100	-100	-100	-100	-100
Philadelphia	8	-7	1	3	-7	-14	-16	-39	-40	-48	-54	-85	-100	-100	-100	-100	-100	-100	-100	-100	-100
Phoenix	-8	-7	-6	-8	-18	-13	-28	-21	-28	-27	-45	-66	-86	-99	-100	-100	-100	-100	-100	-100	-100
Pittsburgh	-10	-17	9	1	-13	-31	-24	-42	-42	-48	-48	-63	-100	-100	-100	-100	-100	-100	-100	-100	-100
Portland	3	0	-3	5	-16	-7	-20	-32	-41	-39	-54	-61	-100	-100	-100	-100	-100	-100	-100	-100	-100
Raleigh	-13	-9	-9	-11	-18	-18	-15	-21	-29	-39	-55	-68	-97	-100	-100	-100	-100	-100	-100	-100	-100
San Antonio	-6	-8	-15	-23	-32	-22	-27	-28	-41	-39	-45	-59	-83	-91	-100	-100	-100	-100	-100	-100	-100
San Diego	-1	-1	-1	-7	-13	-34	-31	-43	-43	-42	-49	-62	-100	-100	-100	-100	-100	-100	-100	-100	-100
San Francisco	-22	-18	-18	-26	-41	-43	-43	-51	-53	-58	-72	-80	-100	-100	-100	-100	-100	-100	-100	-100	-100
Seattle	-36	-34	-35	-25	-47	-49	-54	-58	-63	-63	-62	-83	-100	-100	-100	-100	-100	-100	-100	-100	-100
Tampa	-1	-1	0	-2	0	-15	-14	-16	-22	-23	-20	-48	-75	-84	-86	-95	-100	-100	-100	-100	-100
Washington	-4	-5	1	0	-9	-18	-22	-38	-44	-44	-55	-76	-100	-100	-100	-100	-100	-100	-100	-100	-100



IF WE ARE MOVING TOWARD A VIRTUAL SOCIETY

- Technology
 - Contactless payment
 - Visiting stores at home: video chat with sales associates
- More e-commerce penetration in groceries shopping
 - Grocery-anchored shopping centers experience less foot traffic
- Retail space redeveloped, converted or blended with other uses
 - Conversion to industrial (cold storage and distribution centers)
 - Replacement with multifamily
 - Mixed-use redevelopment

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COVID-19 IMPLICATIONS FOR OFFICE

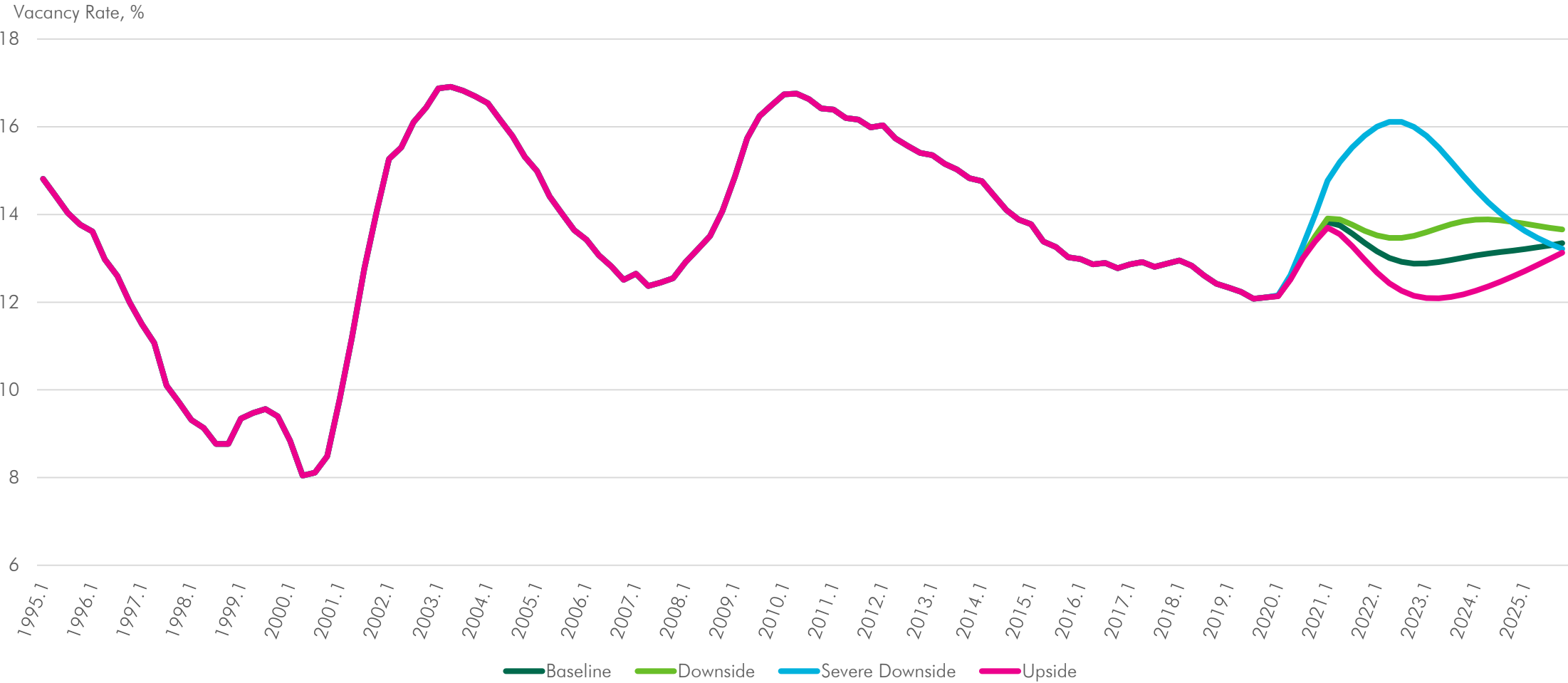
ALEX KRASIKOV, ECONOMIST,
CBRE ECONOMETRIC ADVISORS



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PRELIMINARY FORECAST FOR OFFICE

U.S. Office Sum of Markets Scenarios*



*Based on March 2020 macroeconomic expectations and Q4 2019 real estate fundamentals

Source: CBRE EA.

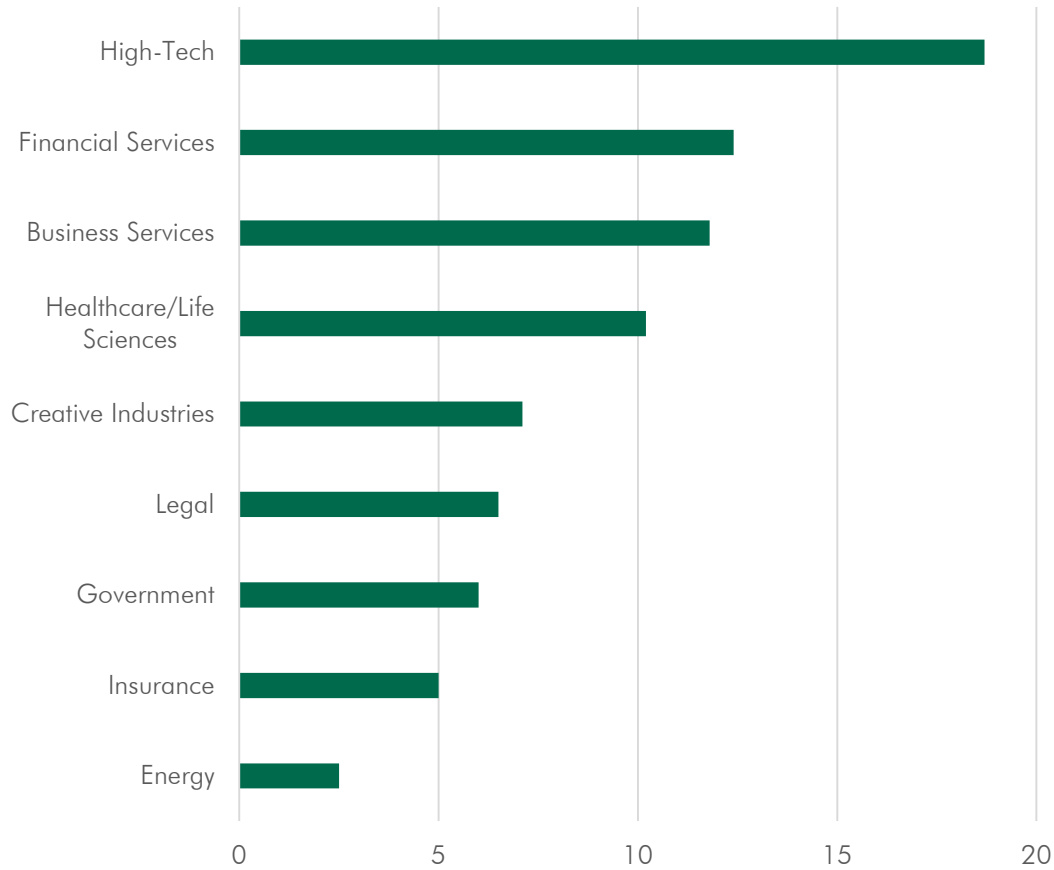
IMPACT OF PREVIOUS RECESSIONS ON OFFICE MARKETS



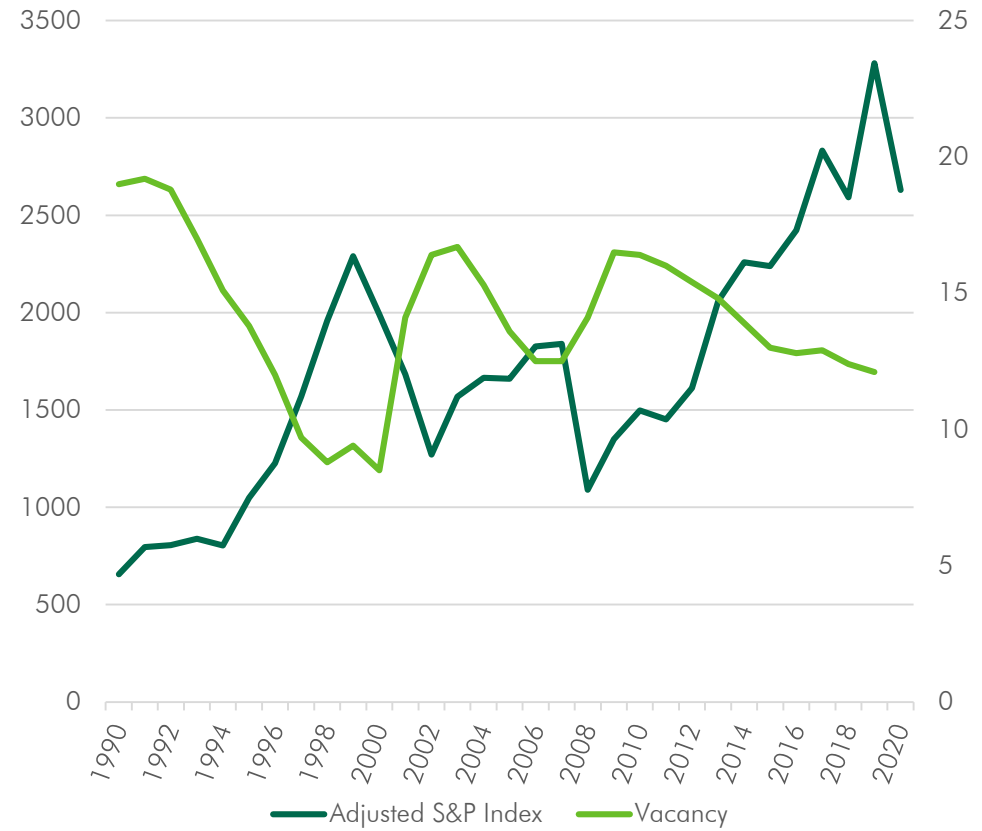
Source: CBRE EA.

UNKNOWN: TECH SECTOR

U.S. Office Leasing Share By Industry, %



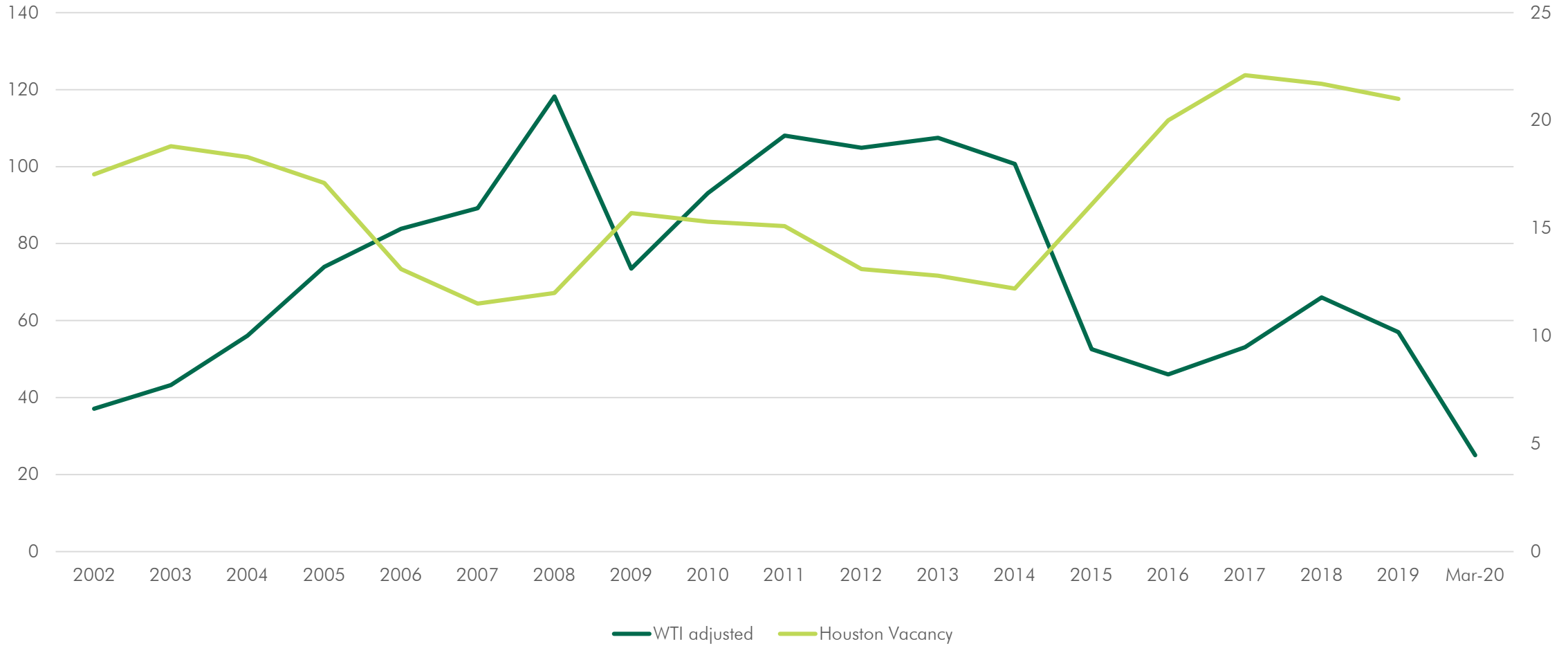
S&P Index and Office Sum of Markets Vacancy



Source: CBRE Research, CBRE EA, Dow Jones & Company, Bureau of Labor Statistics.

UNKNOWN: ENERGY SECTOR

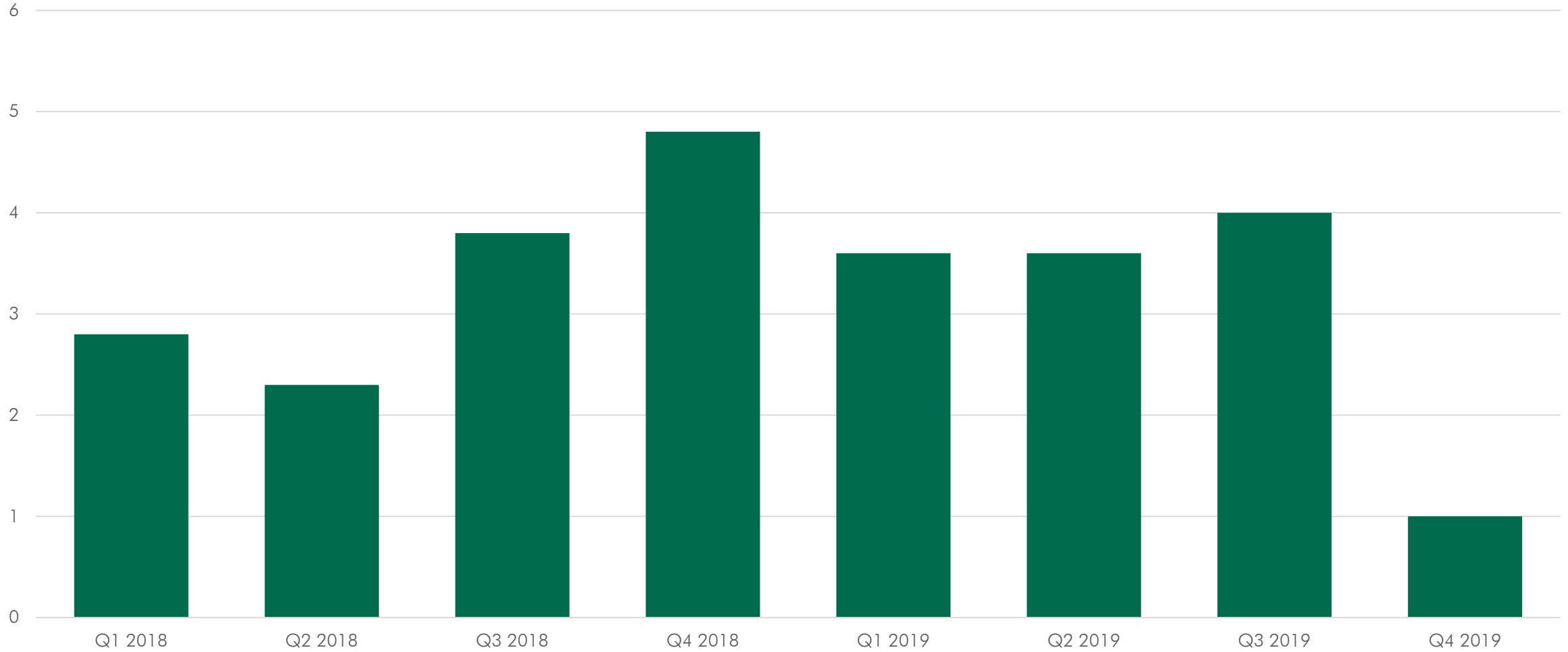
Houston Office Vacancy Rate And West Texas Intermediate Oil Price



Source: CBRE EA, Dow Jones & Company, Bureau of Labor Statistics.

UNKNOWN: FLEXIBLE SPACE

Flexible Office Leasing, MSF



Source: CBRE Research Q4 2019.

SUMMARY AND CONCLUDING REMARKS

Summary

- Currently we forecast a mild to medium impact on the office sector during the short-term shock, with consequent recovery
- The impact of past recessions varied by market and property type and depended on market industry mix and the cause of the recession
- Energy, Tech and Leisure and Hospitality and Flexible Space are sectors to watch

Potential Beacons in Office Investment:

- Life Science and Lab Space
- Corporate Flexible Space

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COVID-19 IMPLICATIONS FOR MULTIFAMILY

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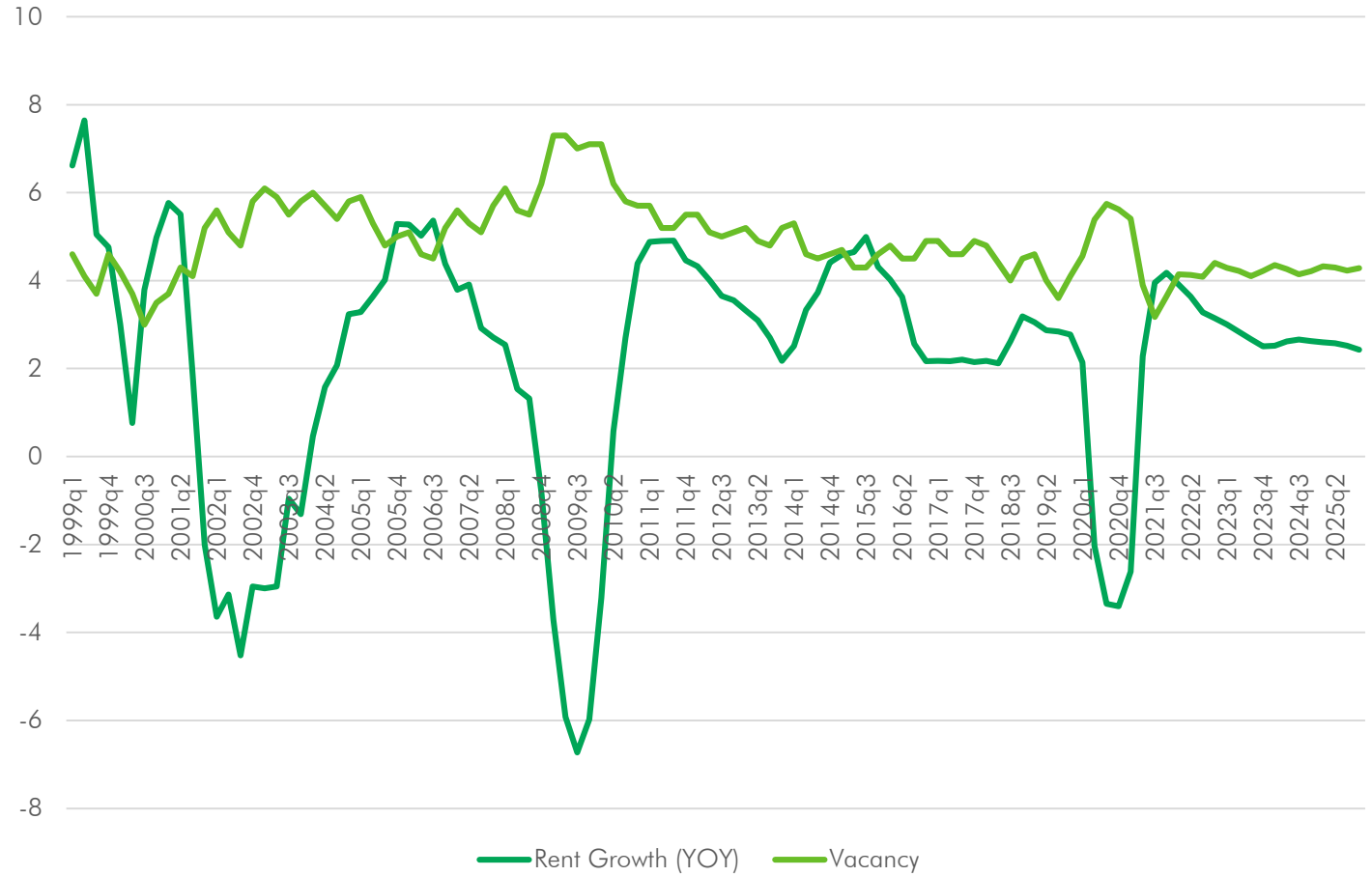
MULTIFAMILY: SHORT TERM



- Turn around in Q3-Q4 2020
- Rent growth -3.4%
- Vacancy 5.7%
- 2% stock growth in the next year
- Speed bump/dip while employment uncertainty subsides
- Housing policy/stimulus could ease uncertainty

Source: CBRE EA, RealPage Inc.

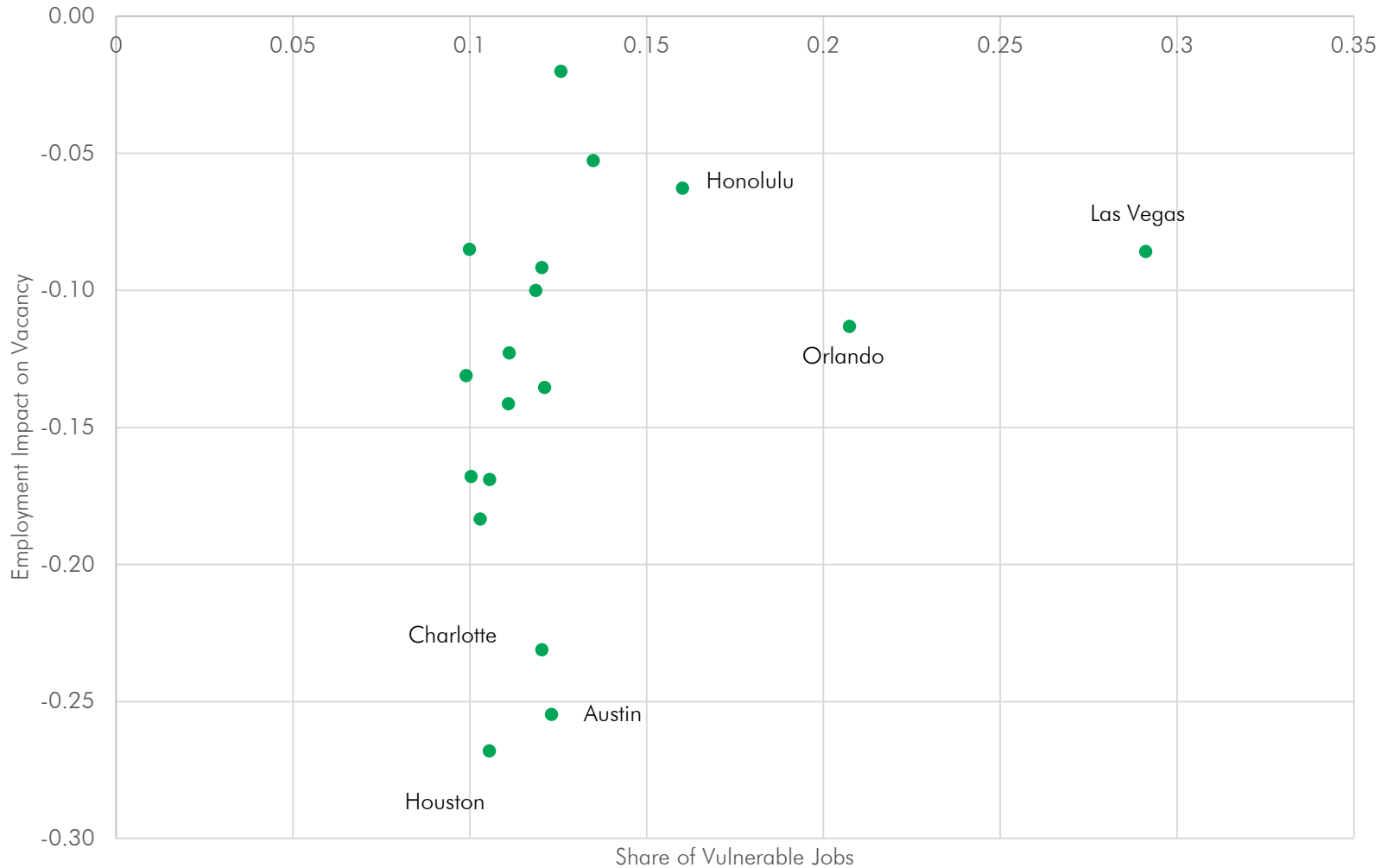
MULTIFAMILY: LONG TERM



- Preferences for city-living remain
- Return to long-run equilibrium in 2023
- Long-run vacancy: 4.25%
- Long-run rent growth: 2.75%

Source: CBRE EA, RealPage Inc.

VULNERABLE MARKETS (SHORT TERM)



Sources: CBRE EA, RealPage Inc., Bureau of Labor Statistics.

- No market is exposed on both fronts
- Employment impact reflects growth in recent markets
- Vulnerable industries: food service, hospitality, entertainment

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COVID-19 IMPLICATIONS FOR INDUSTRIAL

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CORONAVIRUS INDUSTRIAL REAL ESTATE IMPLICATIONS

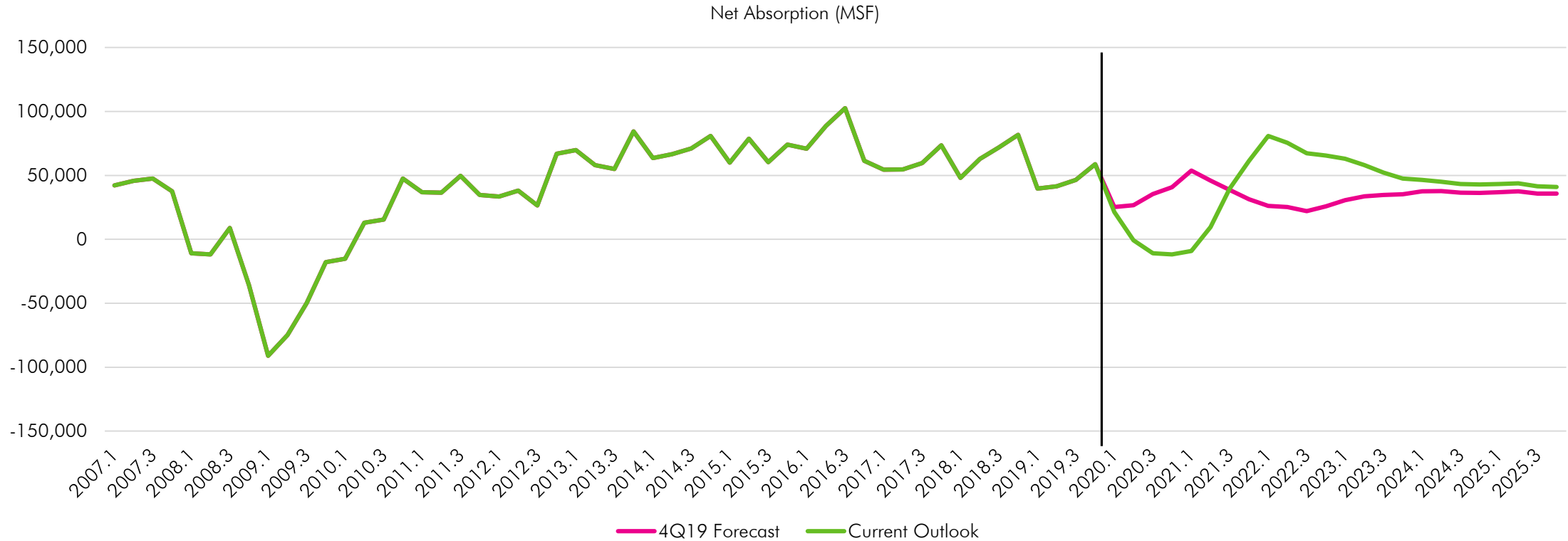
Short-Term Impacts

- Slumping manufacturing activity
- E-commerce gaining significant share, in a declining retail environment
- Near-term delays of lease activity, perhaps construction

Long-Term Impacts

- Push to carry higher inventory levels
- E-commerce representing a higher share of retail than previously thought

INTERIM INDUSTRIAL FORECAST CHANGES – NET ABSORPTION

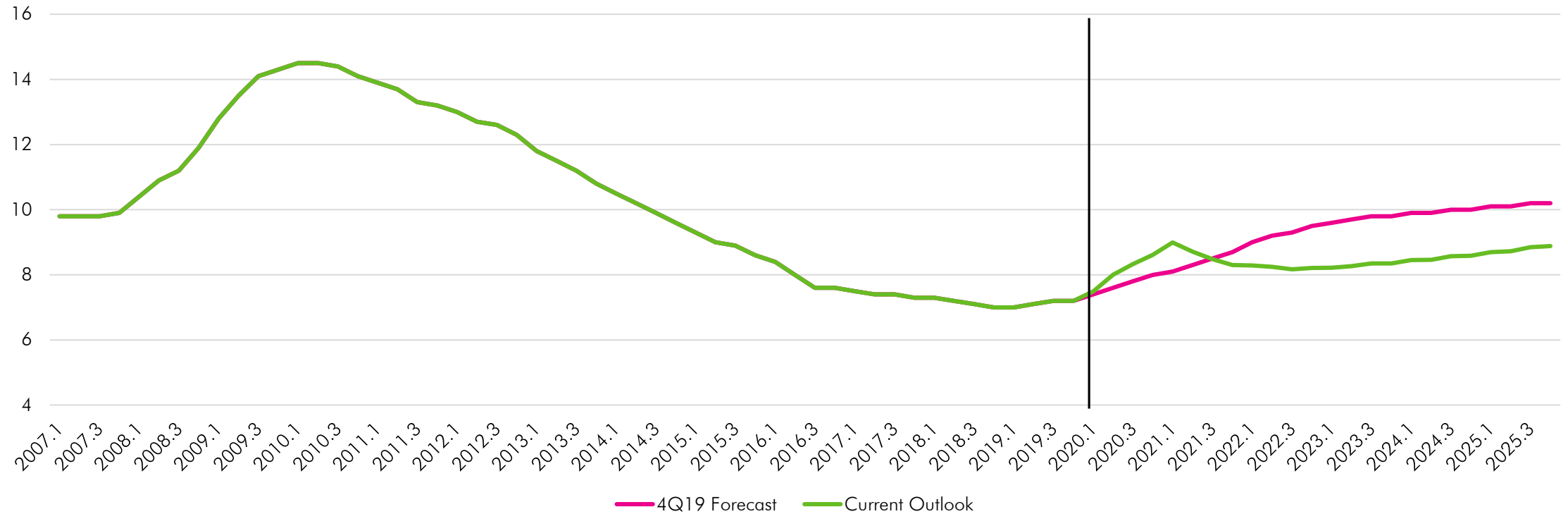


Net Absorption (MSF per year)	2020	2021	2022-2025
Previous	128,233	169,384	131,750
Current	-1,849	101,390	214,250
Change	-130,082.00	-67,994.00	82,500.00

Source: CBRE EA.

INTERIM INDUSTRIAL FORECAST CHANGES – AVAILABILITY

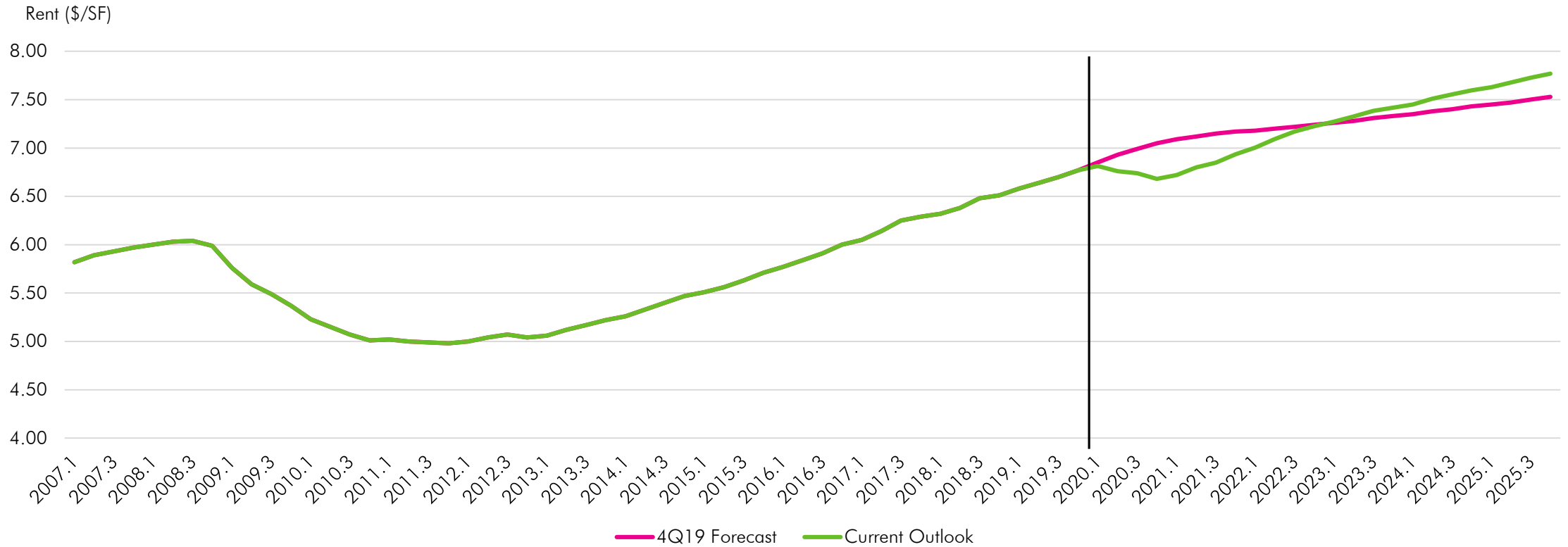
Availability Rate (%)



Availability (%)	2020	2021	2022-2025
Previous	7.7	8.4	9.8
Current	8.1	8.7	8.6
Change	0.4	0.3	-1.2

Source: CBRE EA.

INTERIM INDUSTRIAL FORECAST CHANGES – RENT



Rent (% 4Q/4Q)	2020	2021	2022-2025
Previous	4.1	2.6	1.2
Current	-1.3	3.8	2.9
Change	-5.4	1.2	1.7

Source: CBRE EA.

CONCLUDING THOUGHTS

Summary

- Slumping economic environment and uncertainty over COVID-19 will curb near term industrial demand, leading to higher vacancy
- Longer term, the rebounding economy, shift toward e-commerce, and increased inventories will improve industrial real estate markets

Risk Areas

- Sharp bounce back is projected for industrial after initial shock from COVID-19
- Largely hinges on a rapid economic recovery once the virus is contained
- A more prolonged economic downturn will have negative implications for the industrial outlook

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CLOSING REMARKS

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