



CUSHMAN &
WAKEFIELD

STATUS UPDATE: U.S. PROPERTY MARKETS & THE ECONOMY

SEPTEMBER 2020

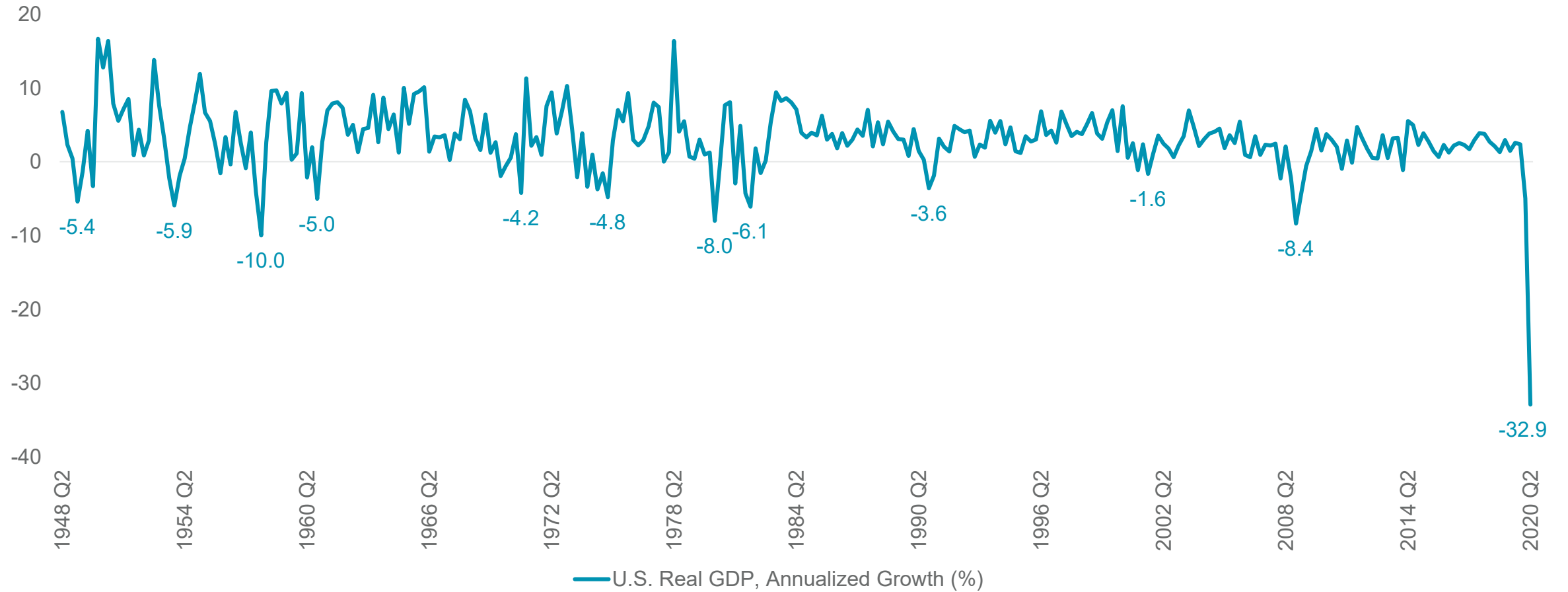


The most severe recession in economic history, but also, the shortest.



MOST SEVERE COLLAPSE IN GDP ON RECORD

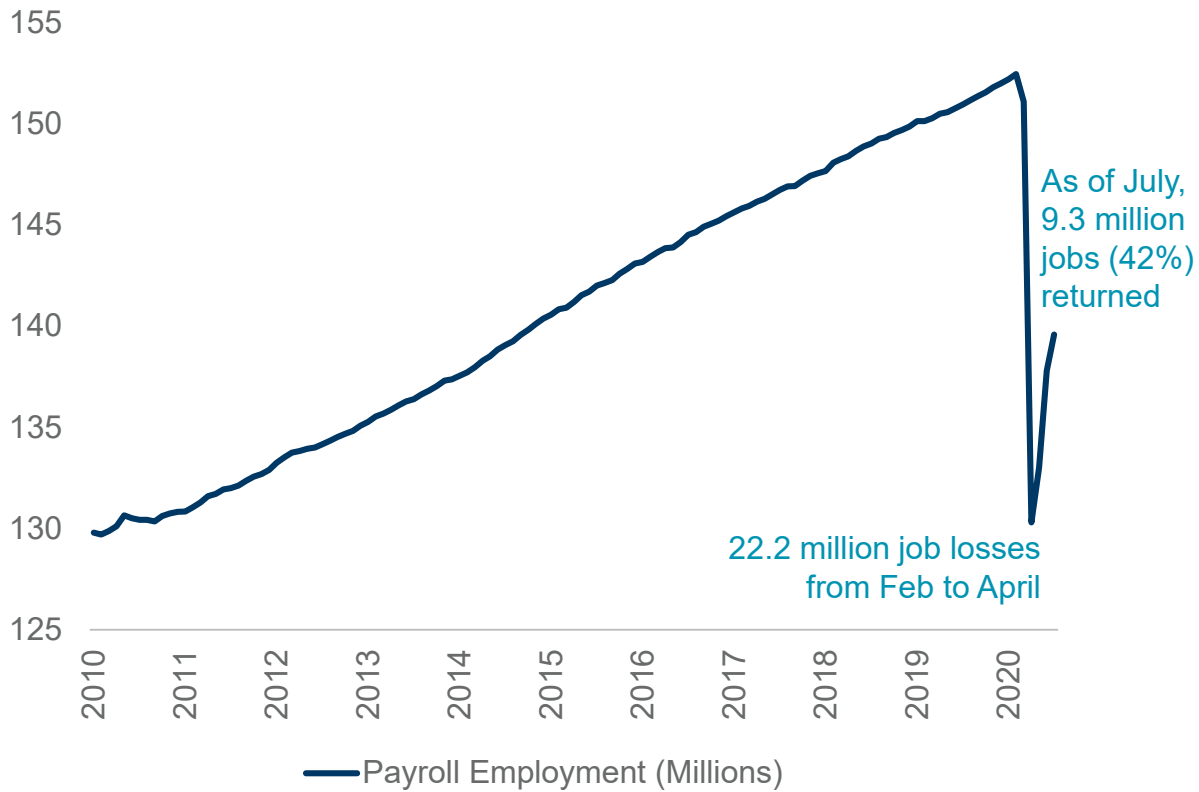
U.S. Real GDP, Annualized Growth(%)



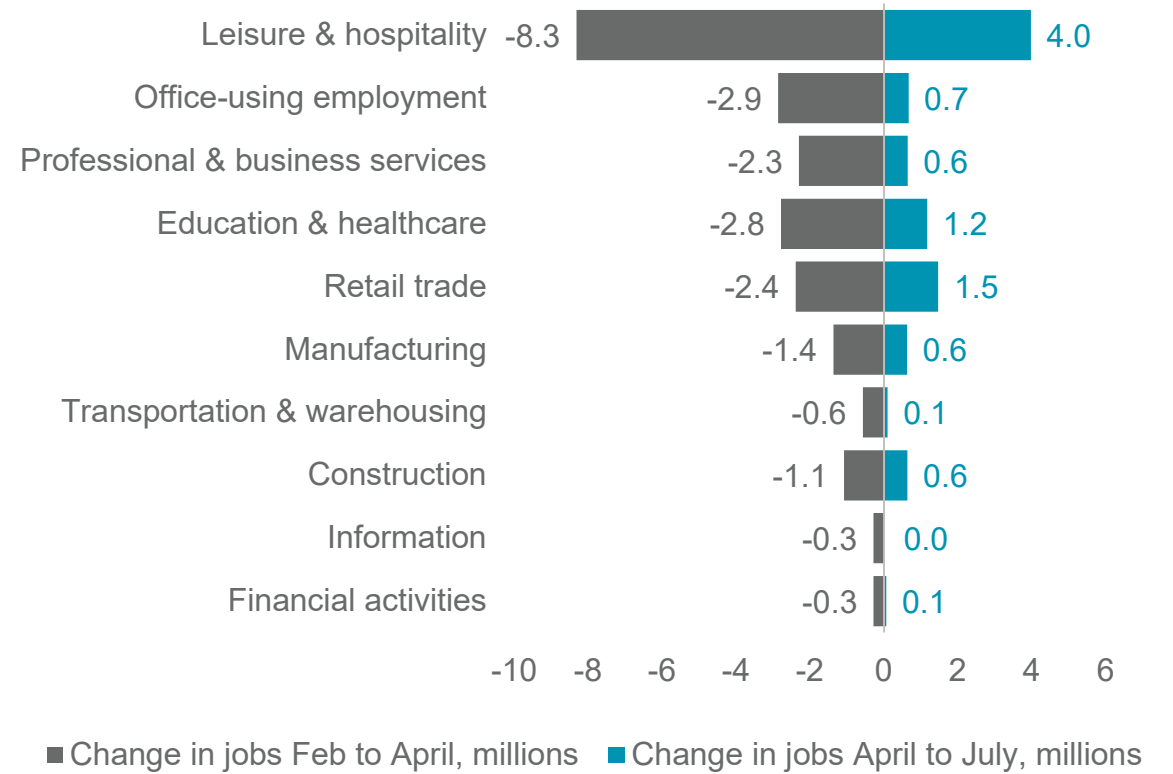
STRIKING A DEVASTATING BLOW TO THE LABOR MARKET

U.S. Employment

RECORD JOB LOSSES



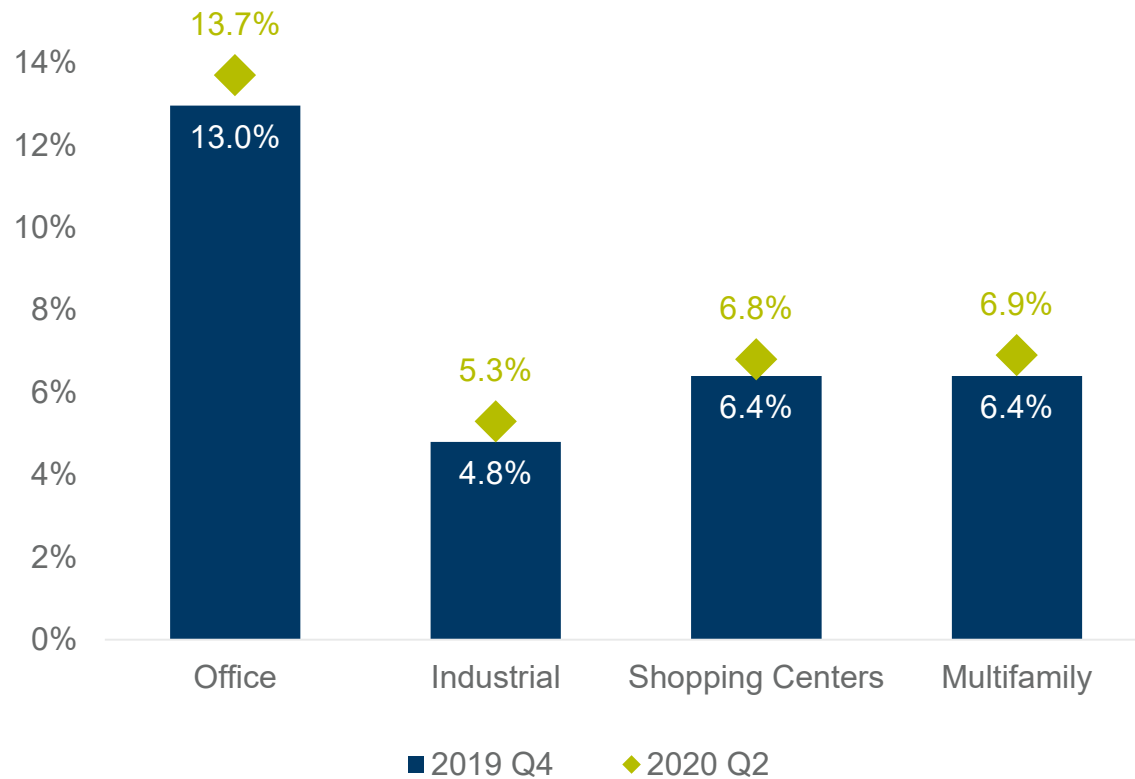
BUT LABOR MARKET RECOVERY HAS BEGUN



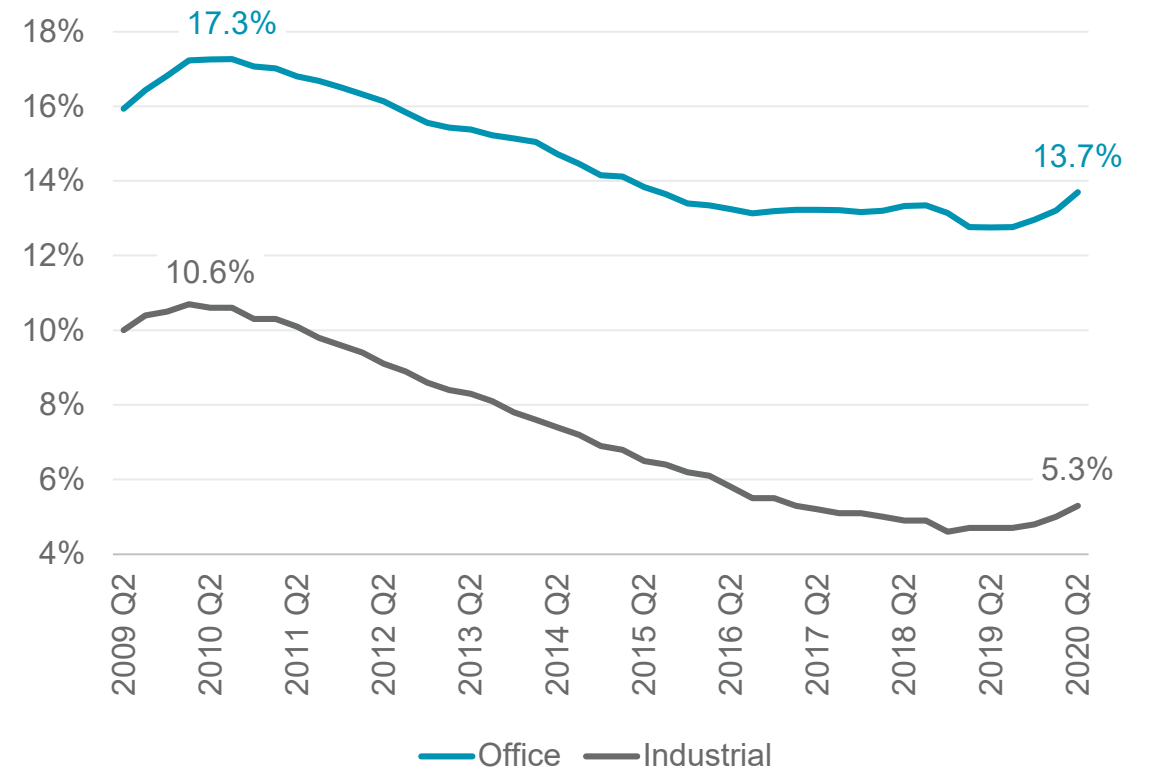
JOB LOSSES STARTING TO IMPACT LEASING FUNDAMENTALS

U.S. Vacancy Rates, Various Property Types

VACANCY ON THE RISE IN THE FIRST HALF OF THE YEAR



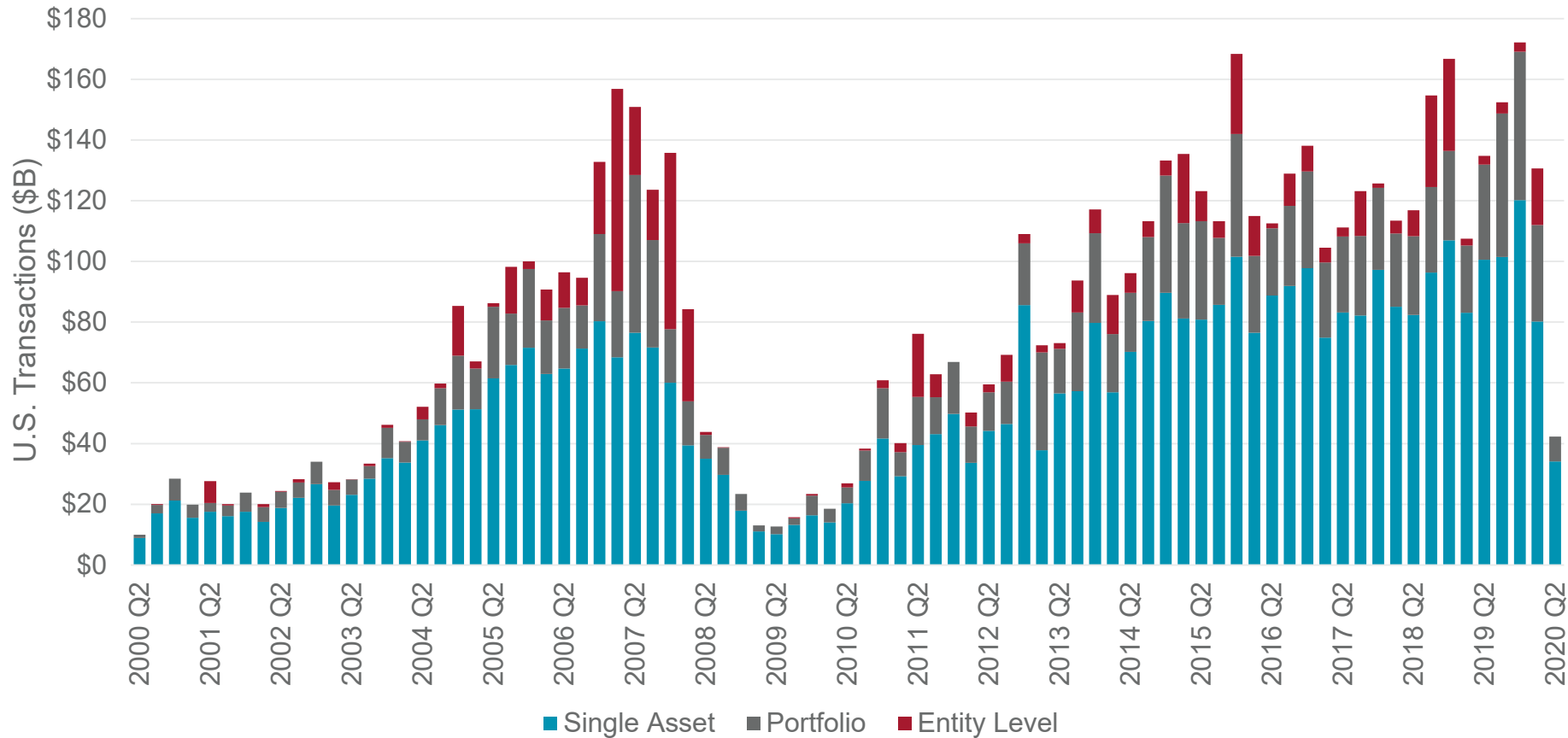
HOWEVER, MARKETS REMAIN RELATIVELY TIGHT



CAPITAL MARKETS LARGELY IN WAIT & SEE MODE

U.S. Sales Volume Transactions, by Entity Type (\$B)

SALES VOLUME IN Q2 AT LOWEST POINT SINCE 2011



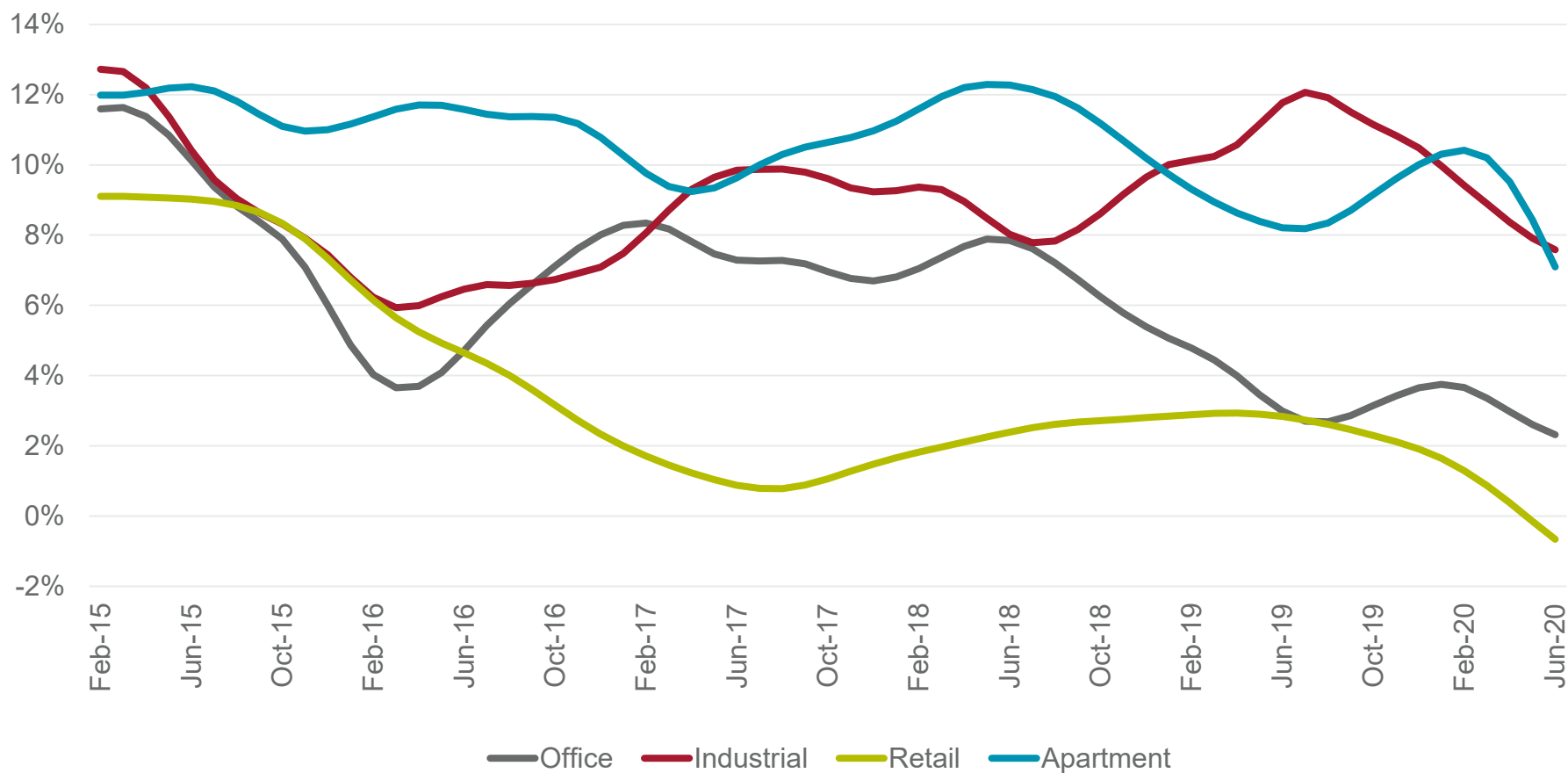
| Property Type | Sales Volume Change YOY (2020 Q2) |
|---------------|-----------------------------------|
| Industrial | -45% |
| Office | -72% |
| Apartment | -72% |
| Retail | -76% |
| Hotel | -91% |
| All | -69% |

Source: Real Capital Analytics; Cushman & Wakefield Research

PRICING BEGINNING TO SOFTEN

Property Price Change (Year-over-Year), 12-Month Rolling (%)

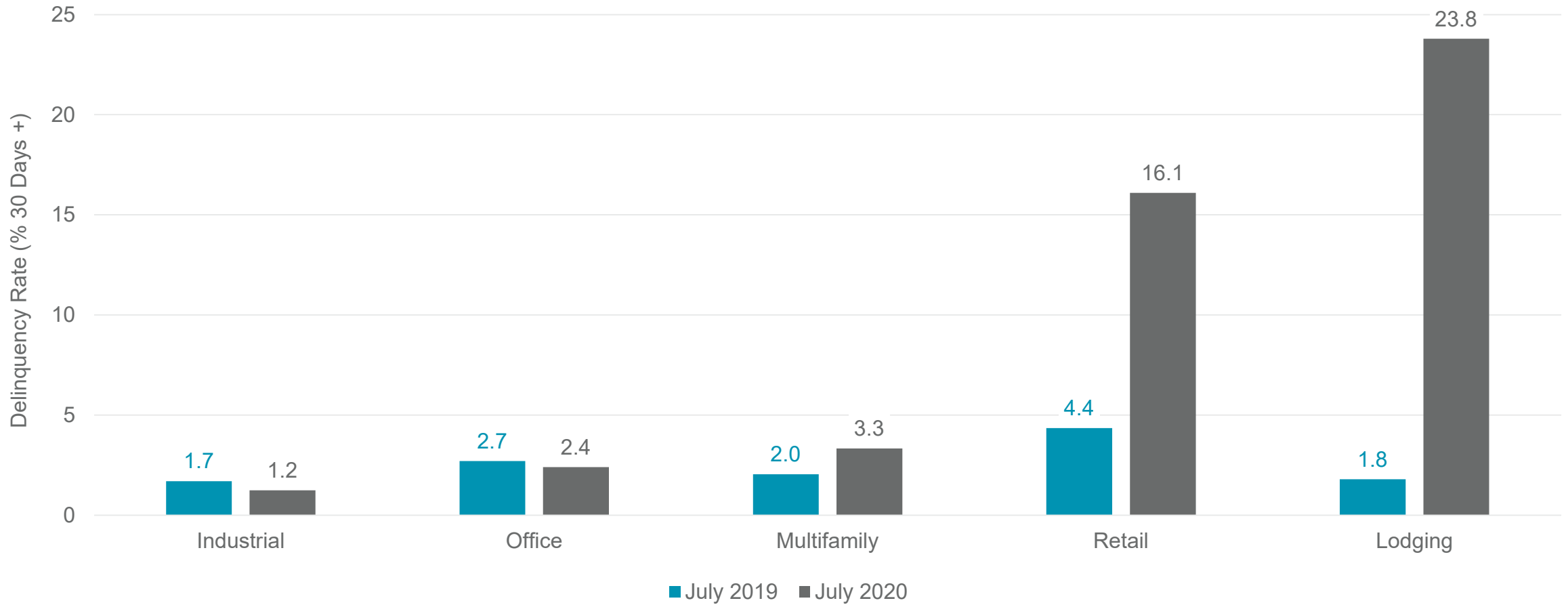
WHILE PROPERTY PRICE INCREASES SLOW DOWN, INDUSTRIAL & MULTIFAMILY MORE RESILIENT



| Property Type | Sales Price Change YOY (2020 Q2) |
|---------------|----------------------------------|
| Industrial | 7.6% |
| Apartment | 7.1% |
| Office | 2.3% |
| Retail | -0.7% |
| Hotel | -5.4% |
| All | 3.6% |

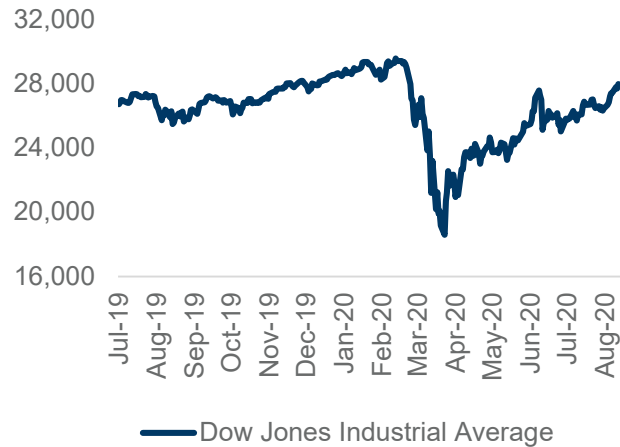
DELINQUENCIES CONCENTRATED IN RETAIL & LODGING, SO FAR

Delinquency Rate by Property Type (% 30 Days +)

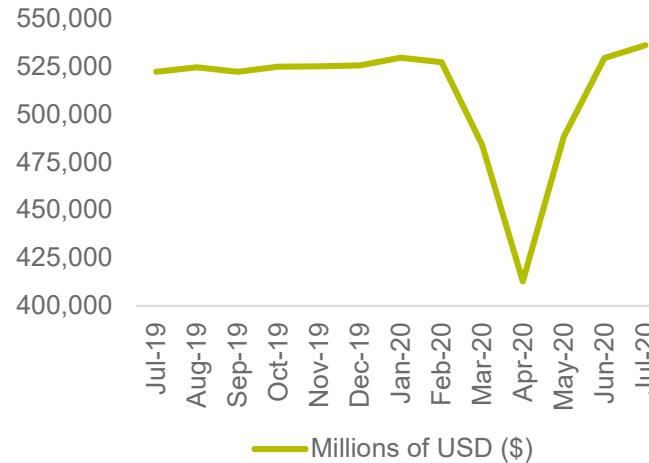


SIGNS OF RECOVERY...

STOCK MARKET SURGE



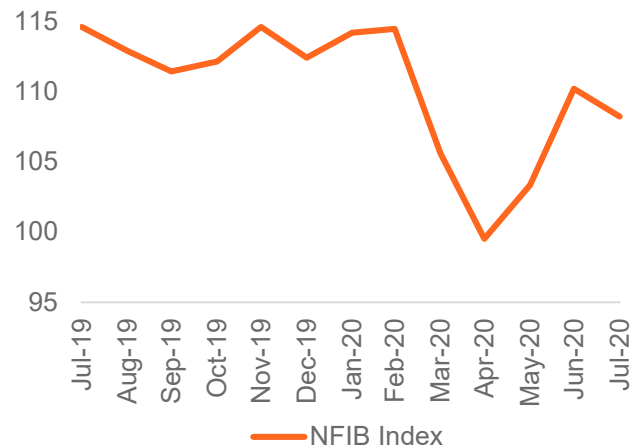
RETAIL SALES REBOUNDED



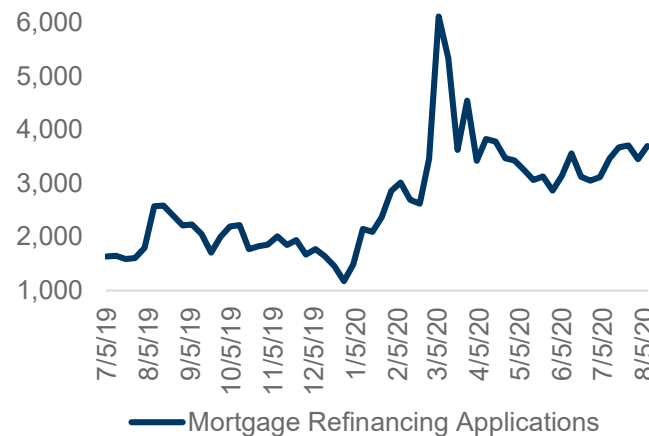
MANUFACTURING GROWING AGAIN



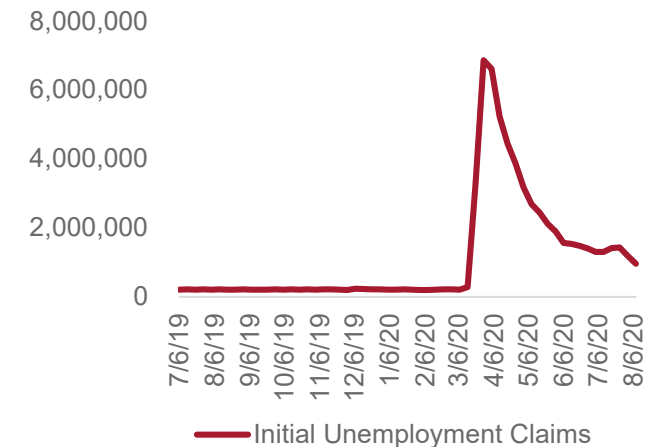
SMALL BUSINESS CONFIDENCE UP



LOW INTEREST RATES = REFINANCING BOOM



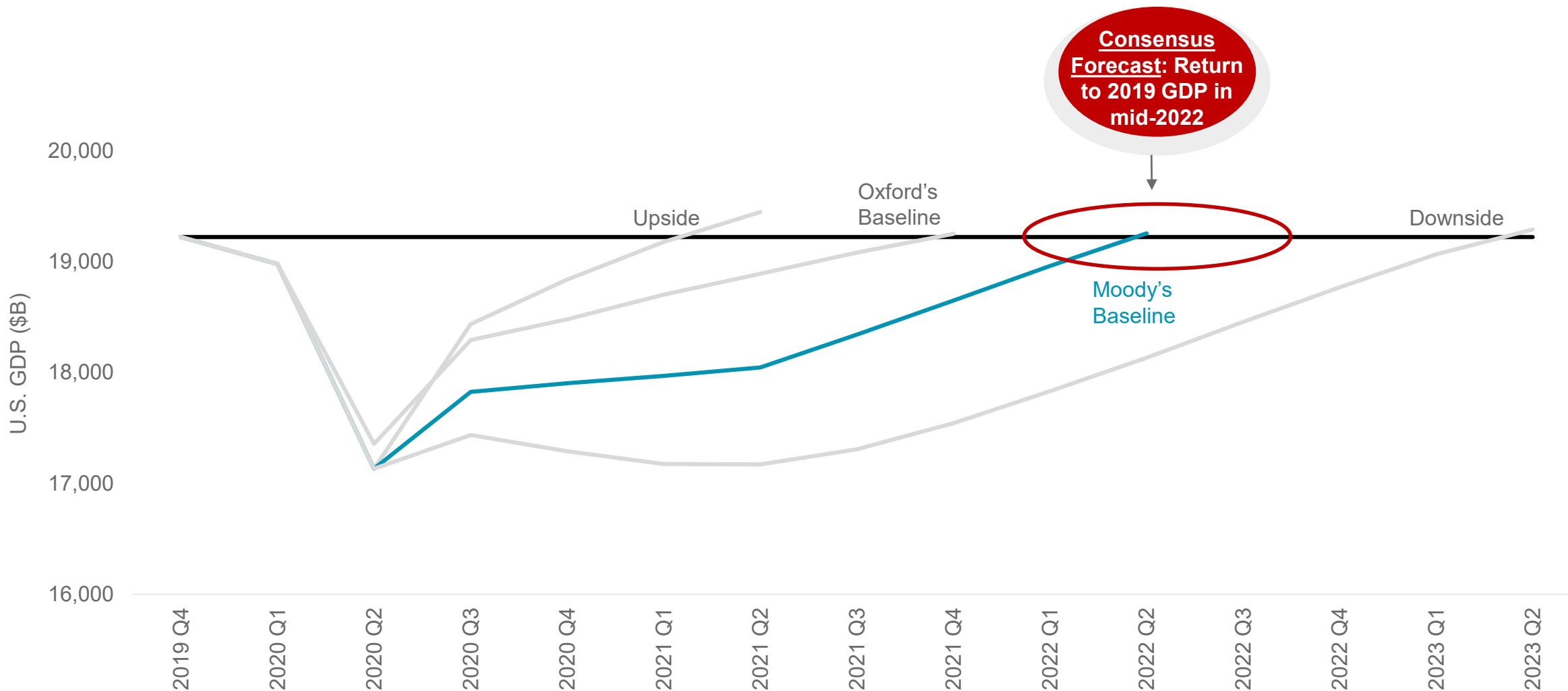
LAYOFFS DOWN: LABOR MARKETS IMPROVING



Source: Various

STILL MANY SCENARIOS & UNKNOWNNS

U.S. Real GDP Forecast Scenarios (\$B)



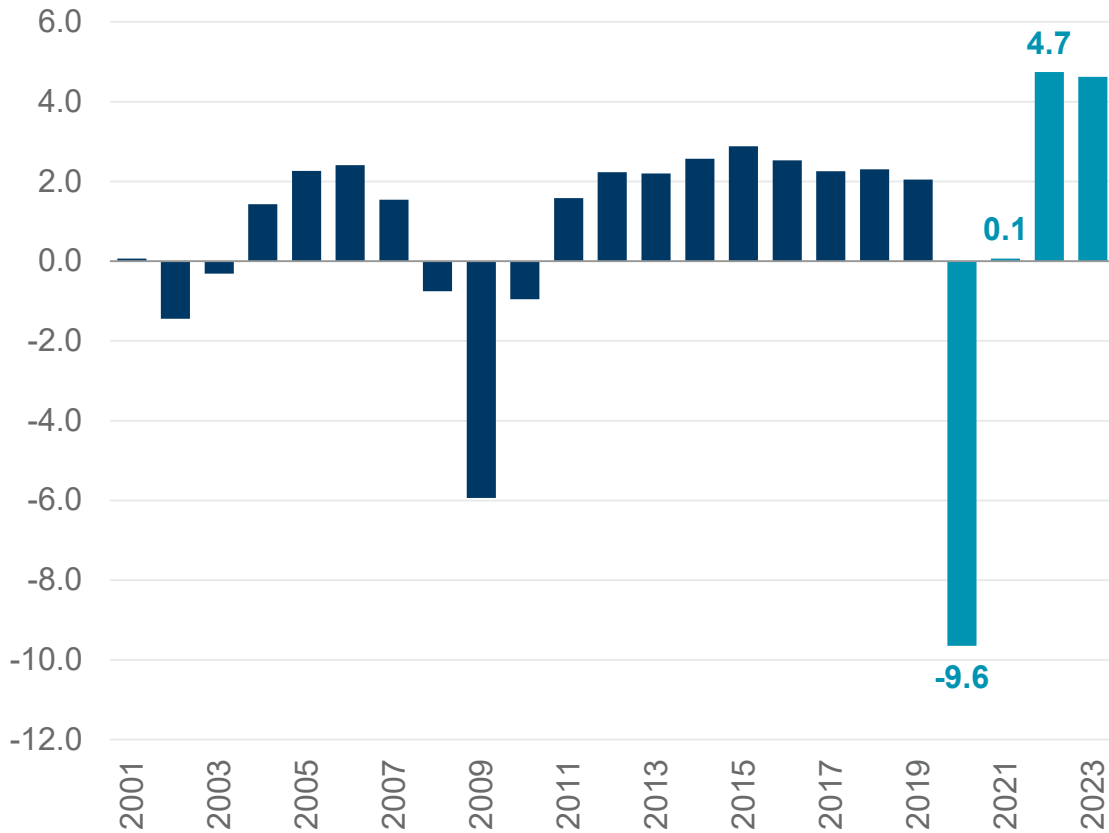
Source: Consensus forecast sourced to FiveThirtyEight/IMG where 22% of economists expect real GDP to return to pre-crisis levels in H2 2021 vs 44% expect H1 or H2 of 2022.

Upside = Moody's Analytics S0 Update Scenario, Downside = Moody's S3 Downside Scenario; Forecast as of 7-22-2020

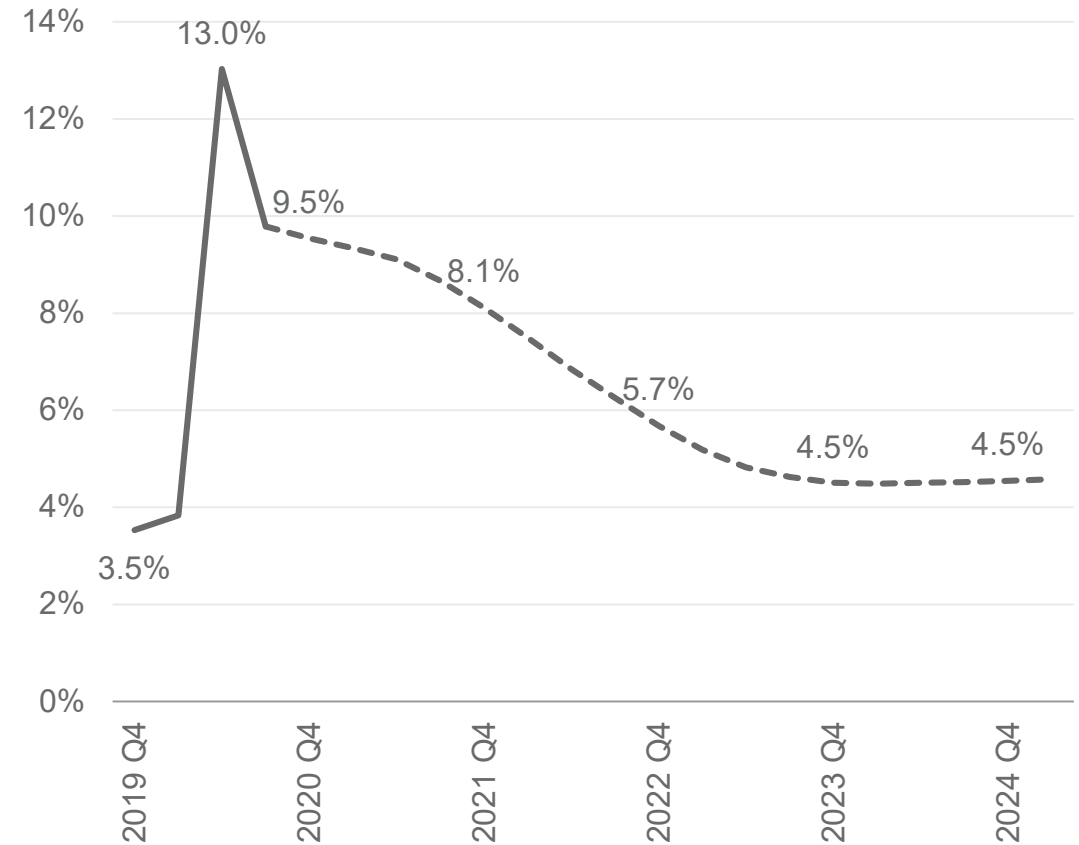
LABOR MARKETS' PATH TO RECOVERY: BASELINE SCENARIO

Job Growth & Unemployment Rate Forecasts

JOB GAINS/LOSSES, MILLIONS (U.S.)



UNEMPLOYMENT RATE (U.S.)



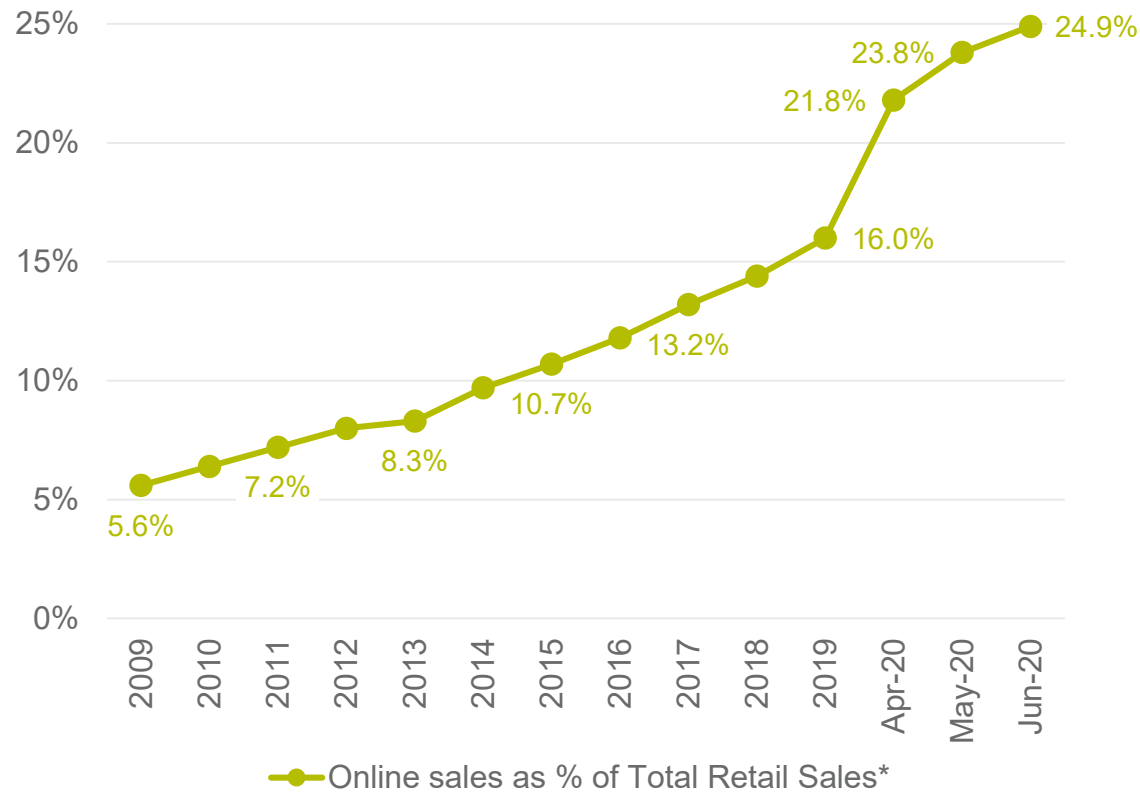
*COVID-19 is accelerating trends
that were already in the making.*



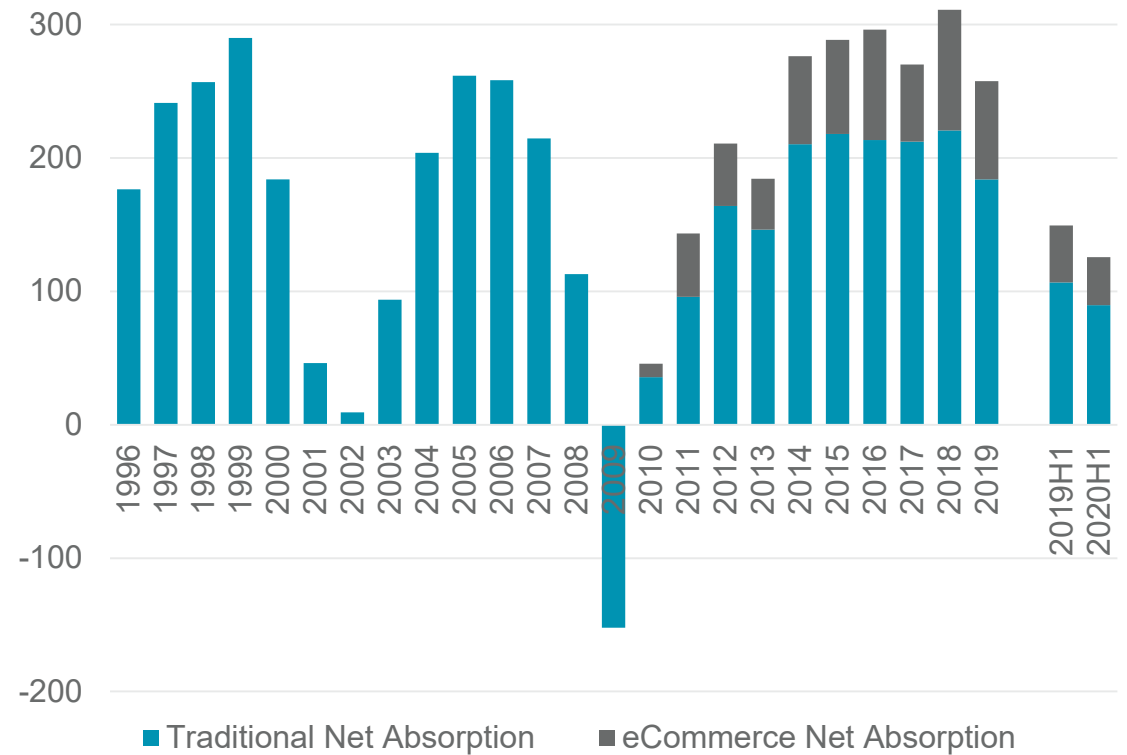
ECOMMERCE SURGE CONTINUES THE INDUSTRIAL BOOM

Online Sales as % of Total Retail Sales* & Industrial Absorption

DRAMATIC INCREASE IN ONLINE SHOPPING



GENERATES DEMAND FOR INDUSTRIAL-LOGISTICS



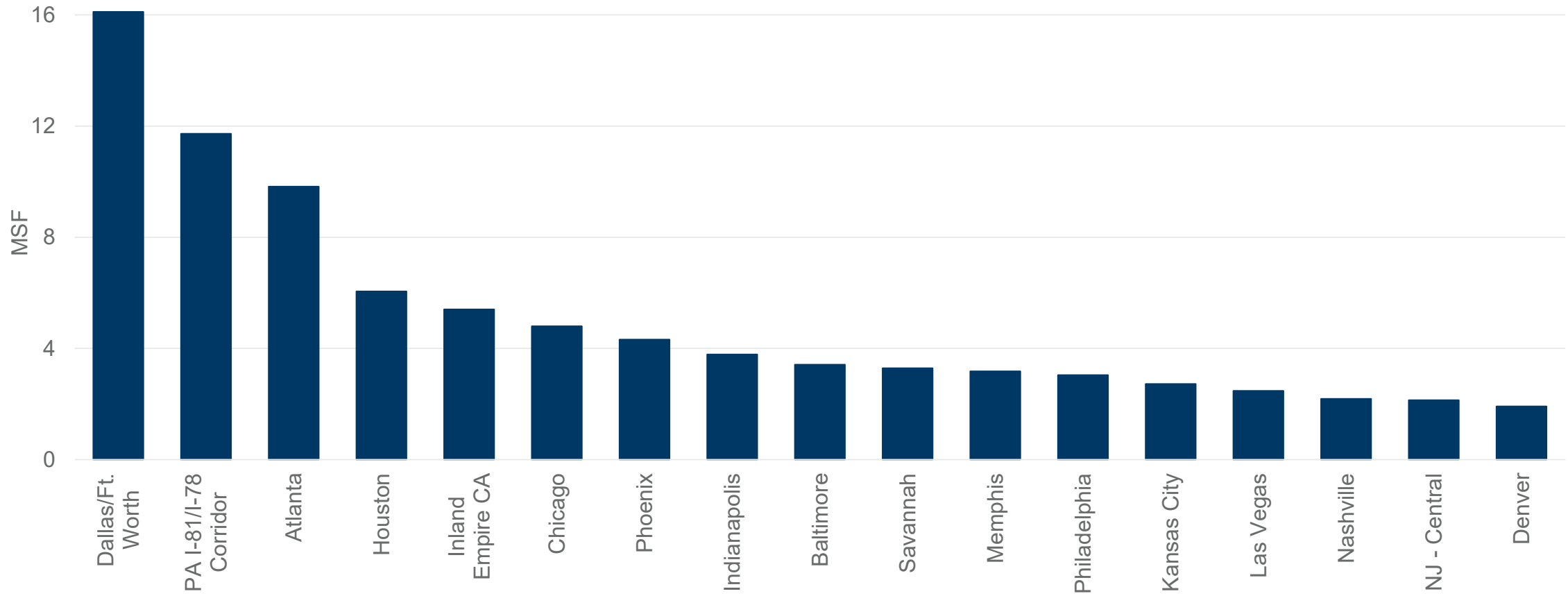
Source: Ecommerce figures from Digital Commerce 360 analyzing the U.S. Department of Commerce's Retail E-Commerce Sales Report and Monthly Retail Trade and Food Services Report.

Note: Total retail sales number excludes the sale of items not normally purchased online; specifically, motor vehicle & parts dealers (NAICS 441), gasoline stations (NAICS 447), and food services & drinking places (NAICS 722).

Industrial figures from Cushman & Wakefield Research

INDUSTRIAL ABSORPTION STRONG IN MANY MARKETS

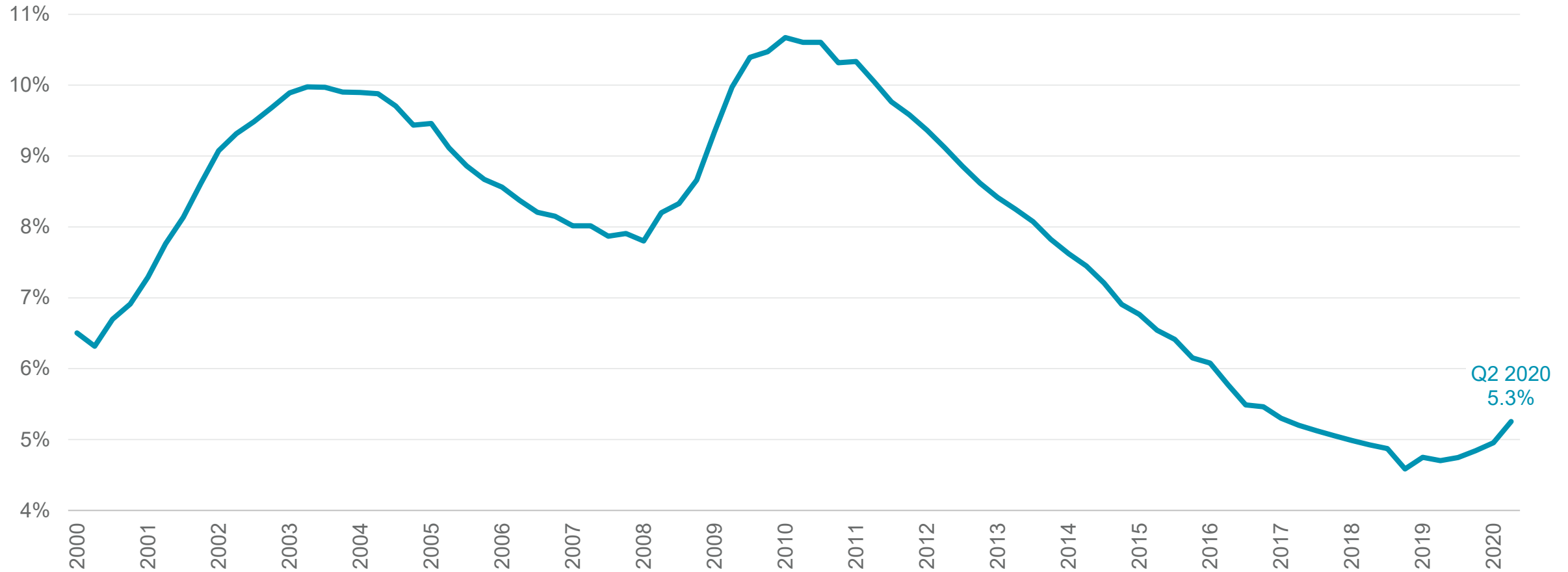
Select U.S. Markets, 2020 H1



Source: Cushman & Wakefield Research

INDUSTRIAL VACANCY REMAINS LOW

U.S. Industrial Vacancy (%)

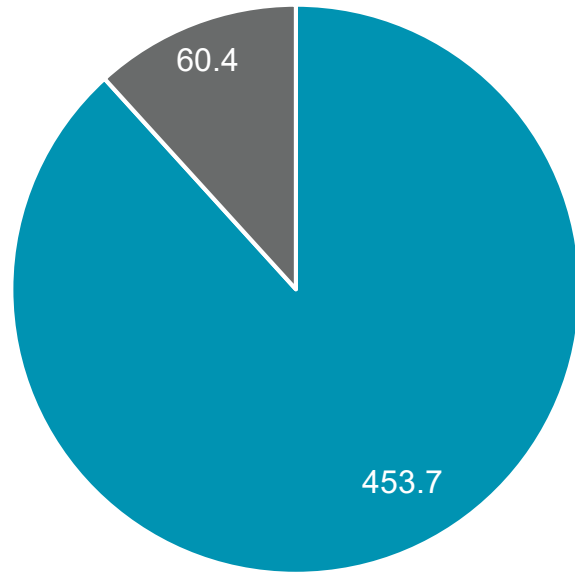


Source: Cushman & Wakefield Research

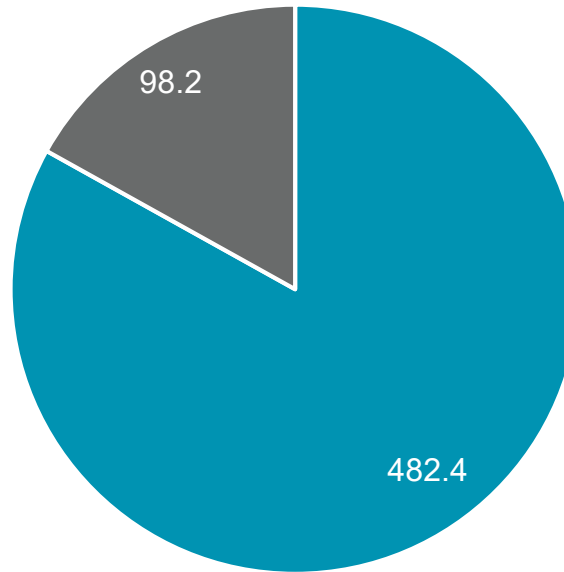
ACCELERATES CAPITAL FLOWING INTO INDUSTRIAL-LOGISTICS

U.S. Sales Volume (\$B)

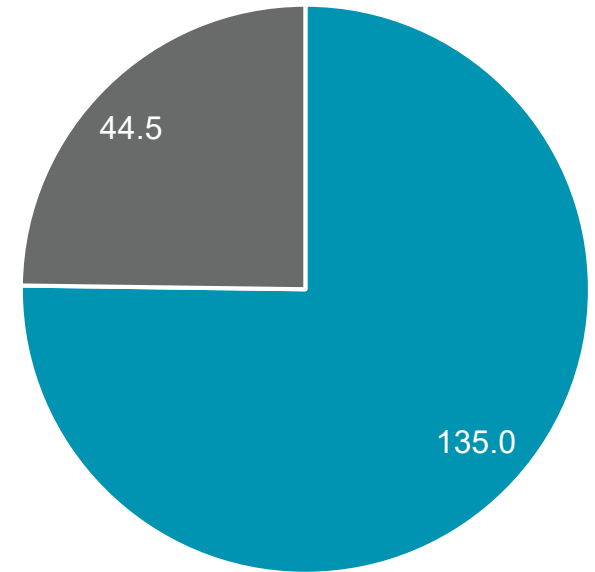
2016



2018



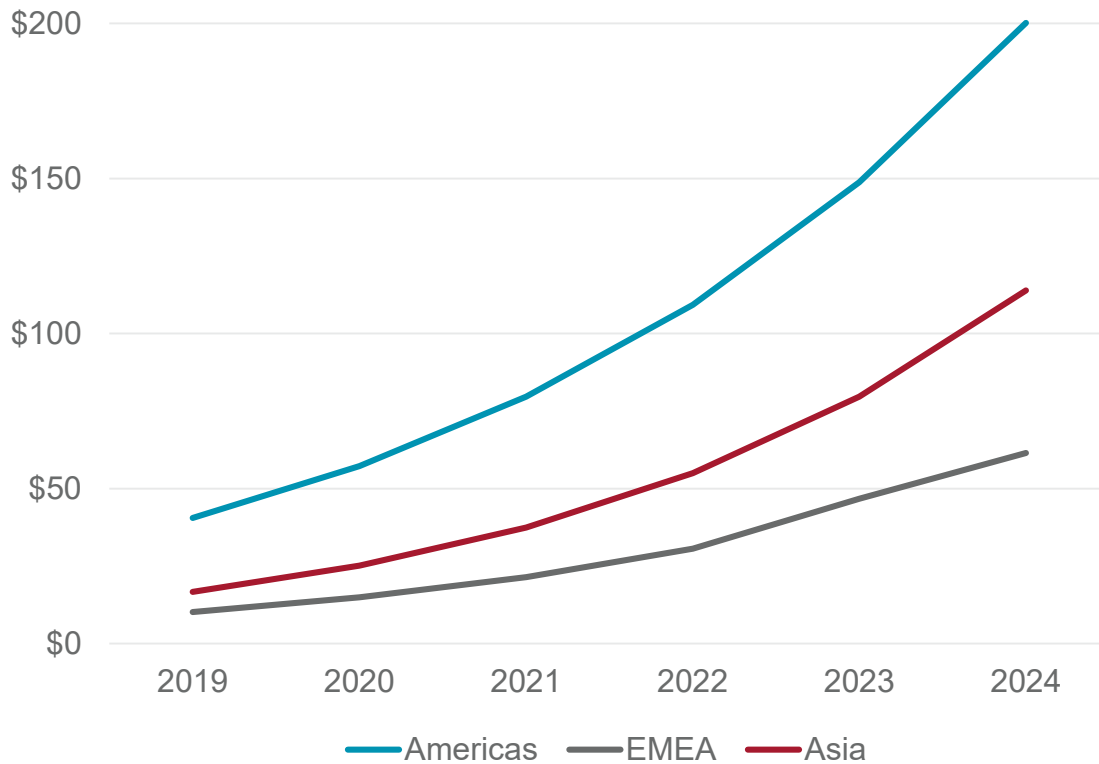
2020 H1



■ All Other Property Types ■ Industrial-logistics

COVID-19 ACCELERATES DATA USAGE & DATA CENTER DEMAND

REGIONAL CLOUD SERVICES SPEND (\$B)



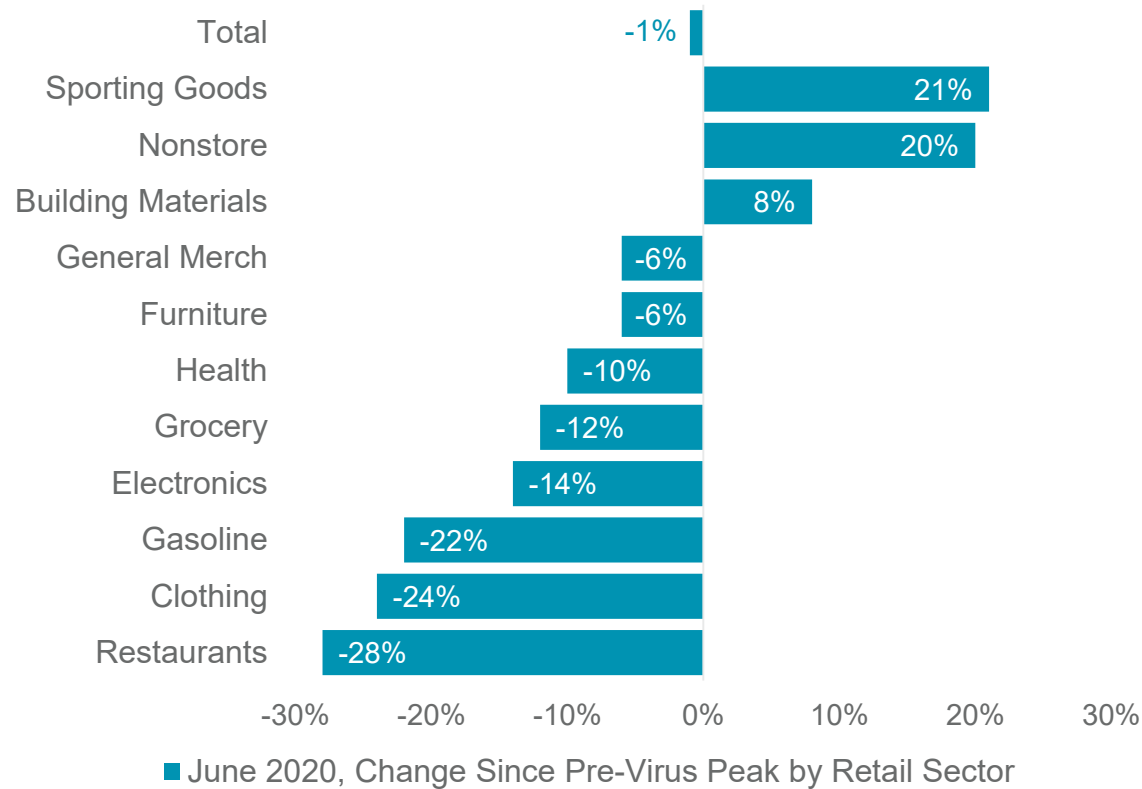
Source: Structure Research; Cushman & Wakefield Research

DATA CENTER Q2 HIGHLIGHTS

- **Distributed workforce:** Cloud services absorbed near-record capacity (200 MW) in Q2 as corporations rapidly shifted IT infrastructure to keep up with a suddenly distributed workforce.
- **Record throughput:** The largest internet exchanges across the world saw new record throughput, noting 50% increases in teleconferencing and 25% increases in online gaming and social media usage.
- **Further expansion:** Data center REITs remain focused on expansion to serve both large cloud services companies and corporations looking for further disaster recovery options and/or scalability.

STRONGER HEADWINDS FOR CERTAIN RETAIL CONCEPTS

CHANGE IN SALES BY RETAIL SECTOR (PRE-VIRUS PEAK TO JUNE 2020)



Source: U.S. Department of Commerce; Cushman & Wakefield Research

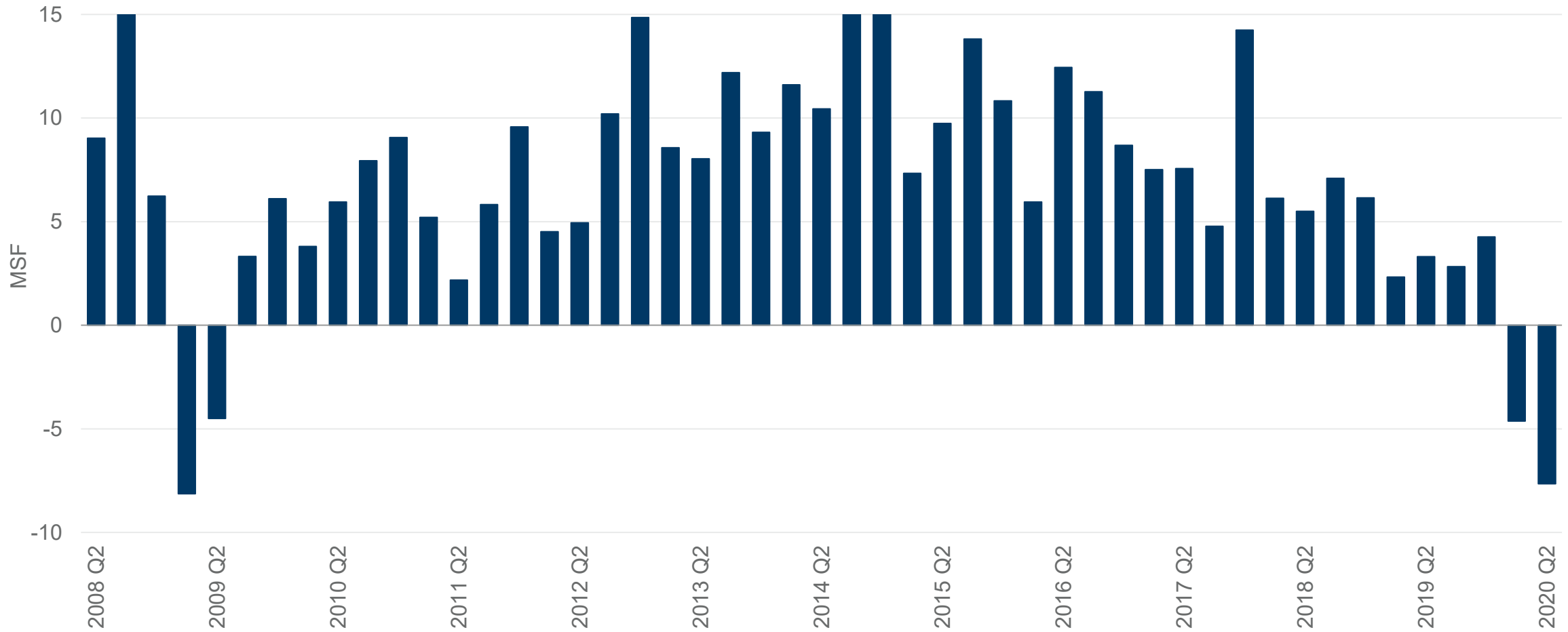
MAPS TO ECOMMERCE PENETRATION

| eCommerce Penetration | Before | After (Forecast) |
|-------------------------|--------|------------------|
| Apparel & Accessories | 29% | 40% |
| Auto & Parts | 5% | 10% |
| Books, Music & Video | 55% | 68% |
| Consumer Electronics | 42% | 55% |
| Food & Beverage | 3% | 15% |
| Furniture & Furnishings | 24% | 42% |
| Health & Beauty | 11% | 25% |
| Office Supplies | 27% | 60% |
| Other | 24% | 40% |
| Toys & Hobby | 37% | 50% |

Source: ShawSpring Partners; Bank of America

RETAIL DEMAND NEGATIVE IN 2020 FOR FIRST TIME SINCE 2009

U.S. Retail Absorption by Quarter



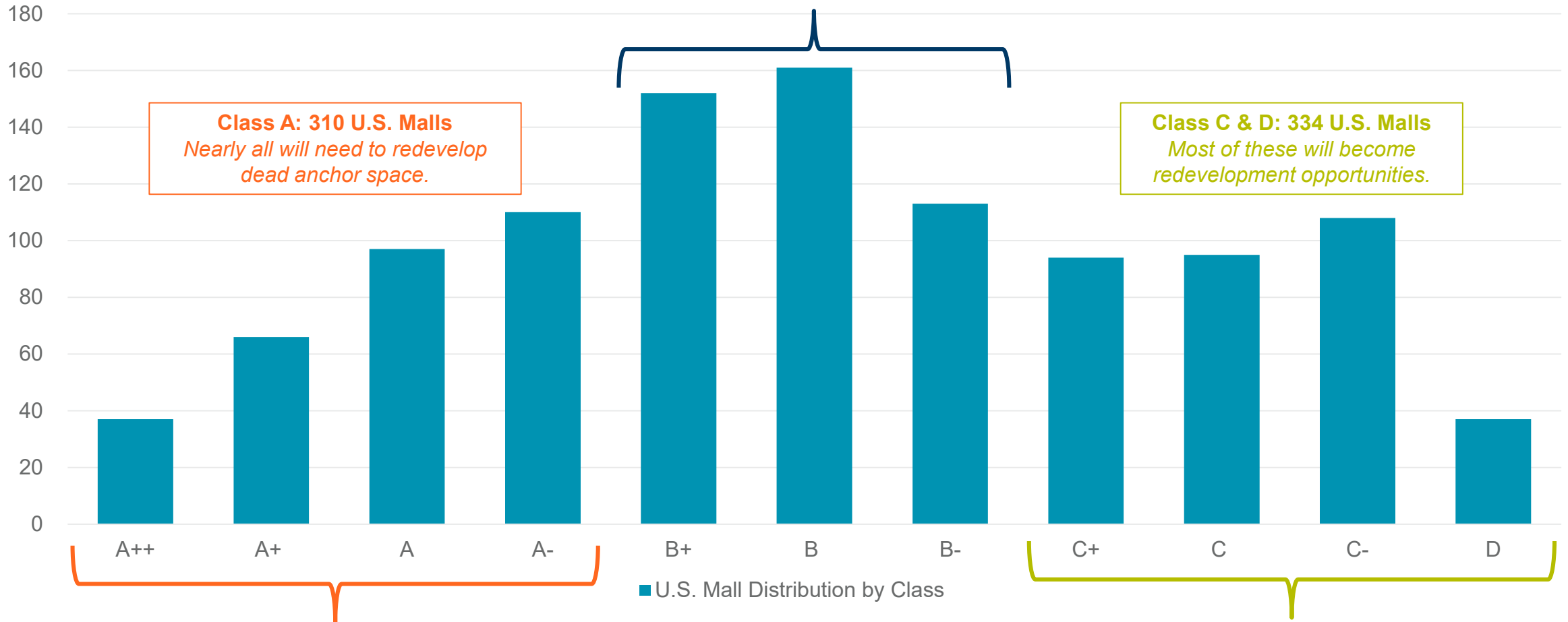
Source: Costar Group; Cushman & Wakefield Research

MALLS WILL BE HIT HARD...

U.S. Mall Distribution by Class

Class B: 426 U.S. Malls

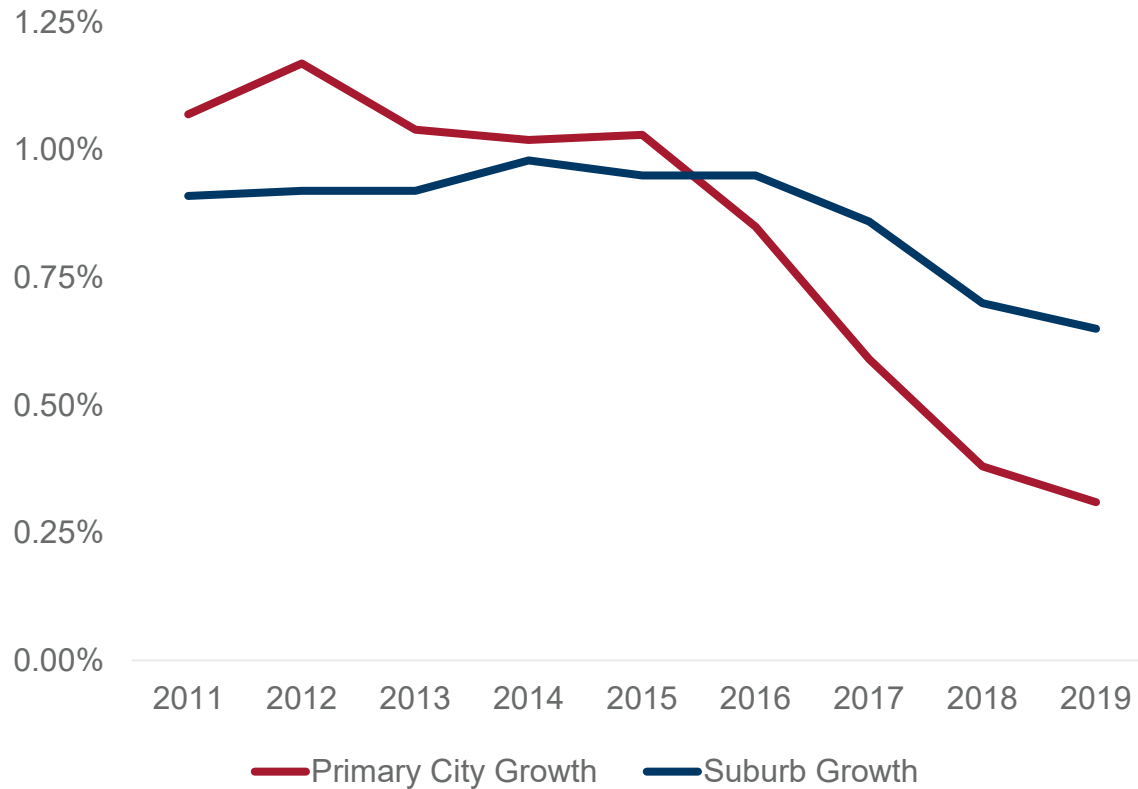
Will need to redevelop dead anchor space. Most will need some level of redevelopment. Weakest properties will be on the same trajectory as Class C & D were before the crisis.



ACCELERATES REBIRTH OF THE SUBURBS THAT WAS ALREADY UNDERWAY

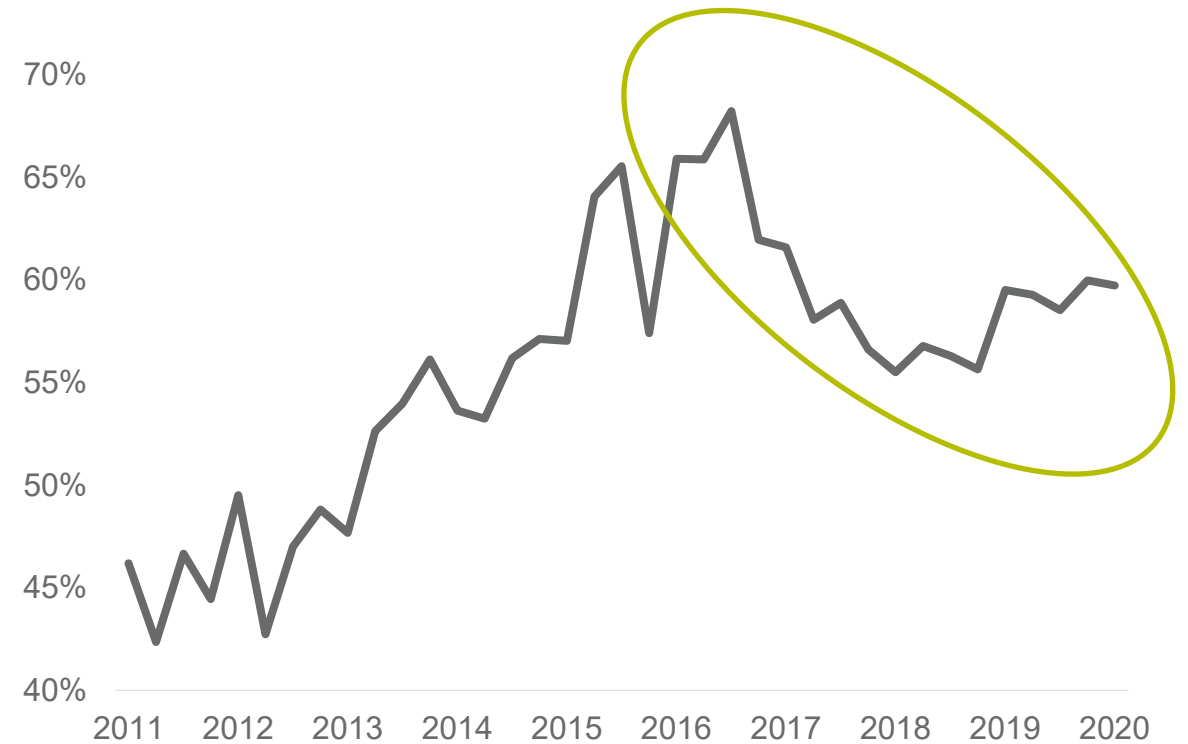
Turn Towards Suburbs Began Three Years Before Pandemic & Recession

POPULATION GROWTH STRONGER SINCE '16



Source: William H Frey analysis of Census Bureau Population estimates July 2010-2019 (released May 21, 2020); Brookings Institute

CBD RENT PREMIUM DOWN FROM PEAK



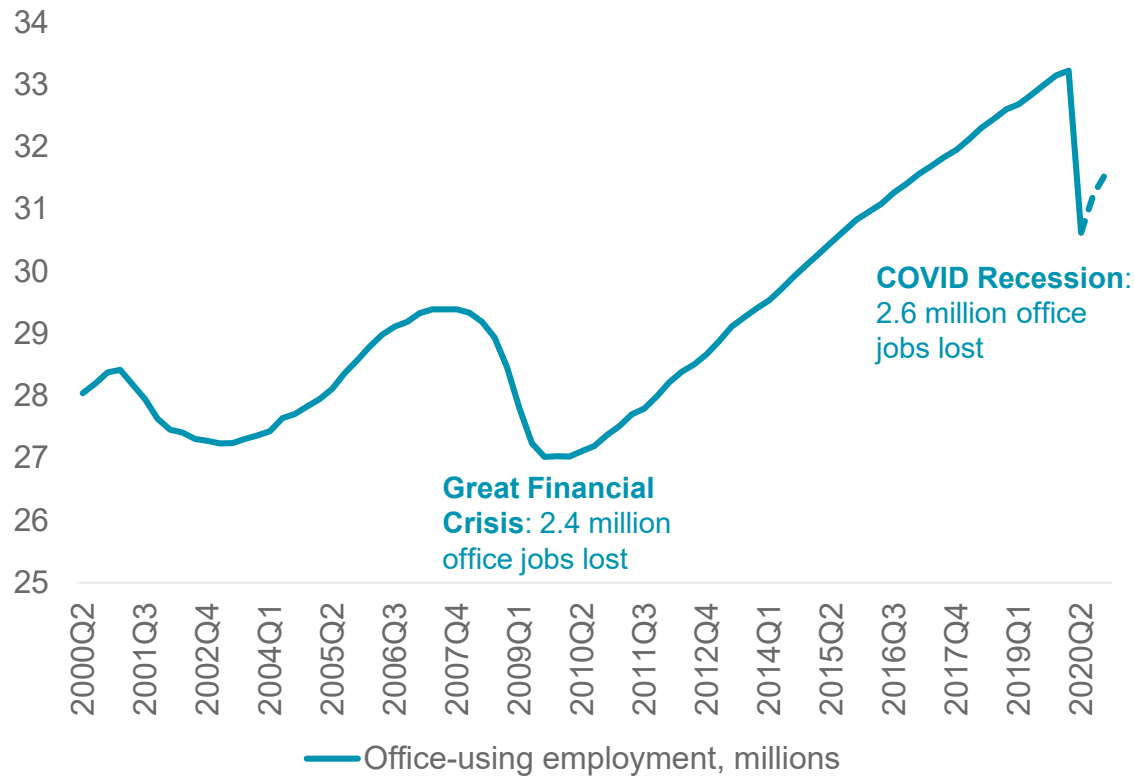
Source: Cushman & Wakefield Research

Office faces both cyclical & structural headwinds, but it will fully recover.



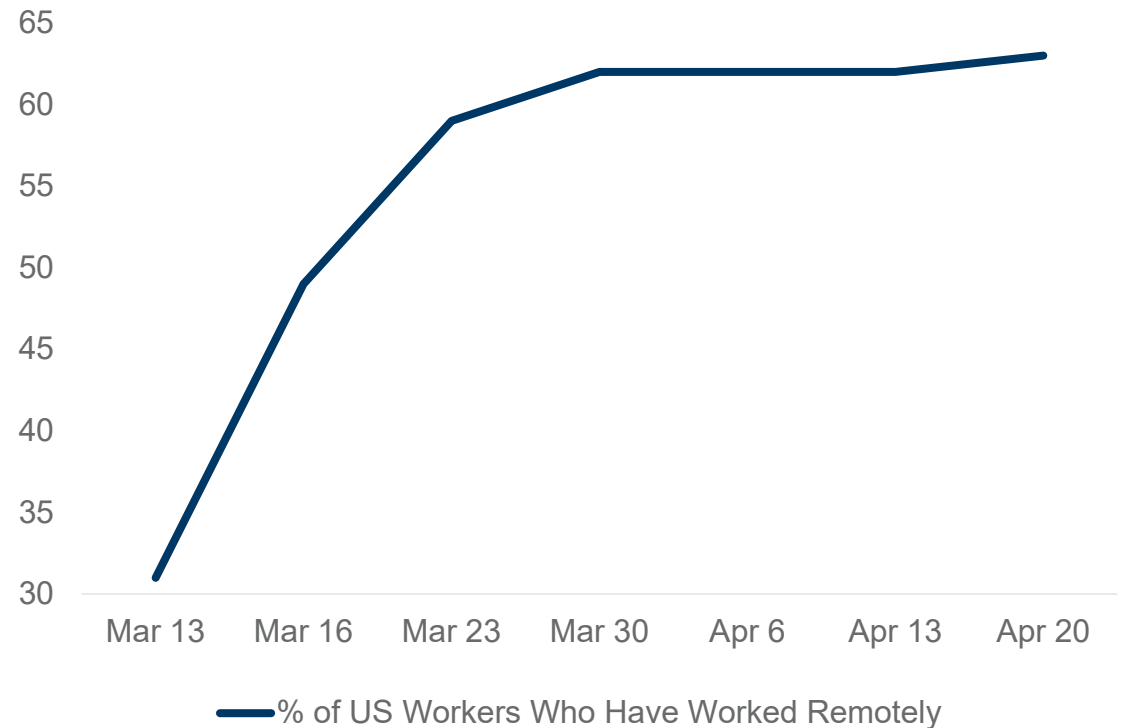
JOB LOSSES (CYCLICAL) & EMPLOYEE LOCATION CHOICE (STRUCTURAL) WILL IMPACT WORKPLACE ECOSYSTEMS

CYCLICAL – JOB LOSSES



Source: U.S. Bureau of Labor Statistics

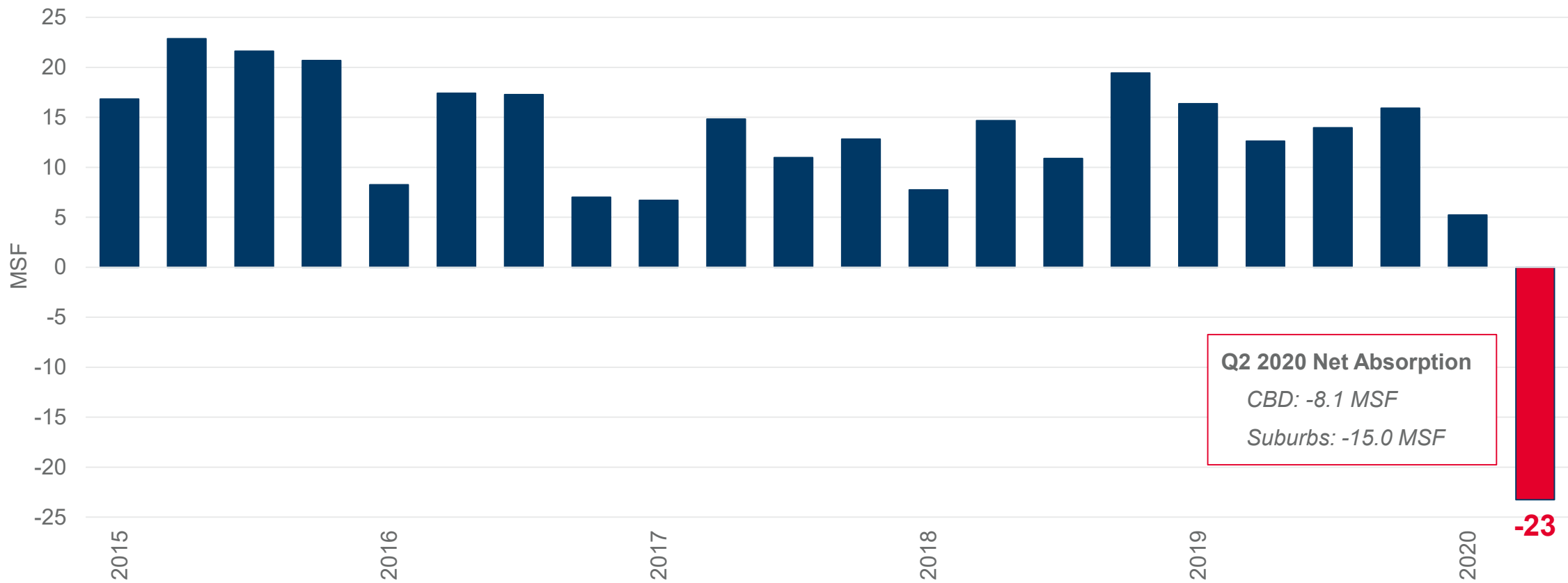
STRUCTURAL – WORKING REMOTELY



Source: Gallup Panel 2020

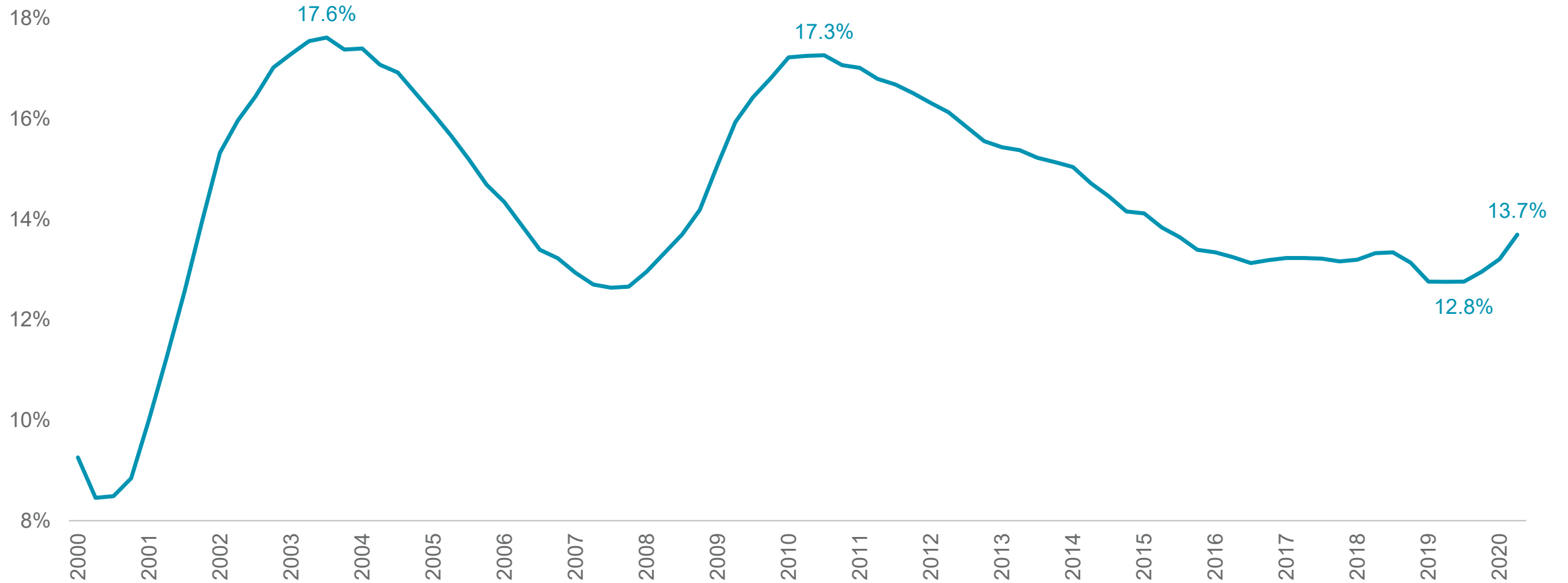
OFFICE ABSORPTION TURNS NEGATIVE

U.S. Office Net Absorption by Quarter



OFFICE VACANCY TRENDS HIGHER; ENDED Q2 AT HIGHEST POINT SINCE 2015

U.S. Office Vacancy (%)



Source: Cushman & Wakefield Research

U.S. OFFICE VACANCY SCENARIOS

Baseline Assumptions:

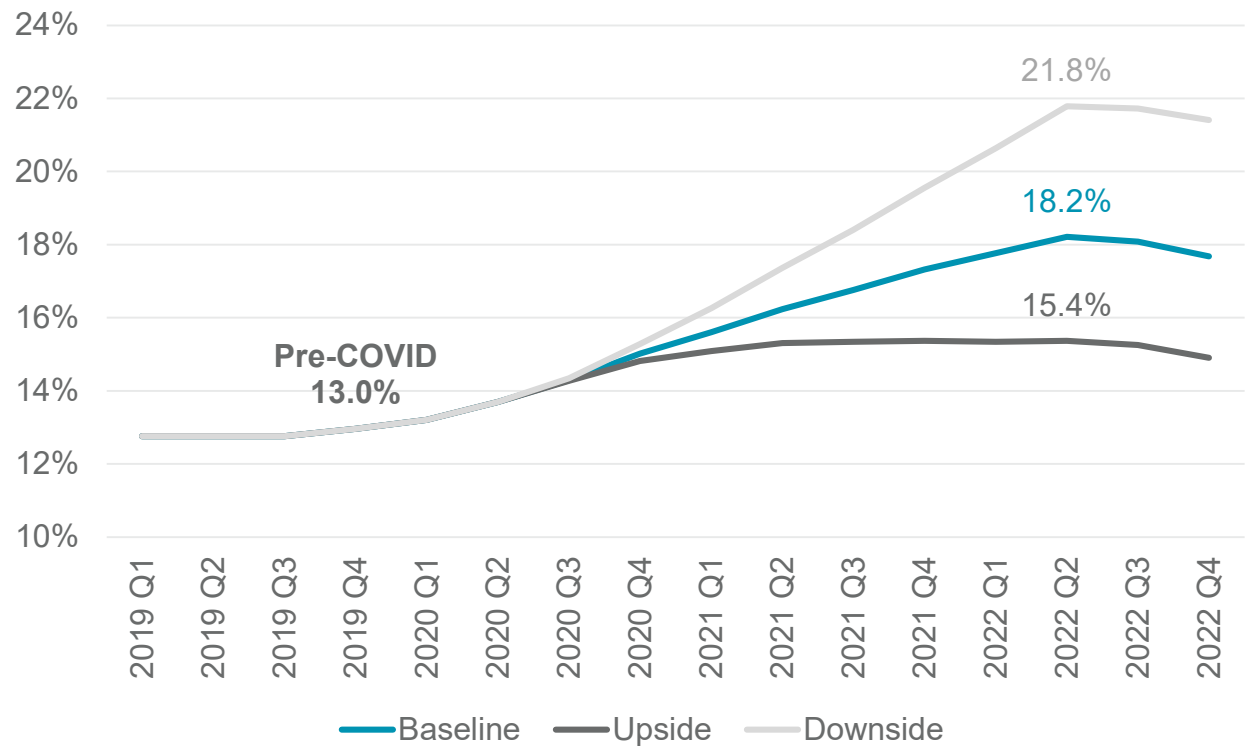
Key Economic Assumptions

- GDP recovery follows the baseline scenario- returns to pre-crisis levels in 2022.
- U.S. office employment declines by 1.2 million office-using jobs in 2020.
- Congress passes another fiscal relief bill.
- Coronavirus situation begins to resolve by mid-2021.

Key Office Assumptions

- Historical relationship between job losses and net absorption holds true in this cycle.
- Percent of people working permanently from home increases from 5% to 10%.
- Share of agile workers increases from 40% pre-COVID-19 to 56%; assume 90% of agile workers have workstations.
- Halt in decade long trend of densification (sf per worker remains fixed at 2019 levels).

U.S. VACANCY SCENARIOS



Source: Upside = Moody's S0 scenarios, Baseline = Moody's baseline scenario where GDP doesn't fully recovery until 2022Q2, Downside = Moody's S3 Scenario

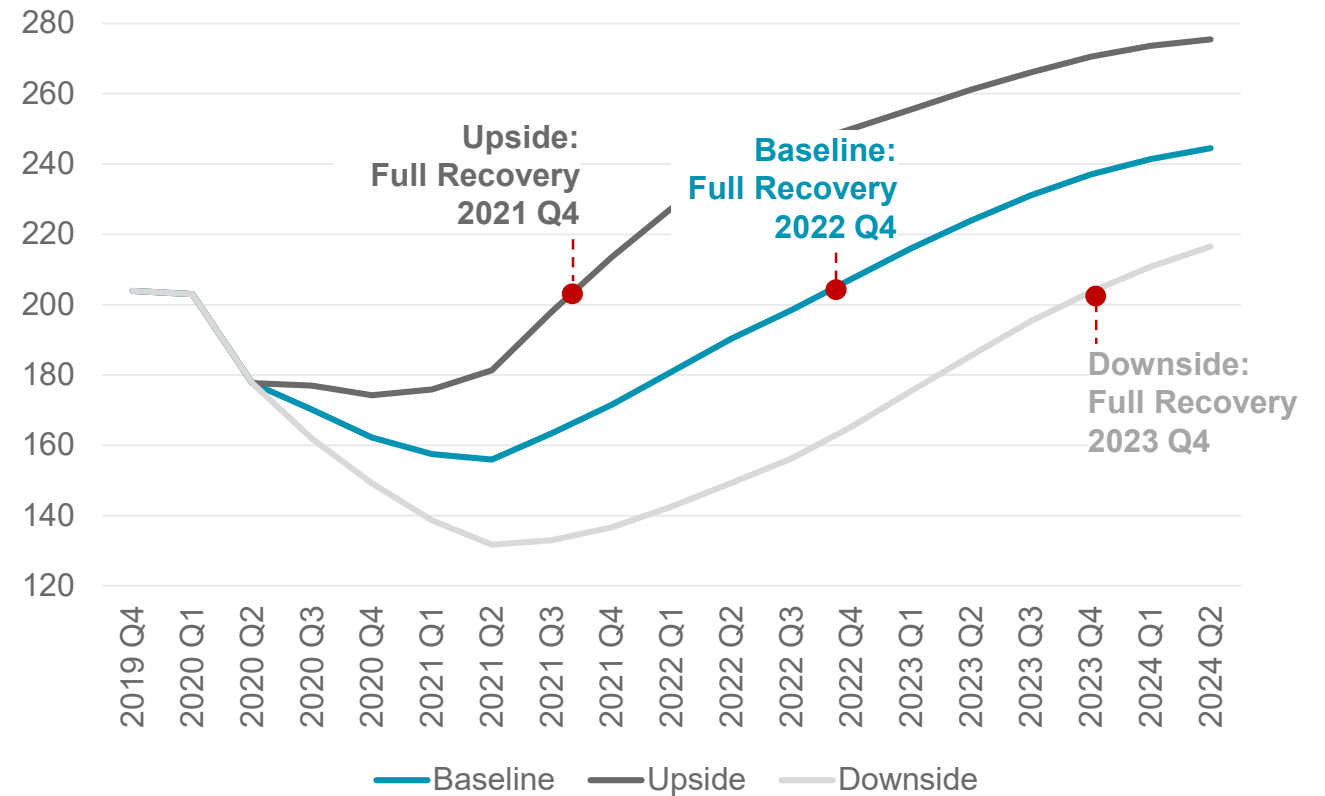
Forecast as of 7-22-2020

PROPERTY PRICE SCENARIOS

Factors That Point to Full Recovery:

- Economic growth (e.g. GDP, population growth over the long-term).
- Share of office employment increasing as a share of nonfarm employment.
- Surveys indicate office employees want options *and* want to be in an office on a regular basis. The future is total workplace ecosystems that offer more employee choice.
 - 90% want to return to the office.
 - 78% want remote working policies expanded and a shift to balancing office, home and third places.
- Office retains value for its role in:
 - Agglomeration / knowledge spillover
 - Worker productivity
 - Cultural / branding factors
 - Mentoring, training and onboarding

U.S. OFFICE PROPERTY PRICE INDEX

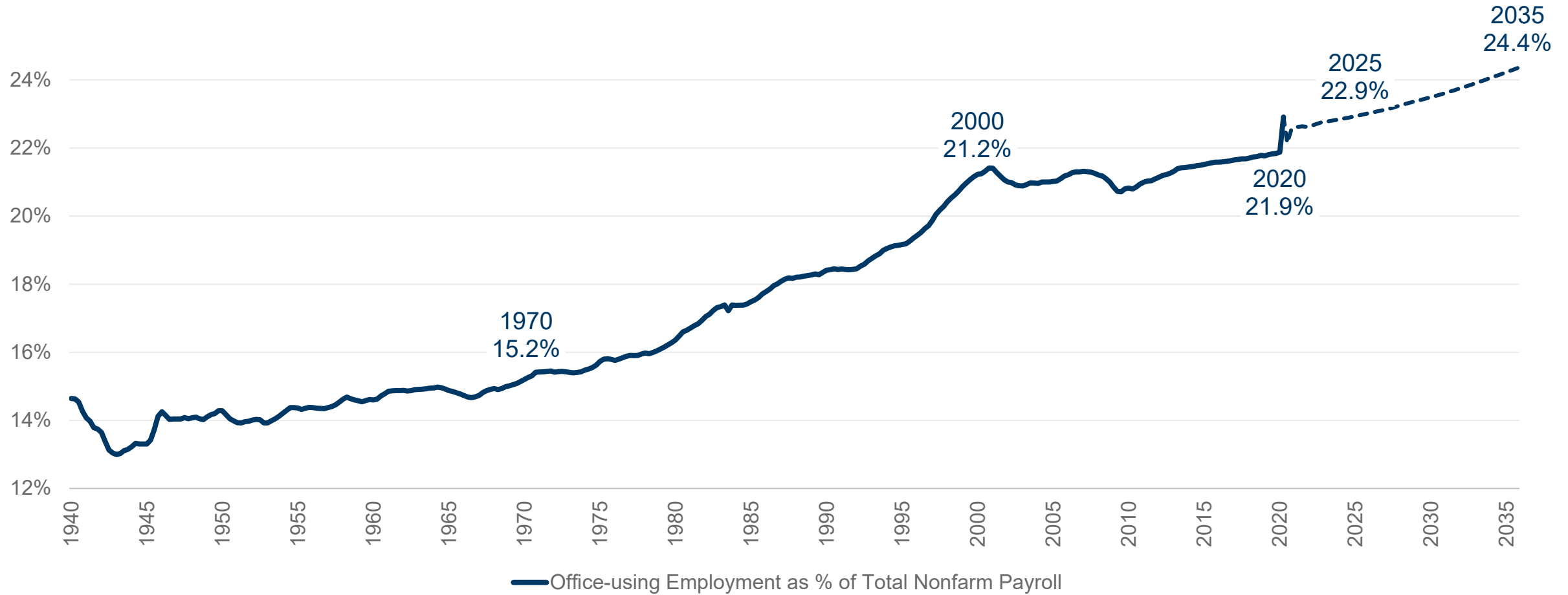


Source: Upside = Moody's S0 scenarios, Baseline = Moody's baseline scenario where GDP doesn't fully recovery until 2022Q2, Downside = Moody's S3 Scenario

Forecast as of 7-22-2020

OFFICE ALSO HAS STRONG STRUCTURAL TAILWIND AT ITS BACK

Office-using Industries Expected to Account for Disproportionate Share of Future U.S. Job Gains



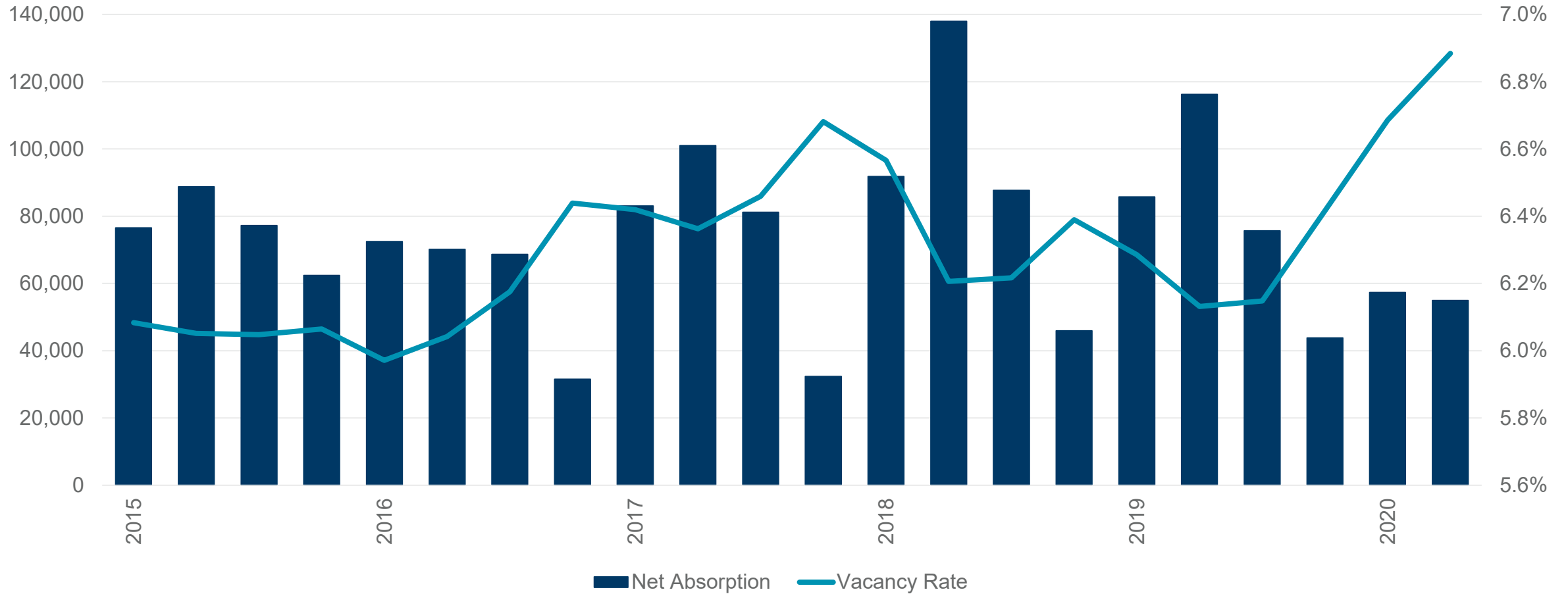
Source: U.S. Bureau of Labor Statistics; Moody's Analytics Forecasted

The COVID-19 recession will hit the multifamily sector as well, but long-term fundamentals remain favorable.



NET ABSORPTION SLOWS & APARTMENT VACANCY TRENDS HIGHER

U.S. Apartment Absorption by Quarter (Units) & Vacancy

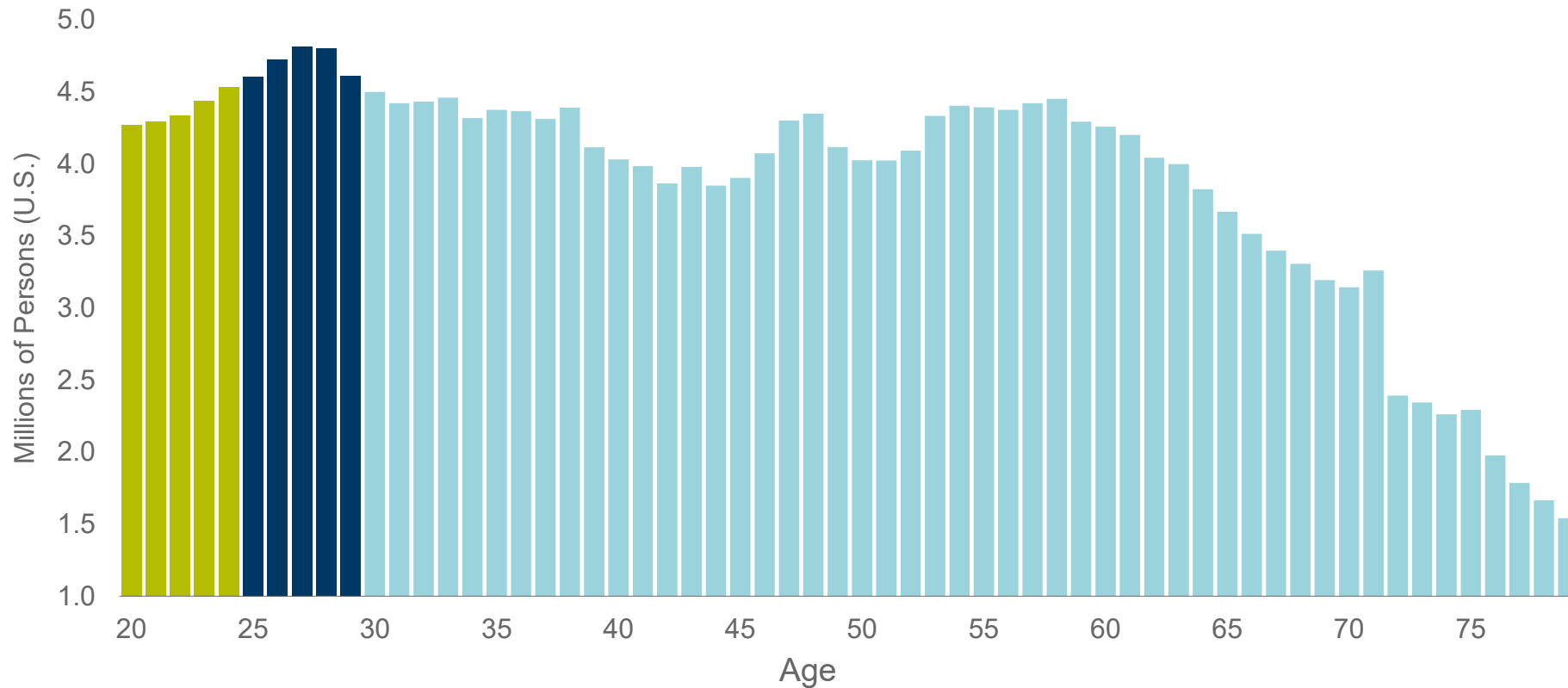


Source: CoStar Group

DEMOGRAPHICS STILL FAVORABLE FOR APARTMENT DEMAND

U.S. Population by Age (Millions)

NEARLY 45.5 MILLION PRIME RENTERS BETWEEN THE AGES OF 20 AND 29 IN THE U.S.



| 5-Year Age Cohort | # (Millions) |
|-------------------|--------------|
| 20-24 | 21.9 |
| 25-29 | 23.6 |
| 30-34 | 22.1 |
| 35-39 | 21.6 |
| 40-44 | 19.7 |

Source: U. S. Census Bureau; Moody's Analytics Forecasted

AFTER SLOWDOWN, DEMAND EXPECTED TO TURN ROBUST BY 2022

U.S. Apartment Absorption by Year (Units) & Effective Rent Growth (Year-Over-Year)



Closing Thoughts to Keep in Mind...

| | |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uncertainty limiting current activity... | <ul style="list-style-type: none">• Current recession is unique in that it is being driven by a health pandemic. Mobility, confidence and activity are dependent upon virus spread being brought under control.• Office workforces are largely still distributed, making it difficult for occupiers to gauge future office needs across their portfolios. |
| ...But, reasons for cautious optimism. | <ul style="list-style-type: none">• Job creation started quickly, after a devastating two-month drop in employment.• The recession is likely already over. The recovery, though fragile and uneven, has begun.• Rent collections have remained strong for office, industrial and multifamily (each of which are averaging 90%+). |
| Some pre-recession trends are being accelerated. | <ul style="list-style-type: none">• eCommerce and online retail sales substituting for the lower levels of in-person shopping, eating, etc.• Need for more data centers and cloud services capacity.• Suburban submarkets increasingly attractive for some residents, workers and employers.• Secular headwinds for retail were accelerated by this crisis. |
| What else is to come? | <ul style="list-style-type: none">• Occupiers examining portfolio strategies now, and some likely to make shifts in workplace ecosystems in the future. The office will remain a critical driver of culture, learning and personal connections.<ul style="list-style-type: none">• Vast majority of office workers now want their employer to expand remote working policies and shift to balancing office, home and third places.• During the current pandemic-forced work-from-home experience, only 55% of workers “have a sense of well-being” and half struggle to connect with their company’s culture.• Opportunities exist as office rents have declined in one-fifth of U.S. markets, national vacancy is up 49 basis points quarter-over-quarter and sublease space has increased by 21% since the beginning of the year.• Industrial demand remains strong, and many U.S. markets continue to have historically low vacancy rates.<ul style="list-style-type: none">• Downside risk does still exist with disruptions to import / export volumes and potential bankruptcies of warehouse retailers. |

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SEPTEMBER 2020

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