



# Investment Performance Outlook

*Presented by CBRE Econometric Advisors*

JULY 8, 2020

**CBRE**

# SPEAKERS | JULY 8, 2020



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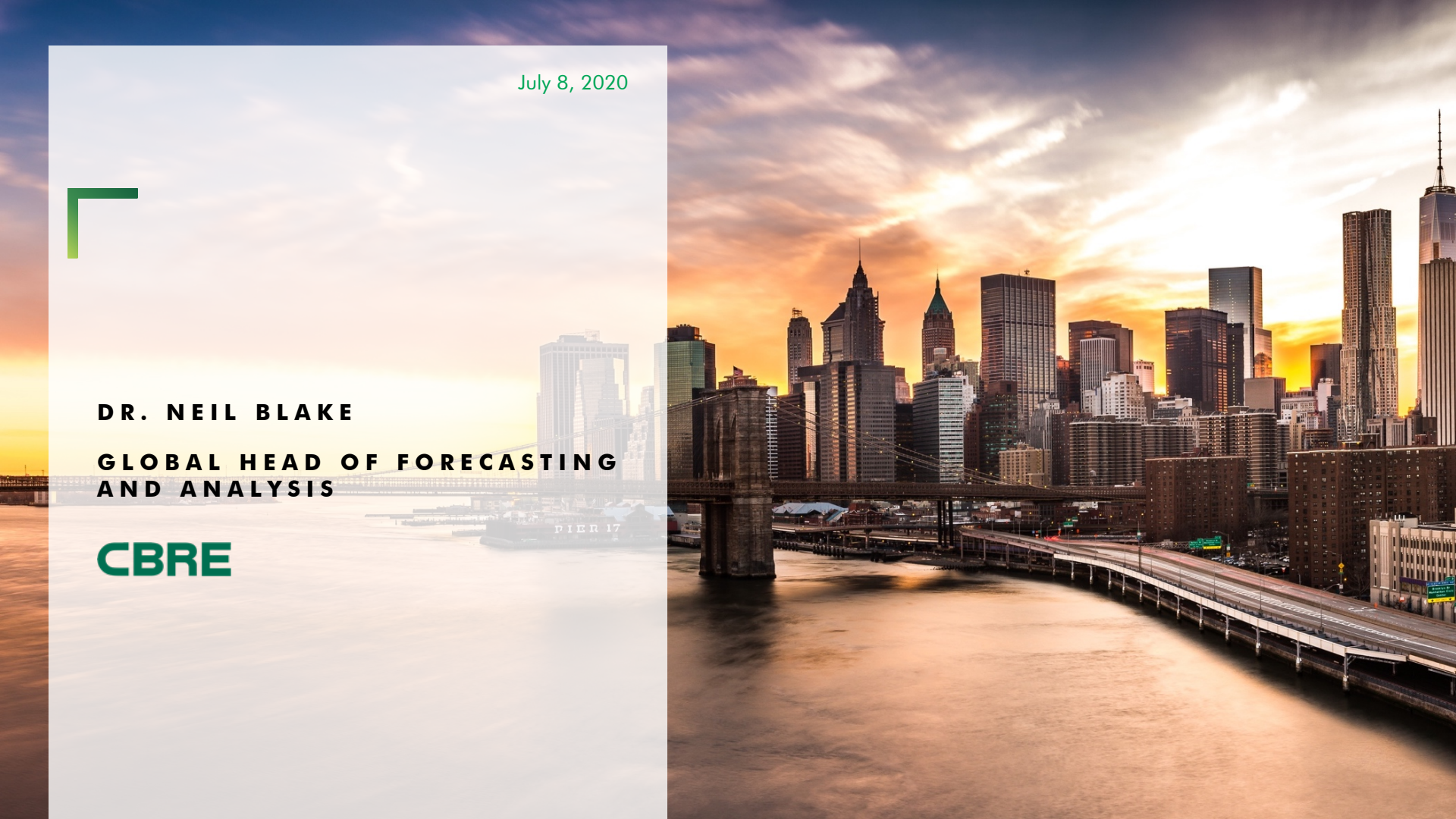
July 8, 2020



**DR. NEIL BLAKE**

**GLOBAL HEAD OF FORECASTING  
AND ANALYSIS**

**CBRE**



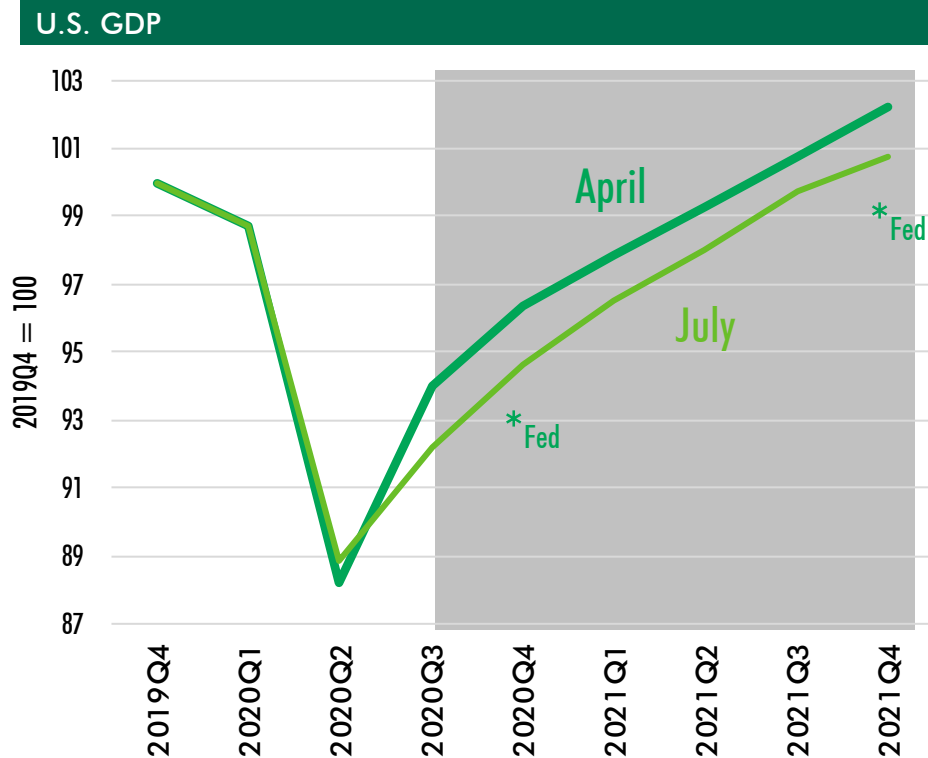


# MACRO DRIVERS OF CAP RATES

- GDP growth/the economic cycle/GDP volatility
- Financial markets
- Monetary policy – particularly quantitative easing

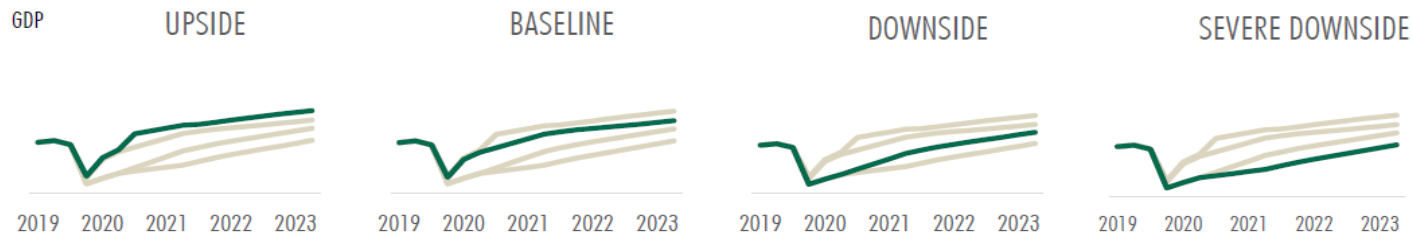


# A V-SHAPED RECESSION



- A sudden hit from late March
- Improving from early May
- Recovery helped by government support
- Early rate of improvement is not maintained because:
  - Restrictions still affect some industries
  - Damage to corporate and household finances during the lockdown
- Recent forecasts revised down
- But still very much a V
- We will not know if we are headed for a V or a more pessimistic outcome until well into Q3

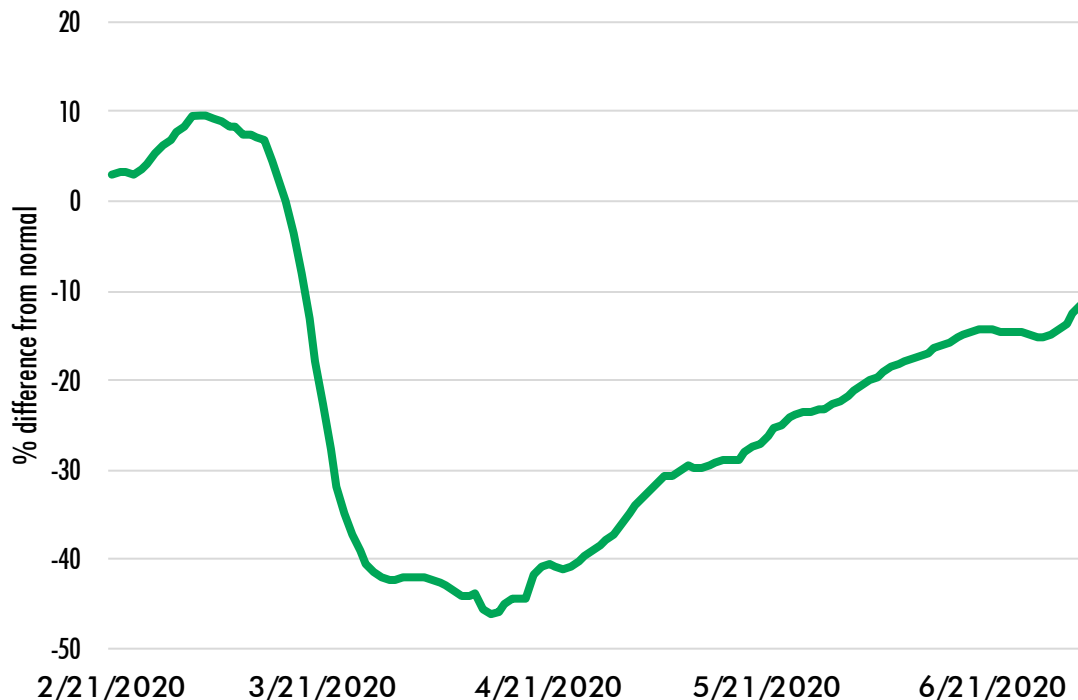
# ALTERNATE SCENARIOS



Scenario	Upside	Baseline	Downside	Severe Downside
Likelihood	Low	High	High/Medium	Low / Medium
COVID-19 Situation	Social distancing measures cause the number of new cases to quickly fall by May/June 2020. Future spread is mitigated by test-and-trace and release of a vaccine by early 2021.	The number of new cases drops enough to allow a slow reopening of the economy commencing in late May / June. Progress will vary by region.	COVID-19 cases and hospitalization rates remain high into the summer and crowd-out resources from other parts of the economy. Viral flare-ups are commonplace in different regions of the country.	After governments ease 'lockdown' rules the virus makes a worldwide resurgence. Meanwhile, the development of a vaccine takes years.
Time to Full Economic Recovery	5 quarters	2 years	3 years	4 years
Economic Impact	A quickly falling case count, swift reopening of the economy and robust government stimulus will unleash a wave of pent-up demand that drives an impressive recovery.	24 million jobs will be lost in 2020q2, pushing the unemployment rate to about 15%. Government stimulus will keep many firms afloat during the lockdown period. Improved consumer sentiment and functioning financial markets will support the recovery.	The reopening of the economy proves to be a slow process and many firms are unable to reopen. High bankruptcies and unemployment will prevent a strong recovery from gaining traction. Pre-virus employment levels are not regained before 2024.	A prolonged recession causes a wave of bankruptcies that severely stress the financial system. Pre-virus employment levels are not regained during the next four years.

# THE RESTRICTIONS ARE EASING

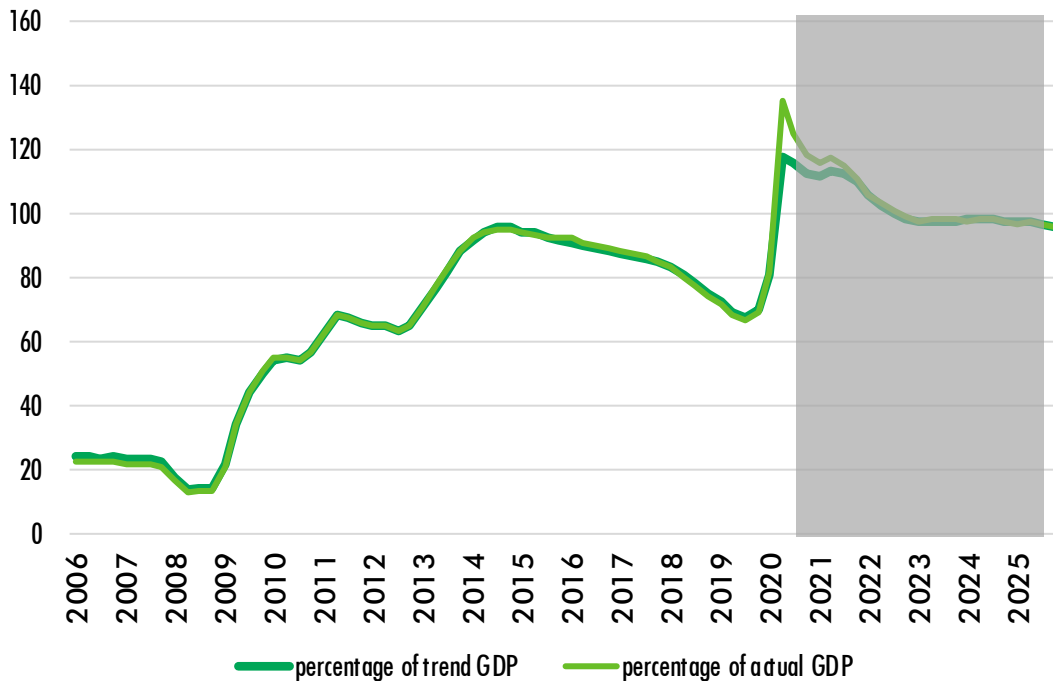
Google Mobility: USA Retail & Leisure



- The public health policy response rather than the virus have hit economic activity
- A lot of official data only go to April (or Q1) which is likely to have been the low point
- Only labour market statistics are relatively up-to-date
- PMIs and other survey data are difficult to interpret
- New role for big data
- Signs of improving economic activity everywhere despite the renewed lockdowns in some states

# MONETARY POLICY

## USA: Quantitative Easing



- Fed Funds Rate range cut to 0 to .25%
- \$300B of loans to companies
- Unlimited asset purchases (QE) to support “smooth market functioning”

Source: CBRE EA Forecast Q1 2020 (April).



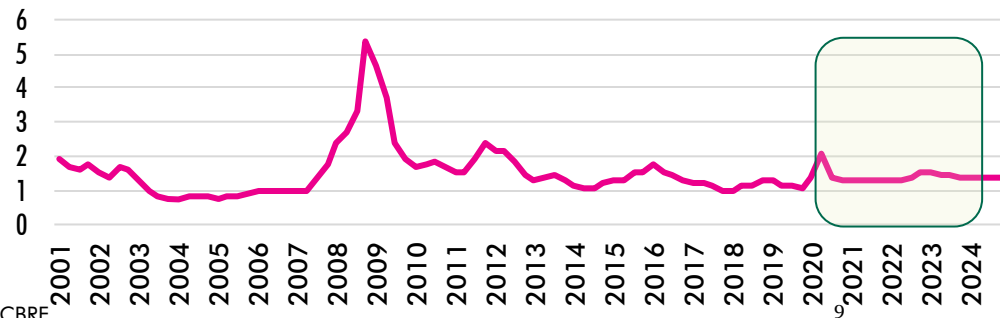
# LONG-TERM INTEREST RATES

## 10-Year T-Bond Yield



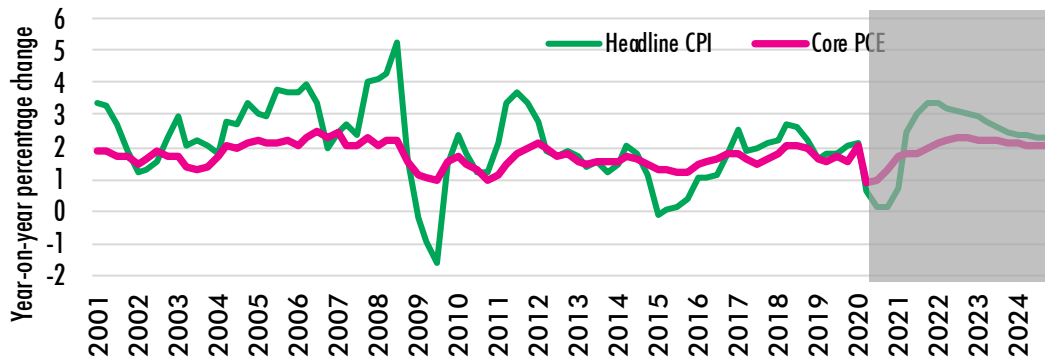
- Bond yields had already fallen substantially in 2019
- Some recovery anticipated as the economy continues to recover in 2021
- But still “Lower for Longer”
- Corporate bond spreads widened initially but nowhere near as much as in the GFC
- Spreads are currently back to their early-2019 levels

## US 10-Year Grade A Corporate Bond Yield Spreads

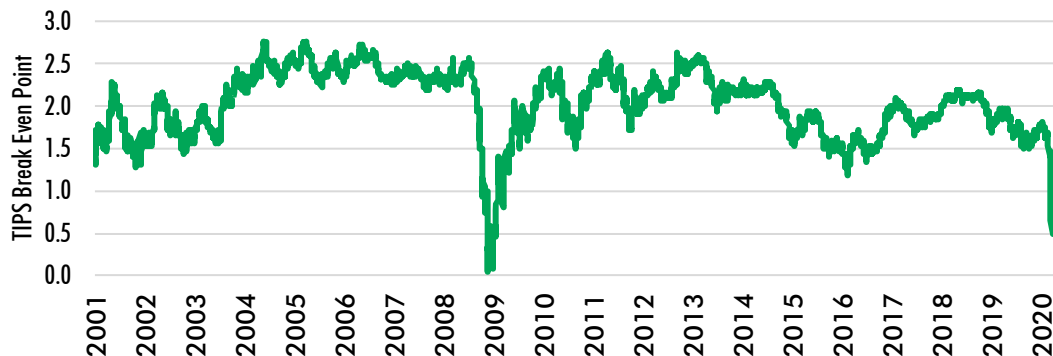


# IS THERE AN INFLATION THREAT

U.S.A. consumer price inflation



U.S.A. inflation expectations



- The inflationary threat was a big concern when the post-GFC QE rounds were announced but the inflation demon did not appear
- Instead, the money multiplier and the velocity of money collapsed and the “output gap” was a better predictor of inflation than the monetary  $PV=MT$  identity
- We do not think it will be any different this time but:
  - Swing in oil prices will show up in headline inflation.
  - Expect some PCE inflation above 2% as the demand recovery runs ahead of supply
  - Essential that the Fed retains its independence



# MACRO SUMMARY

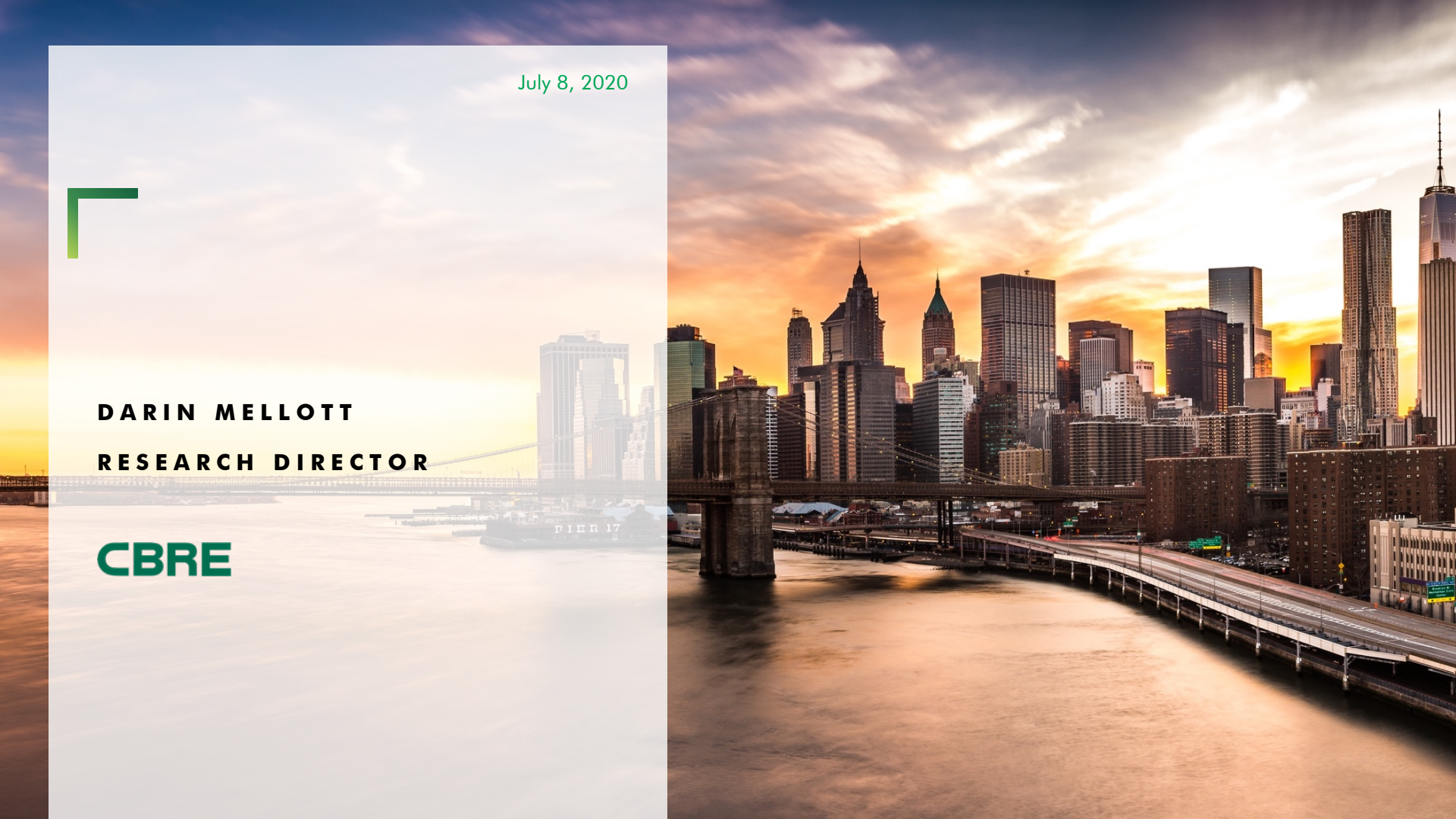
- Sharp slowdown in 2020Q2
- Not a normal recession; could turn into one but...
- The base case is a Nike-swoosh or asymmetric V
- Government support packages essential
- Hefty fiscal support
- Monetary financing by any other name?
- But little sign of inflation taking off
- Lower and lower for longer interest rates
- Spike in corporate bond spreads short lived

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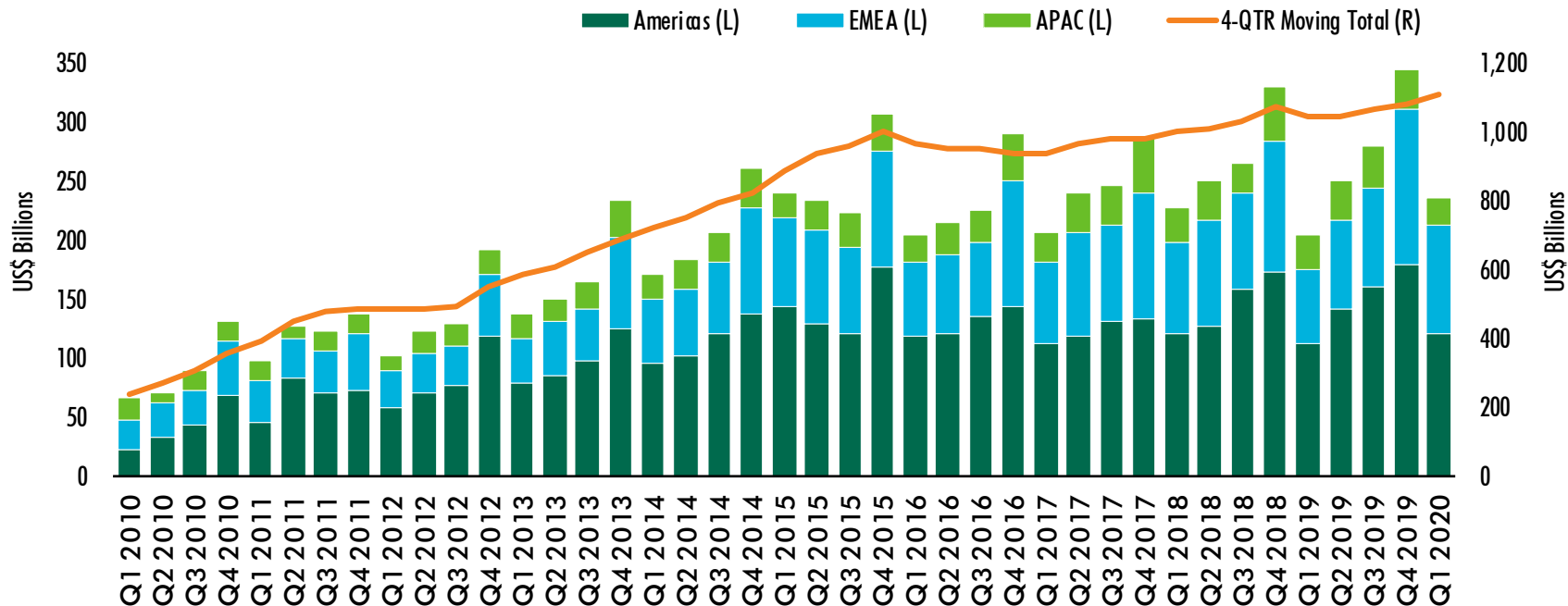
**DARIN MELLOTT**  
**RESEARCH DIRECTOR**

**CBRE**



# Q1 INVESTMENT VOLUME SURPRISED ON THE UPSIDE

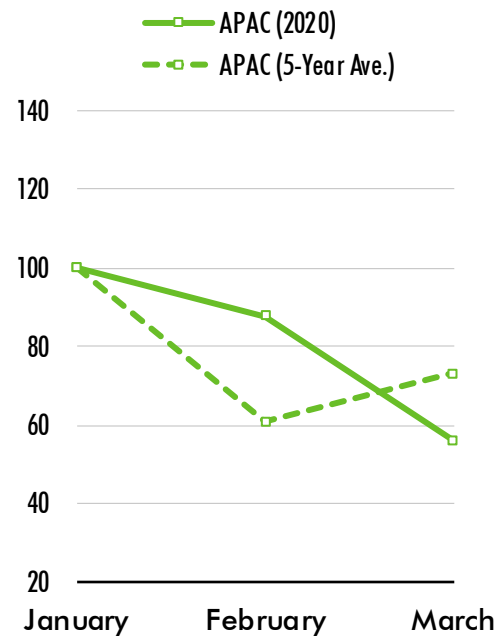
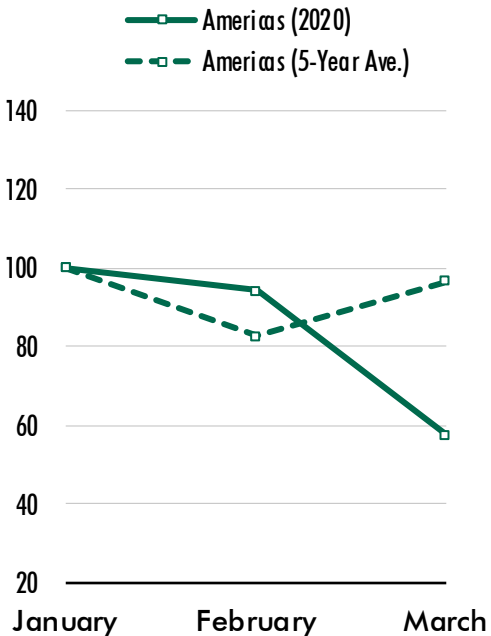
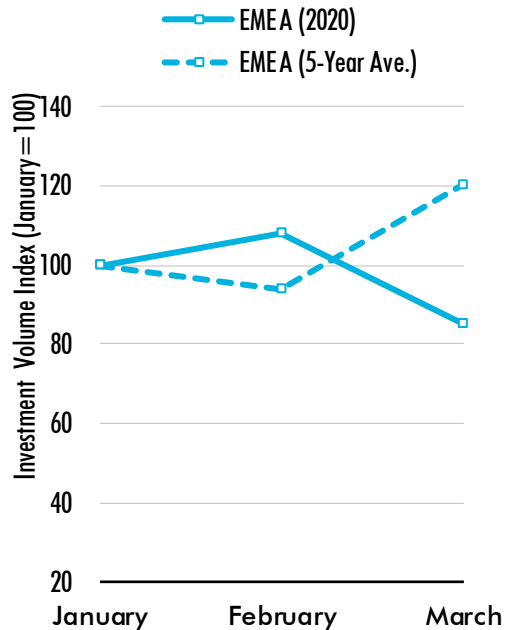
Global CRE sales transaction volume (into US\$ using fixed exchange rate)



Source: CBRE Research, RCA (Americas), Q1 2020.

# BUT VOLUMES SLOWED IN MARCH

Monthly investment volume index (January=100)



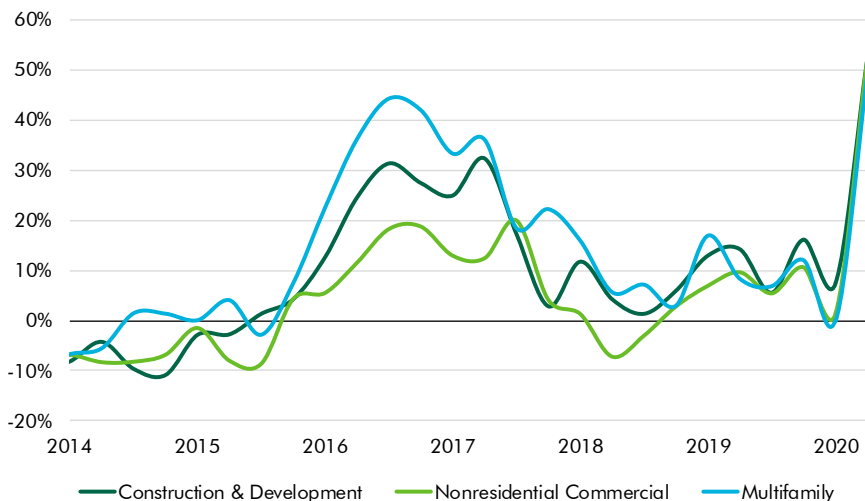
Source: CBRE Research, RCA (Americas), Q1 2020.



# FED SENIOR BANK LOAN OFFICER SURVEY LENDING STANDARDS

## Net percentage of banks tightening CRE lending standards

*Negative = standards easing*



## TOP REASONS FOR TIGHTENING STANDARDS

Less Favorable/More Uncertain Outlook for Property Prices



Less Favorable/More Uncertain Outlook for Fundamentals



Less Favorable/More Uncertain Outlook for Cap Rates



Decreased Ability to Securitize CRE Loans



Reduced Tolerance for Risk



■ Not Important   
 ■ Somewhat Important   
 ■ Very Important

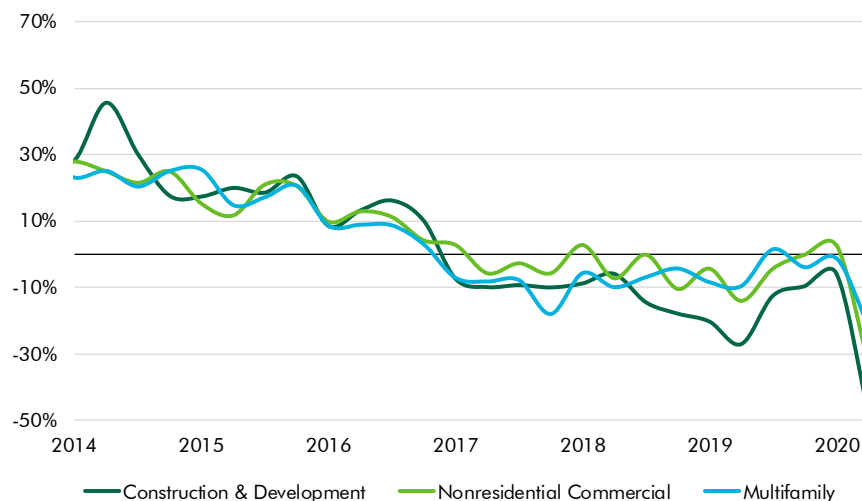
Note: Bar charts represent the highest combined shares of “very important” and “somewhat important” in response to this question: if your bank has tightened its credit policies for CRE loans over the past year, how important have been the following possible reasons for the change?

Source: CBRE Research, U.S. Federal Reserve Board, Q1 2020.

# FED SENIOR BANK LOAN OFFICER SURVEY CRE LOAN DEMAND

## Net percentage of banks reporting weaker CRE loan demand

*Negative = weaker demand*



## TOP REASONS FOR WEAKER CRE LOAN DEMAND

Customer Acquisition or Development of Properties Decreased

50.0%

50.0%

Less Favorable/More Uncertain Outlook for Rental Demand

25.0%

25.0%

50.0%

General Level of Interest Rates Increased

50.0%

50.0%

Not Important

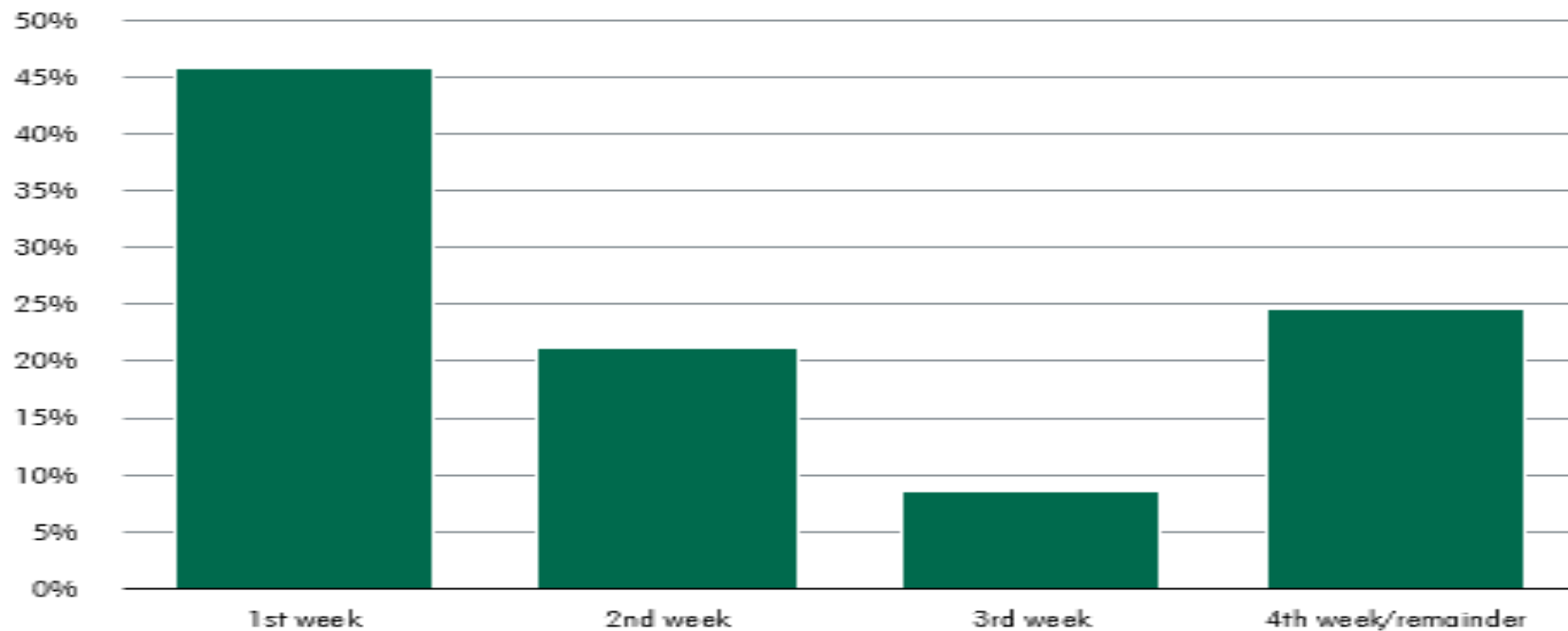
Somewhat Important

Very Important

Note: Bar charts represent the highest combined shares of “very important” and “somewhat important” in response to this question: if your bank has tightened its credit policies for CRE loans over the past year, how important have been the following possible reasons for the change?

Source: CBRE Research, U.S. Federal Reserve Board, Q1 2020.

# CASH PAYMENTS BY WEEK

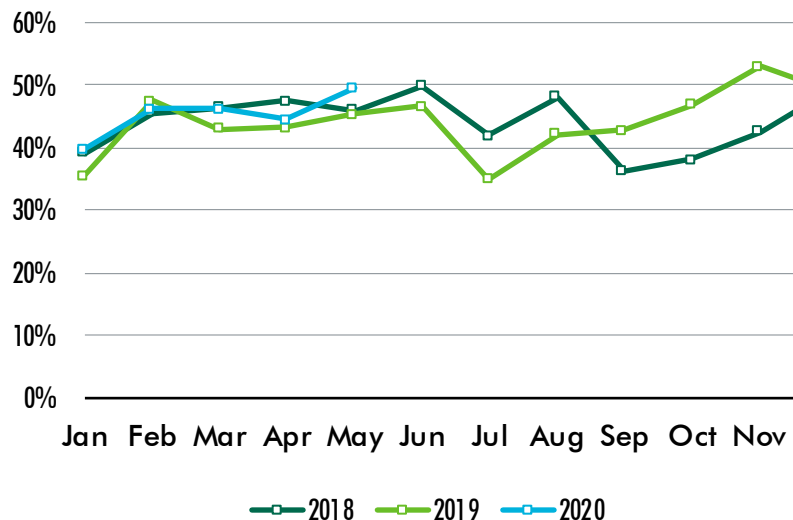


Source: CBRE Research, Q1 2020.

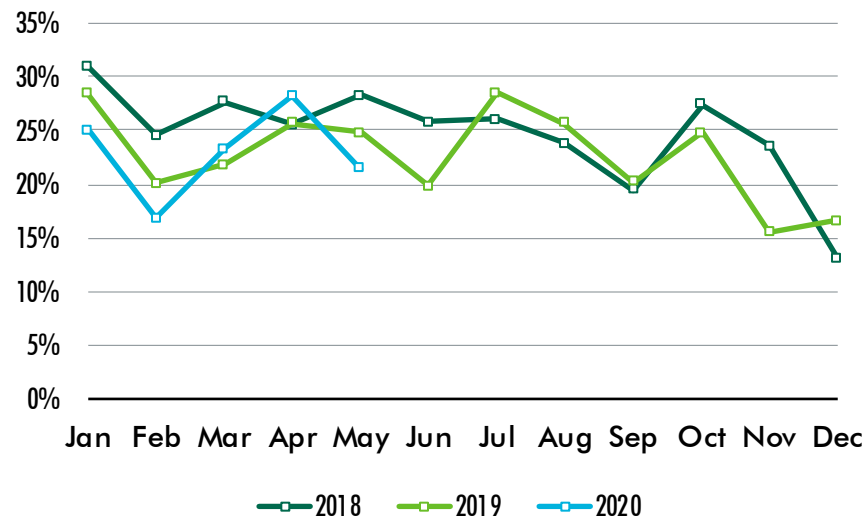
# CASH PAYMENTS BY WEEK

## Office

### First Week Cash Payments



### Fourth Week Cash Payments

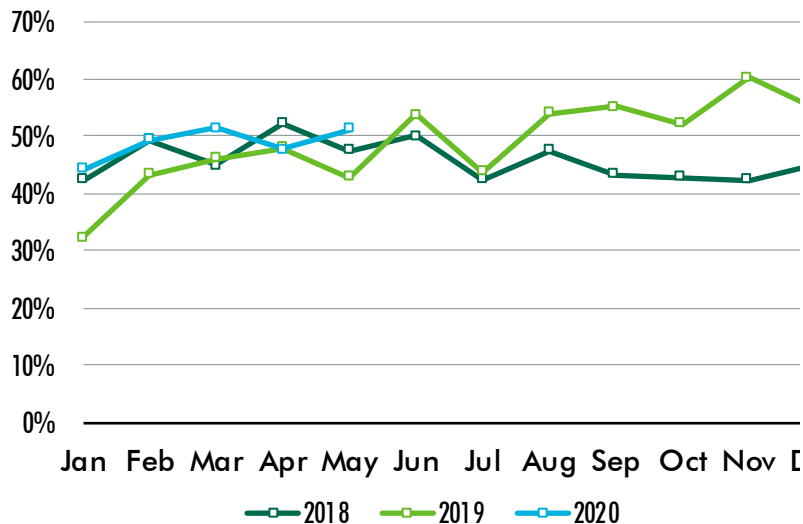


Source: CBRE Research, RCA (Americas), Q1 2020.

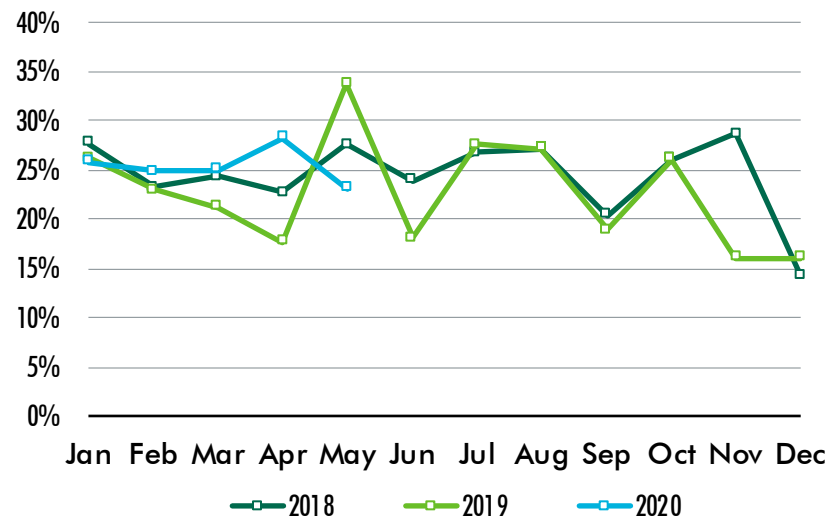
# CASH PAYMENTS BY WEEK

## Industrial

### First Week Cash Payments



### Fourth Week Cash Payments

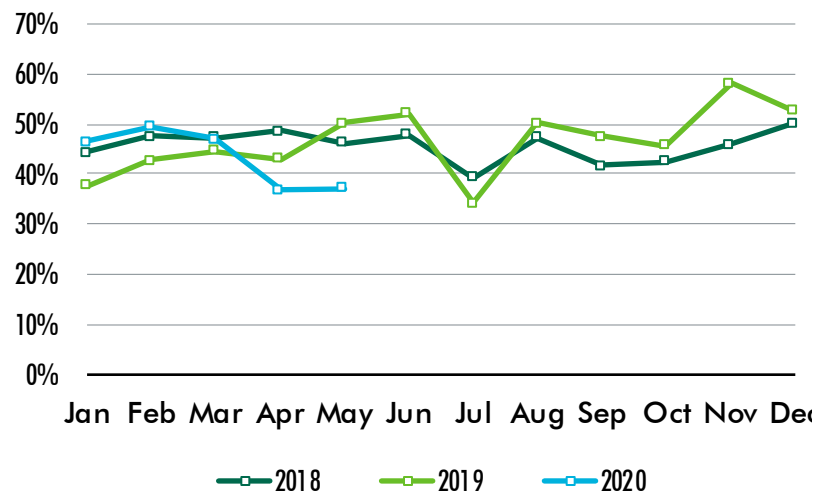


Source: CBRE Research, RCA (Americas), Q1 2020.

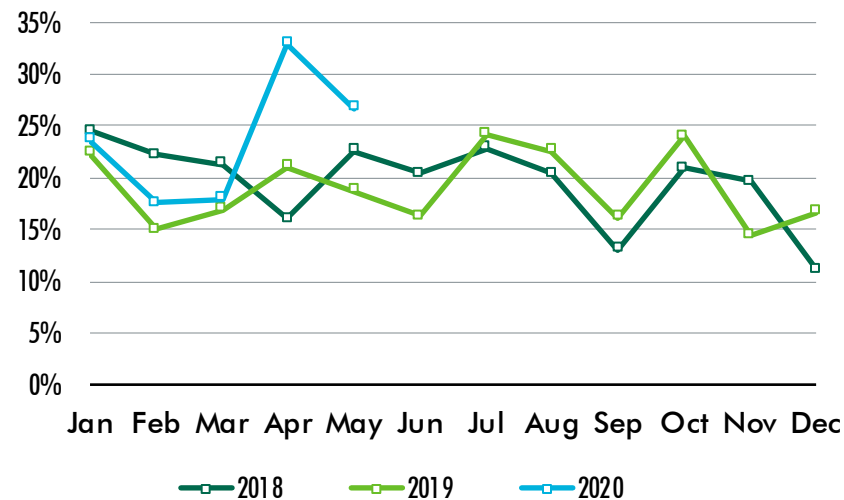
# CASH PAYMENTS BY WEEK

## Retail

### First Week Cash Payments



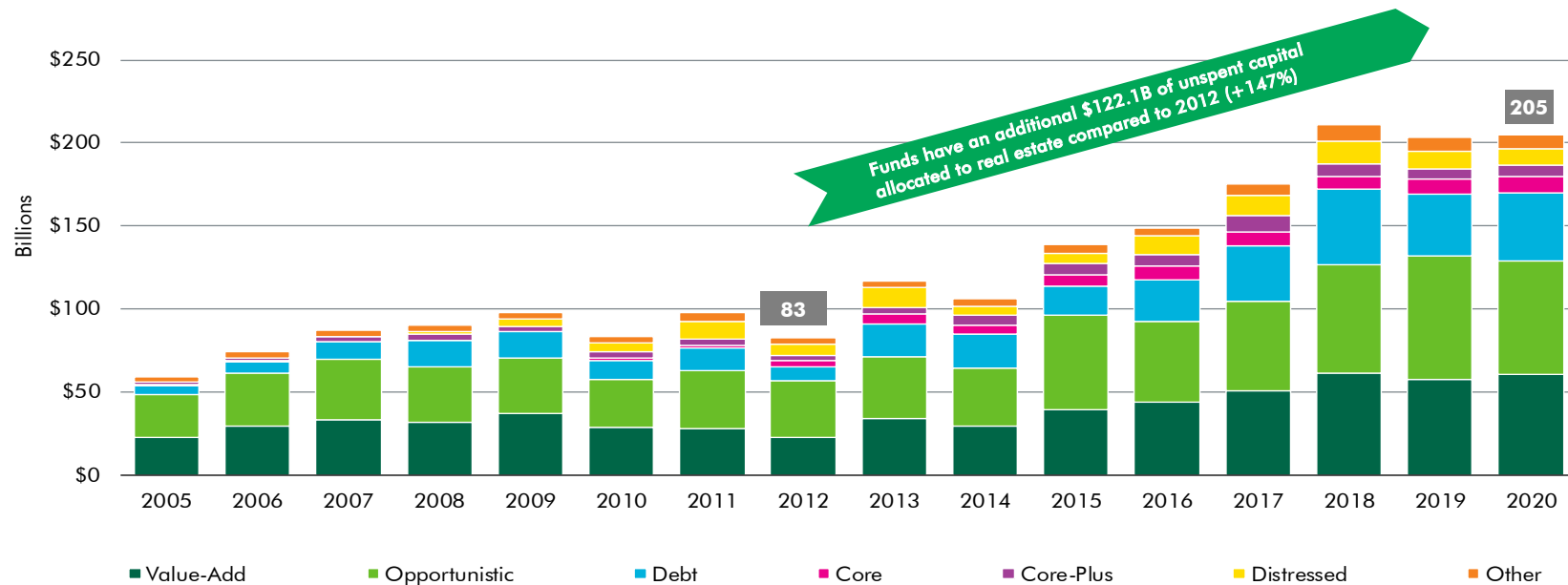
### Fourth Week Cash Payments



Source: CBRE Research, RCA (Americas), Q1 2020.



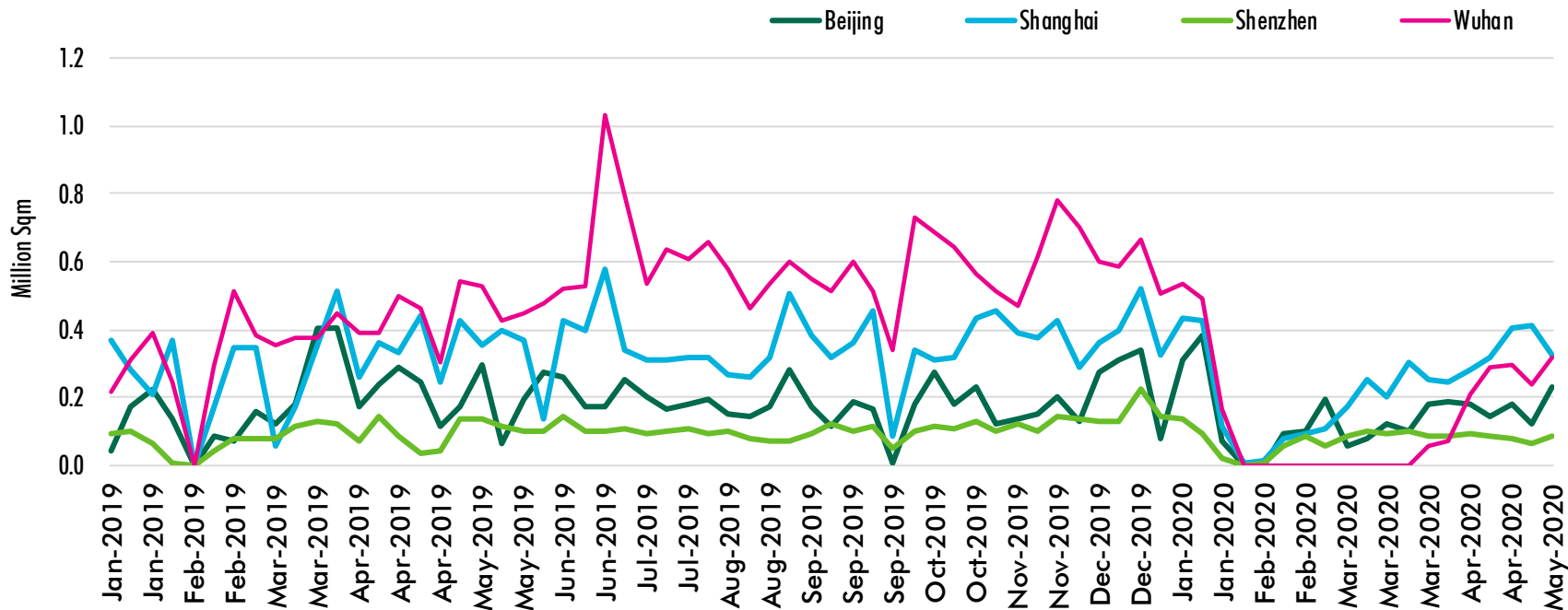
# REAL ESTATE DRY POWDER BY STRATEGY



Note: Latest data as of May 2020. Data includes funds primarily targeting North American real estate.  
Source: Preqin, May 2020.

# CHINA – TRANSACTIONS RESUMED IN APRIL

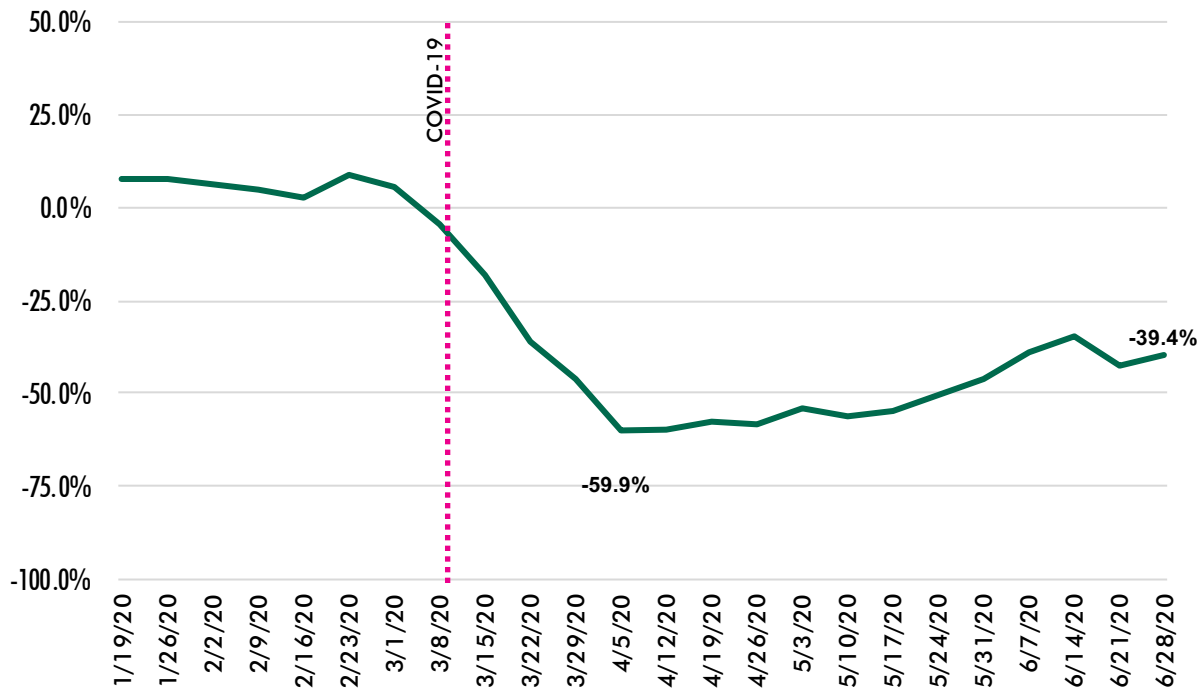
Total building size sold in real estate transactions by city [weekly]



Source: SouFun-CREIS, Macrobond, CBRE Research, May 2020.

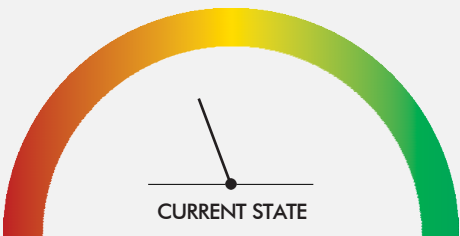
# NEW SUPPLY OF CBRE PROPERTY LISTINGS

YoY Change in Property Listings Launched (Weekly)

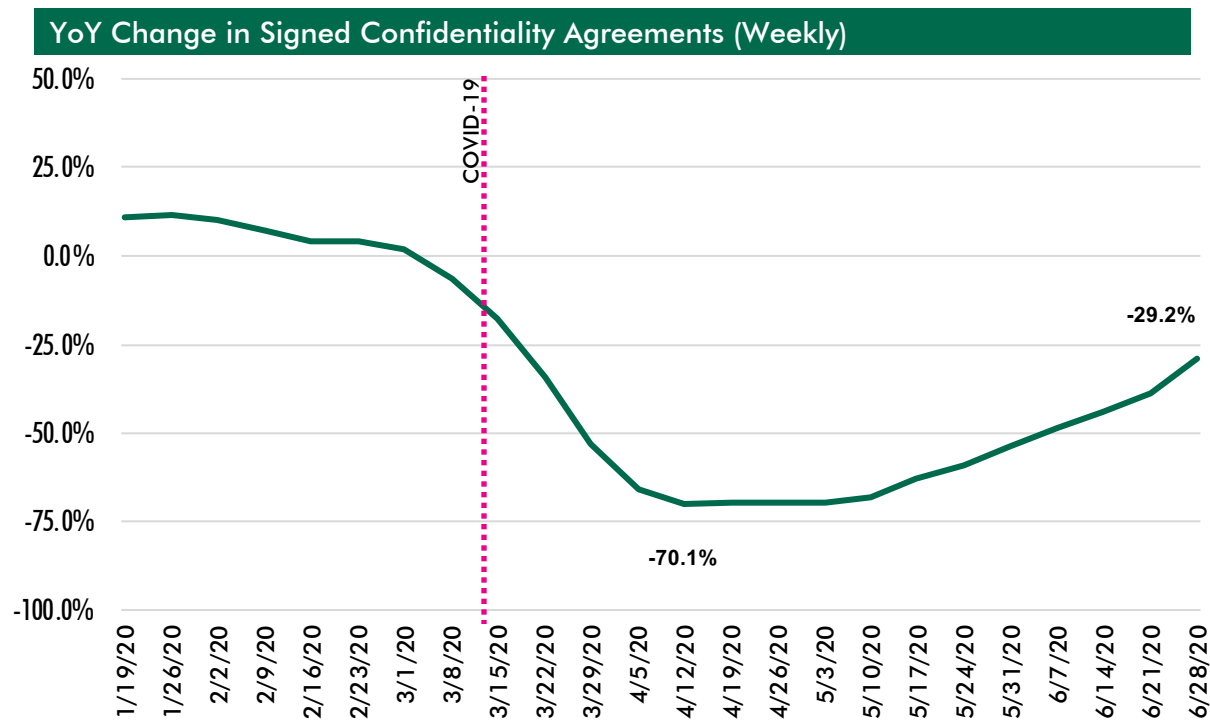


Source: CBRE Deal Flow.

## CBRE PRIVILEGED SUPPLY & DEMAND INDICATORS

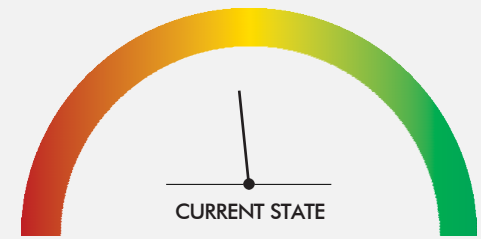


# NEW DEMAND FOR CBRE PROPERTY LISTINGS



Source: CBRE Deal Flow.

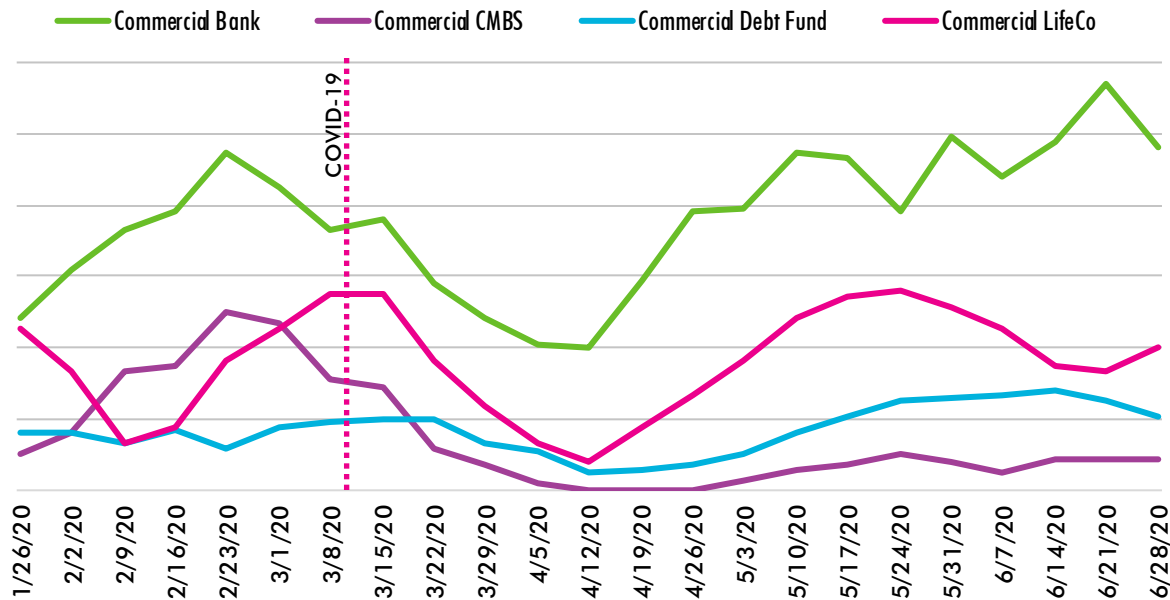
## CBRE PRIVILEGED SUPPLY & DEMAND INDICATORS



# CBRE COMMERCIAL LOAN QUOTE ACTIVITY

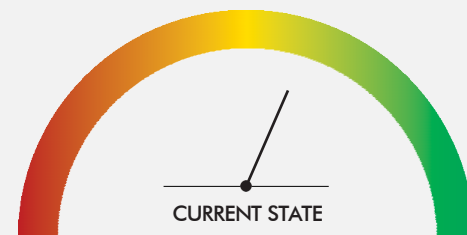
Total Number of Loan Quotes, 4-wk Moving Average (Weekly)

## Total Number of Loan Quotes, 4-wk Moving Average (Weekly)



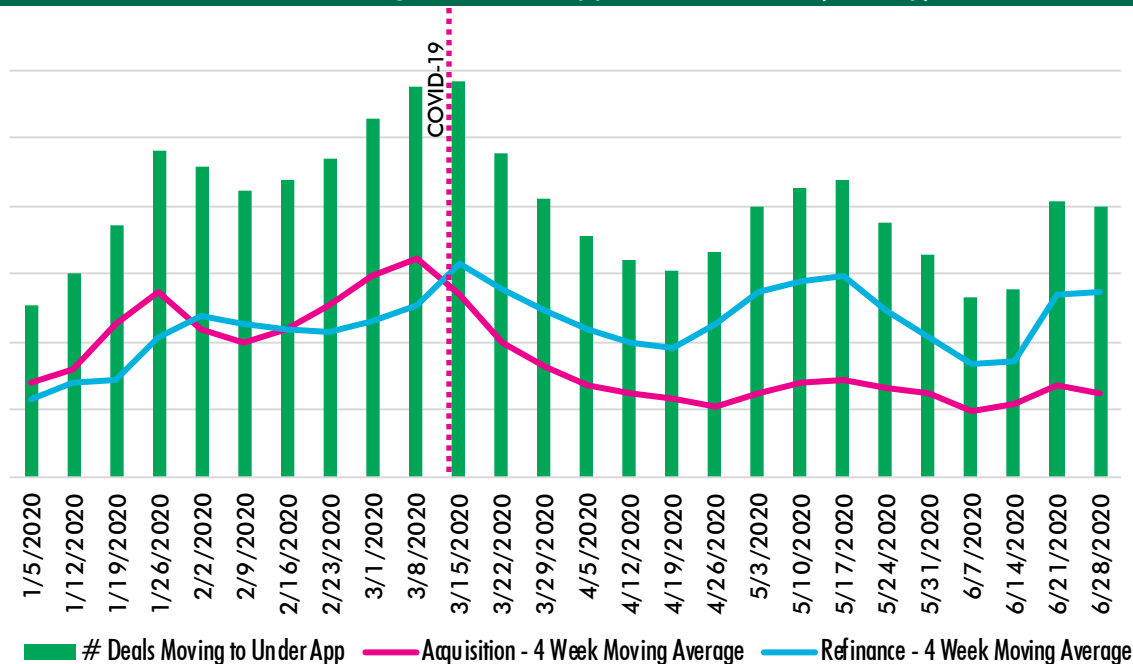
Source: CBRE Connector.

## CBRE PRIVILEGED SUPPLY & DEMAND INDICATORS



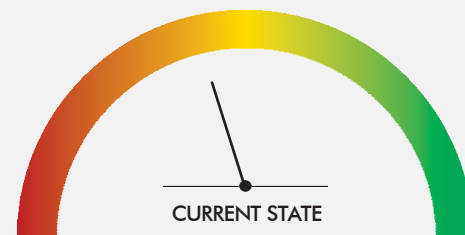
# CBRE LOANS MOVING UNDER APPLICATION

Total Number of Loans Moving to "Under Application" Phase (Weekly)



Source: CBRE Connector.

## CBRE PRIVILEGED SUPPLY & DEMAND INDICATORS





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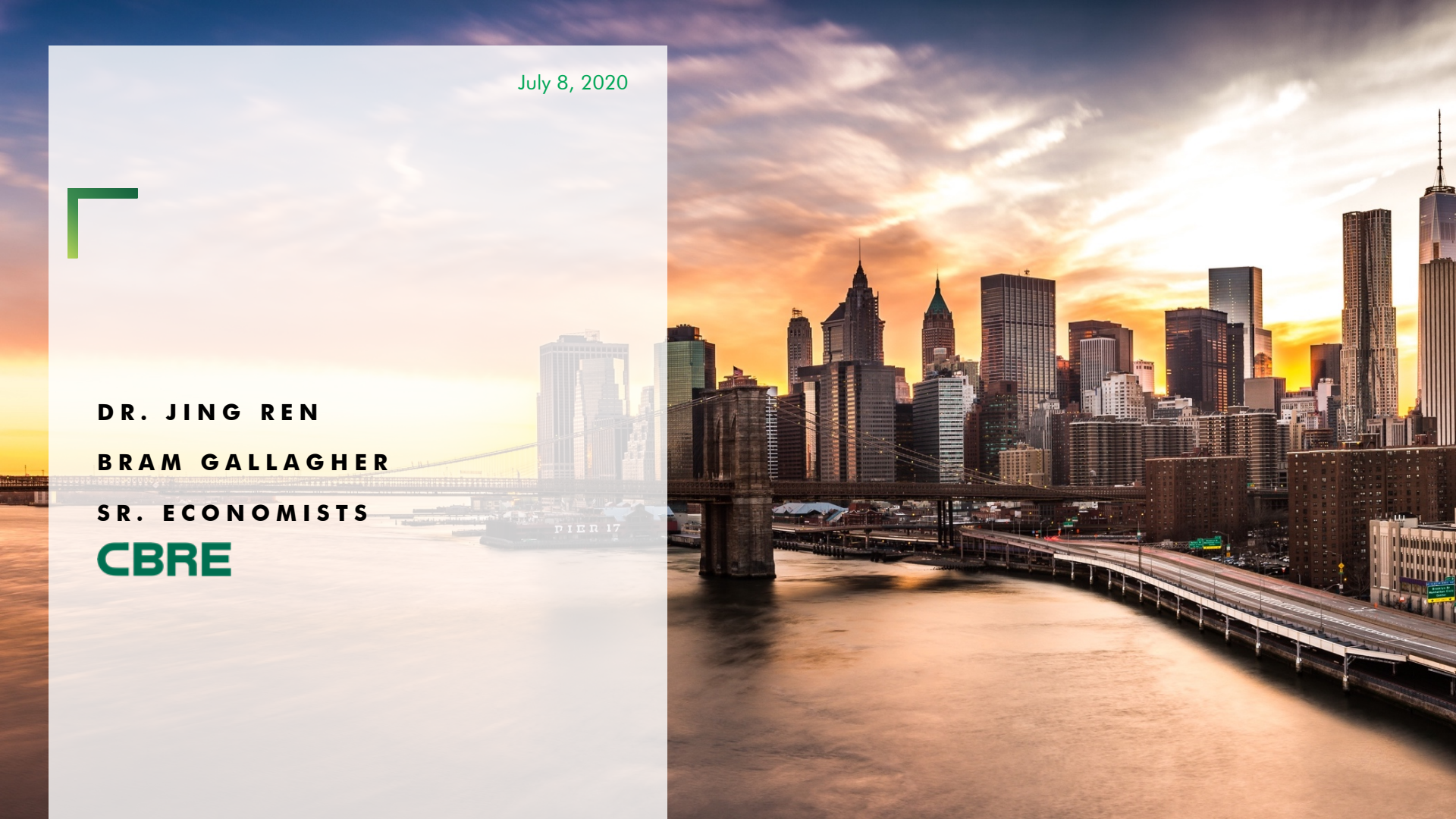


**DR. JING REN**

**BRAM GALLAGHER**

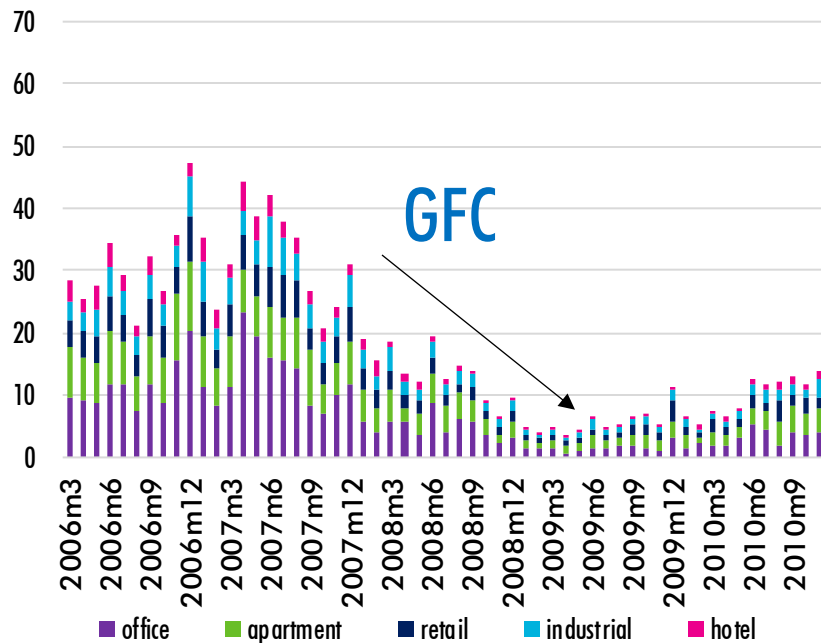
**SR. ECONOMISTS**

**CBRE**

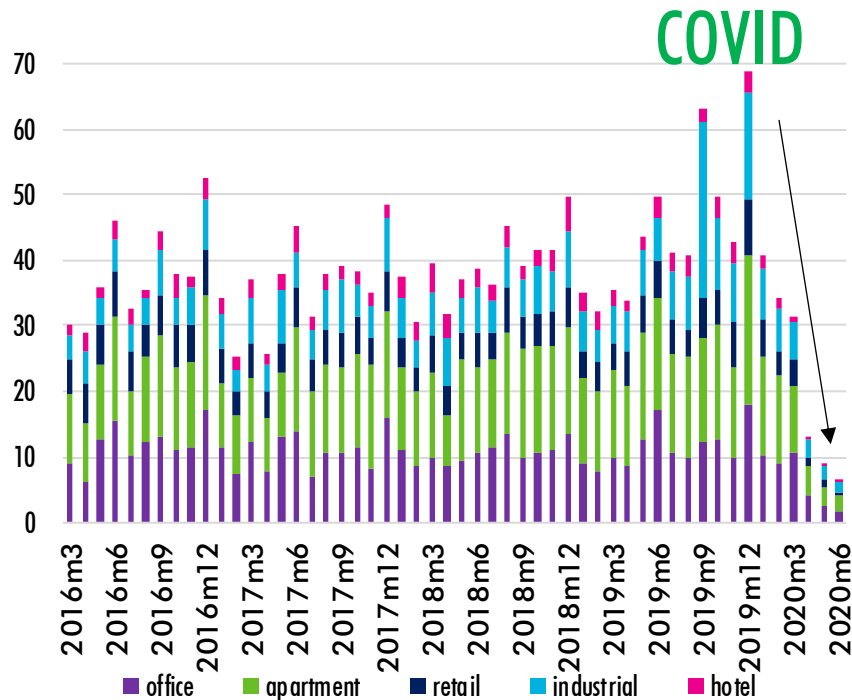


# MONTHLY TRANSACTION VOLUME - SHARPER DECLINE THIS TIME

2006 - 2010



2016 - 2020



Source: Real Capital Analytics.

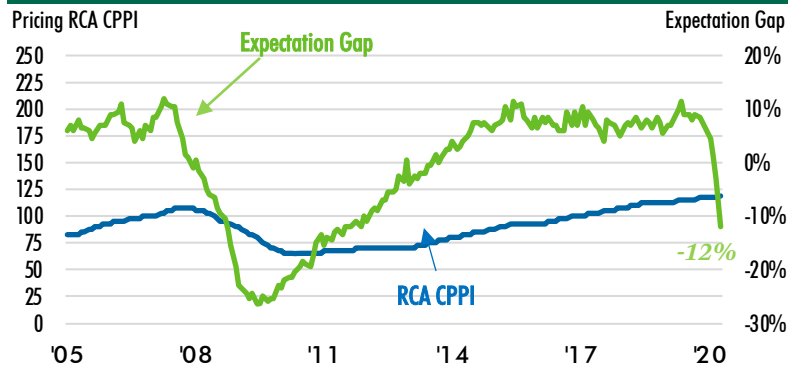


## **TRANSACTION VOLUME DOWN, HOW ABOUT PRICE AND CAP RATE**

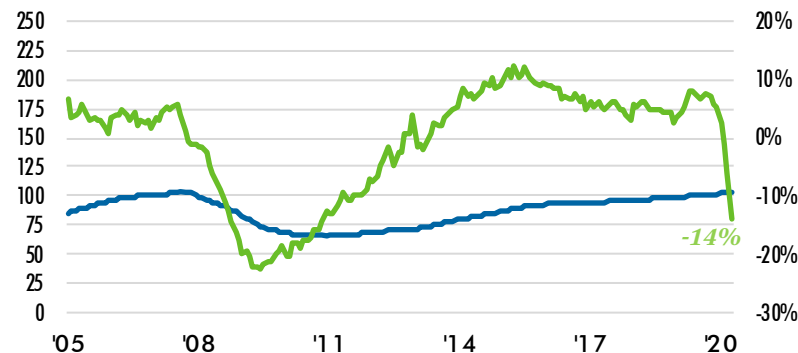
- Transaction volume going down, but price not falling?
- What do we hear on the field?  
“no shortage of capital, shortage of product”
- Disconnect between buyer’s and owner’s expectation on price

# DISCONNECT BETWEEN BUYER'S AND OWNER'S PRICE EXPECTATION

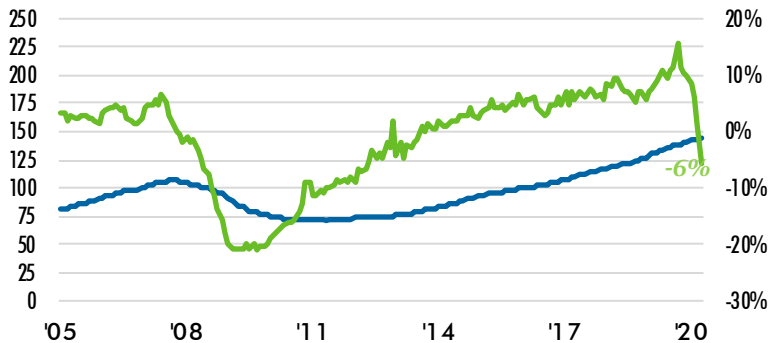
## Office



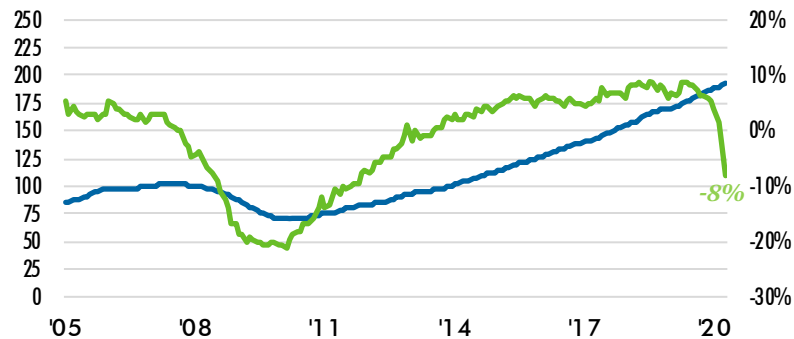
## Retail



## Industrial



## Apartment



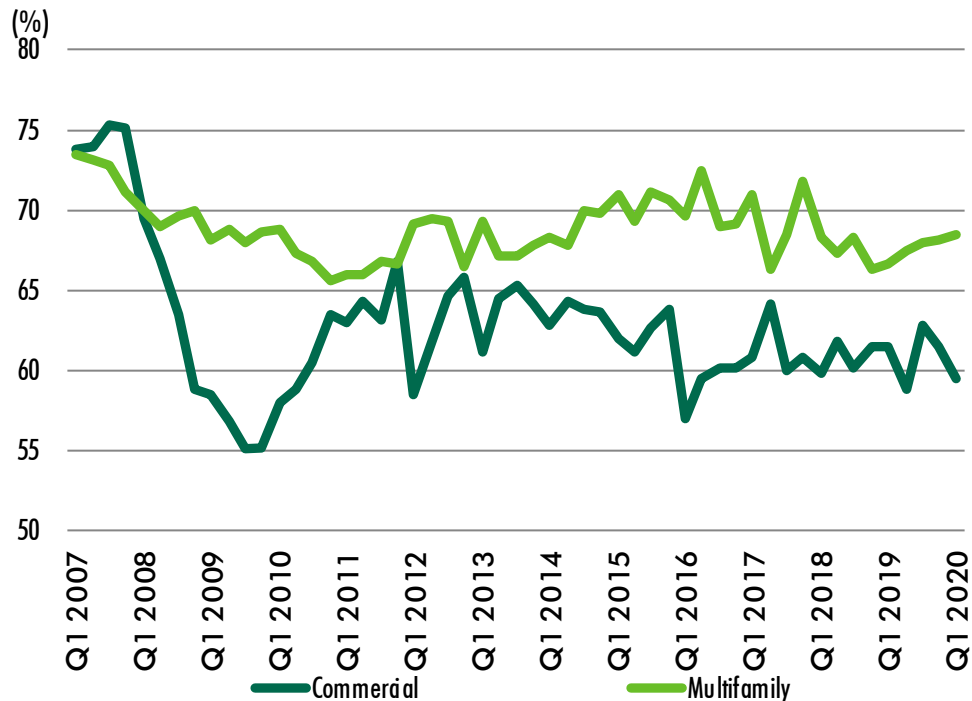


## LENDING MARKETS, OUTLOOK FOR FUTURE GROWTH ARE DRIVING PRICING

- Lending markets influence buyer and owner expectations
  - Buyer
    - If debt costs rise and leverage falls, then pricing needs to fall to meet the target return
  - Owner
    - Owner can delay potential loss as long as the lending market does not seize up
- Outlook for future growth and security of income

# OWNERS' CURRENT LIQUIDITY CONDITION

Commercial LTVs Down; Multifamily LTVs Up Slightly

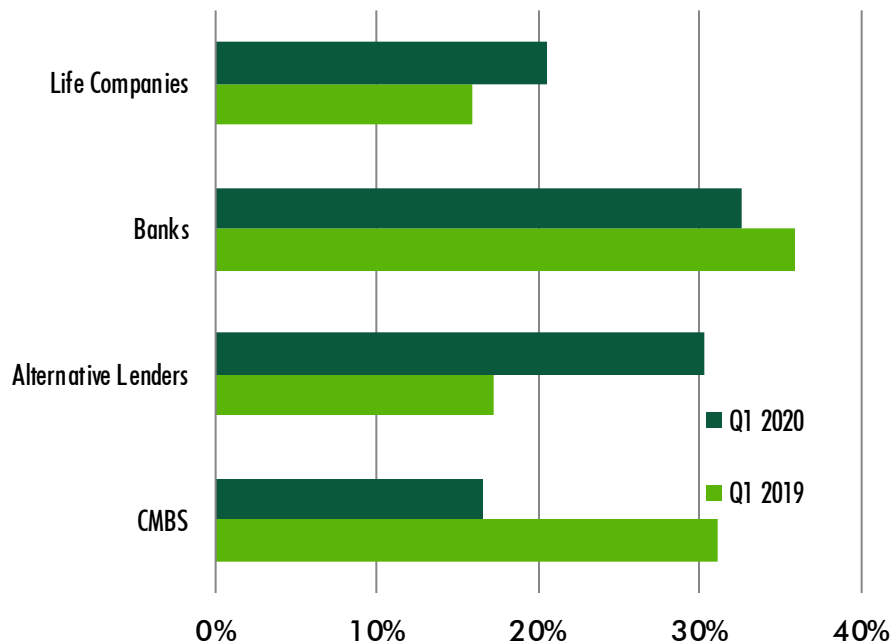


Source: CBRE Research, Q1 2020.

- Ability to collect rent
- Ability to refinance
- Loan relief
  - e.g.: Forbearance program
- Pre-covid: lower LTV compared to GFC
  - apply stressed cap rate from Fitch Ratings

# SOURCE OF LIQUIDITY -- LENDING MARKETS

## Banks and alternative lenders dominate lending in Q1



Source: CBRE Capital Markets and CBRE Research, Q1 2020.  
Reflects non-agency commercial/multifamily loans.

## LOAN UNDERWRITING MEASURES STEADY IN Q1

Key Underwriting Measures	Q1 2020	Q4 2019	Q1 2019	Q1 2017
Debt Service Coverage Ratio	1.51	1.51	1.40	1.51
Loan-to-Value (LTV) (%)	65.0	65.8	65.1	65.4
Cap Rate (%)	5.89	5.89	5.90	6.22
Amortization Rate (%)	20.3	22.6	16.8	24.0
Percent Partial or Full Interest-Only	63.3	64.1	67.5	55.6
Percent Full Interest-Only	22.8	19.9	17.9	11.1
Loan Constant (%)	5.45	5.50	6.10	6.23
Interest Rate (%)	3.82	3.89	4.72	4.24
Debt Yield (%)	9.39	9.26	9.34	9.93

Source: CBRE Research, Q1 2020.

Note: Amortization rate reflects the average percentage of origination balances scheduled to pay down over the loan term.



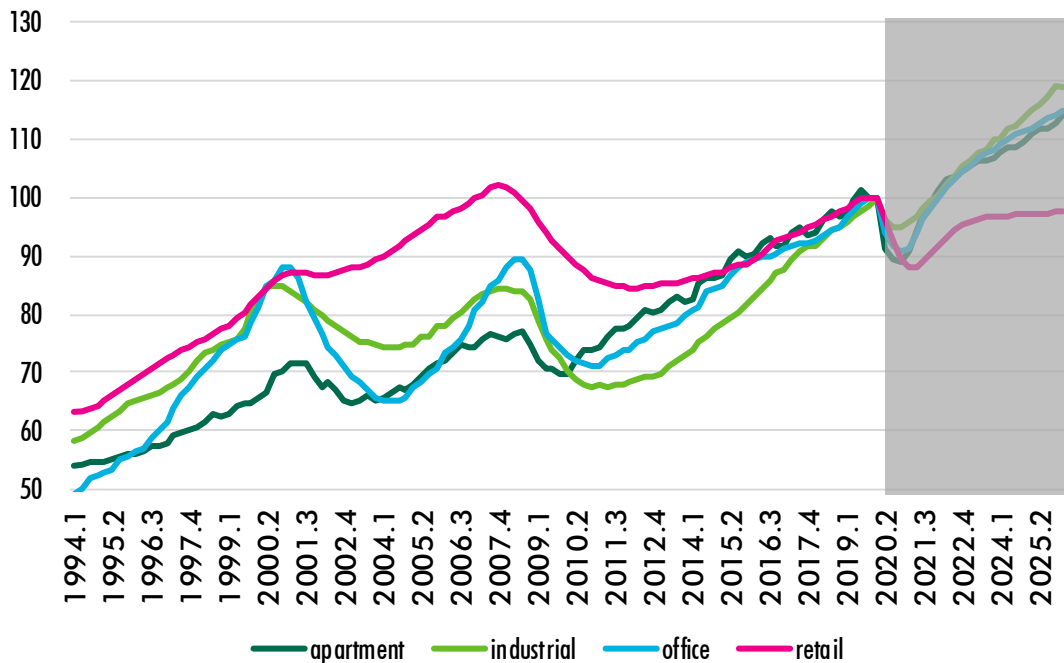
## **LENDING MARKETS AND OUTLOOK FOR FUTURE GROWTH ARE DRIVING PRICING**

- Lending markets
- Outlook for future growth



# OUTLOOK FOR FUTURE GROWTH - REAL ESTATE FUNDAMENTALS

Economic Rent Index (rent\* occupancy rate, 2020q1=100)

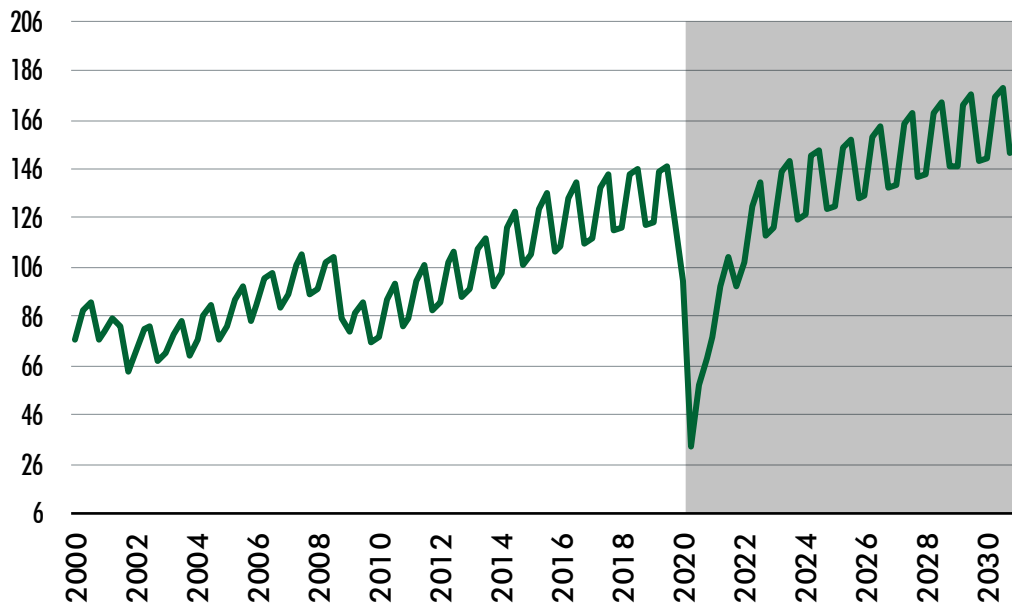


- Retail
  - consumer cutting non-essential spending
  - accelerated e-commerce penetration
  - retailer bankruptcies
- Office
  - rising unemployment
  - work from home
- Apartment
  - less income from rising unemployment
  - high density living environment
- Industrial
  - slow down in economy

Source: CBRE Econometric Advisors, 2020 Q1.

# OUTLOOK FOR FUTURE GROWTH - REAL ESTATE FUNDAMENTALS

National hotel revenue per available room, Q1 2020=100

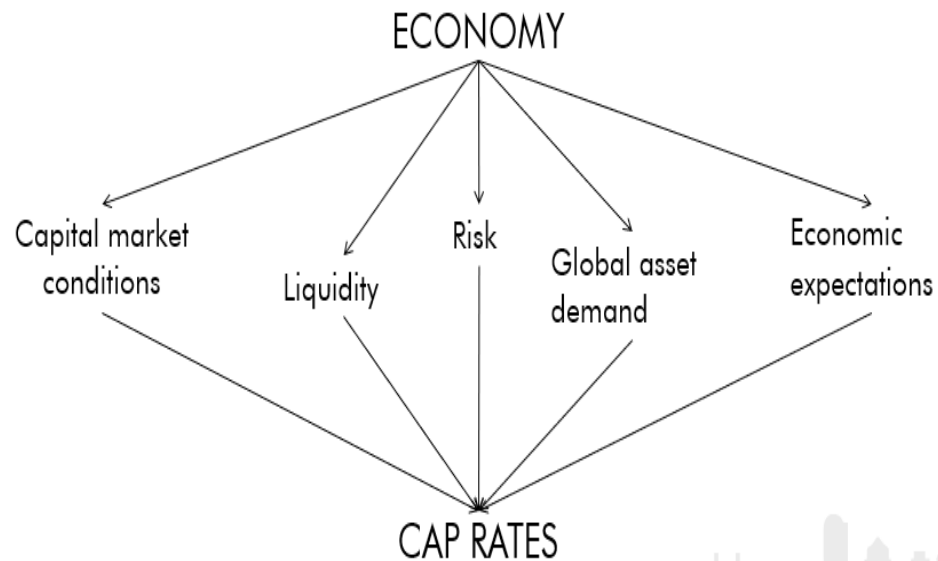


- Hotel
  - RevPAR decrease most acute for hotels, recovers by 2023.
  - Drive-to leisure demand returns most quickly, group business takes longer to resume
  - Demand shifts to lower-priced chain scales initially, then shifts back to higher price scales as recovery progresses

Source: CBRE Hotels, RCA, 2020 Q2.

# OUTLOOK FOR FUTURE GROWTH – CAP RATE

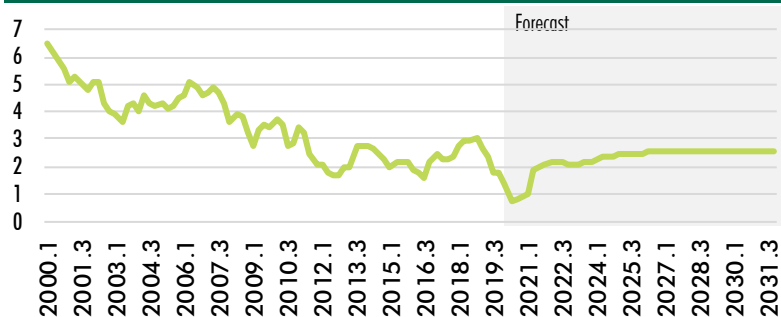
## Capital Markets: Cap Rate forecast – channels of influence



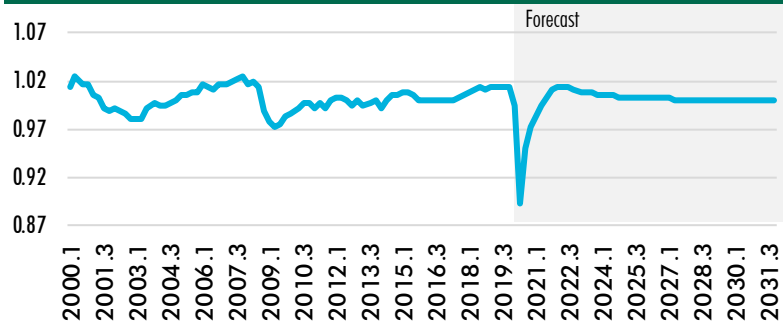
Factor Group	Model Variable	Theory
Capital Market Conditions	Nominal Treasury Yield	+
	Inflation	-
Liquidity-Fed QE	QE	-
Risk	A-Bond Spread	+
Global Asset Demand	Dollar Value	+
National Economic Expectation	GDP Index	-
Local Economic Expectation	Local RE, Real Rent	-

# Q1 MACRO ASSUMPTIONS

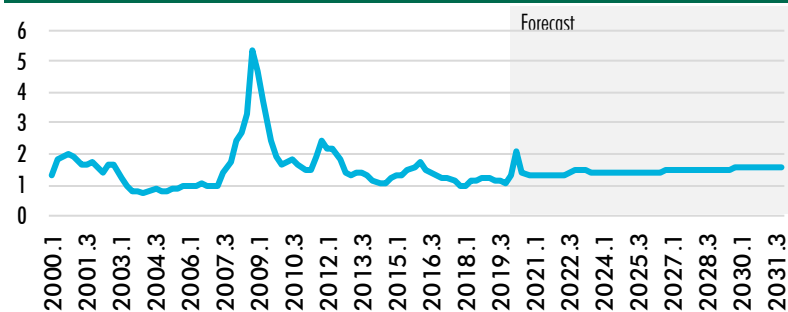
Treasury Yield (%)



GDP index



Grade A bond spread (%)

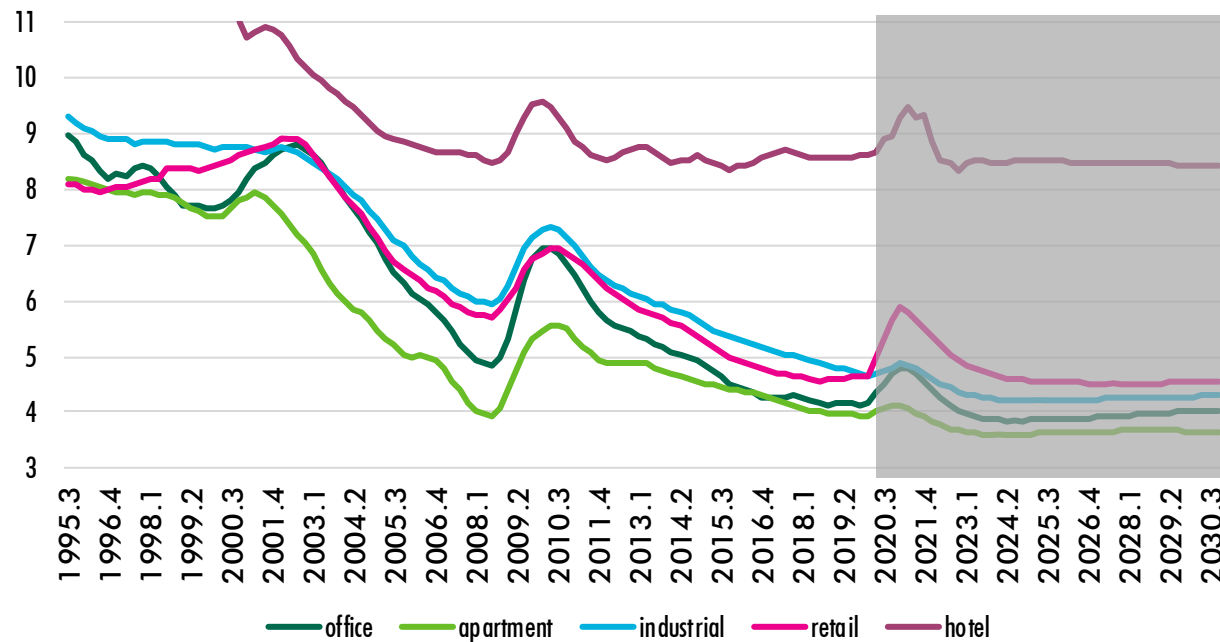


Factor	2020 Forecast	Projected impact
Inflation	Lower Inflation	⬆️
QE	Higher QE	⬇️
Treasury Yield	Lower Yield	⬇️
Dollar Value	Flat	■
GDP Index	Lower GDP Index	⬆️
Risk Spread	Higher Risk	⬆️
Real Rent	Lower Rent	⬆️

Source: CBRE Econometric Advisors, 2020 Q1.

# CAP RATE FORECAST

## Cap rate



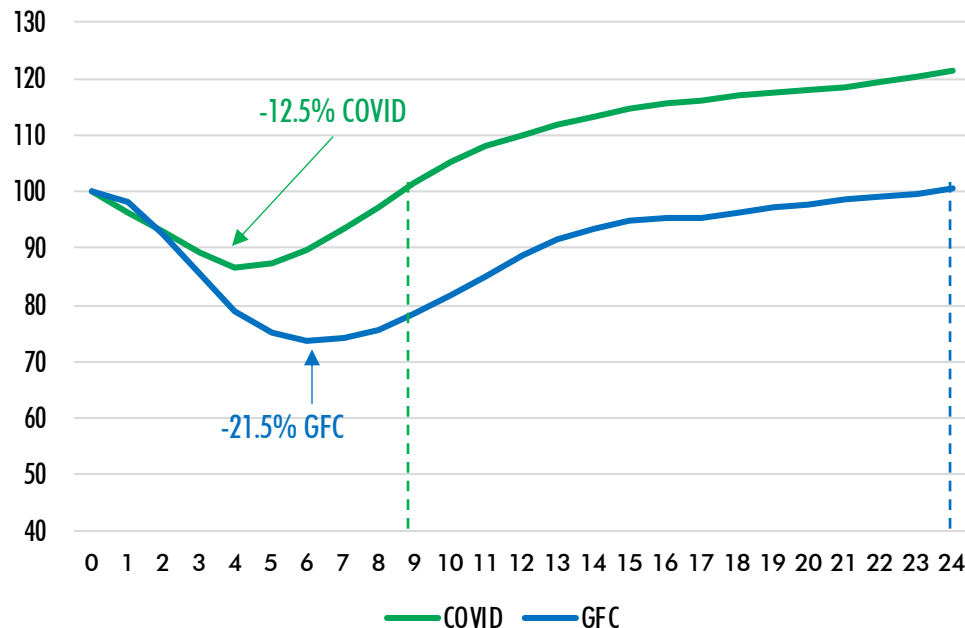
## CAP RATE INCREASE IN 2020

- Hotel: 100 bps
- Retail : 100 bps
- Office: 55 bps
- Apartment: 20bps
- Industrial: 10bps

Source: CBRE Econometric Advisors, CBRE Hotels, 2020 Q1.

# HOW DOES THIS COMPARE TO THE GFC

## Office Property Value for GFC and COVID



- Severity  
COVID: -12.5%; GFC: -21.5%
- Duration  
COVID: 9 quarters; GFC: 24 quarters
- What makes the difference
  - Was there an imbalance in the economy?
  - Liquidity and speed of recovery
- Forecast for current crisis
  - forecast for intrinsic value of an average property
  - During crisis we observe change in value only if there is a transaction
- lending market
  - more liquidity for core properties than value-add

Source: CBRE Econometric Advisors, 2020 Q1.

# SUMMARY ON LIQUIDITY AND OUTLOOK

	Relative Liquidity Condition		Outlook for Future Growth			
	ability to collect rent	lending market	rent decline in 2020	cap rate increase	long term	
Industrial	high	medium-high	small	small	solid fundamentals +	
Apartment	medium-high	high	medium-large	small	Structural change +	
Office	medium-high	medium-low	medium-large	medium	work from home -	
Retail	low	low	large	large	Lower density +	
Hotel	low	low	large	large	Ecommerce -	
					structural change +-	
					solid fundamentals +	
					Structural change +	

Coming soon. "Impact of New Density and Working from Home on Office Sector." Neil Blake, Alex Krasikov. CBRE Econometric Advisors.



## KEY TAKEAWAYS

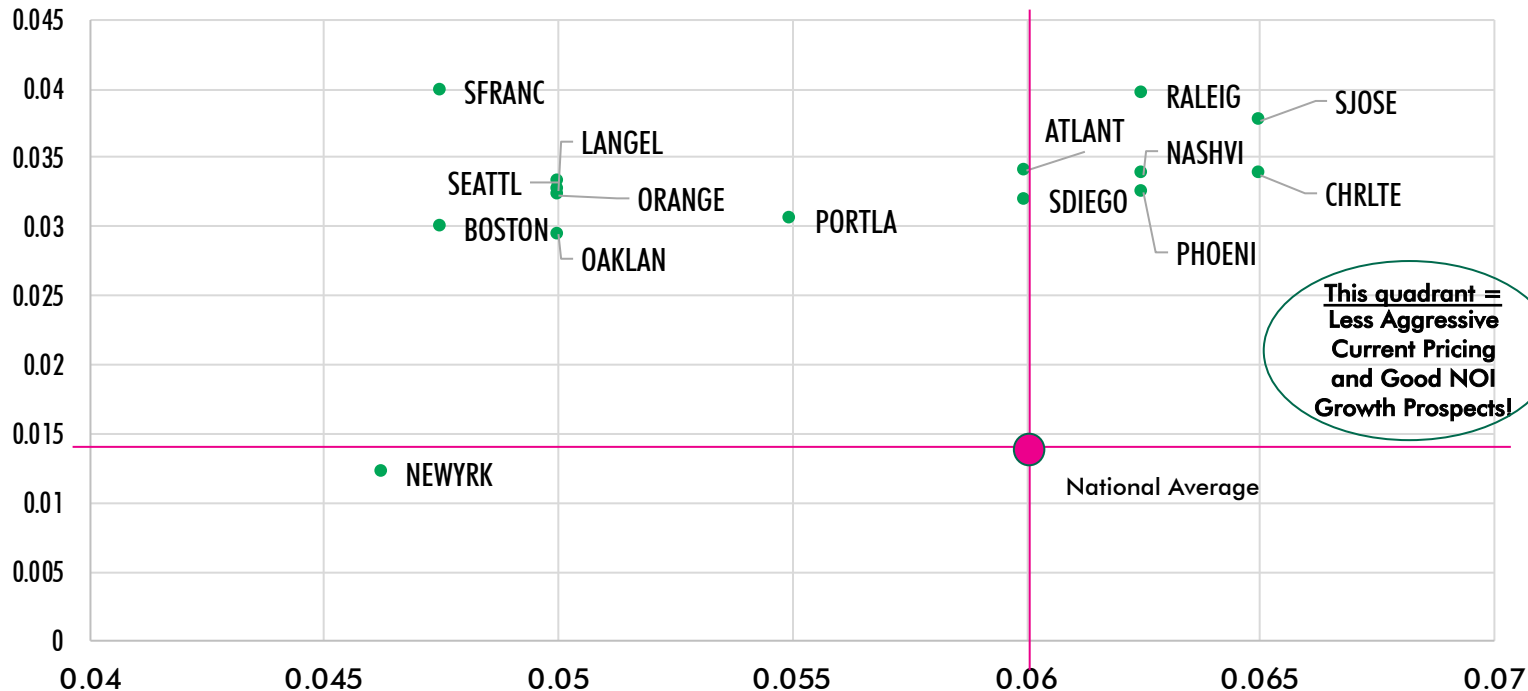
- Current disconnect between buyer's and owner's expectations on price
- Lending markets, outlook for future growth, and security of income are driving pricing
- Intrinsic value is falling, but it won't be realized until owners are forced to transact
- We expect the value for office sector to fall by 12.5%. This is less than the 21.5% decline in the GFC. The recovery is expected to be much faster this time
- Industrial and apartment are expected to weather the crisis
- Value-add properties will see larger loss than core properties



# GEOGRAPHIC OPPORTUNITIES

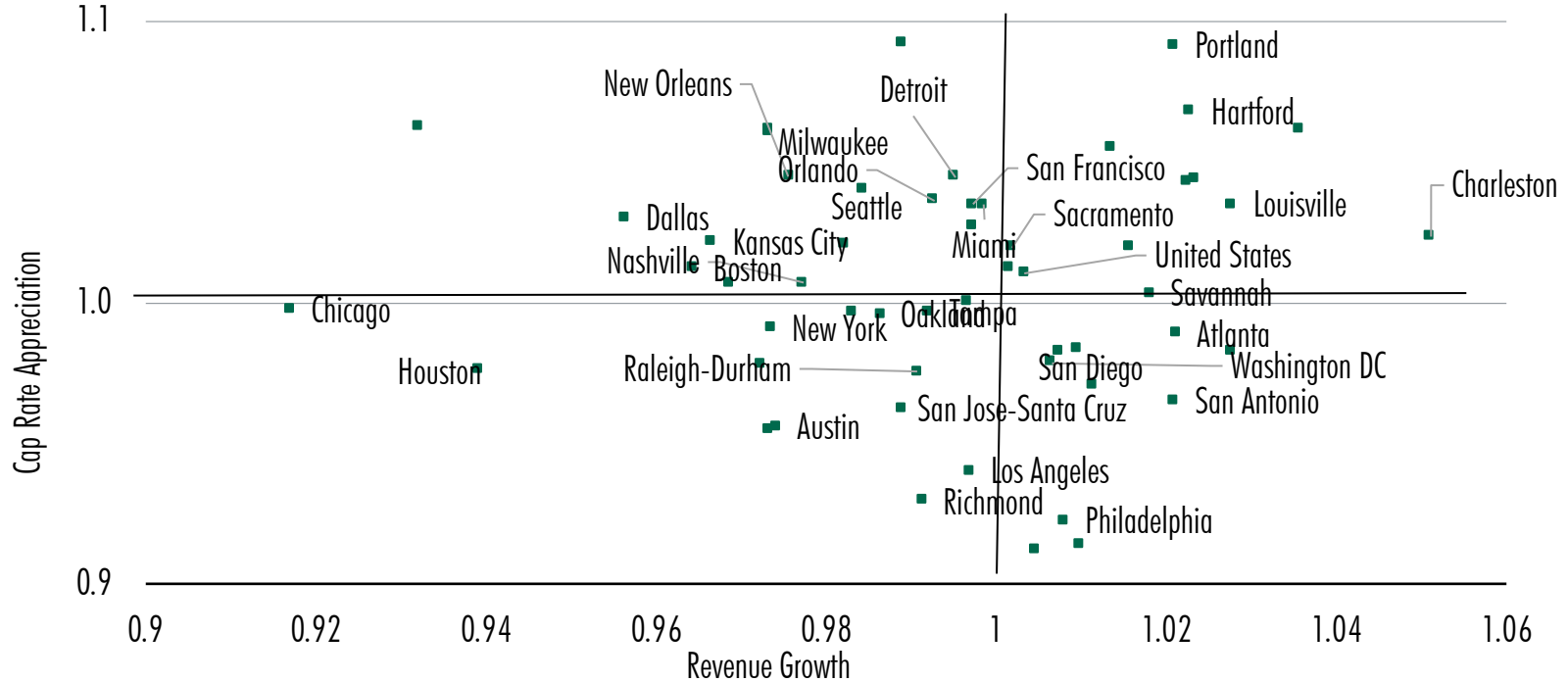
# MARKET ANALYSIS - OFFICE

Annualized NOI growth from 2020-2025



# HOTEL PERFORMANCE

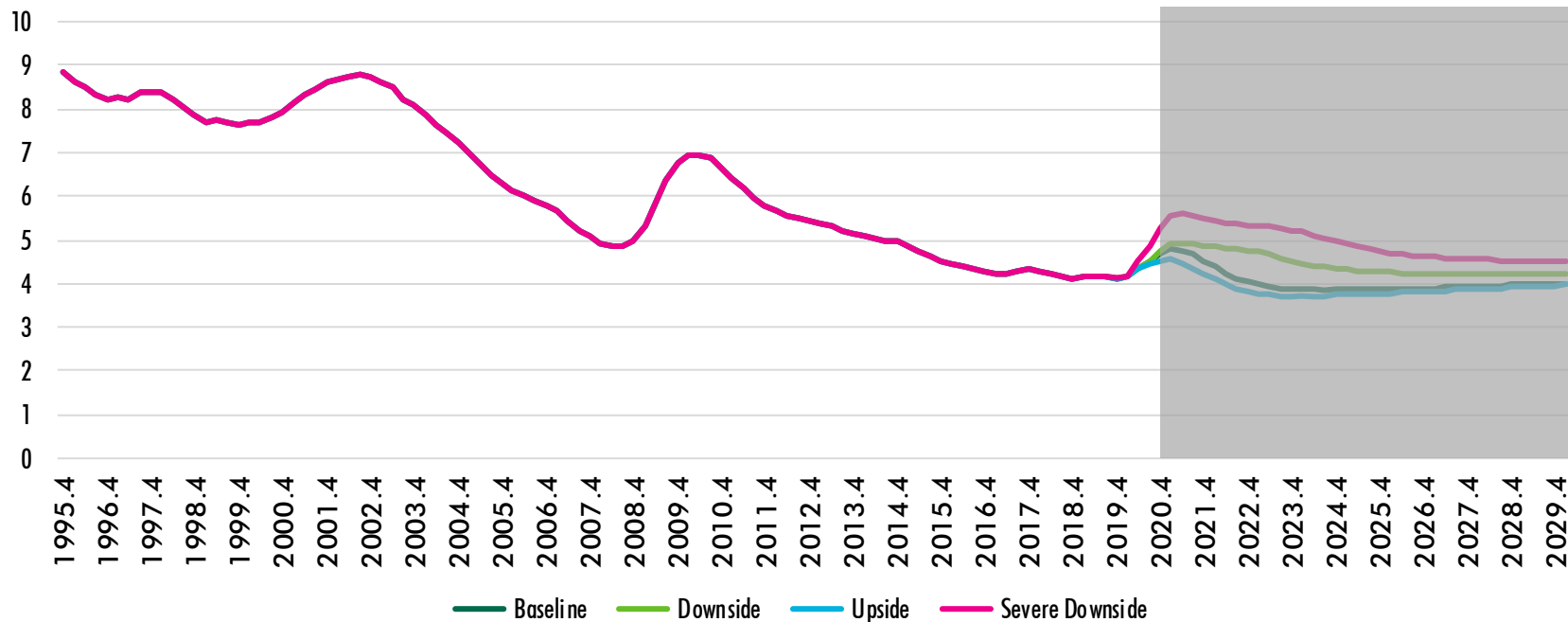
Market Performance: 2019-2023



Sources: CBRE Hotels, RCA Q2 2020.

# OFFICE CAP RATE FORECAST FOR DIFFERENT SCENARIOS

## Office cap rate forecast



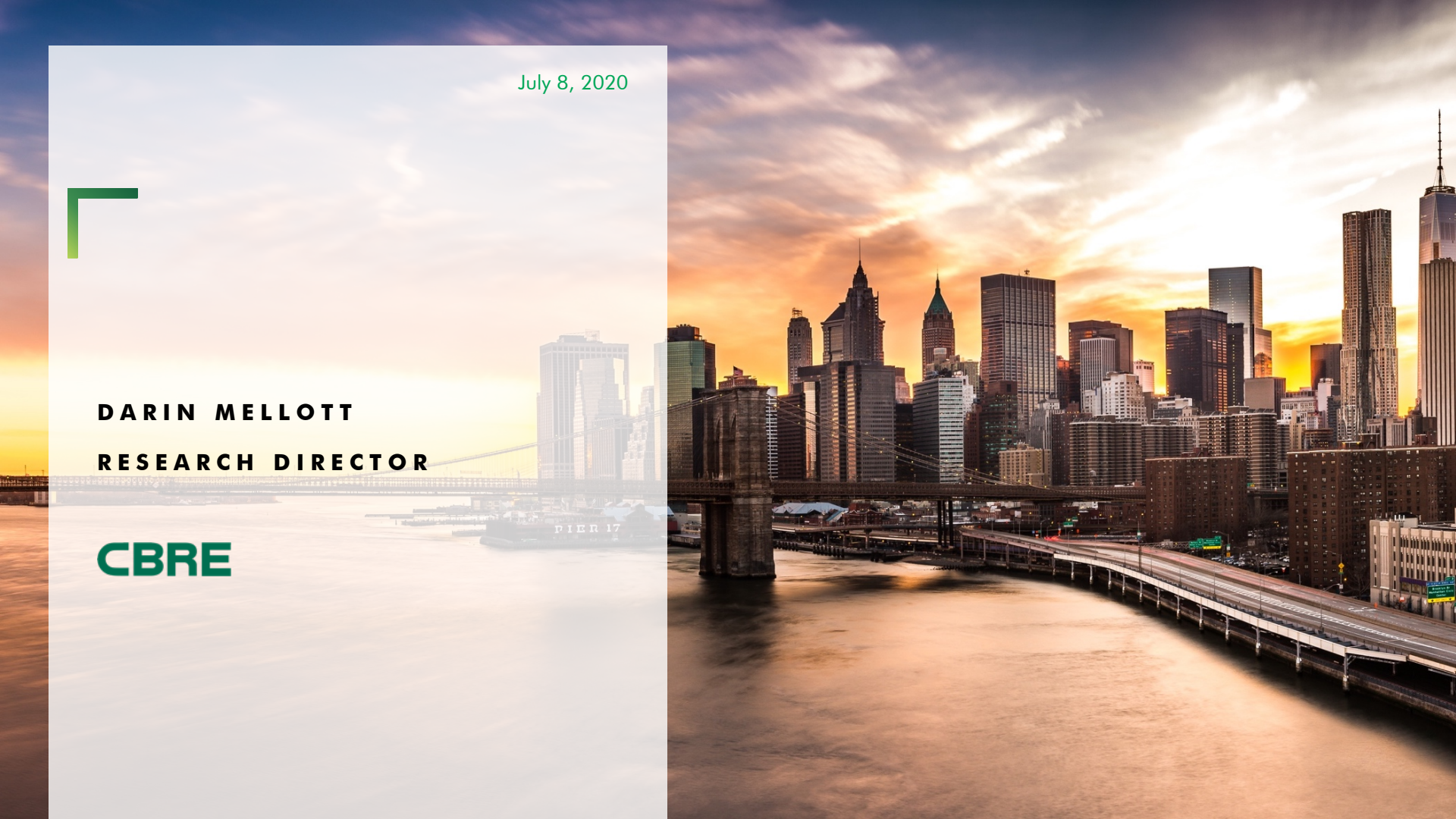
Source: CBRE Econometric Advisors, 2020 Q1.

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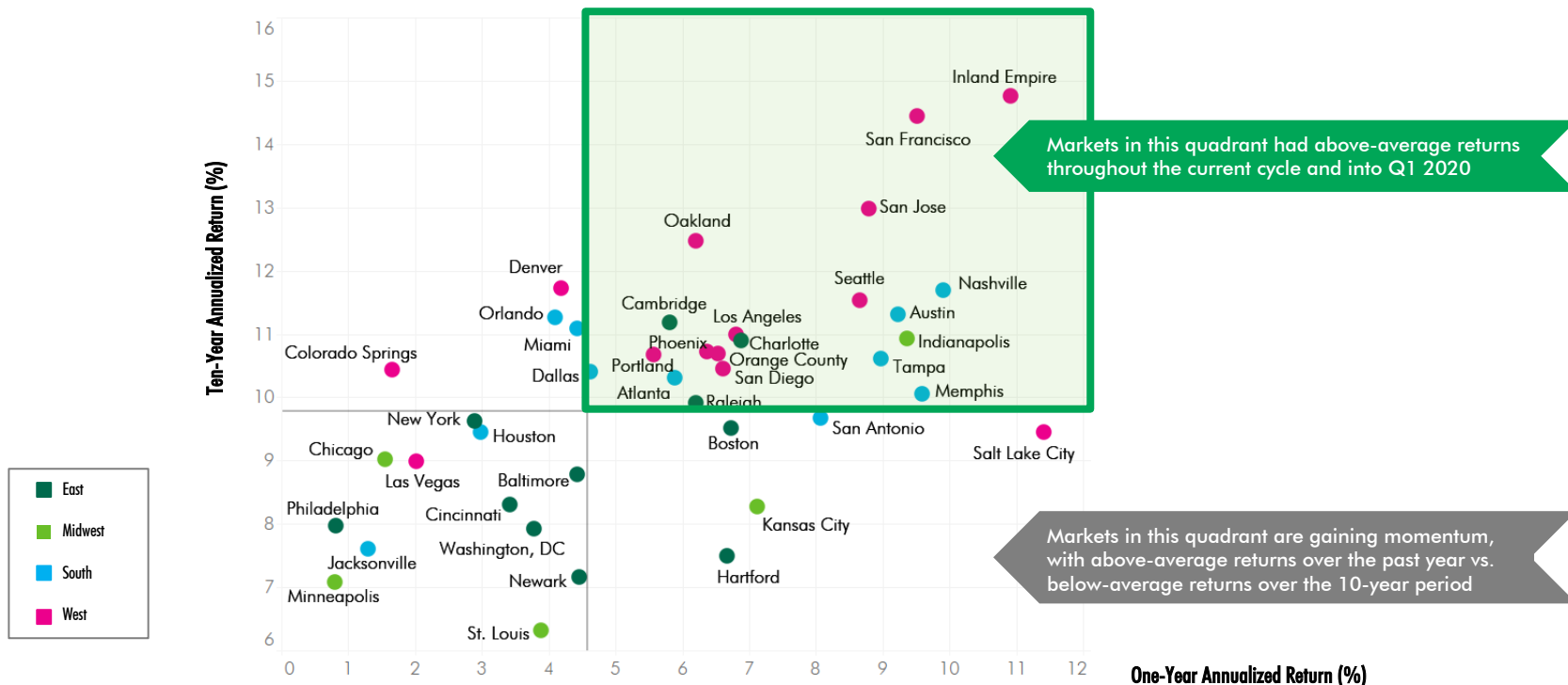


**DARIN MELLOTT**  
**RESEARCH DIRECTOR**

**CBRE**



# NCREIF TOTAL RETURNS BY MARKET AND REGION



Note: 10-year annualized returns based on compounding quarterly returns from Q1 2010-Q1 2020. One-year annualized returns are based on compounding quarterly returns from Q2 2019-Q1 2020. Gray lines show average returns of all NCREIF markets through each period (not all markets included in chart).

Source: CBRE Research, NCREIF, Q1 2020.



July 8, 2020

# Q&A

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