



Yardi Webinar

# COVID-19's Impact on Commercial Real Estate

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# COVID-19's Impact on the Commercial Real Estate Industry



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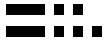
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1. Opening Remarks
2. Epidemiology
3. Financial Markets and Monetary Policy
4. Employment
5. Government Actions
6. Commercial Demand
7. How Bad Can This Get?

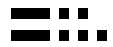




# Opening Remarks

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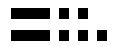




# Yardi Matrix House View April 2020



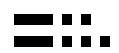
- **U.S. economy was on a roll in February until.....**
  - Up through the end of February, the U.S. economy was on a roll, with rising employment, rising wages , and low inflation
  - Actions taken in March to slow the spread of novel coronavirus in the U.S. and Europe have the goal to avoid overwhelming the healthcare system
  - Experience in Italy, the UK, and NYC so far is not so good, compared to South Korea, Taiwan and Singapore
  
- **The next 4-8 weeks will be very tough**
  - U.S. infection, hospitalization, and death rates we don't think will peak until mid to late May
  - Given what we know, each single death is associated with 800 infections, doubling every 5 days
  - Recovery rates for COVID-19 range from 85%-90%, a 10%-15% hospitalization rate and a 0.5% to 5.0% death rate depending on the public health policies pursued across the globe
  - Until the virus caseload peaks or effective viral treatments are deployed, the economy won't improve



# Yardi Matrix House View April 2020



- **The U.S. economy has been hammered, impacting sectors based on the gathering of people; Energy is collateral damage**
  - Social distancing policies have shut down 20%-25% of the economy, leading to an estimated 2Q20 GDP of -10% to -30%
  - Employment in industries associated with Travel, Hospitality, and Restaurants cover =>30 million people
  - Goes to the heart of the industries supporting the Intellectual Capital economy
  - The collapse of oil prices on March 8, has set the U.S. Energy industry into a related tailspin
  - However, the Agricultural, Industrial, Distribution and Construction sectors are functioning; as is Technology
- **The U.S. monetary and fiscal response has been rapid and broad-based**
  - The Fed has thrown the kitchen sink at the problem – all in 3 weeks – in “Whatever it Takes” Mode
  - The Administration & Congress have passed a \$2T Stimulus Package to offset the decline in Aggregate Demand
- **The rate of business bankruptcies will be a binding constraint as to the speed of the recovery once the virus subsides**
  - If the CARES Act package can stave off business bankruptcies, then employees can be recalled
  - If not, recovery is likely to be much slower



# Yardi Matrix House View - Office, Industrial, Retail



- **Impact of Measures to Slow the Novel Coronavirus have Differing Impacts by Asset Class**
  - CMBS and retail loans could be in big trouble
- **Office** –
  - Most large businesses will keep their footprint and pay for space – for now
    - Small businesses are most at risk, as well as ground floor retail
    - Long term footprint may not look the same – density vs. number of in-office employees
    - Energy concentrated markets in Houston, Oklahoma, Denver, New Orleans and Pittsburgh could be hit hard
- **Industrial** –
  - E-commerce will do well, perhaps even grow
  - Multi-tenant small business is most at risk
- **Retail** –
  - Grocery anchored retail will be OK
  - Retail based on experiences, the savior of retail, is getting hammered by social distancing policies
  - Small businesses won't or can't make April rent; all in cash conservation mode
  - Watch business bankruptcy rate closely



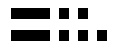


# Epidemiology

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# A Current Look Coronavirus Globally

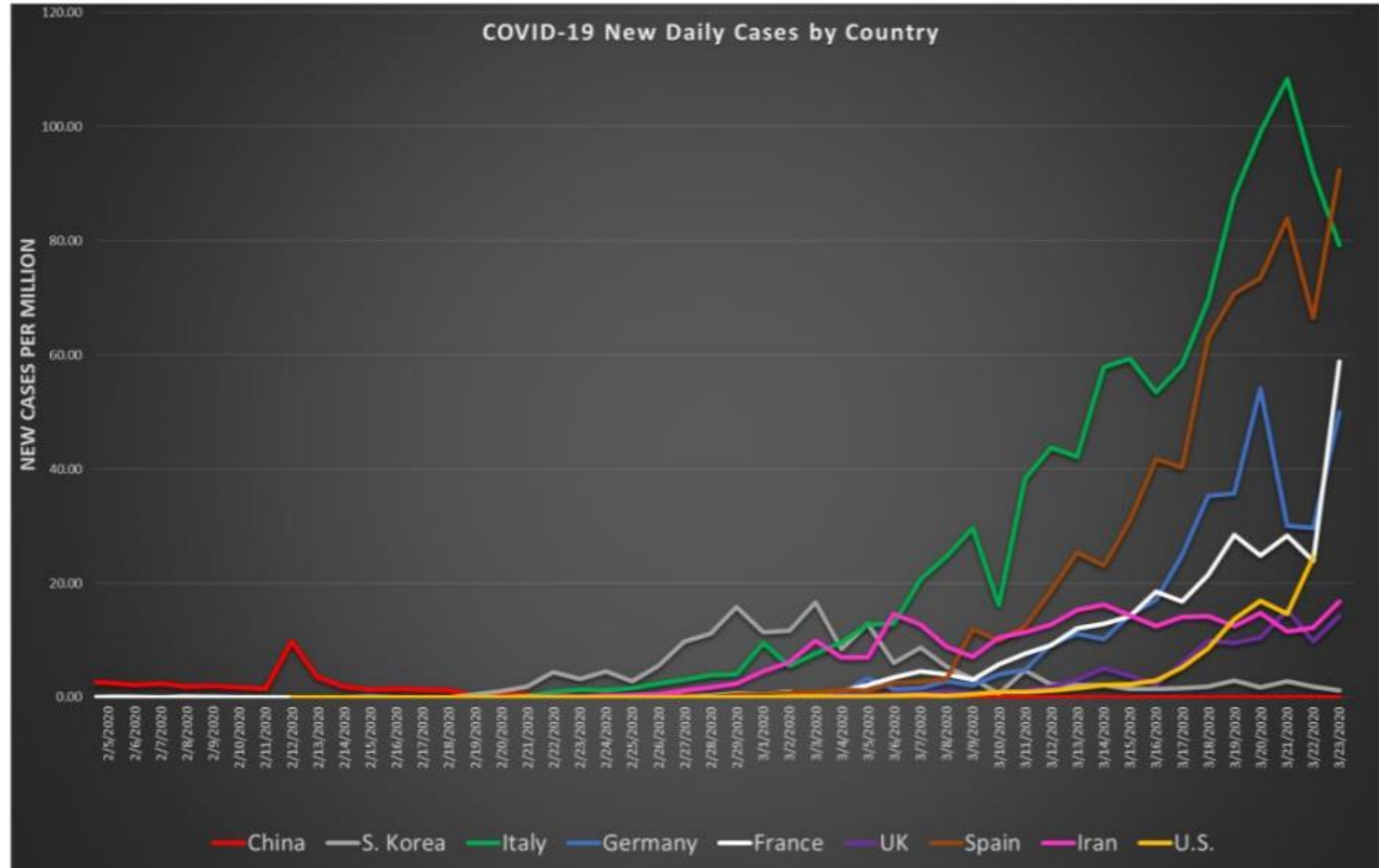


## COVID-19 Global Situation

Total Confirmed Cases:  
911,308

Total Deaths:  
45,497

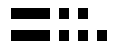
Total Recovered:  
191,673



\*As of April 1, 2020 at 12:20 PM MST

Source: Yardi Matrix; WHO; Johns Hopkins University; Piper Sandler & Co: "A Little Thomas Paine to Justify the Pain; a Case for Tougher COV-19 Measures"





# Which Countries are Flattening their Trajectory Curve?

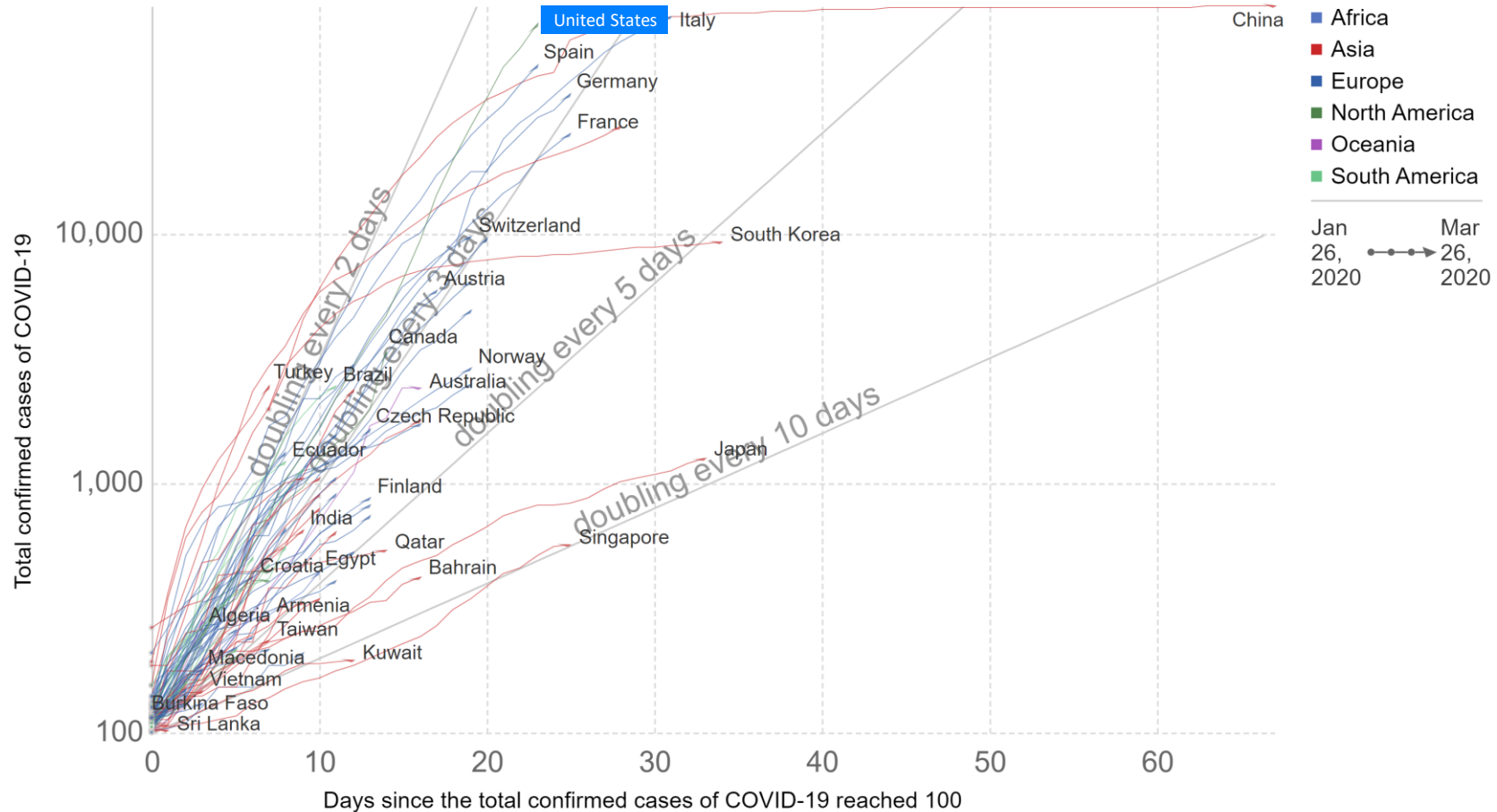


## Total confirmed cases of COVID-19



The starting point for each country is the day that country had reached 100 confirmed cases. This allows us to compare the trajectory of confirmed cases between countries.

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.



Source: European CDC – Latest Situation Update Worldwide

OurWorldInData.org/coronavirus • CC BY

\*As of March 26, 2020

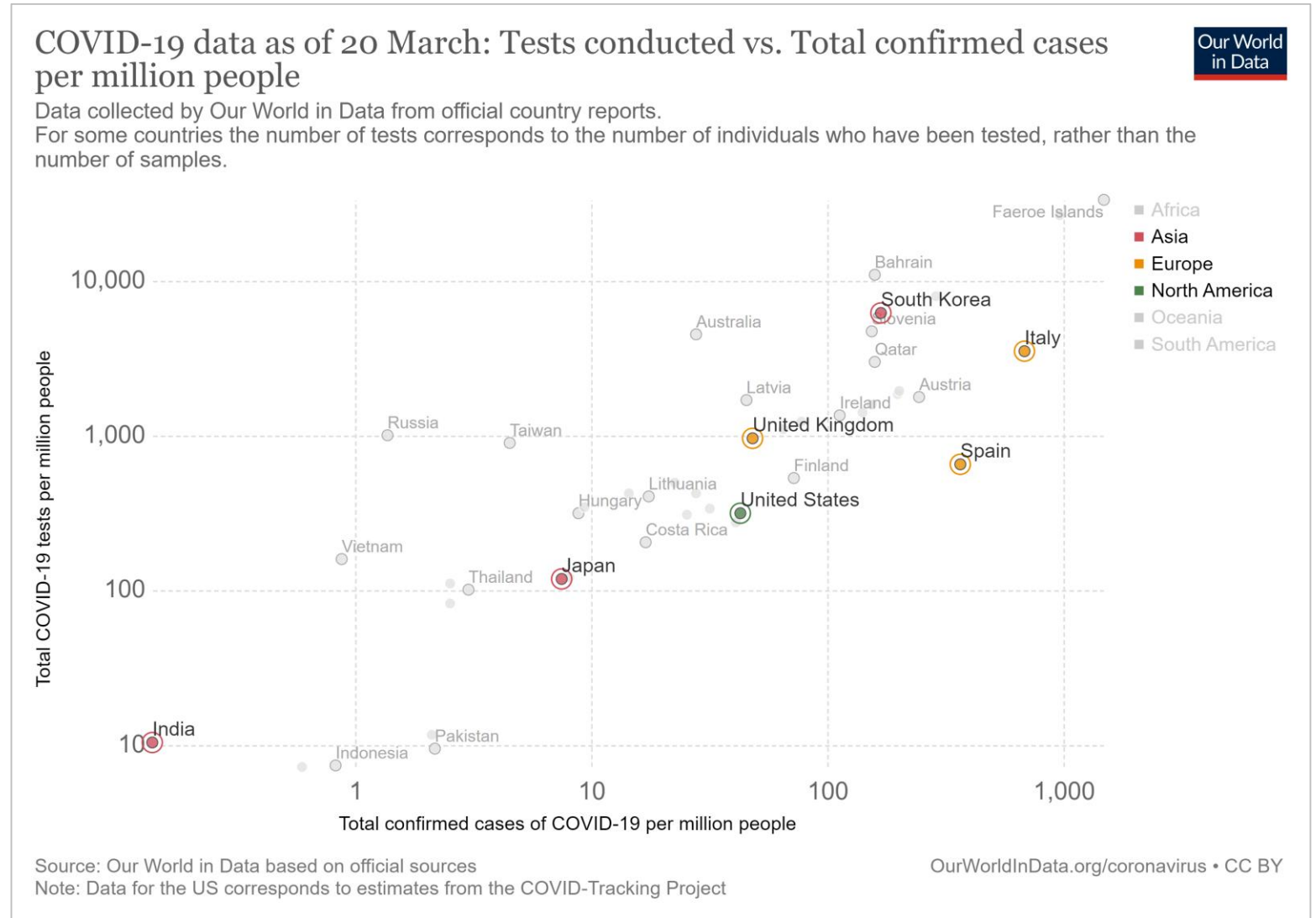
Source: Yardi Matrix; Our World in Data



# ☰ Limited Testing Capabilities Globally Affecting Case Data ☰

*Due to low testing capacity in most countries, the actual number of infected individuals is expected to be much higher*

- In most cases, there is a positive correlation between tests performed & cases confirmed
- South Korea's extensive testing strategy means their number of confirmed cases is likely closer to the real number of infected people compared to other countries



\*Testing level estimates as of March 20, 2020. Only available up-to-date testing data is included; China has not updated since February 24<sup>th</sup> & therefore not included.

Source: Yardi Matrix; Our World in Data based on official sources

# ☰ Limited Testing Capabilities Globally Affecting Case Data ☷

*Due to low testing capacity in most countries, the actual number of infected individuals is expected to be much higher*

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# Current Status in China & Europe – Different Strategies, Different Outcomes

## China

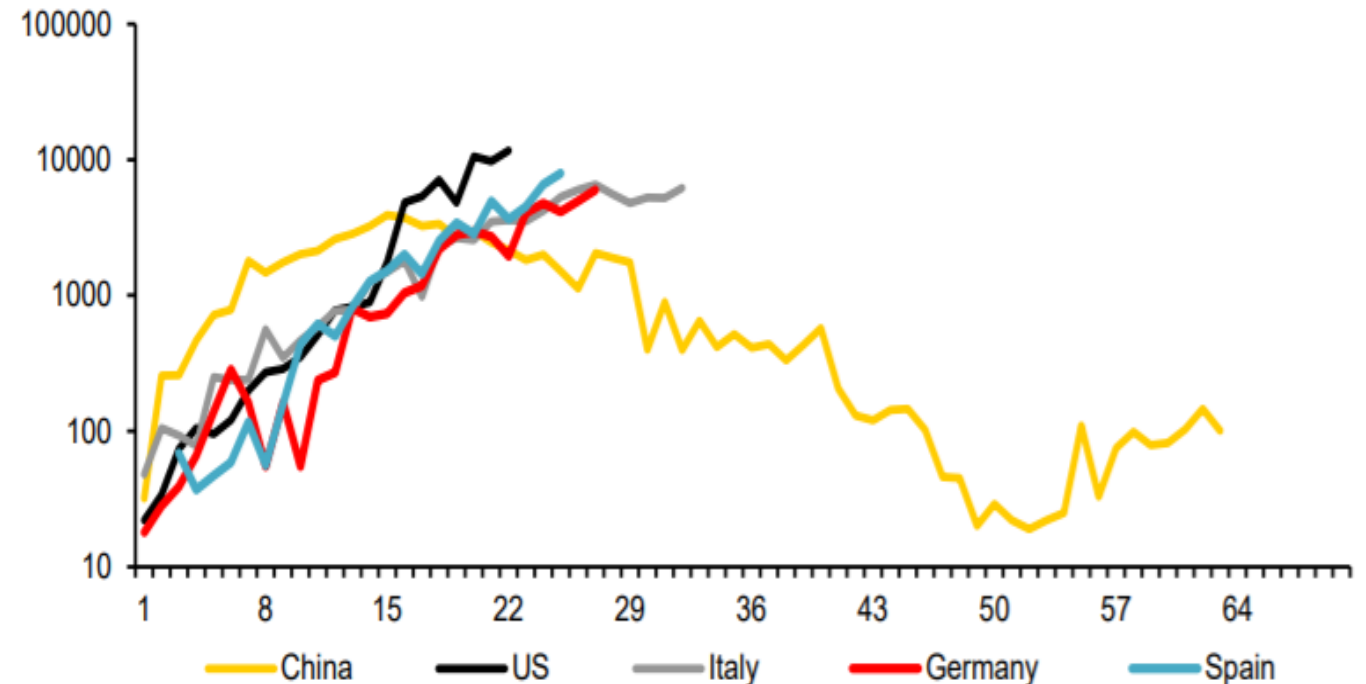
- Between March 17<sup>th</sup> – 24<sup>th</sup>, China reported several days without new domestic infections
- About 90% of China's 80,000-plus coronavirus patients have recovered, according to Johns Hopkins
- China is gradually calming, while still quarantining any new visitors and monitoring the situation intensely

## Europe

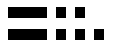
- On March 13<sup>th</sup>, Europe became the latest epicenter of the pandemic
- Italy has the second highest number of confirmed cases (97,689) behind the U.S., and the highest death toll (10,779)
- Germany seems to be following Italy's coronavirus trajectory (*see chart*)
- Spain has suffered one of the fastest-growing outbreaks of the coronavirus in the world over the last two weeks

**Chart 1 - US the next pandemic focus**

New infections, China 1 = 22 January, USA 1 = 25 February, Italy 1 = 24 February, Germany 1 = 29 February, Spain 1 = 1 March, logarithmic scale



Source: WHO, RKI, Commerzbank Research

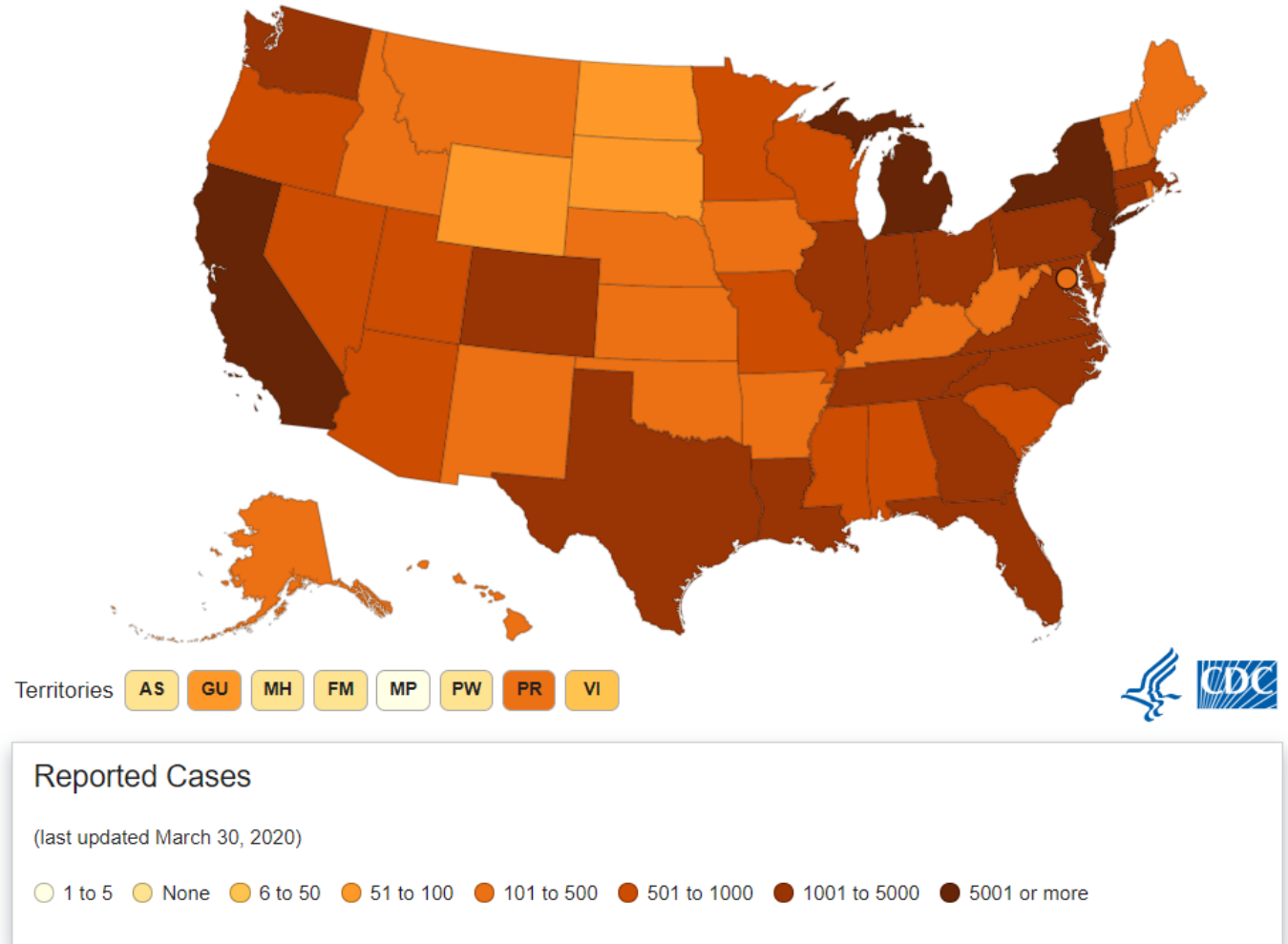


# Current Status in the United States



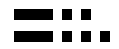
- The United States has overtaken China as the country with the most cases in the world of the novel coronavirus
- With more than 59,000 confirmed cases, New York state has emerged as the nation's epicenter with the highest and fastest infection rate
- To help state and local authorities decide whether to tighten or relax social-distancing measures, the Trump administration plans to issue guidelines categorizing counties across the nation as high, medium or low risk

## States Reporting Cases of COVID-19 to CDC



\*As of March 30, 2020

Source: Yardi Matrix; CDC; Wall Street Journal

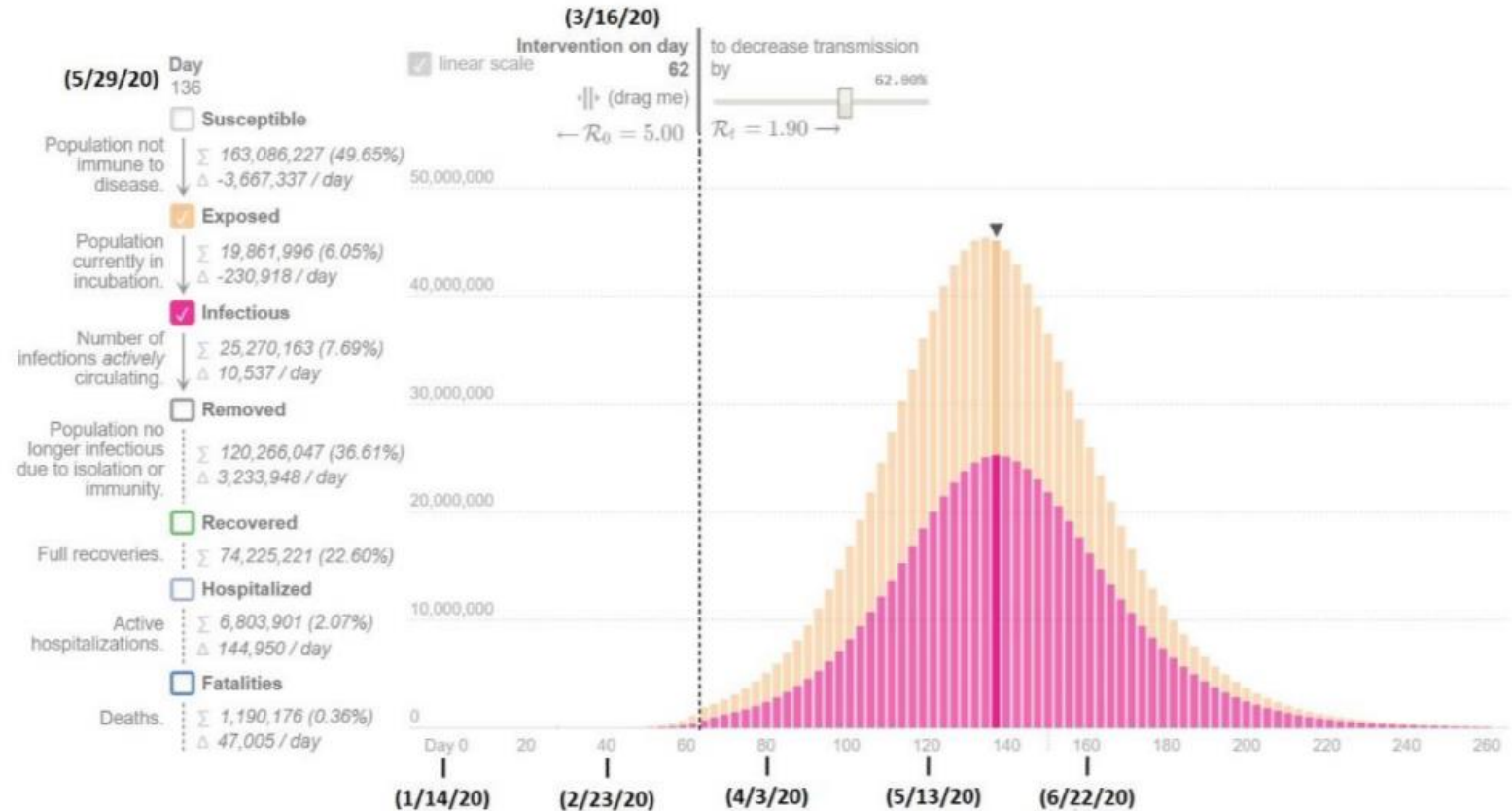


# When Could COVID-19 Infections Peak in the U.S.?

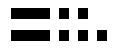


- Model based on current community level quarantine and isolation that began March 16<sup>th</sup> (Day 62) for most areas in U.S.
- Based on this model, we think U.S. will likely peak May 29<sup>th</sup> (Day 136) at approx. 25 million cumulative active infections
- The critical concern is peak load strain on the healthcare system, which is driving the social distancing

## Current Scenario Assuming Community Level Quarantine and Isolation



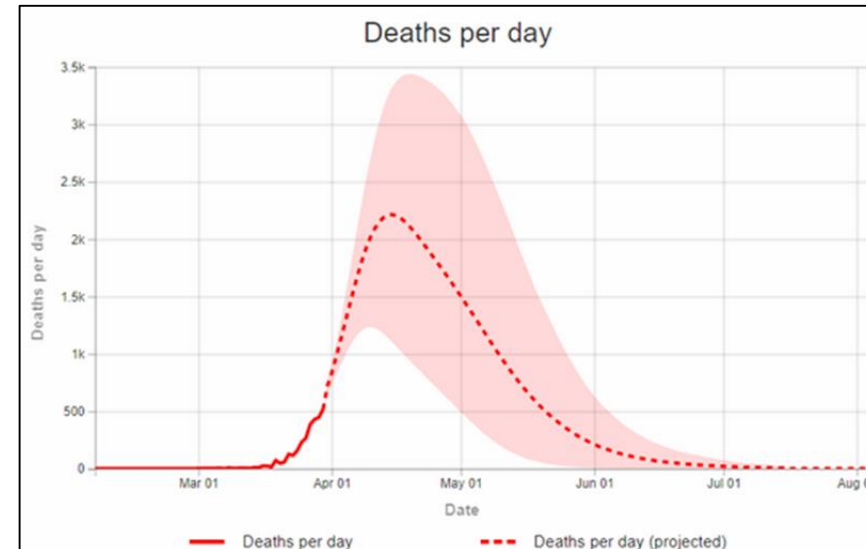
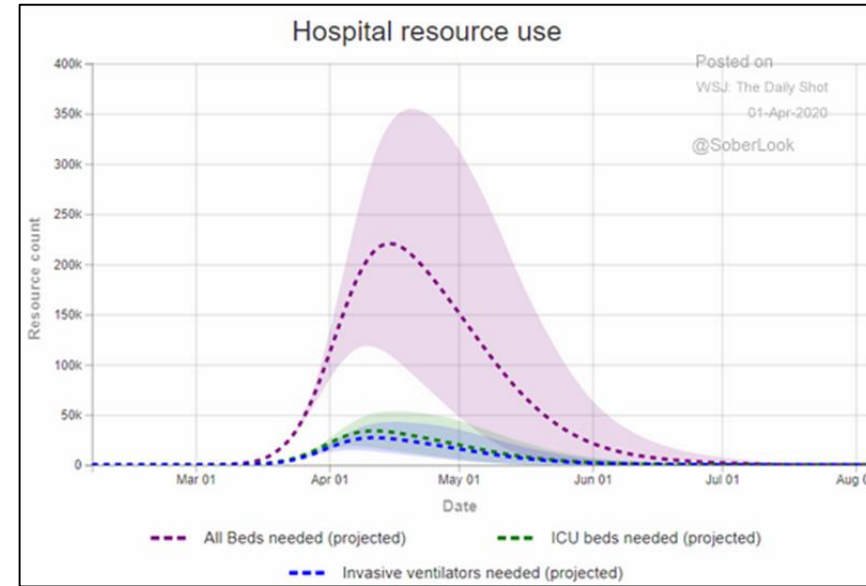
Source: Epidemic Calculator, Piper Sandler



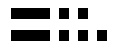
# When Could COVID-19 Infections Peak in the U.S.?



- Other Models are a bit more optimistic, called peak load for Mid-April, With re-opening of the economy in mid-late May
- The critical concern is peak load strain on the healthcare system, which is driving the social distancing







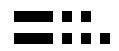
# Other Industry Efforts to Slow Spread & Relieve Pressure on Hospitals



*As medications and vaccinations are being developed, the following sectors are being shut down or making efforts to slow the infection and relieve pressure on hospitals.*

- **Restaurants, Bars & Food Establishments** — Almost all 50 states have enacted orders requiring these businesses to close or have limited service (pick-up or delivery only)
- **Travel Industry**
  - **Airlines** — Majority of major airlines have reduced operations and suspended flights to specific countries due to travel restrictions
  - **Cruises** — After the U.S. State Department warned citizens against traveling on cruise ships in order to mitigate the risk of spreading the virus, many major cruise lines have suspended operations for up to 2 months
  - **Hotels** — Many major hotel companies are waiving reservation cancellation and modification fees
- **Entertainment** — Theaters, theme parks, ski resorts and tourist attractions have temporarily closed operations
- **Grocery & Drug Stores** — Despite being considered essential businesses, grocery and drug stores are shortening hours to better protect employees and customers, as well as encouraging pick-up and drive-thru services





# Pharmaceutical Treatments Underway for COVID-19



*“We have to go to war with the weapons you have at the time,” Dr. Jeff Colyer, White House Rural Health Official*

86 clinical trials of COVID-19 treatments or vaccines underway, with new ones added daily. WHO has launched global megatrials for the 4 most promising coronavirus treatments, but these drugs may not be ready for months or years (listed below).

**The only way to get out of this is for existing drugs to be deployed rapidly.** On March 29, the FDA issued an emergency use authorization for hydroxychloroquine and chloroquine, the decades old anti-malarial, allowing for the drugs to be prescribed by doctors to patients with COVID-19, as appropriate, when a clinical trial is not available or feasible

Hydroxychloroquine & Azithromycin*	Remdesivir*	Ritonavir/Lopinavir*	Ritonavir/Lopinavir & Interferon-beta*
Approved by the U.S. FDA for the treatment of malaria, lupus & rheumatoid arthritis. FDA has issued an emergency use authorization for hydroxychloroquine & chloroquine	Originally developed by Gilead Sciences to combat Ebola	Combination drug, sold under the brand name Kaletra, was approved in the U.S. in 2000 to treat HIV infections	Combines the two antivirals with interferon-beta, a molecule involved in regulating inflammation in the body
Pfizer has announced positive data for the use of its azithromycin (Zithromax) drug, along with hydroxychloroquine, in a COVID-19 clinical trial performed in France	Successful in a few individual cases of COVID-19, but not enough to prove its safety and effectiveness in general population	Can inhibit the protease of other viruses, specifically coronaviruses, but the first trial with COVID-19 did not prove beneficial to patients	Being tested in MERS patients, but use of interferon-beta on patients with severe COVID-19 might be risky and worsen tissue damage in late COVID-19 stages



\*All drugs are currently available, but in testing phases as treatment for COVID-19. \*\*Data as of March 29, 2020.

Source: Yardi Matrix; livescience.com; sciencemag.org; WHO; politico.com; clinicaltrialsarena.com



# Financial Markets & Monetary Policy

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# U.S. and International Financial Market

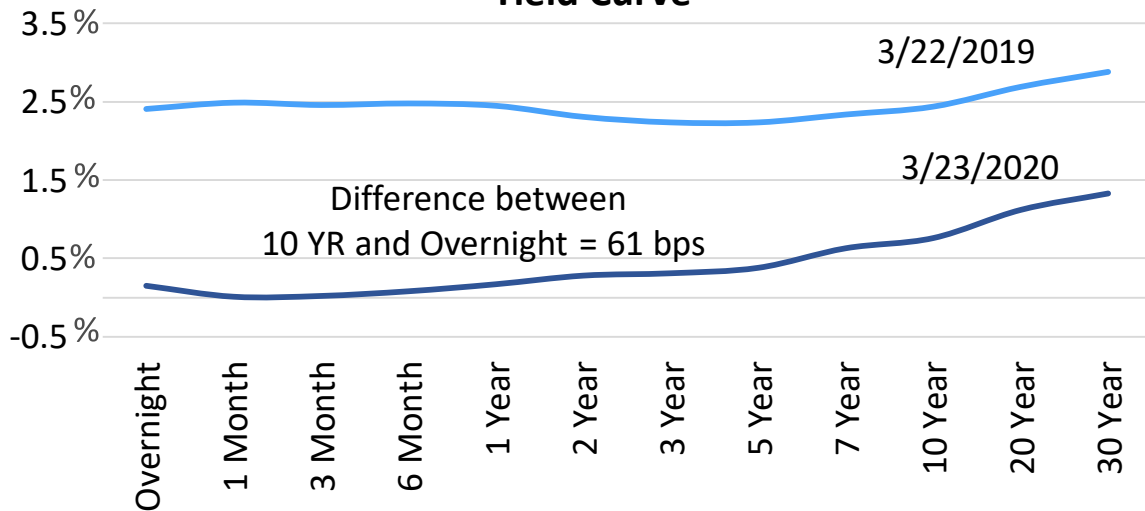
### S&P 500



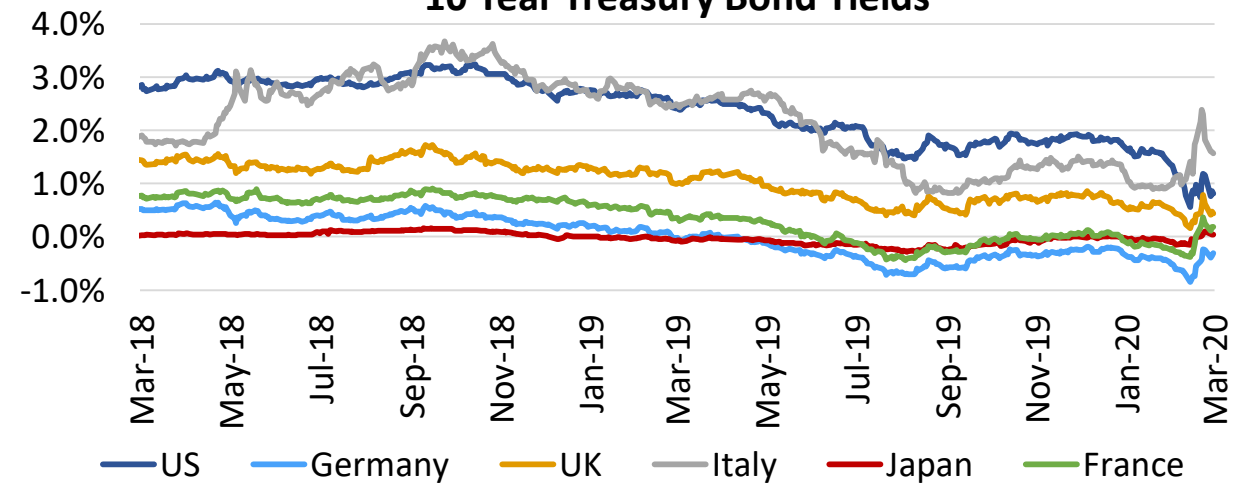
### 10 -Year Treasury Note



### Yield Curve



### 10 Year Treasury Bond Yields



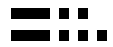
## ☰ Actions Being Taken in Real Estate to Cushion the Blow ☷

- Bank regulators will permit banks to **defer mortgage payments for 90 days** and will not consider the loans non-performing (triggering bank capital write-downs)
- Many cities are halting evictions for small businesses. Here are just a few:
  - **Seattle**: Moratorium on evictions of small businesses and nonprofit tenants impacted by the pandemic. The order is effective immediately and will be in place for at least 60 days.
  - **San Diego**: Eviction moratorium approved to provide relief to residents and businesses facing financial hardship related to COVID-19. Will last until May 31.
  - **Los Angeles**: Temporary moratorium on evictions for tenants who are unable to pay rent due to circumstances related to the COVID-19 pandemic.
  - **Oakland**: Small businesses with commercial leases are protected by the city's moratorium on evictions if they can't make rent because of the pandemic
  - **New York**: Expanded 90-day eviction moratorium to commercial tenants

# ☰ The U.S. Federal Reserve is in “Whatever it Takes” Mode ☷

*The scope of some of these actions is unprecedented – going beyond what we saw in 2008*

- **Support for critical market functioning:** Unlimited QE, purchase of Treasury securities and agency mortgage-backed securities in amounts needed to support smooth market functioning
  - FOMC previously announced purchase of \$500 billion of Treasury securities & \$200 billion of mortgage-backed securities
- **Support for commercial real estate:** Mortgage-backed security purchases will include agency CMBS
- **Support for consumers and businesses:** Credit facility to provide financing of up to \$300 billion
- **Support for bonds:** Two facilities created to stabilize primary & secondary corporate bond markets:
  - Primary Market Corporate Credit Facility (PMCCF): new bond & loan issuance
  - Secondary Market Corporate Credit Facility (SMCCF): provide liquidity for outstanding corporate bonds

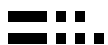


# The U.S. Federal Reserve is in “Whatever it Takes” Mode (Cont.)



*The scope of some of these actions is unprecedented – going beyond what we saw in 2008*

- **Support for consumer credit:** Term Asset-Backed Securities Loan Facility (TALF) created to support the flow of credit to consumers and businesses
  - Will enable the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans
- **Support for municipal finance:** Expansion of the Money Market Mutual Fund Liquidity Facility (MMLF) to include a wider range of securities, including municipal variable rate demand notes (VRDNs) and bank certificates of deposit
  - Also, expanding the Commercial Paper Funding Facility (CPFF) to include high-quality, tax-exempt commercial paper as eligible securities
- **Support for small and medium-sized businesses:** Announcement expected soon for the establishment of the ‘Main Street Business Lending Program’



# Monetary Policy Actions



Policy	Organization	Action	Amount
Interest Rate	Federal Reserve	Cut interest rate from 1.50 – 1.75% to 1.00 – 1.25% and later to 0.00 – 0.25% Forward Guidance, “The Committee expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its...goals” Decreased the primary credit rate of the Discount Window from 1.75% to 0.25%	\$60 to \$120bn
Asset Purchases	Federal Reserve Congress	Committed to purchase \$500bn in Treasuries and \$200bn in MBS. Later eliminated limits and announced “in the amounts needed” Proposed amendment to the Federal Reserve Act that would allow the Fed to purchase municipal bonds in “unusual and exigent circumstances”	\$1 to \$3tn \$50 to 100bn
Credit Facilities	Federal Reserve	Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance; \$10 billion of credit protection from U.S Treasury Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds; \$10 billion of credit protection from U.S. Treasury	\$50 to \$100bn \$50 to \$100bn
	U.S. Treasury	Proposal to appropriate \$50 billion to the ESF for secured lending to U.S. passenger and cargo air carriers	\$250 to \$500bn
Emergency Liquidity	Federal Reserve	Large scale repo operations Primary Dealer Credit Facility (PDCF), overnight and term funding up to 90 days against a broad range collateral	\$0.4 to \$1.5tn \$60 to \$120bn
Market Liquidity	Federal Reserve	Commercial Paper Funding Facility (CPFF), a special purpose vehicle (SPV), to purchase three-month U.S. dollar-denominated commercial paper. Later amended to include high-quality, tax-exempt commercial paper as eligible securities and reduced pricing; \$10 billion of credit protection from U.S. Treasury	\$50 to \$100bn
		Money Market Mutual Fund Liquidity Facility (MMLF) to make loans available to eligible financial institutions secured by high-quality assets purchased from money market funds, including prime, single state and other tax-exempt municipal money market mutual funds. Later expanded to include municipal variable rate demand notes (VRDNs) and bank certificates of deposit; \$10 billion of credit protection from U.S. Treasury	\$50 to \$100bn
		Term Asset-Backed Securities Loan Facility (TALF), enabling the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets; \$10 billion of credit protection from U.S. Treasury	\$50 to \$100bn
		Expects to announce a Main Street Business Lending Program to support lending to eligible small-and-medium sized businesses, complementing efforts by the SBA.	\$200 to \$400bn
Swap Lines	Federal Reserve	Enhanced US Dollar swap lines with Bank of Canada, Bank of England, Bank of Japan, European Central Bank, Swiss National Bank; later increased frequency	\$400 to \$900bn
		Temporary US Dollar swap lines with the Reserve Bank of Australia, Banco Central do Brasil, Danmarks Nationalbank, Bank of Korea, Banco de Mexico, Norges Bank, Reserve Bank of New Zealand, Monetary Authority of Singapore, Sveriges Riksbank	\$150 to \$450bn

Source: BBVA Research; Yardi Matrix



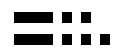




# Monetary Policy Actions (Cont.)



Policy	Organization	Action	Amount
	Federal Reserve	<p>Reduced Reserve Requirements to 0%</p> <p>Encouraged banks “to use their capital and liquidity buffers to lend and undertake other supportive actions in a safe and sound manner.”</p> <p>Encouraged banks “to utilize intraday credit extended by Reserve Banks, on both a collateralized and uncollateralized basis”</p> <p>Revised the definition of eligible retained income for total loss-absorbing capacity (TLAC) to make any automatic limitations on capital distributions more gradual</p> <p>Temporarily reduce its examination activities, with the greatest reduction in activities occurring at the smallest banks</p> <p>Additional time will be granted for resolving non-critical existing supervisory findings</p> <p>Regulators will not direct institutions to automatically categorize loan modifications as troubled debt restructurings (TDRs)</p> <p>Six-month delay in the planned policy changes to the provision of intraday credit to U.S. branches and agencies of foreign banking organizations (FBOs)</p>	
Macroprudential	<p>CFTC</p> <p>Fannie Mae</p> <p>FDIC</p> <p>FHFA</p> <p>Freddie Mac</p> <p>SEC</p>	<p>Granted temporary, targeted no-action relief regarding recording of oral communications, time-stamping and certain audit trail and reporting requirements</p> <p>Mortgage assistance and relief options to those impacted by COVID-19</p> <p>Revised the definition of eligible retained income for banks and BHCs to incentivize the use of capital buffers in adverse conditions and to get rid of the cliff effect on dividend restrictions when they breach capital buffers</p> <p>Authorized Fannie Mae and Freddie Mac to enter into additional dollar roll transactions</p> <p>Mortgage relief options for borrowers impacted by COVID-19</p> <p>Provides public companies a 45-day extension to file certain disclosure reports that would otherwise have been due between, Provides additional time to certain investment funds and advisors to hold in-person board meetings and certain filing requirements, Temporary flexibility for registered funds affected by recent market events to borrow funds from certain affiliates and to enter into certain other lending arrangements</p>	
Fiscal	<p>Congress</p> <p>U.S. Treasury</p> <p>White House</p>	<p>\$7.8bn in new spending for a variety of goals including the development of vaccines and the acquisition of medical equipment</p> <p>At least \$100bn to expand access to free testing, food aid, limited expansion of unemployment and SNAP benefits and an emergency paid sick leave program</p> <p>\$2tn stimulus package to support the healthcare sector, individuals, and businesses affected severely by the coronavirus</p> <p>Extend the tax-filing deadline by three months without interest or penalties</p> <p>Proposal to temporarily ease restrictions on its Exchange Stabilization Fund, to create guarantee programs for the money market mutual fund industry</p> <p>Waive interest on all federal student loans, allowing borrowers to temporarily cease payments without facing penalties</p>	<p>\$7.8bn</p> <p>\$100 to \$200bn</p> <p>\$2tn</p> <p>\$8 to \$16bn</p>
<b>Total</b>			<b>\$4.9 to \$9.8tn</b>

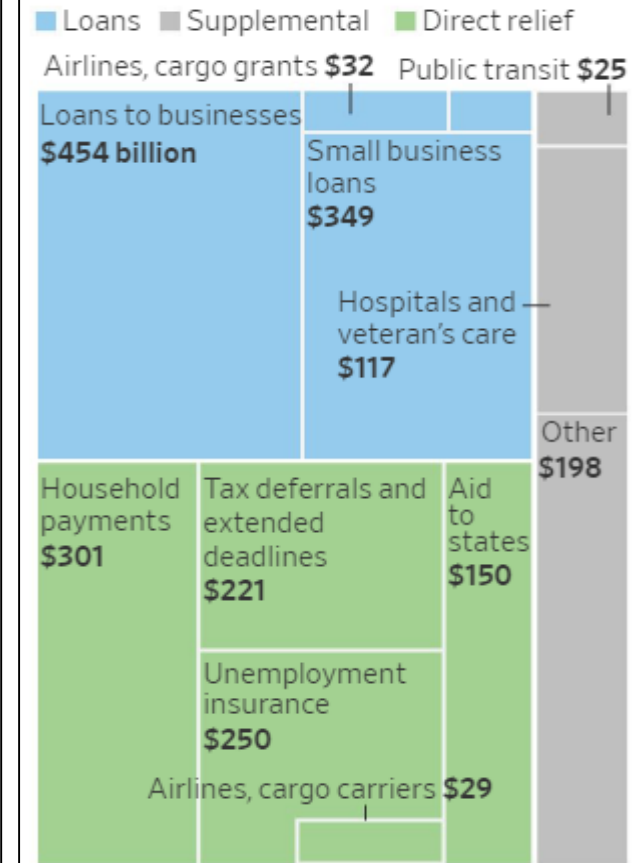


# \$2 Trillion Economic Disaster Relief Package Approved

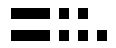


- One-time direct payments of up to \$1,200 for individuals & \$2,400 for couples (with \$500 added for every child)
  - Benefit phases out above \$75,000 in income for individuals & \$150,000 for couples – goes away completely at \$99,000 and \$198,000, respectively
- Boost unemployment insurance – additional \$600 per week for 4 months
- \$25 billion in grants to airlines & \$4 billion to cargo carriers
- \$117 billion into hospitals & veterans' health care
  - Additional \$16 billion for the nation's stockpile of pharmaceutical and medical supplies
- \$350 billion in loans for small businesses
- Suspends federal student loan payments through Sept. 30

## What's in the Senate's \$2.1 Trillion Emergency Aid Bill



Sources: Preliminary legislative text; estimates by aides, lawmakers and outside groups.

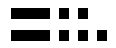


# CARES Act Should Allow Unemployed to Keep Up with Rent and Other Bills



- Generally, unemployed individuals are paid half of their weekly wages based on earnings from the previous four quarters
- Under the new stimulus bill, workers will be paid an additional \$600 per week on top of what they would normally receive, until July 31
  - Example: **\$385** per week (Jan. 2020 avg. unemployment payment) + **\$600** = **\$985 per week** or **\$3,940 per month**
- Allow workers to receive benefits for an additional 13 weeks, providing up to 39 weeks (nearly 10 months) of coverage
- Loosens unemployment insurance eligibility to include: self-employed, gig workers, independent contractors and freelancers





# Resources: For More Information on the CARES Act



*For the Treasury's most recent information on the CARES Act, [CLICK HERE](#)*

## **ASSISTANCE FOR AMERICAN WORKERS AND FAMILIES**

Americans will see fast and direct relief in the form of Economic Impact Payments.

- For more information, [CLICK HERE](#)

## **ASSISTANCE FOR SMALL BUSINESSES**

The Paycheck Protection Program prioritizes millions of Americans employed by small businesses by authorizing up to \$349 billion toward job retention and certain other expenses.

- For an **overview of the program**, [CLICK HERE](#)
- If you're a **lender**, for more information [CLICK HERE](#)
- If you're a **borrower**, for more information [CLICK HERE](#)
- For **borrowers**, the application can be found [HERE](#)

## **PRESERVING JOBS FOR AMERICAN INDUSTRY**

The CARES Act assists eligible businesses looking for payroll support to keep Americans working.

- For more information, [CLICK HERE](#)

# ☰ CARES Act Measures Related to Commercial Real Estate ☰

- Provides \$357B in loans for small businesses – up to \$10M per business
  - Payroll, rent and other related expenses for the next two months can be converted into a grant
- Allows for a business net operating loss carryback of five years for tax years 2018, 2019 and 2020
- Provides a \$5,000 refundable tax credit for retaining employees – not limited to small business
- Delays payroll tax payments for employers through the remainder of the year
- Includes a technical fix for qualified improvement property (QIP), which would allow BOMA members, as well as the restaurant and retail sectors, to fully expense tenant improvements





# Office Loans Coming Due will Likely be Renegotiated



**Lenders - # of Loans Due in...**

	3 Months	6 Months	12 Months
Well Fargo Bank	27	161	239
Barclays	18	18	18
Lincoln Financial Group	12	14	15
Wilmington Trust	11	28	41
U.S. Bank	9	21	42

**Market - # of Loans Due in...**

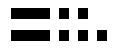
	3 Months	6 Months	12 Months
Urban Chicago	48	98	258
Urban Atlanta	34	65	201
Urban Twin Cities	26	64	114
North Dallas	25	49	139
West Houston	25	66	145



# Employment

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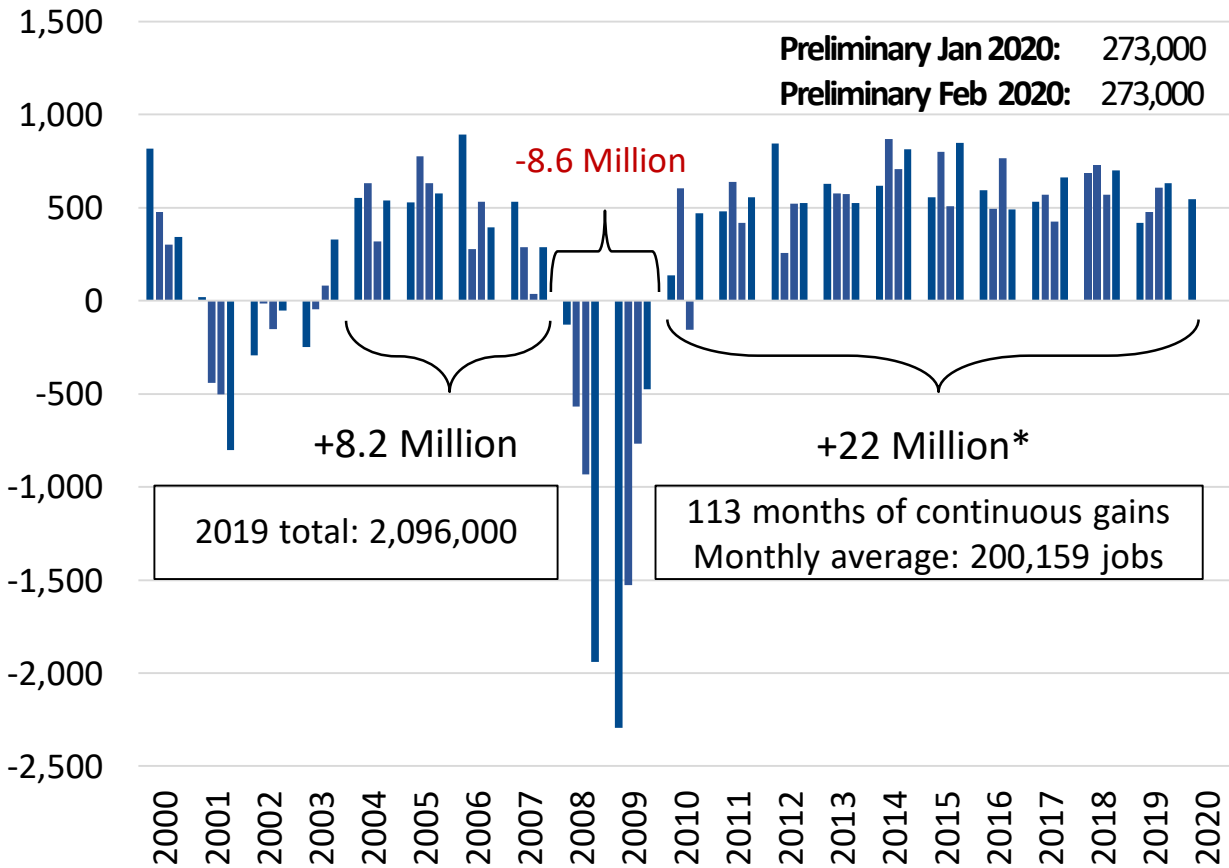




# Things Were Looking Good Through February... They Didn't Start Taking a Turn Until Early March



Long Stretch of Continuous Job Gains



Unemployed Persons per Job Opening

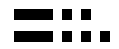


\*Through February 2020

Source: Moody's Analytics; Bureau of Labor Statistics (BLS); The Conference Board







# The Shutdown of Multiple Industries That Rely on “Gathering” Will Severely Impact Q2 GDP



## **The following sectors make up about 12.3% of GDP:**

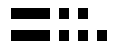
- Mining – Oil and Gas Extraction
- Retail Trade – Motor Vehicle and Parts Dealers & Other Retail
- Transportation and Warehousing – Air Transportation & Transit and Ground Passenger Transportation
- Information – Motion Picture and Sound Recording Industries
- Arts; Entertainment; Recreation; Accommodation and Food Services

***Given other industries impacted, we can expect to see a 10-20% GDP loss in the second quarter***

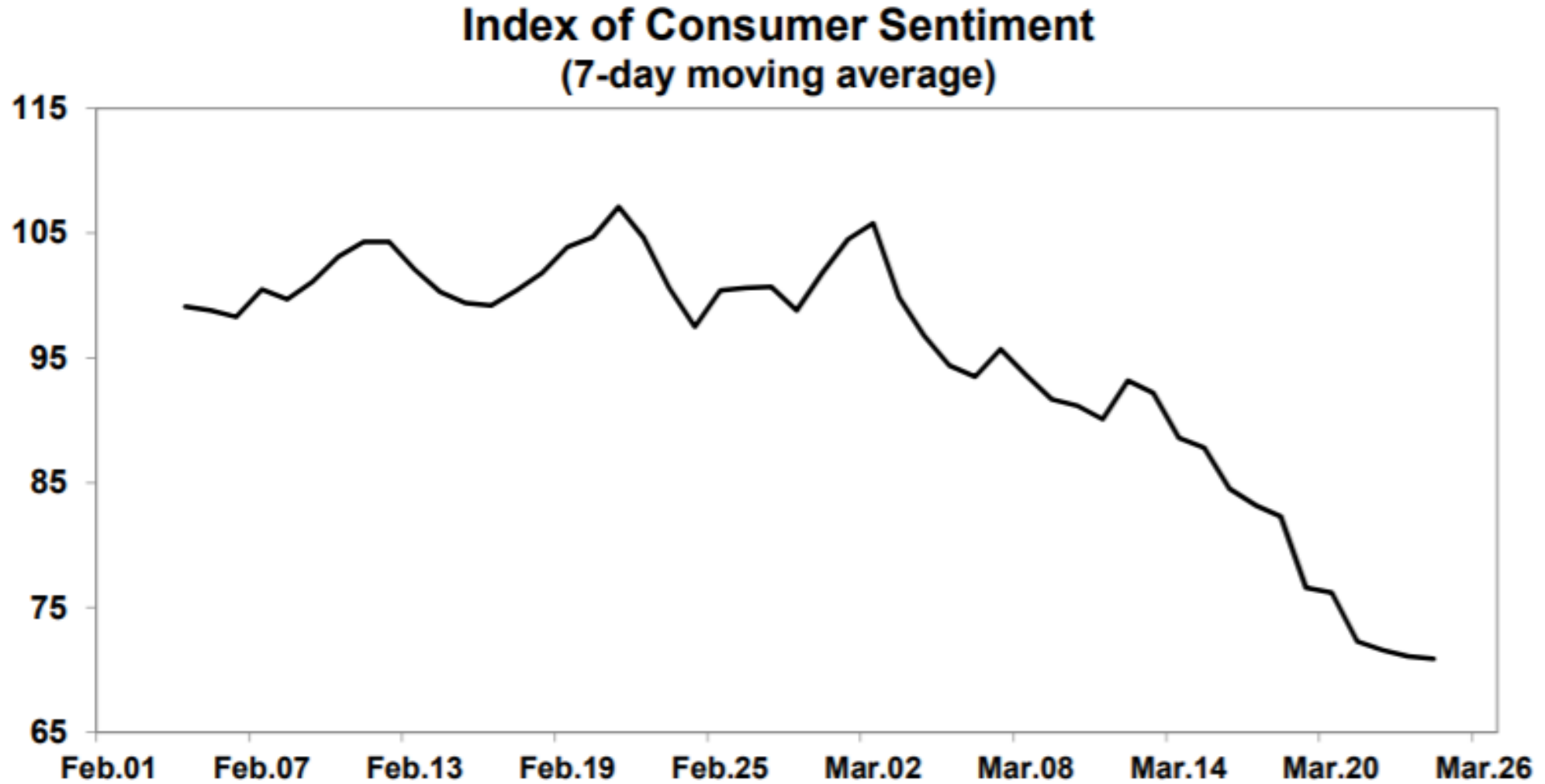
OECD last week told G-20 leaders: *“The private sector will emerge in a very fragile state when the health crisis is past.”*

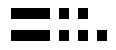
The OECD calculated that between 30% and 40% of total output is directly affected by the shutdowns, ranging from restaurants to automobile makers. If 35% of the US economy is shut down 50%, and the other 65% of the economy grows +3%, then real GDP overall in Q2 would contract about -15%, or at almost a - 50% annual rate.

If workers come back by June, the decline could be smaller than that.

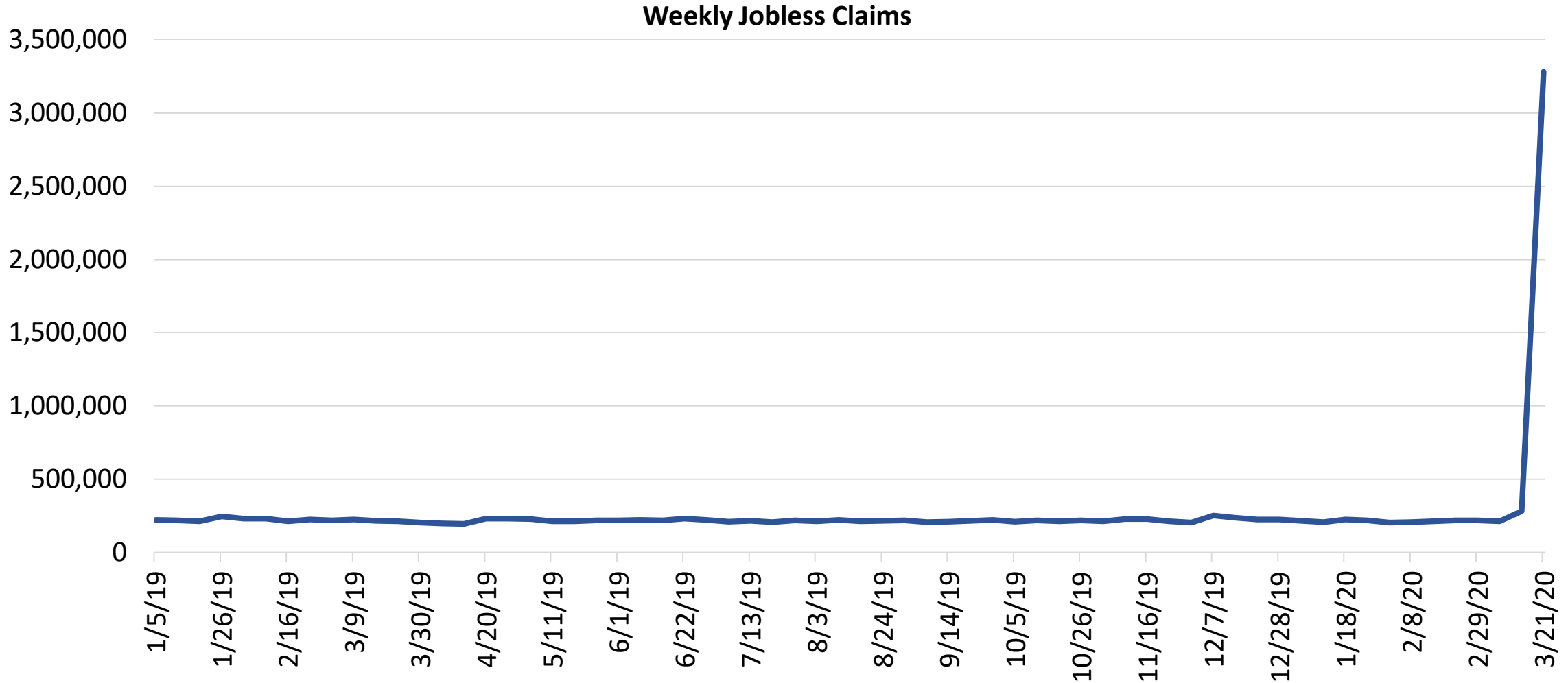


# Index of Consumer Sentiment Falling





# Record 3.28 Million File for U.S. Jobless Benefits

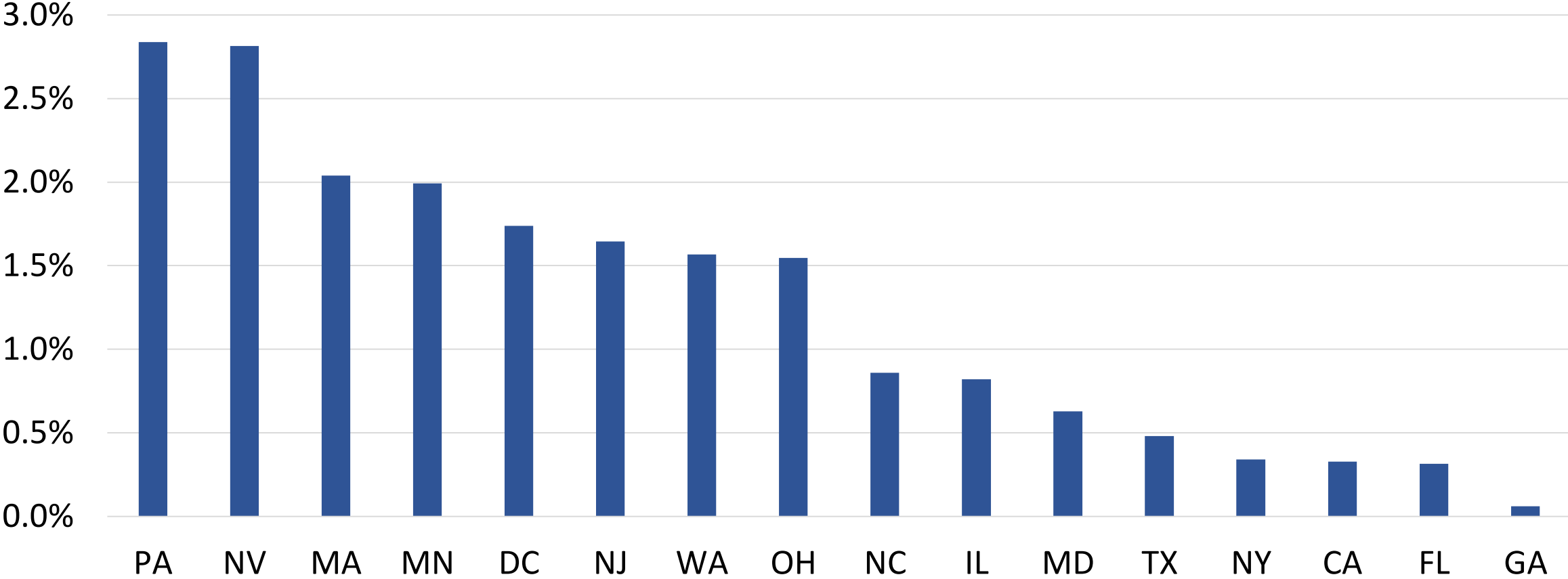


Source: Yardi Matrix; Moody's Analytics; U.S. Employment & Training Administration (ETA)



# Pennsylvania Had the Greatest Spike in Unemployment Claims, Both Absolute and Per Capita

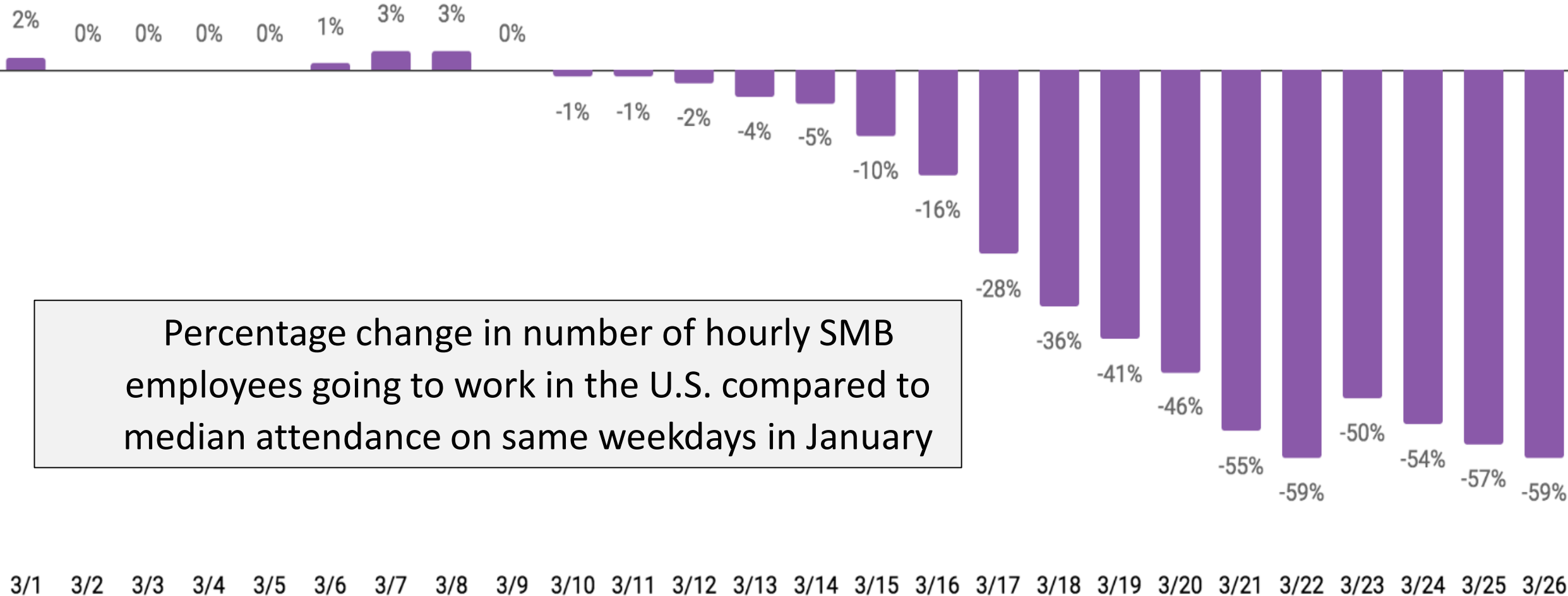
Increase in Initial Job Claims per Capita for the Week Ended 3/21



Source: Yardi Matrix; The Department of Labor



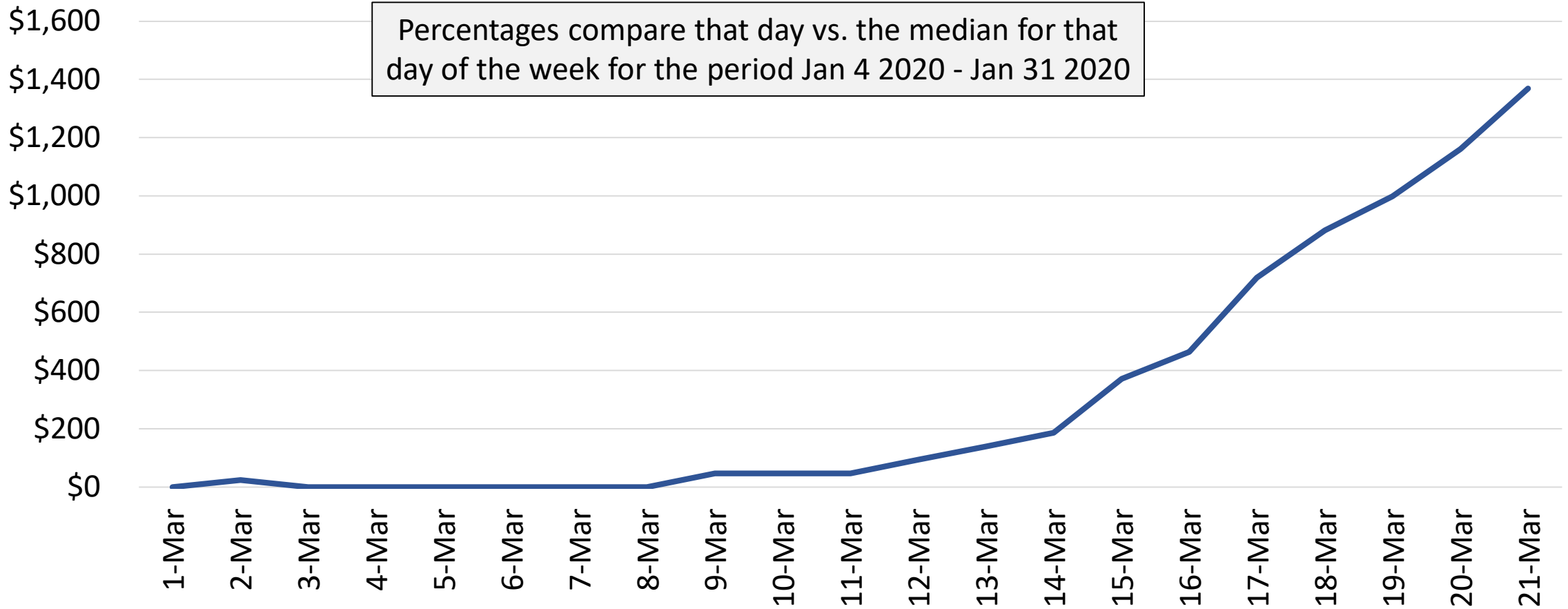
# ☰☰☰ Many Hourly Employees are No Longer Going in to Work ☰☰



Percentage change in number of hourly SMB employees going to work in the U.S. compared to median attendance on same weekdays in January

# Hourly Employees are Taking a Significant Hit to Their Income

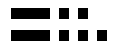
## Monthly Income Loss per Employee



\*Based on Homebase data and BLS data covering 48 million hourly workers across restaurant, food & beverage, retail, other main street and services

Source: Yardi Matrix; Homebase

Link to Homebase data: [https://joinhomebase.com/?utm\\_source=blog&utm\\_medium=organic&utm\\_campaign=reachout](https://joinhomebase.com/?utm_source=blog&utm_medium=organic&utm_campaign=reachout)



# Airlines to Receive Nearly \$60 Billion in Financial Assistance from the CARES Act



**There has been a rapid plunge in air travel bookings, and airlines have been forced to allow flexible cancellation policies for travel already booked**

## **The bill grants:**

- \$25B in loans and loan guarantees for passenger airlines + \$4B for cargo air carriers
- \$25B in grants to pay workers through September + \$4B for cargo air carriers
- \$17B in loans for companies critical for national security (Boeing)

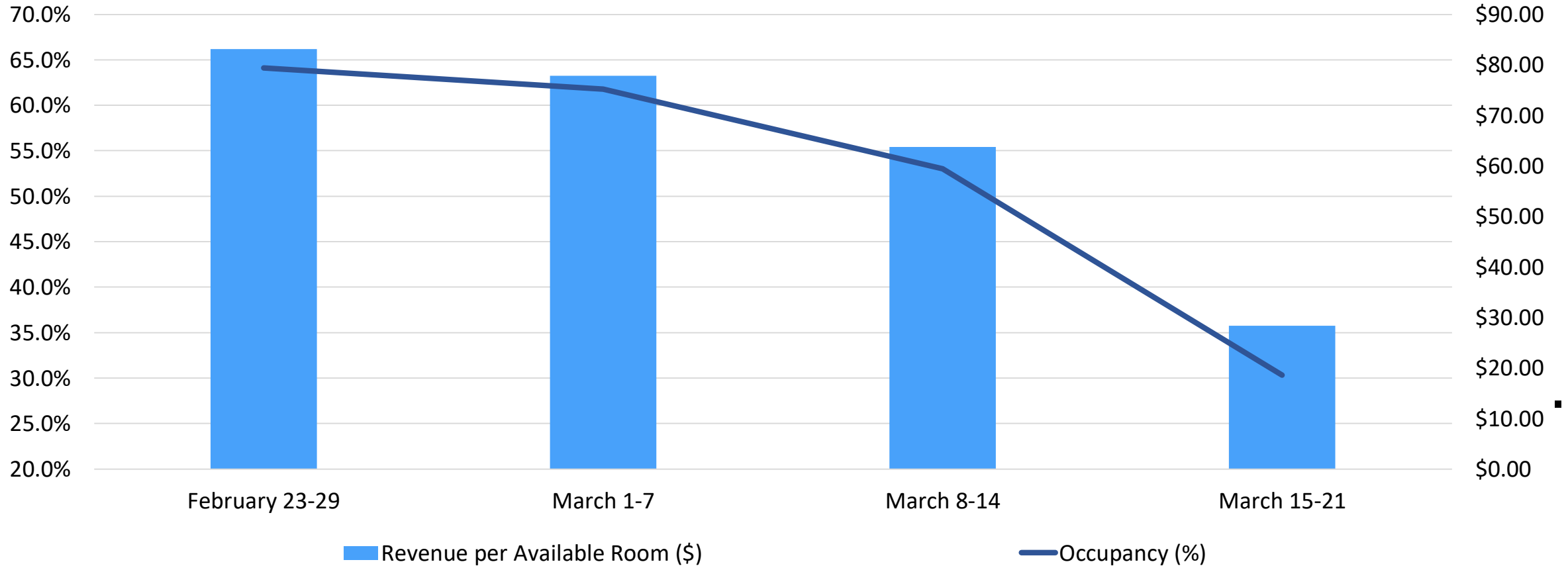
## **Conditions of bill:**

- Airlines receiving aid cannot buy back shares of their own stock for a year after the loan is fully paid off and cannot issue dividends to shareholders while receiving aid
- Under the loan portion of the bill, the government would take an equity interest in the companies until the loan is paid back
- Airlines accepting aid will not be allowed to lay off/furlough workers until 9/30

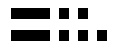


# The U.S. Hotel Industry Saw a Nearly 80% Drop in Revenue From the First to Second Week in March

U.S. Hotel Occupancy and Revenue  
STR Weekly







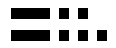
# “We’re Seeing Revenue Down 75% Plus”

*Arne Sorenson, CEO of Marriott*



## ***Marriott CEO Arne Sorenson’s Interview with CNBC***

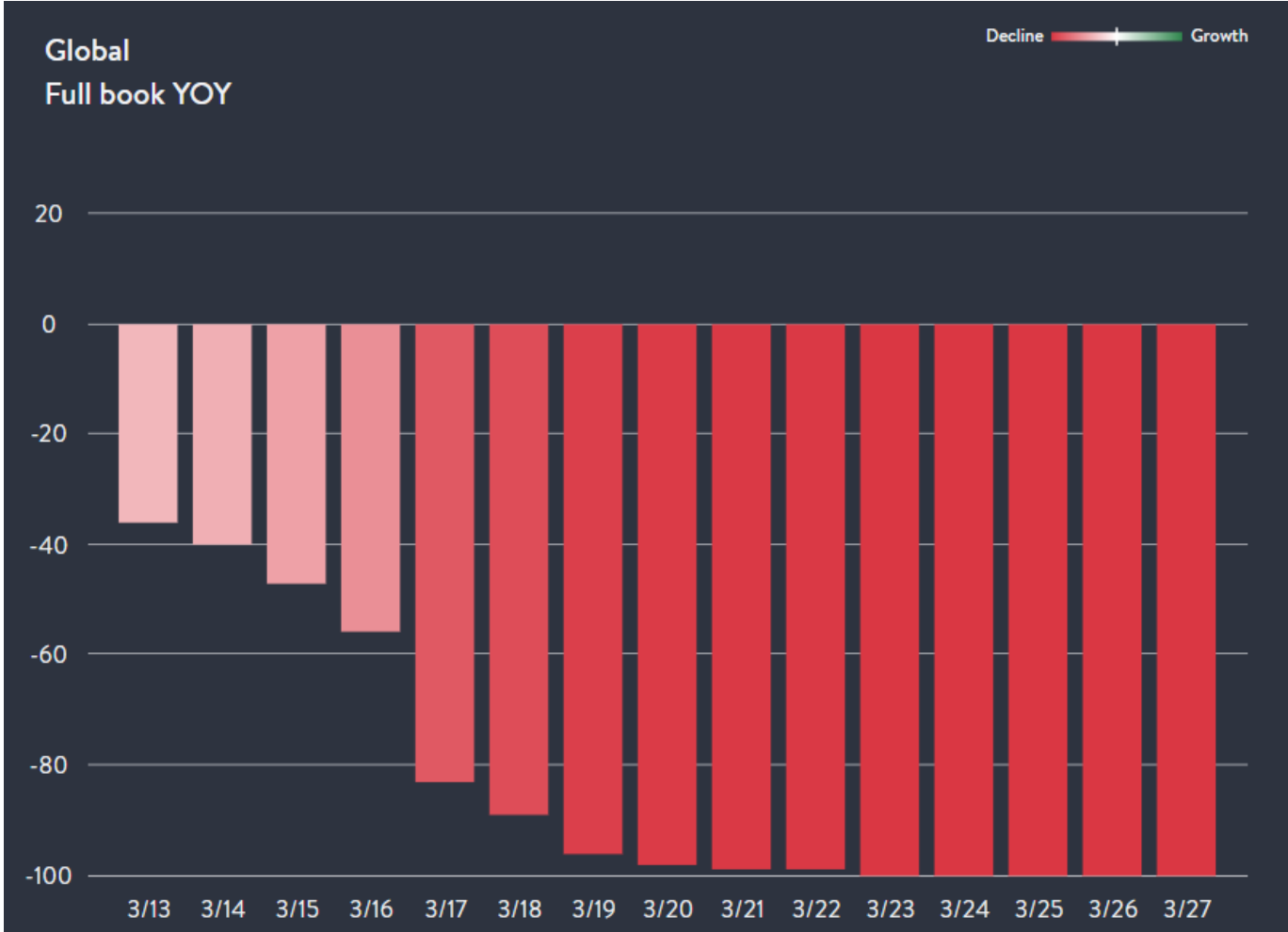
- The Coronavirus has caused a bigger dent to Marriott International’s business than 9/11 and the financial crisis combined
  - “What we’re seeing is dramatically worse than what we saw in those two prior crises”
- Sorenson, who suspended his salary for the year, said revenue is down 75%+ at Marriott
- Marriott recently furloughed around two-thirds of its 4,000 corporate employees, and is beginning to furlough tens of thousands of workers at the properties it manages



# Restaurants Closing for Dine-In Customers: The Service Industry Will Struggle



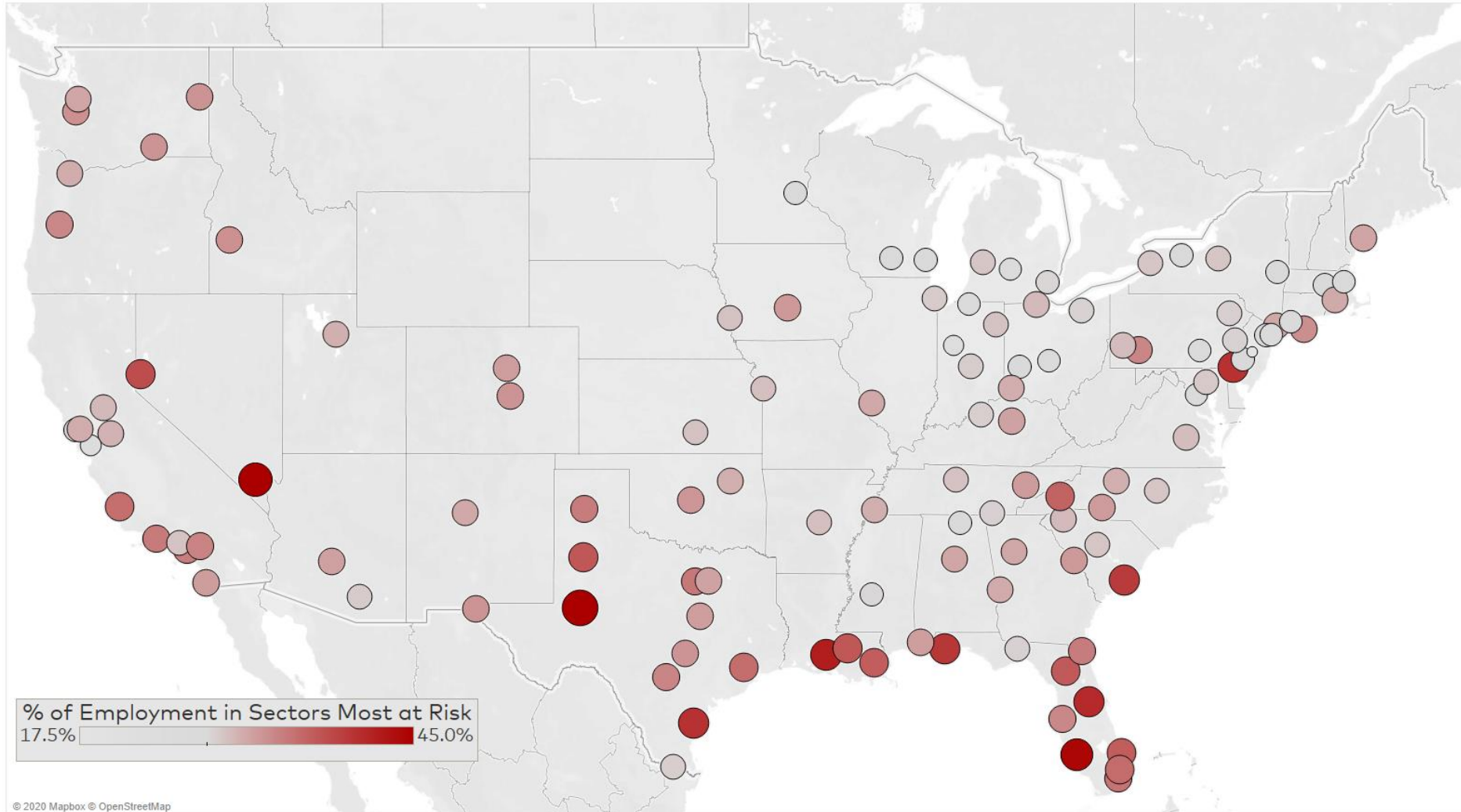
*Year-over-year seated diners at restaurants on the OpenTable network*



Source: OpenTable.com; Yardi Matrix

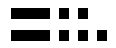


# The Most At-Risk Markets for Sharp Employment Drops are Concentrated in Florida, Texas, Nevada and Louisiana



\*At-risk employment sectors include: Leisure and hospitality, Mining, Logging and Construction, Retail and Wholesale Trade

Source: Yardi Matrix; Tableau; Bureau of Labor Statistics (BLS)



# Some Positive News: Companies Hiring



- A handful of large companies are looking to hire 500,000 new employees as they try to keep up with the demand for food and household products, such as Walmart (150,000 new positions), Amazon.com, Inc. (100,000) and CVS (50,000)
- Many of these large companies are offering enhanced benefits, such as paid sick time and child-care services, and many have even boosted hourly wages
- Grocery delivery company, Instacart, announced plans to add 300,000 workers over the next 3 months
- Delivery drivers are in high demand: Pizza Hut, LLC is looking to fill 30,000 positions, Papa John's International, Inc. is looking to add 20,000 positions, and Domino's is looking to hire 10,000 new positions
- E-learning platforms are poised to do well during this pandemic as well...Zoom, GoToMeeting, etc.

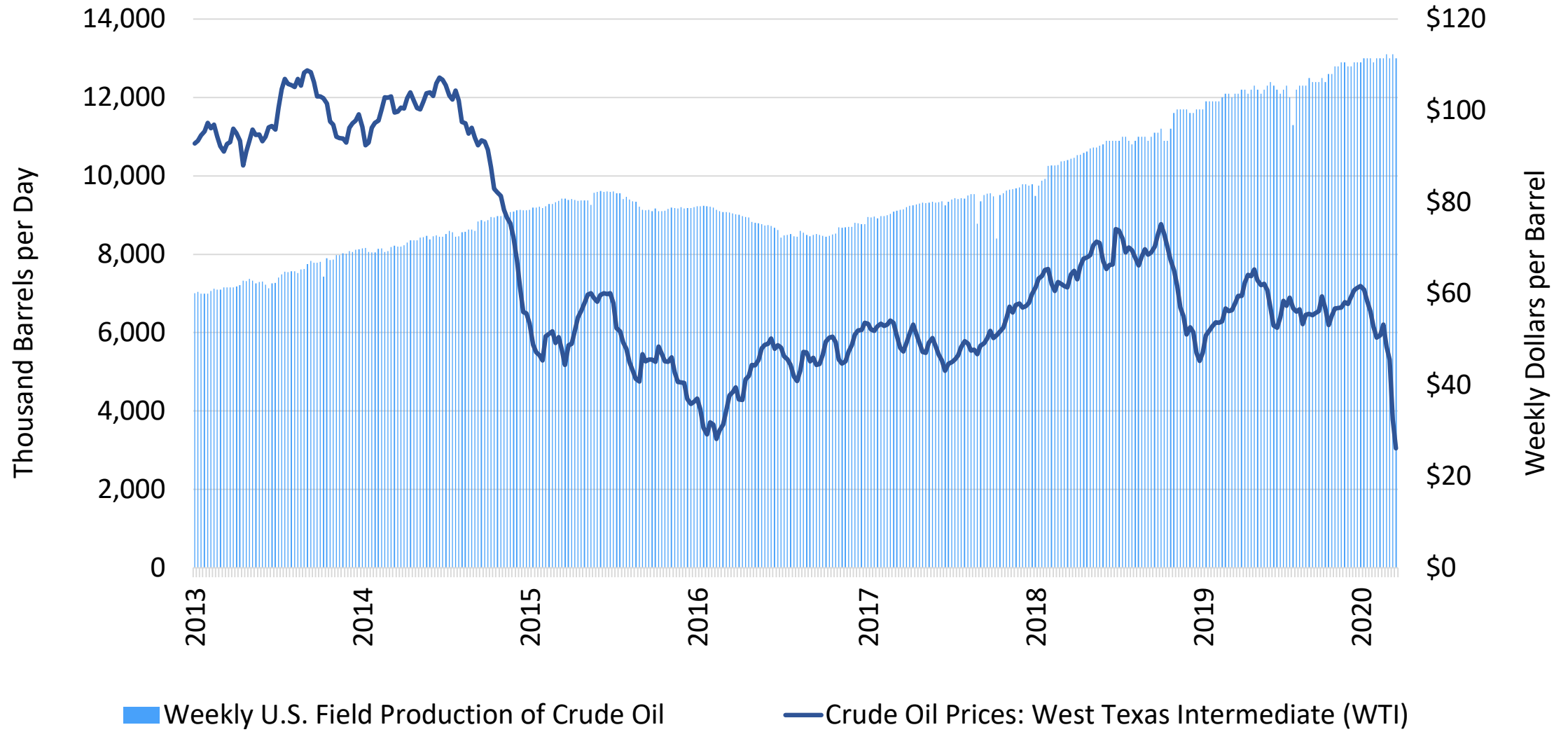


# Oil Prices Have Crashed in Response to a Decrease in Demand and an Increase in Production by Saudi Arabia and Russia

- Oil and gas companies in the U.S. are reducing their operations in the Permian Basin, as a result:
  - Apache Corporation:
    - Pulling all oil and gas rigs out of the Permian to save on short-term spending
    - Plans to reduce its 2020 capital investment by almost \$1 billion
  - Pioneer Natural Resources:
    - Rig count will be cut from 22 to 11 and completion crews will be cut from 6 to 2-3
    - Overall capital budget was to be cut by 45 percent
- The Energy Department requested \$3 billion to purchase crude for storage in the strategic petroleum reserve, but this was ultimately left out of the \$2 trillion stimulus bill
- American Petroleum Institute executives wrote to President Trump and the EPA asking that they temporarily waive “non-essential compliance obligations” such as record-keeping, training and other non-safety requirements



# No Inflation Here!



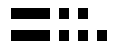
Source: Yardi Matrix; Energy Information Administration, Federal Reserve Bank of St. Louis, Economic Research Division



# Government Actions

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# International Government Actions



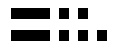
Country	Fiscal Response
Argentina	Went into a "preventative and compulsory" lockdown on March 21
Australia	Enforced a shutdown of restaurants and bars after saying voluntary measures weren't doing enough
Canada	Canada's 2 biggest provinces, Ontario & Quebec, ordered all nonessential businesses to close as of midnight on March 24
China	China's Hubei province it will allow transportation to resume for the city of Wuhan on April 8, effectively lifting a mass quarantine over the city which began on January 23
Colombia	Ordered a three-week nationwide lockdown and sealed its borders, people over 70 told to remain indoors until May
India	Went into a full lockdown on March 24 for 21 days
Israel	On March 19, Israel went into partial lockdown — foreigners were already banned from entering the country. On March 24, restrictions tightened further
Jordan	Has been under a strict indefinite lockdown since March 21, although the government eased some restrictions on March 25. People caught leaving their homes are subject to up to a year in prison
New Zealand	Imposed a lockdown on March 24, which includes closing all schools
UK	Announced nationwide lockdown for at least 3 weeks on March 23
South Africa	Announced nationwide lockdowns on March 23
Saudi Arabia	Locked down its capital and two holy cities on March 25



\*As of March 26, 2020

Source: Yardi Matrix; Wall Street Journal; Business Insider





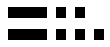
# United States Federal Government Actions



## Federal Executive Orders Issued by President Trump:

- **March 23** – Executive Order on Preventing Hoarding of Health and Medical Resources to Respond to the Spread of COVID-19
- **March 22** – Memorandum on Providing Federal Support for Governors' Use of the National Guard to Respond to COVID-19
- **March 20** – Memorandum on the Delegation of Functions Under 31 U.S.C. 5302
- **March 18** – Executive Order on Prioritizing and Allocating Health and Medical Resources to Respond to the Spread of COVID-19
- **March 14** – Proclamation on the Suspension of Entry as Immigrants and Nonimmigrants of Certain Additional Persons Who Pose a Risk of Transmitting Coronavirus
- **March 13** – Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak
- **March 13** – Memorandum on Expanding State-Approved Diagnostic Tests
- **March 11** – Memorandum on Making General Use Respirators Available





# U.S. State Government Actions



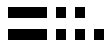
State	Statewide Limits on Gatherings	Statewide Closure of Non-Essential Businesses
Alabama	10 people	Limited operations required - restaurants, bars, breweries
Alaska	10 people	Limited operations required - restaurants, bars, breweries, food trucks, self-service dining
Arizona	Recommended	Limited operations recommended- restaurants in counties with confirmed cases; Closures recommended– bars, movie theaters, and gyms in counties with confirmed cases
Arkansas	10 people	Limited operations required – restaurants and bars; Closure required – gyms, indoor entertainment venues
California	Stay at home order	Closure recommended - bars, wineries, nightclubs and brewpubs
Colorado	Stay at home order	Closure required - bars, restaurants, gyms, theaters, casinos, ski resorts
Connecticut	Stay at home order	Closure required - gyms, fitness studios, movie theaters; Limited operations required - restaurants
Delaware	Stay at home order	Closure required - bowling alleys, movie theaters, fitness centers, health spas; Limited operations required - restaurants, bars
District of Columbia	10 people	Limited operations required - restaurants, bars
Florida	Stay at home order (65+)	Limited operations required - restaurants
Georgia	Stay at home order*	Closure required – bars <i>*for medically fragile only</i>
Hawaii	Stay at home order	Closure required - movie theaters, visitor attractions, and places of worship; Closure or limited operations recommended - restaurants, tour companies
Idaho	Stay at home order*	<i>*for Blaine County only</i>
Illinois	Stay at home order	Limited operations required - restaurants, bars
Indiana	Stay at home order	Limited operations required - restaurants, bars, nightclubs
Iowa	10 people	Limited operations required - restaurants, bars
Kansas	10 people	In-person workforce prohibited at non-essential businesses
Kentucky	Stay at home guidance	Closure required - bars, restaurants, entertainment, hospitality and recreational facilities, community and recreation centers, gyms and exercise facilities, hair salons, nail salons, spas, concert venues, theaters, and sporting event facilities
Louisiana	Stay at home order	Closure required - bars, gyms, movie theaters Limited operations required - restaurants
Maine	10 people	Limited operations required - restaurants, bars
Maryland	10 people	Closure required - casinos, racetracks, betting facilities, bars; Limited operations required - restaurants
Massachusetts	Stay at home order	In-person workforce prohibited at non-essential businesses; Limited operations required – restaurants
Michigan	Stay at home order	Closure required - casinos, bars, theaters; Limited operations required - restaurants
Minnesota	Stay at home order	In-person workforce prohibited at non-essential businesses; Limited operations required – restaurants
Mississippi	10 people	Limited Operations required – Restaurants



\*Data as of March 27, 2020

Source: Yardi Matrix; National Governors Association





# U.S. State Government Actions

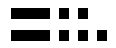


State	Statewide Limits on Gatherings	Statewide Closure of Non-Essential Businesses
Missouri	10 people	Closure required – casinos
Montana	Stay at home order	
Nebraska	County orders	Limited operations required - restaurants, bars
Nevada	10 people	In-person workforce prohibited at non-essential businesses; Limited operations required – restaurants
New Hampshire	Stay at home order	Limited operations required - restaurants, bars
New Jersey	Stay at home order	Closure required - gyms, theaters, casinos; Limited operations required - restaurants, bars
New Mexico	Stay at home order	Limited operations required - restaurants, bars, food establishments
New York	Stay at home order	Closure required - bars, gyms, movie theaters, casinos; Limited operations required – restaurants
North Carolina	50 people	Limited operations required - restaurants, bars
North Dakota		Limited operation required – bars, restaurants, recreational facilities and entertainment venues.
Ohio	Stay at home order	Limited operations required - restaurants, bars
Oklahoma	Stay at home order*	<i>*for most vulnerable population and includes a 10-person limit to mass gatherings for all others</i>
Oregon	Stay at home order	Limited operations required - restaurants, bars; Closures recommended
Pennsylvania	County orders	Required closures of all non-life-sustaining businesses; Limited operations required – restaurants
Rhode Island	10 people	Limited operations required - restaurants, bars, entertainment venues
South Carolina	3 people	Limited operations required – restaurants, bars
South Dakota	10 people	Suggested alternate operations – restaurants, businesses with telework capacity
Tennessee	10 people	Limited operations required – restaurants, bars; Closures required – recreational venues
Texas	10 people	Limited operations recommended – restaurants, bars, recreational venues
Utah	10 people	Limited operations required - restaurants, bars
Vermont	Stay at home order	Limited operations required - restaurants, bars
Virginia	10 people	Limited operations or closure required - restaurants, fitness centers, theaters
Washington	Stay at home order	Closure required - entertainment and recreational facilities; Limited operations required - restaurants, bars
West Virginia	Stay at home order	Closure required – casinos; Limited operations required - restaurants, bars
Wisconsin	Stay at home order	Limited operations required - restaurants, bars
Wyoming	10 people	Closure required - salons, recreational facilities, theaters



\*Data as of March 27, 2020

Source: Yardi Matrix; National Governors Association



# United States Local Government Actions



## Local Government Responses to COVID-19 include:

- **Birmingham, AL** – Mayor proposed a Shelter in Place Ordinance, which includes curfews on March 25
- **Burbank, CA** – City Council approved an Urgency Ordinance on March 17, prohibiting the evictions of residential and commercial tenants for non-payment of rent caused by COVID-19 until April 30
- **Charleston, NC** – On March 23, City Council agreed to defer the collection of hospitality taxes for 90 days
- **Dallas, TX** – Shelter in Place Order enacted March 23 for Dallas County until April 3
- **Denver, CO** – The city will create an initial relief fund of \$4 million to provide support to small businesses during the pandemic
- **Los Angeles, CA** – No landlord shall evict a resident tenant in the city during this local emergency period, if tenant is able to show an inability to pay rent due to COVID-19. Tenants will have up to 6 months following expiration of local emergency period to repay any back due rent.
- **Seattle, WA** – On March 18, city announced a moratorium on evictions of small businesses and non-profit tenants impacted by the COVID-19 pandemic. The order will be in place for at least 60 days.
- **Washington, DC** – Legislative action prohibiting the disconnection of electric, gas and water utilities, and prohibits evictions during the public health emergency for both residential and non-residential tenants



\*Data as of March 25, 2020

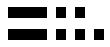
Source: Yardi Matrix; National League of Cities; burbankca.gov



# Commercial Demand

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# Commercial Sectors Will Navigate the COVID-19 Situation Differently



## Office

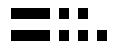
- The longer companies and offices stay closed, the harder the office sector will be hit
- Large, well-capitalized companies should have less of an issue paying rent and meeting the terms of lease
- Smaller companies will have more cash flow issues short term, and may resort to bankruptcy to avoid expenses, including lease agreements
- Coworking operators will likely see the most immediate impact to cash flow and vacancy
- Energy concentrated markets in Houston, Oklahoma, Denver, New Orleans & Pittsburgh could be hit hard

## Industrial

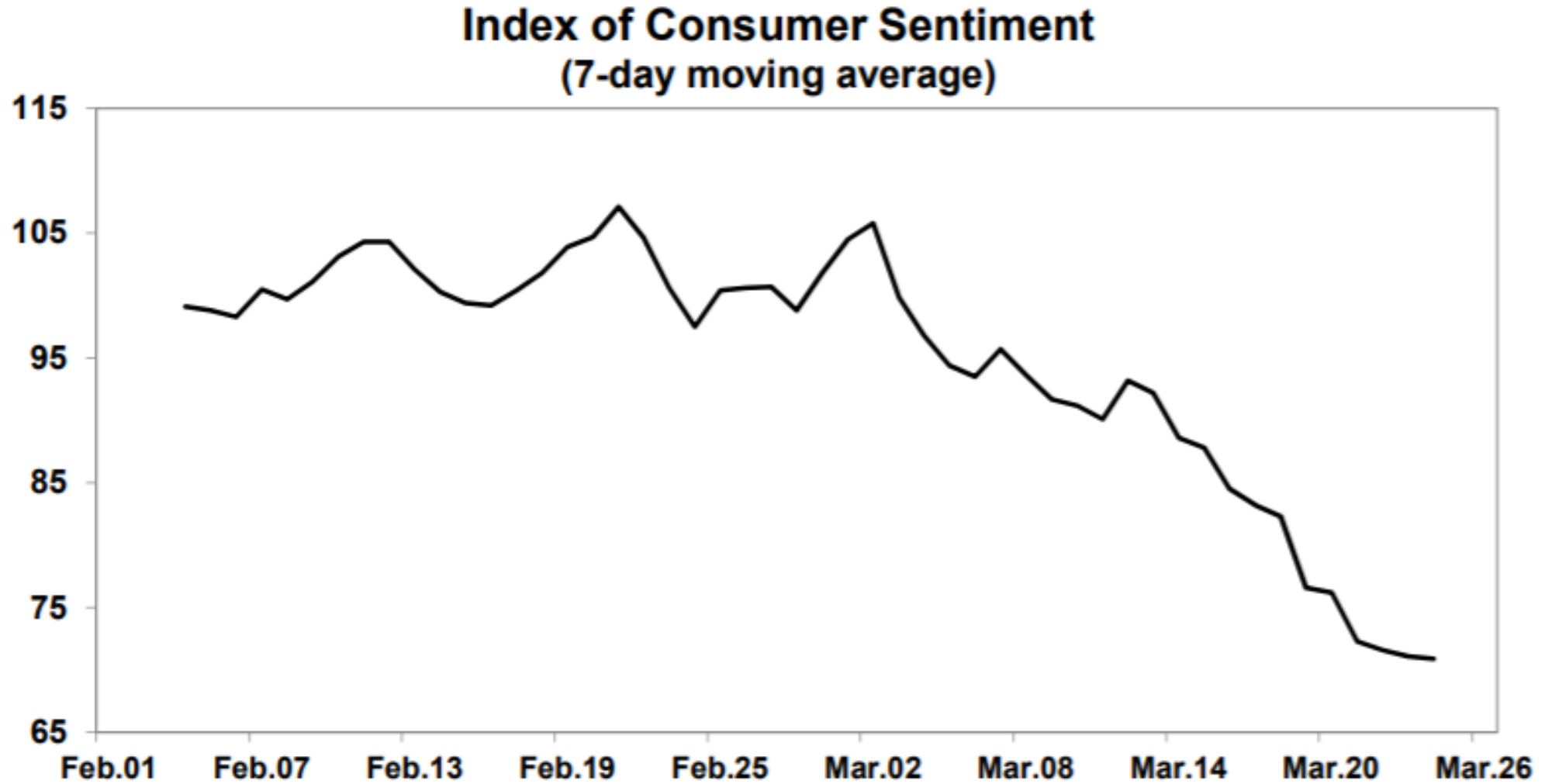
- Will be the best performing sector of commercial real estate
- Demand has increased as more people utilize e-commerce for not only discretionary goods, but now consumer staples and groceries
- Logistics and distribution have increased in value overnight
- Multi-tenant industrial could be in trouble
- Cold storage demand also increasing significantly

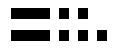
## Retail

- Likely the hardest hit sector of commercial real estate
- Experiential retail including restaurants, theatres, show rooms had been increasing in demand – but, have been crushed due to social distancing restrictions
- Grocery anchored retail will outperform the rest of the retail sector, but still may take a sizable hit



# Index of Consumer Sentiment Falling

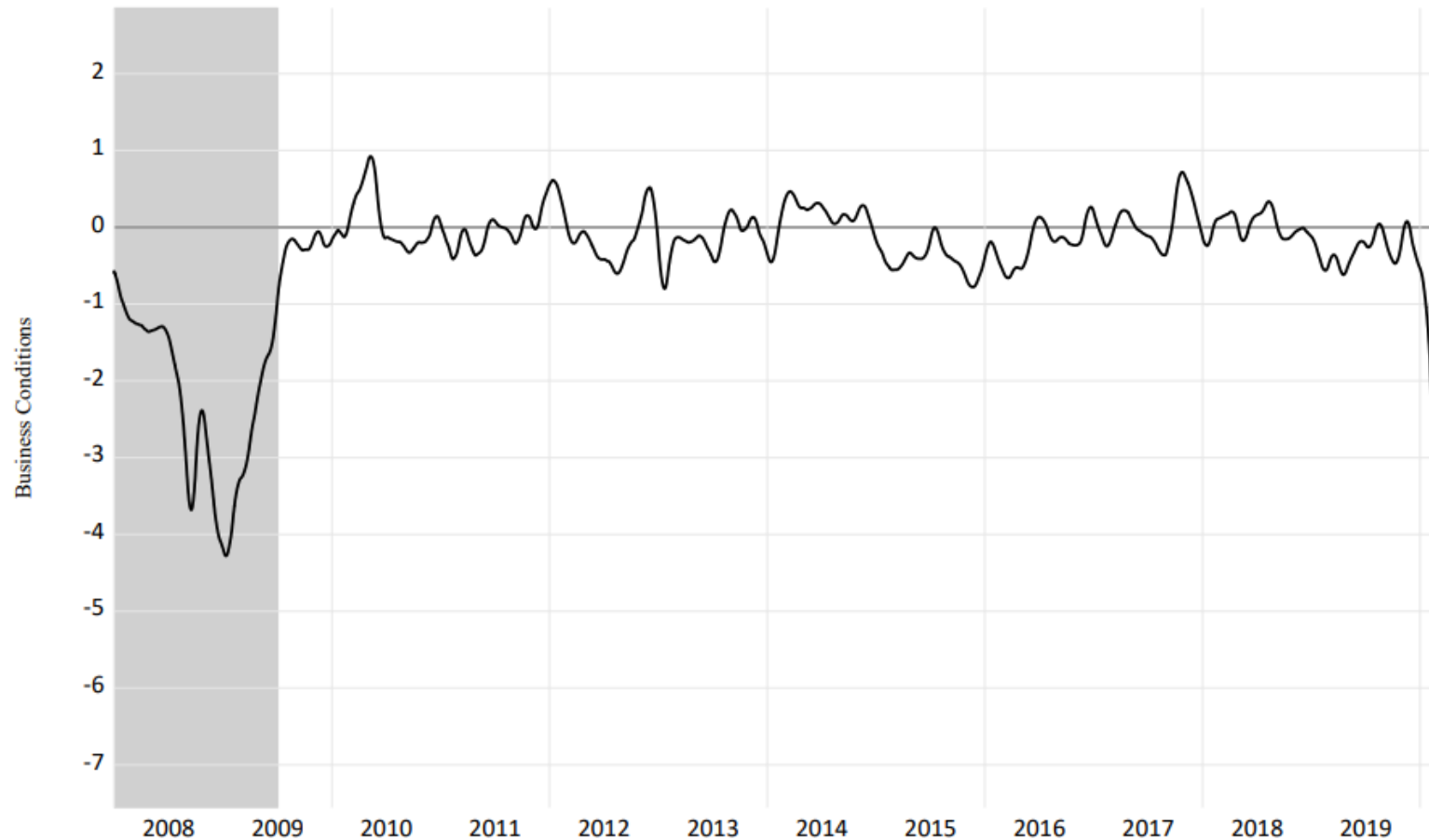




# Business Conditions Index Has Plummeted



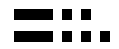
Aruoba-Diebold-Scotti Business Conditions Index (12/31/2007- 03/21/2020)



Note: We construct the ADS Index using the latest data available as of March 27, 2020. We have temporarily truncated the y axis at -7.5.







# Potential Fundamental Changes in the Office Sector

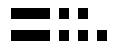


## Does this crisis change some notion of working from home in the future?

- What has Yardi found? Our employees have adapted to working from home fairly quickly. But we think that people tend to like the social aspect of being in an office.

## Companies catering to the new wave of remote work:

- Slack Technologies, Inc.: Free consultations for companies adapting to remote work for the first time & free Standard and Plus upgrades for the next three months for nonprofits
- Microsoft: Cloud-based “productivity suite” free to small businesses for the next six months
- Zoom Video Communications, Inc.: Lifted limitations on its free tier, allowing conversations to exceed 40 minutes



# What is the Impact on Coworking?



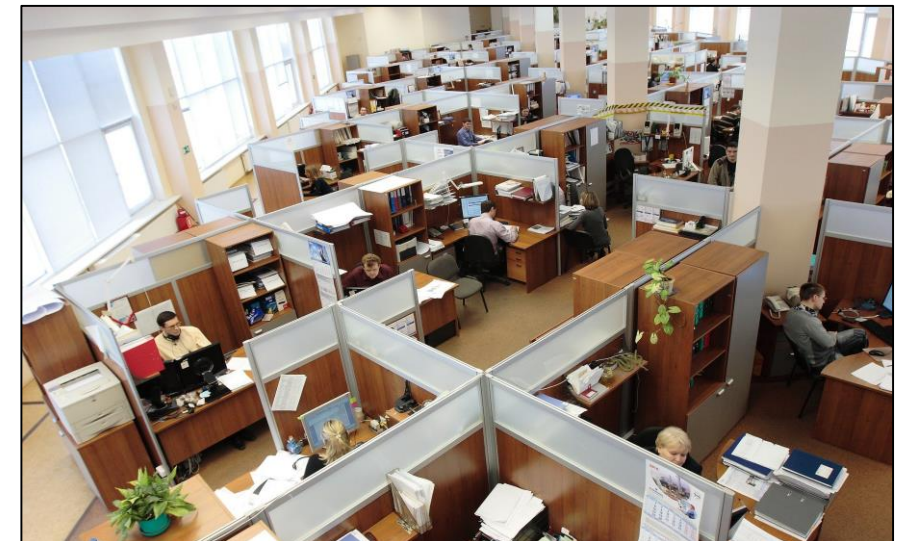
- 2014 study from Stockholm University found that workers in open offices take more sick leave
- 2017 study from the University of Arizona found that a virus on a doorknob in a 100-person office could spread to **50%** of the office in four hours

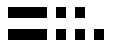
## WeWork Companies Inc.

- Most U.S. locations remain open
- No refunds or suspension of rent
- SoftBank is trying to back away from a \$3B stock purchase
- Offered community workers at select locations \$100/day to go into the office

## Convener

- Closed all 28 locations
- Laid off 20% of its workforce





# Key Indicator to Watch Is Whether Businesses Go Bankrupt or Not

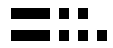


**\*\*We will be tracking this closely\*\***

## Regional airlines are the first go:

- ***Trans States Airlines (US)*** – March 2020, Missouri-based regional airline that flies routes for United
- ***Compass Airlines (US)*** – March 2020, regional carrier, which operates flights for American Airlines





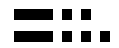
# Bedrock Takes Unprecedented Measures to Rescue Small Businesses



**“The irony is that it’s long been said if the nation catches a cold, Detroit gets pneumonia” – Matt Cullen, Bedrock CEO**

- Bedrock unveiled a rescue package that will cost the firm “millions of dollars”
- Bedrock won’t collect rent and fees from dozens of small businesses over the next three months
- Bedrock owns about 50% of the leasable commercial real estate space in Detroit’s 1.4-square-mile downtown – program covers nearly 40% of downtown retail & restaurants



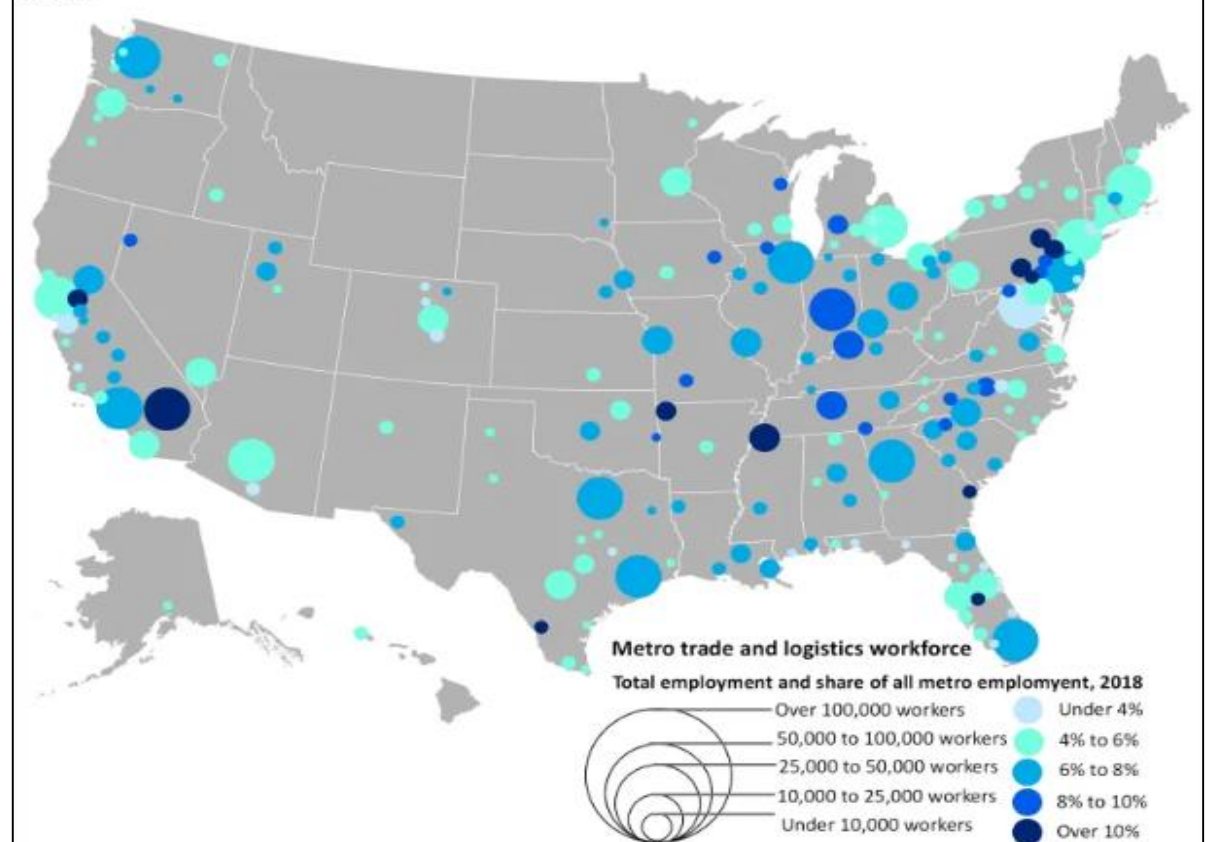


# Impact on Industrial Less Severe, as Need for E-commerce Expected to Ramp Up



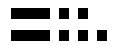
- Industrial sector will face the consequences of lower growth due to a slowdown in the demand for goods
- **But**, the reduction of activity at retail destinations & restaurants will translate to an increase in e-commerce delivery
  - Expected spike in home delivery of food, groceries and other goods
- **Amazon.com, Inc.** plans to hire an additional **100,000** warehouse & delivery workers

Metro area trade and logistics exposure, by total employment and share of employment, 2018



Source: Brookings analysis of BLS OES data

**B** Metropolitan Policy Program  
at BROOKINGS



# However, Multi-Tenant Industrial Could be at Risk



	Multi-Tenant	Owner Occupied	Single Tenant
<b>NATIONAL</b>	<b>44.1%</b>	<b>34.1%</b>	<b>21.8%</b>

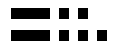
Market	Multi-Tenant %	Owner Occupied %	Single Tenant %
Fort Lauderdale	75.6%	13.4%	11.0%
Las Vegas	71.2%	15.7%	13.1%
Miami	66.7%	19.0%	14.3%
San Diego	62.7%	20.1%	17.2%
New Jersey	54.7%	28.4%	16.9%
Austin	53.7%	30.4%	15.9%
Sacramento	53.0%	25.8%	21.2%
Orlando	52.3%	31.3%	16.4%
Phoenix	50.9%	26.7%	22.4%
Seattle	50.2%	25.5%	24.3%
Tampa	50.1%	35.4%	14.5%
Denver	49.0%	30.5%	20.5%
Dallas-Fort Worth	48.1%	28.4%	23.5%
San Francisco	47.8%	24.4%	27.8%
Orange County	46.2%	32.1%	21.7%

Market	Multi-Tenant %	Owner Occupied %	Single Tenant %
Houston	45.9%	34.3%	19.8%
Los Angeles	44.1%	31.8%	24.1%
Bay Area	44.0%	29.9%	26.1%
Minneapolis	43.0%	40.9%	16.1%
Atlanta	41.4%	25.7%	32.9%
Philadelphia	40.5%	40.1%	19.4%
Pittsburgh	39.6%	47.2%	13.2%
Chicago	38.5%	42.0%	19.5%
Boston	36.3%	37.3%	26.4%
Kansas City	34.3%	35.6%	30.1%
Nashville	34.1%	40.7%	25.2%
St. Louis	33.1%	45.5%	21.4%
Inland Empire	32.9%	30.4%	36.7%
Cleveland	28.3%	53.7%	18.0%
Detroit	18.8%	57.9%	23.3%

Source: Yardi Matrix

\*Sorted by the highest percentage of multi-tenant space





# Grocery Store Demand Surges, While Most Other Retailers Are Forced to Close

## Many companies are negotiating April rents:

- Cheesecake Factory has announced that it will not pay April rents
- Nike, Inc. is asking to pay half its rents

## National Restaurant Association:

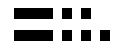
- U.S. restaurant industry has lost \$25 billion in sales since March 1 (according to a survey of 5,000 owners by the National Restaurant Association)
- Nearly 50,000 stores of major U.S. retail chains have closed

**Costco Wholesale Corporation** has acquired logistics firm Innovent Solutions from Transform Holdco (TFCO) for **\$1 billion**

Expected to boost last-mile delivery capabilities

## Companies increasing wages in the short-term:

- Amazon (\$2 increase/hour)
- Walmart (\$2 increase/hour)
- Target (\$2 increase/hour)
- Sheetz (\$3 increase/hour)
- Albertsons (\$2 increase/hour)
- BJ's Wholesale Club (\$2 increase/hour)
- Starbucks (\$3 increase/hour)
- Costco (\$2 increase/hour)



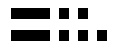
# The “Downturn Playbook”



1. Talk to your tenants, especially small businesses...right now!
  - What is the state of their business?
  - How is their team holding up? Working from home?
  - Which are closed due to government order, or effectively the same?
  - Reduced Hours? Furloughs? Lay-offs?
2. Work out payment plans – waive late fees, etc. – keep tenants in their buildings
3. Expirations – lock them down
  - Month to month if necessary –
4. Pricing Strategy – freeze new and renewal rents – this is a short-term disruption – don’t impair future rent growth, use concessions as needed
5. Talk to:
  - Senior management – what do you expect April to look like?
  - Investors – keep them involved – consider suspending cash distributions for 90 days
  - Lenders – keep them engaged and part of the solution – discuss reduced payments for 90 days







# The “Downturn Playbook” – Pt. 2



1. Deploy Automation/self-service for new deals
2. Vendor Management
  - How do you TIs, services with social distancing?
  - How are your vendors doing with cash flow?
  - Energy conservation
3. Work Orders
  - Online entry
  - Deploy video/audio recordings to assess priorities/in person repairs
  - Deploy mobile abilities for techs
4. Employees
  - Onsite – can they do their work remotely or without in person contact?
  - Can emergency calls go to a call center?
  - Assure Employees (mental health is also needed)
5. Capital Expenditures
  - Freeze for now
6. Sanitizing
  - How do you sanitize common areas from COVID-19?

**Yardi’s COVID-19 Resource Page:**

<https://www.yardi.com/coronavirus/>



## ☰ Actions Being Taken in Real Estate to Cushion the Blow ☷

Bank regulators will permit banks to **defer mortgage payments for 90 days** and will not consider the loans non-performing (triggering bank capital write-downs)

**What will happen to CMBS loans?**

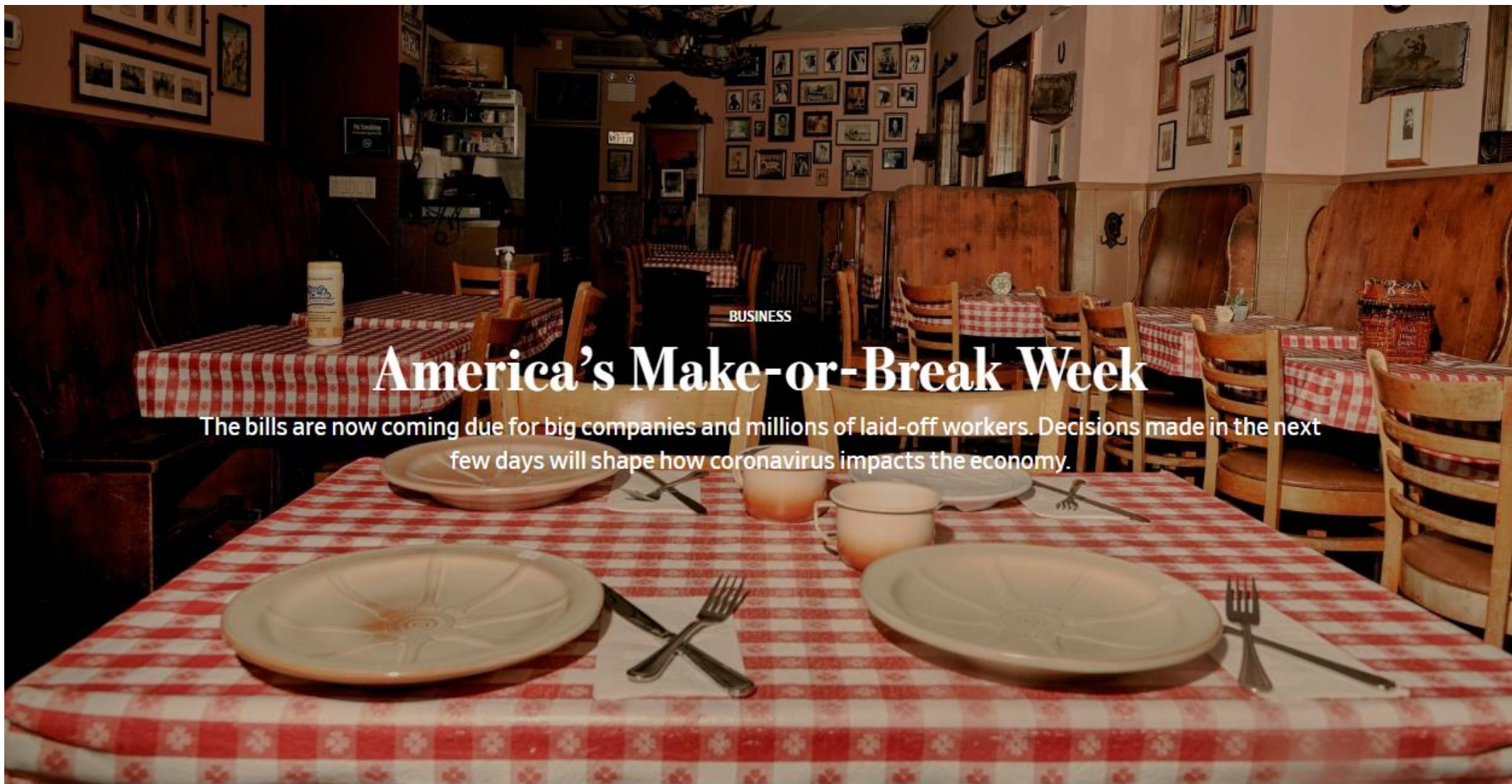
**What about life insurance company loans?**

**What about private debt fund loans?**

☷



# So What?



BUSINESS

## America's Make-or-Break Week

The bills are now coming due for big companies and millions of laid-off workers. Decisions made in the next few days will shape how coronavirus impacts the economy.

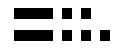
Cowgirl restaurant in New York, closed during the Covid-19 pandemic. VICTOR LLORENTE FOR THE WALL STREET JOURNAL



# How Bad Can This Get?

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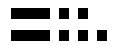


# JPMorgan Chase & Co. Expects 2Q U.S. GDP to Contract a Historic 25%



- JPMorgan slashed its growth outlook for 2Q to -25% from -14%
- Widespread stay-at-home orders and record-high weekly jobless claims contributed to their revision
- According to the bank, the federal government's \$2 trillion stimulus "should provide only a partial offset to ongoing income losses" while adding to the economy's debt load
- The JPMorgan forecast assumes the virus has run its course by June

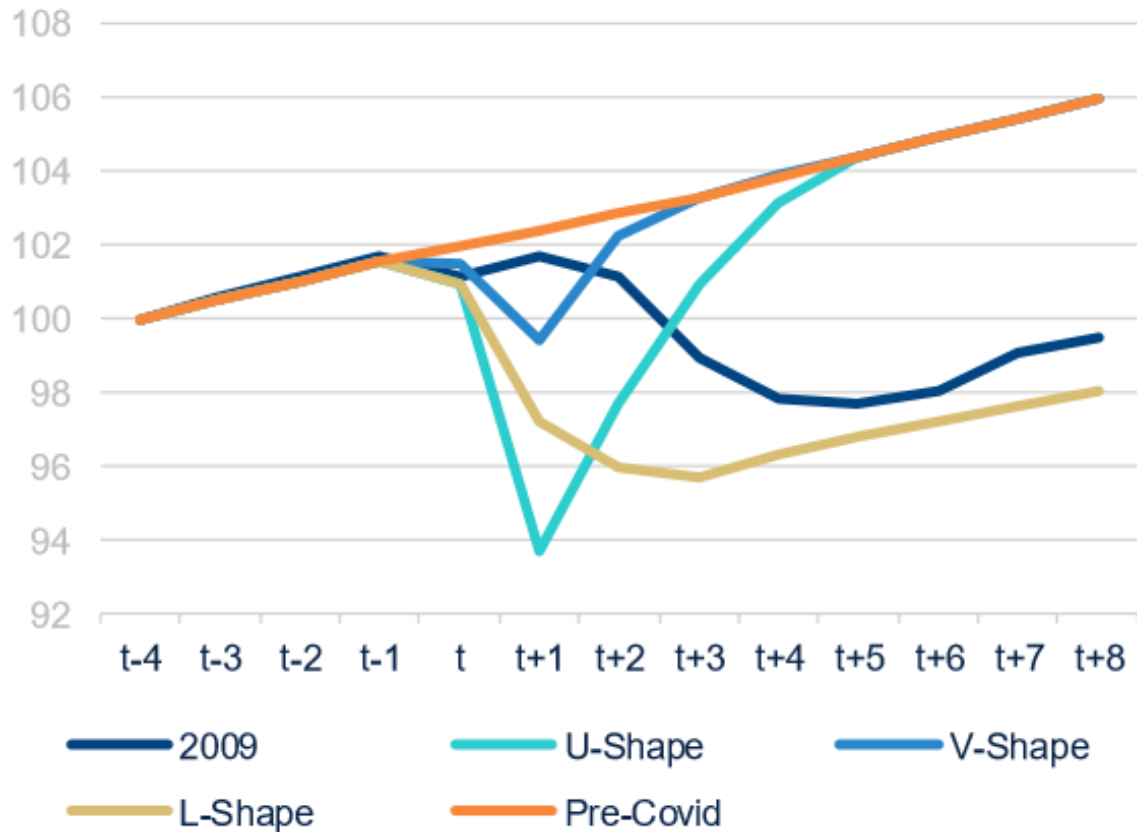




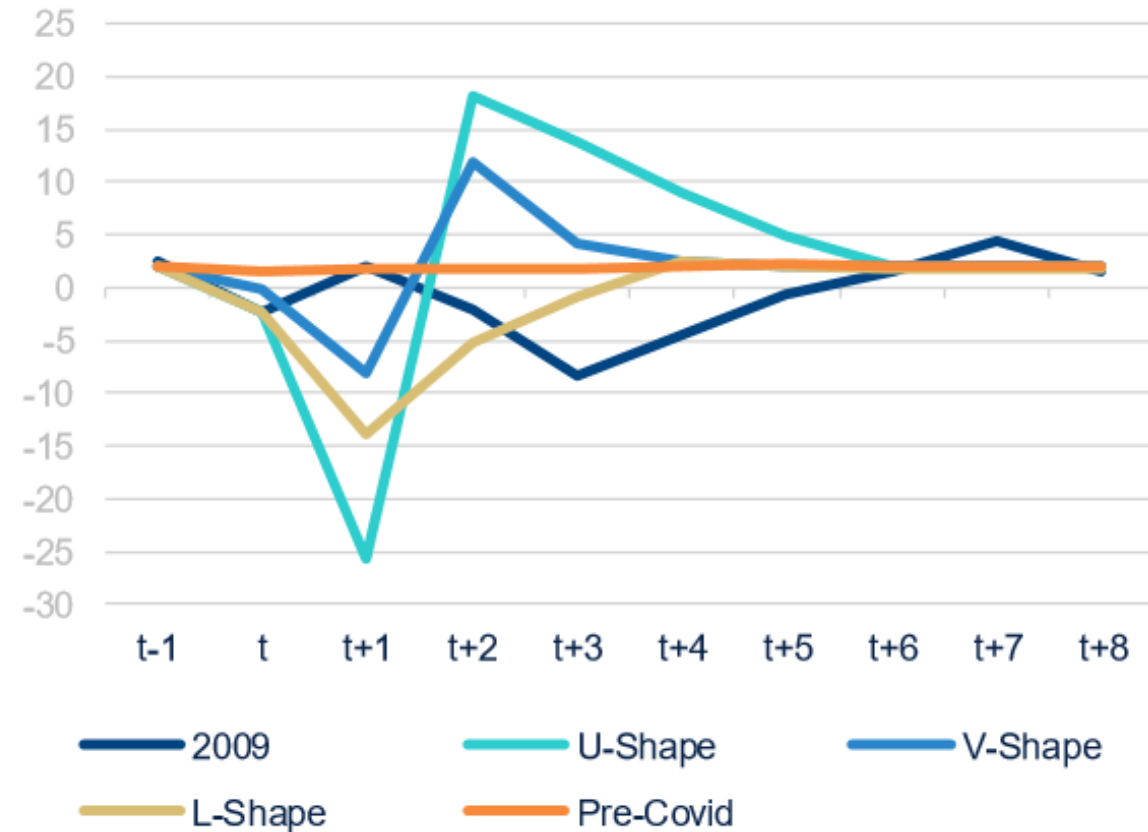
# BBVA Research GDP Simulations



Pre-Covid vs V, U and L-shape recoveries  
(Index t-4=100, quarters)



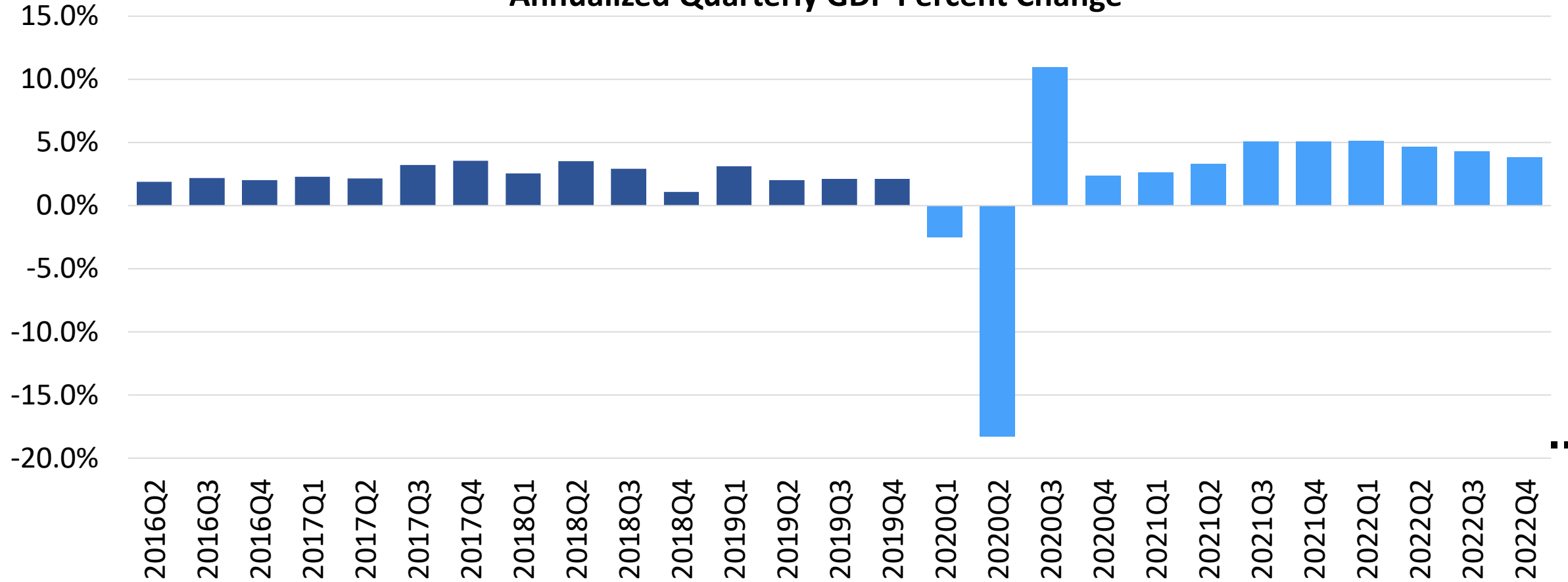
Pre-Covid vs V, U and L-shape recoveries  
(QoQ % Change, annualized, t=start of recession)

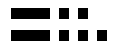


Source: Yardi Matrix; BBVA Research, "When will the U.S. economy recover from the infection?"

# Moody's Analytics GDP Projections: Q2 Will Take a Hard Hit, But Will Rebound Quickly

Annualized Quarterly GDP Percent Change





# There is a Wide Range of 2Q20 GDP Estimates

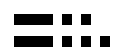


Firm	2Q2020 GDP estimate
Bloomberg Economics	-9.0%
UBS	-9.5%
Pantheon	-10.0%
Strategas	-10.0%
Cornerstone Macro	-11.0%
Oxford Economics	-11.9%
Citigroup	-12.0%
Credit Suisse	-12.0%
Bank of America Merrill Lynch	-12.0%
Deutsche Bank	-12.9%
IHS Markit	-13.0%
Wells Fargo	-14.7%
TSLombard	-17.7%
Evercore ISI	-20.0%
JPMorgan	-25.0%
Morgan Stanley	-30.1%
Goldman Sachs	-34.0%
Capital Economics	-40.0%

Source: Charles Schwab







# Yardi Matrix House View - Office, Industrial, Retail



- **Impact of Measures to Slow the Novel Coronavirus have Differing Impacts by Asset Class**
  - CMBS and retail loans could be in big trouble
- **Office** –
  - Most large businesses will keep their footprint and pay for space – for now
    - Small businesses are most at risk, as well as ground floor retail
    - Long term footprint may not look the same – density vs. number of in-office employees
    - Energy concentrated markets in Houston, Oklahoma, Denver, New Orleans and Pittsburgh could be hit hard
- **Industrial** –
  - E-commerce will do well, perhaps even grow
  - Multi-tenant small business is most at risk
- **Retail** –
  - Grocery anchored retail will be OK
  - Retail based on experiences, the savior of retail, is getting hammered by social distancing policies
  - Small businesses won't or can't make April rent; all in cash conservation mode
  - Watch business bankruptcy rate closely






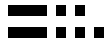
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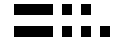
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# COVID-19 Update

- Social Distancing Webinars
- Training & Resources
- Letter from Anant Yardi

The screenshot shows the Yardi website's COVID-19 update page. At the top, the Yardi logo is on the left, and navigation links for PROPERTY MANAGEMENT, MARKETS, SERVICES, EVENTS, RESOURCES, and COMPANY are on the right. The main heading is "COVID-19 Update" with the subtext "Supporting clients, employees and communities". Below this is a graphic of a computer monitor displaying the Yardi logo, a keyboard, and a mouse. The main content area features a paragraph: "We are closely monitoring recommendations from national and international organizations including the CDC and WHO. We are also taking the following measures to protect and support our clients, employees and communities during the COVID-19 outbreak:". This is followed by a large image of two men in a modern office setting, with a blue button labeled "CLIENTS" overlaid on the right side. Below the image is the section "Client Support" with a paragraph: "Property managers' obligations to tenants, residents, employees and communities continue even in this period of extreme disruption. The Yardi team is working on tools and training to help our clients ensure business continuity, safety and productivity in this near-term reality of increased remote work and social distancing."



[Yardi.com/coronavirus](https://Yardi.com/coronavirus)





THANK YOU

FOR ANY QUESTIONS PLEASE FEEL FREE TO CONTACT ME

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