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THE WALL STREET JOURNAL

DOW JONES News Corp ***** WEDNESDAY, MARCH 25, 2020 - VOL. CCLXXV NO. 70 WSJ.com ★★★★★ \$4.00

DJIA 20704.91 ▲ 2112.98 11.4% NASDAQ 7417.86 ▲ 8.1% STOXX 600 304.00 ▲ 8.4% 10-YR. TREAS. ▼ 16/32, yield 0.813% OIL \$24.01 ▲ \$0.65 GOLD \$1,660.20 ▲ \$93.20 EURO \$1.0788 YEN 111.22

What's News

Business & Finance

The Dow surged 11.4%, its biggest one-day percentage gain in 87 years, on signs that lawmakers were nearing a deal on a stimulus package. The S&P 500 and Nasdaq jumped 9.4% and 8.1%, respectively. **A1, A5**

◆ **Facebook said** usage of its products was skyrocketing but warned that increased activity wouldn't shield the company from the pullback in online advertising. **B1**

◆ **Occidental Petroleum** is cutting salaries for its U.S. employees by up to 30% in a bid to slash expenses, according to an internal email. **B1**

◆ **Nike said** business has rebounded in China after the outbreak of coronavirus and that it was able to offset much of its lost store sales with online orders. **B1**

◆ **Top executives** at U.S.-traded firms sold a total of roughly \$9.2 billion in shares of their own companies between the start of February and the end of last week. **B8**

◆ **Boeing's CEO suggested** he would decline taxpayer aid if lawmakers require the government to take an equity stake in the firm. **B3**

World-Wide

◆ **Trump administration** officials urged anyone leaving the New York metro area to isolate themselves for 14 days to avoid spreading the coronavirus to other parts of the country. Overall, the U.S. surpassed 55,000 confirmed cases on Tuesday, as countries around the world continued to take preventive action. **A1, A4-A12**

◆ **The president said** he hopes to have the country reopened in just over two weeks, much sooner than what many public-health experts have recommended to help contain the pandemic. **A4**

◆ **Doctors and other** health experts say U.S. and European leaders seeking to beat the coronavirus may be drawing the wrong lessons from the progress made by China. **A1**

◆ **The Tokyo 2020 Olympics** were postponed until 2021, an unprecedented shifting of the world's largest sporting event. **A12, A13**

◆ **Amazon accused** the Pentagon of seeking to manipulate its review of a huge cloud-computing deal to steer the award to Microsoft. **A2**

◆ **Died: Terrence McNally**, 81, playwright. **A14** ... **Walter Robb**, 92, ex-GE executive. **B4**

NOTICE TO READERS

The Wall Street Journal's printing plants and delivery services are taking precautions in light of the coronavirus, frequently cleaning equipment and facilities while reducing human contact with the newspaper. A digital version of the print edition also can be viewed at <https://www.wsj.com/itp>.

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Dow Soars 11%, Best Day in 87 Years

Rally fueled by hope that lawmakers are nearing an agreement on a stimulus package

The Dow Jones Industrial Average surged more than 11% Tuesday, its biggest one-day

By Alexander Osipovich, Caitlin Ostroff and Joanne Chiu

gain since 1933, on signs that lawmakers were nearing a deal on a stimulus package to ease

the economic fallout from the coronavirus pandemic.

Major indexes opened sharply higher after Treasury Secretary Steven Mnuchin and Sen. Chuck Schumer of New York, the Democratic leader, emerged from late-night negotiations saying they were within striking distance of a deal.

Stocks continued climbing throughout the day and closed near session highs. Senate Majority Leader Mitch McConnell (R., Ky.) voiced hope Tuesday that a deal would get done later in the day. The stimulus package is expected to be

worth at least \$1.6 trillion.

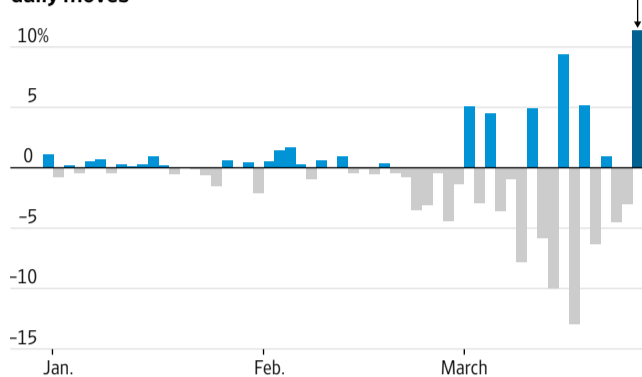
"Markets are definitely reacting to the prospects of a stimulus deal," said Jason Pride, chief investment officer for private wealth at Glenmede.

The blue-chip index gained 2,112.98 points to close at 20704.91. It was the biggest one-day percentage gain for the blue-chip index in 87 years and its largest-ever move in point terms.

The S&P 500 climbed 209.93 points, or 9.4%, to 2447.33. The tech-heavy Nasdaq Composite rose 557.18 points, or 8.1%, to

Please turn to page A5

Dow Jones Industrial Average, daily moves



Source: FactSet

Largest gain since 1933

India Orders Its 1.3 Billion People to Stay Home



AT THE GATE: Indian policemen stand guard at a deserted commercial hub in New Delhi on Tuesday after Prime Minister Narendra Modi ordered people to remain at home for three weeks in an effort to stem the spread of the coronavirus. **A8**

Isolation Urged for New York Travelers

By REBECCA BALLHAUS AND JENNIFER CALFAS

Trump administration officials urged anyone leaving the New York metro area to isolate themselves for 14 days to avoid spreading the new coronavirus to other parts of the country as cases in the region continued to sharply rise.

"We have to deal with the New York City metropolitan area as a high-risk area, and for that reason we're taking these steps and asking for the cooperation of the American people," Vice President Mike Pence said during a Tuesday afternoon briefing.

Mr. Pence said individuals leaving New York should monitor their temperature and any symptoms and said the administration would continue to send resources to New York.

Ambassador Deborah Birx, special representative for global health diplomacy, said 60% of all new virus cases in the U.S. were coming from New York, which has sharply increased its levels of testing

Please turn to page A4

Workers Thrust Onto Virus Front Lines

Delivery drivers, grocery clerks and others risk their health on the job, tending to basic needs

Much of the American workplace has shut down, sending millions of employees home to wait out the coronavirus pandemic.

By Valerie Bauerlein, Jennifer Levitz and Alejandro Lazo

Among those still on the job are grocery-store clerks, prison guards and delivery drivers. "Who would have ever thought that we would be on the front lines?" said Joyce Babineau, a 67-year-old supermarket supervisor in Dartmouth, Mass., a coastal village 60 miles

south of Boston.

Ms. Babineau is in one of the groups deemed essential—men and women who carry on even as cities and communities shut down around them.

Workers from New Hampshire to California say they feel both duty and dread. They're also glad to still be working. On every shift, they tend to basic needs in an unfolding disaster likely to be prolonged, widespread and perilous.

Ms. Babineau was up at 5:30 a.m. last Wednesday and packed her usual lunch of a half sandwich and piece of fruit. She put on her Stop & Shop wind-

breaker and grabbed a box of 100 rubber gloves.

The counter staff at the local Dunkin' knew to fill her thermos with coffee and milk, no sugar. The doughnut shop was clear of tables and chairs, emptied by the state's social-distancing directive. "It's eerie," she said.

Dawn filled the sky with shades of pink when Ms. Babineau started her shift at the Stop & Shop supermarket. "How ya doing?" she asked co-workers. "Got your gloves this morning?"

Ms. Babineau has worked there two decades and normally is in charge of

Please turn to page A10

No, Sheltering in Place Doesn't Include Hiking in Crowds

Authorities scold Californians who stretch the lockdown's outdoor-activity exception

By ALICIA A. CALDWELL

LOS ANGELES—Southern California's always-jammed roads were eerily quiet the first weekend of a statewide lockdown meant to slow the spread of the new coronavirus, but bumper-to-bumper traffic found a new venue: local hiking trails.

So many Californians headed outdoors, state and local officials reversed earlier statements that getting out and enjoying nature was a safe exception in shelter-in-place rules.

In a Monday press conference, Los Angeles Mayor Eric Garcetti said: "For those who still haven't heeded the call to stay home, who are not physi-

cally distancing, who crowded beaches and canyons, we know who you are and this is serious."

California Gov. Gavin Newsom on Monday scolded residents for crowding parks and trails where "it's almost impossible to socially distance," adding: "To make it easier for you, we are going to shut down all state parking lots," which he did. On Monday, Los Angeles County, home to roughly 10 million people, closed its roughly 60 hiking trails and parks.

In locked-down America, the outdoors is one of the only places left to go. And everyone seems to be going. Leaders and health officials around the

Please turn to page A2

INSIDE



WORLD
In Italy, tradition puts older generations at greater risk as nation battles virus. **A11**



LIFE & ARTS
Many canceled events hope for a second chance in the autumn. **A15**

Wuhan's Stern Tactics Not Yet Used in West

By JEREMY PAGE

BEIJING—U.S. and European leaders are looking at China's progress in curbing the coronavirus pandemic to guide them on how to beat the virus within their own borders.

They may be drawing the wrong lessons, doctors and health experts say.

The *cordon sanitaire* that began around Wuhan and two nearby cities on Jan. 23 helped slow the virus's transmission to other parts of China, but didn't really stop it in Wuhan itself, these experts say. Instead, the virus kept spreading among family members in homes, in large part because hospitals were too overwhelmed to handle all the patients, according to doctors and patients there.

What really turned the tide

in Wuhan was a shift after Feb. 2 to a more aggressive and systematic quarantine regime whereby suspected or mild cases—and even healthy close contacts of confirmed cases—were sent to makeshift hospitals and temporary quarantine centers.

The tactics required turning hundreds of hotels, schools and other places into quarantine centers, as well as building two new hospitals and creating 14 temporary ones in public buildings. It also underscored the importance of coronavirus testing capacity, which local authorities say was expanded from 200 tests a day in late January to 7,000 daily by mid-February.

The steps went beyond what's envisioned in many hard-hit Western cities. As a

Please turn to page A8



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U.S. NEWS

States Struggle to Handle Record Unemployment Claims

Letter From the Editor

To Our Readers:

I hope all of you are safe and secure during this extraordinary period. The continuing spread of the new coronavirus and the widening economic fallout are creating sudden and unexpected challenges and stresses for all of us. The weeks and months to come are certain to bring new complications; it is hard to remember a time in recent history when there was so much uncertainty around so many significant issues.

Here at The Wall Street Journal, our global team of journalists continues to work to cover all aspects of this story and bring you insight, clarity, intelligence and depth. Like most of you, our staff has gone remote across the globe. But we recognize that the relevance and necessity of reliable facts and insight are heightened at this time of crisis, and all of us are committed to helping you navigate this moment.

This story touches every area of our coverage. Our journalists are posting breaking news and stories on all aspects of the virus all day on WSJ.com, from the course of the disease to the financial im-

pact, from how companies are responding to how it looks in different countries, from the politics to the best advice on managing through this. Our live coverage page is regularly updated with breaking news, and you can receive updates as well through emailed newsletters; visit wsj.com/newsletters for more information. Our daily podcast, The Journal, is also focusing on the crisis with important interviews and information; you can find it at wsj.com/podcasts.

An important reminder: We're also pleased to offer all members a first look at the day's paper in your email inbox with Today's Print Edition newsletter. This means you can see your print paper even if service is disrupted for any reason. Please sign up at wsj.com/digitalpaper.

Challenging moments like this one do help us focus on the things that matter most. For The Wall Street Journal that has meant a rededication to our mission of bringing you the news you need. We are honored to serve you and grateful for your support. It is a dark moment just now, but this will end, and we will be there with you on the journey.

Sincerely,
Matt Murray
Editor in Chief

By SARAH CHANEY
AND ERIC MORATH

Americans are waiting anxiously for unemployment benefits as state unemployment systems adjust to record-high levels of claims in the wake of the new coronavirus.

States say they are waiving waiting periods for accruing benefits and bulking up with staff to field calls and quickly process claims. But the unemployment-insurance system wasn't designed to move as quickly as the coronavirus is knocking the U.S. labor market off course.

"States are at a historically low level of administrative funding, but processing a historically high level of claims," said Michele Evermore, policy analyst at the National Employment Law Project, which advocates for lower-wage workers. "There are mechanisms to staff up quickly, but it's never smooth, easy or perfect."

Economists surveyed by The Wall Street Journal estimated that 1.5 million new jobless claims were filed last week. The U.S. Labor Department will release a national compilation of claims on Thursday. The highest number of new claims on

record is 695,000 filed in the week ended Oct. 2, 1982.

Georgia's labor department website tells applicants to expect to wait. "Due to an extremely high volume of unemployment claims filed as a result of the Covid-19 outbreak, individuals may experience a delay in requesting weekly benefit payments," the website said Monday afternoon.

Ohio's call center and website to register for unemployment benefits experienced hiccups earlier on Monday.

"This system was not built for a crisis," said Ohio Lt. Gov. Jon Husted at a news conference. "It was built to take care of what we could expect on a regular or even robust basis."

Tunc Samli, 46 years old, was laid off in early March from a Washington, D.C., company that arranges passports and visas for corporate clients. He tried every day last week to apply for unemployment benefits on the district's website but the site would crash.

On Monday, he waited on hold for two hours trying to reach someone at the Department of Employment Services, but no one answered. "That's a

frustration," he said. "I'm waiting and no one is answering, and I need information."

Washington Mayor Muriel Bowser said at a news conference Tuesday that those calling for claims assistance are likely to experience long hold times. The city's claims website works on computers, but not on cell-phones, frustrating users.

Kelly Medina, 57, applied for unemployment benefits in Colo-

rer," he said. But added, "there's nobody hiring right now."

Colorado residents who successfully submitted their claim online early last week should receive a benefit payment this week, a spokeswoman for Colorado's labor department said.

On Monday, Colorado's labor department added 90 staff members to the customer call center and plans to add more.

The federal government and states should look at promoting lesser-known programs in the unemployment insurance system as a way to mitigate the impact of the coronavirus pandemic on workers, said Katharine Abraham, a University of Maryland labor economist and former economic adviser to President Obama.

In 26 states, covering about 70% of the workforce, states can pay unemployment insurance benefits to two workers who share a full-time job by each working part time. The concept is common in Europe but little used in the U.S. At the end of February, 11,564 workers received work-share benefits, versus 2.1 million in regular state programs that typically require a person to be laid off before accessing jobless payments.

'This system was not built for a crisis,' Ohio's lieutenant governor said.

rado last week when the coronavirus shut down the restaurant where he worked. As he understood it, it would take four to six weeks to receive his first unemployment check, and he didn't see any guidance from Colorado's labor department that the waiting period to receive benefits would be shortened.

"If it takes too long, maybe I need to look for a different ca-

U.S. WATCH

PENTAGON

Jedi Review Tainted, Amazon Alleges

Amazon.com Inc. accused the Pentagon of seeking to manipulate its review of a huge cloud-computing deal to steer the award to rival Microsoft Corp.

Amazon urged a federal judge on Tuesday to require the Defense Department to conduct a broader review than it has proposed.

The judge already halted work on the Joint Enterprise Defense Infrastructure, or Jedi, citing allegations by Amazon of contract irregularities. In response, the Pentagon sought a halt to temporary court proceedings, saying it needed time to rethink certain aspects of the project.

The Pentagon last year awarded the contract, expected to be worth up to \$10 billion over a decade, to Microsoft—triggering the lawsuit by Amazon challenging the decision.

Amazon contends the decision to award the contract to Microsoft was tainted by political influence from President Trump.

A Pentagon spokesman said the department believes the award to Microsoft was based on a fair and unbiased process, and disagrees with Amazon's arguments. "Our goal remains to get this much-needed capability to the warfighter as quickly as possible, in compliance with the law and the court," said Lt. Col. Robert Carver.

—John D. McKinnon

NEW YORK

Cohen's Bid for Early Release Is Rejected

A former personal lawyer for President Trump was denied early release from a three-year prison sentence Tuesday after he pleaded guilty to numerous charges, including campaign finance fraud and lying to Congress.

U.S. District Judge William H. Pauley III said it seemed Michael Cohen's request for release to home confinement after serving 10 months in prison "appears to be just another effort to inject himself into the news cycle."

The judge noted that Mr. Cohen raised the danger of getting the coronavirus in prison as the latest reason why he believed he was entitled to a reduced sentence.

—Associated Press

ARIZONA

Court Upholds Arias Murder Conviction

The Arizona Court of Appeals on Tuesday upheld Jodi Arias's first-degree murder conviction and life prison sentence in the 2008 killing of her former boyfriend.

Ms. Arias's lawyers had argued that a prosecutor's misconduct and a judge's failure to control news coverage during the case deprived her of the right to a fair trial. Ms. Arias was convicted of killing ex-boyfriend Travis Alexander. She has acknowledged killing Mr. Alexander but claimed she acted in self-defense.

—Associated Press



Musicians played Dave Matthews Band's 'The Space Between' at Solstice Canyon; below, Cherie Melos with her partner—and tape measure—at a post-hike tailgate at Colby Canyon.

Hikers Fill California Trails

Continued from Page One
country are struggling to balance the need for separation with the need for escape and exercise. Managing this in L.A. is especially tricky: life in the sprawling city revolves around its trails and beaches.

Mayor Garcetti's admonitions confused Matthew Lurie, who celebrated his 40th birthday with a hike and picnic at L.A.'s Griffith Park on Saturday afternoon. "It's a little weird because Garcetti was like 'please go out and hike but don't go to the gym,' and there was this sort of like 'tisk-tisk' announcement," he said.

"There's a little bit of lack of explicitness," he said. "Can you go hike as long as there's not too many people? And who's keeping track of that?"

On Saturday, Mr. Lurie had packed a lunch from his favorite local Armenian bakery and



a nearby Guatemalan restaurant, making sure everything was individually wrapped. He wore gloves while serving the three people who showed up. Everyone was spaced out, he said, although they "weren't technically 6 feet apart" the whole time.

At Runyon Canyon, one of the most popular Los Angeles

parks, with a trailhead in the heart of Hollywood, foot traffic was so heavy residents took to Twitter calling for the park's closure.

By Monday morning, tips were attached to the entry gate calling for social distancing, advising hikers to "refrain from petting other people's dogs" and "slowdown or speed up to create space."

The Los Angeles Department of Recreation and Parks website now says all its facilities, including Runyon Canyon Park, are closed until further notice.

Hundreds of people made their way along the Solstice Canyon trails in the Santa Monica Mountains National Recreation Area in Malibu on Saturday, finding whatever space they could to park along windy roads leading in and out of the park's full parking lot.

Families with dogs, strollers and straggling children did their best to keep the recommended 6-foot distance from others—a difficult task along the narrowest stretches of trail.

Mihika Reddy, a 28-year-old engineer from North Hollywood, went hiking there with friends Roshane Maleknadani, 25, and Lynette To, 24. Along with supplies such as water

and snacks, Ms. Reddy brought a tape measure to ensure they kept the recommended distance apart.

"We're trying to do what we normally do," she said, "but with some separation."

In the crowded parking lot and steady line of hikers under a cloudless sky, the coronavirus pandemic was top of mind



for many. As of Sunday, California had reported 1,733 coronavirus cases and 27 deaths.

Wyatt Cole, 8, couldn't help touching a trailside sign describing the area, much to the dismay of his mom, Jane Cole. "I just gave you hand sanitizer," Ms. Cole said as she spotted her son at the sign. "Why are you touching that?"

She said he is used to hand cleaner, as she has been a frequent user since he was a baby. "So it's nothing different. But it's just so hard to find hand sanitizer these days that

I'm just trying to make sure he doesn't waste it."

Ms. Cole, a lawyer, said she and her family were doing their best to keep their distance from others, but with a crowded park it wasn't always easy. "We're just out trying to get some vitamin D," she said, "but it looks like everyone else had the same idea."

Ms. Cole later said the crowds on Saturday were too big to keep a safe distance, so they'll be looking for other outdoor exercises.

A group of musicians whose tours and other shows had been canceled hefted their instruments to the end of one trail to perform a rendition of Dave Matthews Band's "The Space Between."

Ari Herstand, a guitarist and singer, said it was a conceptual-art effort aimed at showing people can still be together while keeping their distance, "And this may be one of the last weekends to freely move around."

As the five-piece band set up, with hand sanitizer and a bottle of Lysol spray nearby, a small crowd of hikers gathered in a well-spaced semicircle to listen as Mr. Herstand began singing.

All five musicians wore masks.

Cherie Melos will probably heed the mayor and governor. She goes hiking in Southern California most Saturdays and this weekend went to Colby Canyon in the Angeles National Forest.

She estimated the crowd was 90% larger than usual. As people passed each other, one typically ran off the trail into a bush and faced the other way, she said.

She held her breath as other hikers passed by, she said. "I did not breathe their air and they did not breathe mine."

From now on, the 45-year-old Orange County resident said, she'll be doing yoga in her yard and hiking more in the high Sierra peaks "where we never see anyone."

—Anne Steele
contributed to this article.

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THE WALL STREET JOURNAL

(USPS 664-880) (Eastern Edition ISSN 0099-9660)
(Central Edition ISSN 1092-0935) (Western Edition ISSN 0193-2241)

Editorial and publication headquarters: 1211 Avenue of the Americas, New York, N.Y. 10036

Published daily except Sundays and general legal holidays.
Periodicals postage paid at New York, N.Y., and other mailing offices.

Postmaster: Send address changes to The Wall Street Journal,
200 Burnett Rd., Chicopee, MA 01020.

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U.S. NEWS

States Say Curbs on Procedures Include Abortions

BY BRENT KENDALL AND ELIZABETH FINDELL

A pair of states are saying their coronavirus restrictions on some medical procedures compel providers to stop performing most abortions, setting up new skirmishes on the issue at a time of national crisis.

Governors across the U.S. are ordering elective and non-essential medical procedures be postponed to preserve personal-protective equipment, such as masks and gloves, and critical-care resources for medical workers and facilities responding to the novel coronavirus pandemic.

Two states, Ohio and Texas, in recent days have said their restrictions apply to abortion.

"No one is exempt from the governor's executive order on medically unnecessary surgeries and procedures, including abortion providers," Texas Attorney General Ken Paxton, a Republican, said Monday.

Mr. Paxton said restrictions apply to "any type of abortion that is not medically necessary to preserve the life or health of the mother." Failure to comply could bring financial penalties and jail time, he said.

Whole Woman's Health was forced to close all its clinics and cancel more than 150 procedures, a spokeswoman said.

Linda Shafer, administrator of Aaron Women's Center in Houston, said she had 60 to 70 appointments for this week.

"They start crying and become hysterical," she said of each canceled appointment. "They're going to end up having children that they can't feed. Many of our patients are right at the end of the line where they can't do it after this week or next week."

Abortion-rights advocates, clinics and their legal advisers were still sorting out the impact of the Texas measure, but decried using a public-health emergency to halt abortions.

"All abortions are medically necessary...and time sensitive," said Denise Rodriguez, a spokeswoman for Texas Equal Access Fund, which gives financial assistance to women seeking abortions.

Under Supreme Court precedent, states have latitude to impose some abortion restric-

Ohio and Texas said restrictions amid the coronavirus crisis apply to abortion.

tions, so long as the measures don't place an undue burden on a woman's constitutional right to obtain the procedure. State efforts that impose wholesale limitations on obtaining abortions, especially in the first trimester, have been found to violate that test.

Courts, however, could be in uncharted territory if asked to consider how the undue-burden framework applies amid declarations of emergencies.

In Ohio, the office of state Attorney General Dave Yost, a Republican, recently sent letters that ordered abortion clinics "to immediately stop performing nonessential and elective surgical abortions." Ohio defined nonessential procedures as "those that can be delayed without undue risk to the current or future health of a patient."

Abortions are being performed, however, as providers like Planned Parenthood have deemed them essential. Under Ohio's order, "Planned Parenthood can still continue providing essential procedures, including surgical abortion, and our health centers continue to offer other health care services," the group said.

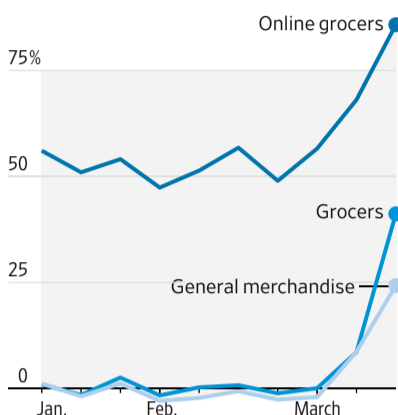
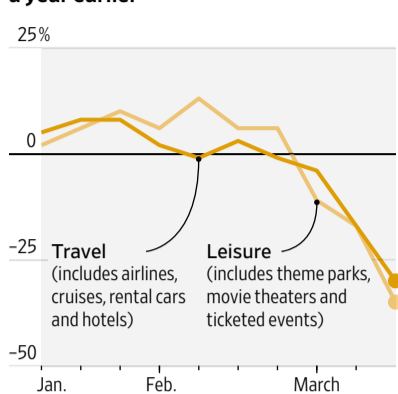
Antiabortion groups say clinics are flouting the emergency directives. "As hospitals struggle to provide care, find supplies to protect doctors, nurses, patients, and other hospital personnel, abortion clinics are endangering staff and patients in those same communities," said Carol Tobias, president of National Right to Life.

—Jess Bravin contributed to this article.

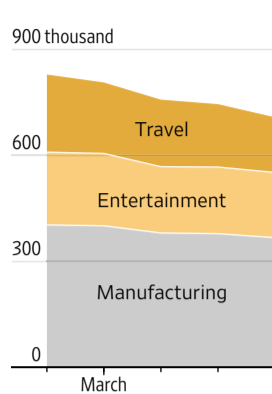
Tourism and Travel Slide While Essentials Take Off

Sectors that rely on Americans' going out have seen sales tumble, while sales of everyday essentials, such as groceries, have surged in the past month. For individual sectors, this means deep declines for restaurants and hotels. Meanwhile, low interest rates and remote work have boosted mortgages and teleconferencing.

Change in sales from same week a year earlier



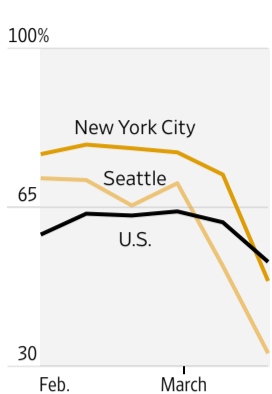
Job postings, weekly



Weekly online visitors



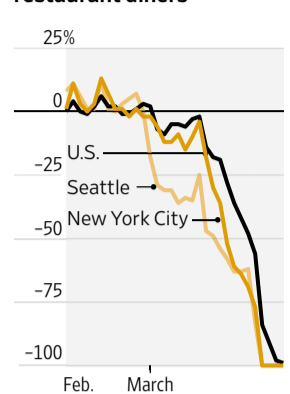
Hotel occupancy rates



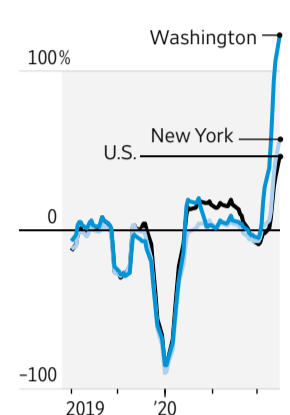
Composite indexes of mortgage applications



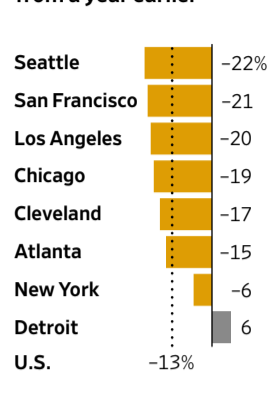
Change in number of seated restaurant diners



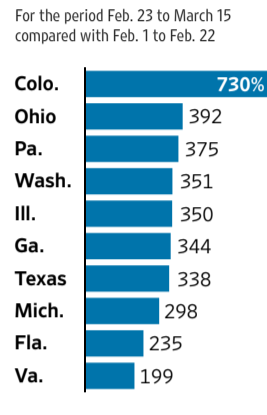
Change in weekday online meeting minutes, by state



Change in new auto sales from a year earlier



Change in ammunition sales on Ammo.com



Note: Change in sales based on credit and debit card records. Change in restaurant diners is online reservations, phone reservations and walk-ins compared to the same day a year earlier. Auto sales are for March 1-15. Online meeting time is compared to October 1-31 weekday average. Location for ammo sales is based on browser location.

Source: Earnest Research (change in sales), ZipRecruiter (job postings), OpenTable (diners), STR (occupancies), J.D. Power (autos), ComScore (online visitors), Mortgage Bankers Association (mortgages), BlueJeans (online meetings), Ammo.com (ammunition)

Gwynn Guilford and Danny Dougherty/THE WALL STREET JOURNAL

What Sells, or Doesn't, in a Crisis

BY GWYNN GUILFORD

U.S. household-consumption patterns have gone haywire during the early stages of the global coronavirus health crisis.

A Wall Street Journal analysis of high-frequency data from a range of U.S. industries showed sharp declines in spending on hotels, restaurants, airlines and other travel, while spending boomed in other areas including groceries, general merchandise stores, gun and ammunition shops and marijuana suppliers. Mortgage applications surged as interest rates dropped, new-car sales in many cities fell and consumers quickly grew reluctant to buy big-ticket household items.

The data suggest that while overall consumer spending is likely sinking sharply, this is happening unevenly.

Consumers are a critical engine of the global economy, providing more than two-thirds of demand for all U.S. economic output, in addition to demand for production and jobs at major U.S. trading partners including China and Mexico.

Spending patterns will surely change as the shock plays out. Here is a look at how spending changed in the first few weeks of March.

THE HARDEST-HIT

In some industries, the hit from coronavirus has been quick and devastating.

Dining's Dive: Well before several big cities began ordering millions of people to stay home, visits to restaurants in Seattle and San Francisco began tanking, according to data on reservations and walk-ins released by OpenTable, the restaurant booking app. By March 19, dining visits across the country through OpenTable had collapsed by 98%.

There are signs of resilience. Yelp, an online business directory and review site, noticed consumer interest in pizzerias and fresh-produce shops, while consumers shunned cafes, wineries and gelato shops.

Travel Plunge: Travel and leisure suffered an abrupt collapse. Hotel occupancy in Seattle collapsed from 70% in late February to 33% two weeks later, according to STR, a hotel-research firm.

Leisure Lost: Spending on leisure—activities such as theme parks, movie theaters and other ticketed events—dropped in late February, and was down 35% on an annual basis as of March 13, reports Earnest Research.

Job Listings Vanish: ZipRecruiter, an online jobs marketplace, has registered a slide in job listings. A decline that began four or five weeks ago in travel has more recently spread to tourism, manufacturing, sports and recreation.

SURGES

In other sectors, the coronavirus pandemic has induced a consumer frenzy.

Grocery Stocking: As the outbreak worsened in major cities, shoppers stocked up on groceries, sending sales—both online

and offline—sharply higher, according to Earnest Research.

Online News, Shopping Booms: Web traffic to retailers Amazon, Target, and Walmart climbed in March, too, according to Comscore. With audiences holed up at home and seeking information, news viewership and, in particular, online news consumption are sharply growing.

Virtual Meetings: The number of companies temporarily shutting offices and directing employees to work from home is likely behind the jump in digital-conferencing activity. By March 16, average meeting minutes were up 47%, compared with the October 2019 average, according to BlueJeans, the videoconferencing platform.

Weapon Gains: Ammunition sales and the share prices of major gun manufacturers rose in March as the crisis took hold in the U.S. Yelp reported a 360% uptick in consumer interest in gun and ammunition stores in recent weeks. As the S&P 500

has fallen, share prices of gun makers have risen.

Cannabis: Consumers are turning to cannabis too, according to data from Weedmaps, the nation's largest legal cannabis marketing platform. On March 19, Weedmaps' Travis Rexroad said the site's users placed a record number of orders on the platform, surpassing sales volume booked last year on April 20, an unofficial day of cannabis celebration.

BIG TICKETS

Housing Finance: As the economic outlook darkened, a sharp slide in mortgage rates sent homeowners scrambling to refinance, according to the Mortgage Bankers Association indexes of borrowing activity. Online lending site Better.com had around 27,000 mortgage applications in the first 18 days of March, compared with 18,000 in February and 4,500 in March a year ago.

Despite the refi bonanza, the outlook for the industry as a

whole may be less rosy. **Redfin**, an online real-estate brokerage, said demand has weakened markedly in recent weeks at a national level.

Car Curbs: Sales of new autos declined this month. J.D. Power, the auto-industry research company, reported a 13% slump in auto sales as of March 15, compared with the same period in 2019. Before the coronavirus outbreak, the company had expected a decline of about 4%.

Sharper drops in Seattle and other cities at the front lines of the pandemic suggest that bigger declines may yet come.

No New Sofa: A daily survey conducted by Morning Consult, a data intelligence firm, has registered an sharp uptick in respondents saying now is a bad time to buy major household items such as furniture or appliances.

—Jon Hilsenrath contributed to this article.

◆ New e-commerce winners emerge with crisis..... B1



Grocery stores are among the places American consumers have been spending during the crisis. Here, a shopper in Oklahoma City.

SUE OGORICH/ASSOCIATED PRESS

Gun Industry Presses to Keep Shops Open

The firearms industry is lobbying state and federal officials to have gun stores be categorized as essential businesses

By Zusha Elinson in San Francisco and Jess Bravin in Washington

that are allowed to remain open during the nationwide shutdowns meant to slow the spread of the coronavirus.

Business has boomed for the industry in the past week, with long lines stretching outside gun stores across the country. On March 16, background checks were up 300% compared with the same day last year, according to federal data shared

with the National Shooting Sports Foundation, the firearms industry association. The total number of checks since Feb. 23 is twice as high as in the same period in 2019.

The rush for guns is colliding with orders from state and local governments to close up shop. Several states that issued shutdown orders, including California, New Jersey, New York and Pennsylvania, didn't include gun stores among the essential businesses that can stay open, such as grocery stores, pharmacies and gas stations.

The NSSF last week began to press the White House, the Department of Homeland Security, governors and local offi-

cials to classify gun and ammunition dealers and manufacturers as essential businesses that must remain open, said Lawrence Keane, the organization's senior vice president for government and public affairs.

"This is exactly when the Second Amendment right is most important, because people are concerned about the safety of their families, their property and their businesses," said Mr. Keane.

Authorities in places like San Jose and Castro Valley, Calif., ordered stores to close last week after they initially refused to shut their doors.

"Since we don't live in the Wild West, where people are

dependent on guns for food, and we do have a well-functioning police department, it would be hard to articulate a basis for arguing that a gun shop would be an essential service," said San Jose Mayor Sam Liccardo.

Some states have kept gun stores open while ordering other businesses to close, including Ohio, Kentucky, Illinois and Connecticut. The latter two states have Democratic governors who have supported gun control.

Gun makers with defense and police contracts are already among the sectors considered essential to stay open by the federal government. Mr. Keane argued in a letter to the

Department of Homeland Security on Friday that the "critical infrastructure" designation should be extended to the whole industry, including dealers and shooting ranges.

A DHS representative didn't respond to a request for comment.

David Chipman, senior policy adviser with the Giffords Law Center to Prevent Gun Violence, a gun-control group, said there are risks on both sides. More Americans bringing guns into their homes for the first time without training at a time of heightened anxiety could be dangerous, he said, but closing down stores could push more sales to the black market or unregulated private transactions.

THE CORONAVIRUS PANDEMIC

Antsy Americans Hunker Down at Home

By JENNIFER LEVITZ AND KRIS MAHER

State by state, America is locking down its residents, as more officials urge people to fight the spread of the novel coronavirus by limiting their interactions with the world outside of their homes.

Jeff Binder and his wife decided that starting Monday no visitors would be allowed into their house in Webster Groves, Mo., with even limits on extended family. That came as St. Louis County, where they live, joined the growing list of municipalities flat-out ordering residents to stay home.

sure," said Mr. Binder, who is 51 years old and the managing director of a real-estate brokerage firm for senior housing. But he calls the lockdown a necessary step: "Whatever it takes to get us to the other side."

Indiana, Michigan and Oregon on Monday announced orders to stay home other than for essential business, joining other states, including hard-hit New York and California, in enacting far-reaching measures to curb daily life. Massachusetts' governor advised people to stay indoors, while Pennsylvania Gov. Tom Wolf imposed a lockdown in Pittsburgh and eastern counties, ordering people to stay home "unless someone's life de-

depends on leaving." Philadelphia is under a stay-at-home order.

The orders vary from place to place, causing some confusion. North Carolina hasn't ordered residents to stay at home, but Tonya Palumbo, a 41-year-old photographer in Holly Springs, said it would be easier if that happened.

"It's time to shut things down and bring everybody to the same level," she said.

Tension also is building between citizens who are following the directives to stay home or 6 feet from others, and those who aren't.

In Carlsbad, Calif., Peter Meade, who runs a public-relations business with his wife,

Sue Hetzel, has been staying in with his family under a shelter-at-home order in that state. He decided to use some of his downtime to write postcards to people with whom he had lost touch and drove to a mailbox Sunday, cruising by the beach on his way home. It was crowded, and people were close to one another, he said.

"Are these people crazy?" he said. "I understand. We are stir crazy, everyone is stir crazy. But what I saw, I thought was irresponsibility."

Carlsbad Mayor Matt Hall said local officials have been asking the state, which owns most of the beaches, to mandate beach closures.

Farther north in Westlake Village, Bruce Beck is taking the shelter-in-place order seriously, particularly since he and his wife are considered among those at a higher risk. He is 66 years old, and she is 65 with an autoimmune condition. He said it hasn't been easy. He worries about his family and turns the TV off to get away from constant news about the pandemic.

"I feel as if I'm living in a disaster movie," he said.

The new ranks of the home-bound citizenry describe a stew of feelings: resolve at doing their part, assurance in having clear directives—and a burgeoning ingenuity, as necessity forces people to find ways to

fill the time and stay connected. Mr. Beck said he and his wife, Robin, are both "social animals" and have celebrated happy hour with friends via teleconference. They often FaceTime with their grown children, who worry about coming home and possibly infecting them.

But beneath the novelty, camaraderie and memes, an anxiety simmers: When will we go out freely again, and what will the world look like?

"I fear that things will be permanently changed," said Molly Tolsky, who is 33 and lives in Brooklyn, N.Y.

—Jim Carlton and Deepa Seetharaman contributed to this article.

New York Travelers' Risk Eyed

Continued from Page One in recent days. Overall, the U.S. surpassed 55,000 confirmed cases Tuesday.

President Trump said in a Fox News town hall that he hopes to have the country reopened in just over two weeks, by Easter, a timeline that is earlier than what many public-health experts have recommended.

World-wide cases surpassed 422,500 Tuesday and more than 18,900 people have died of Covid-19, the pneumonialike disease caused by the virus, according to data from Johns Hopkins University. About 108,000 people infected with the virus have since recovered.

With more than 25,000 cases, New York has emerged as the epicenter of the crisis nationwide with the highest and fastest rate of infection, Gov. Andrew Cuomo said Tuesday. Infections are doubling every three days, the governor said, and the state expects its peak in these cases in two weeks. New York City hospitals are already straining to keep up with a surge of patients. Officials have sought to increase hospital capacity, including turning Manhattan's Javits Center into a makeshift hospital, and find additional staff, like retired doctors.

"I will turn this state upside down to get this number of beds that we need," Mr. Cuomo said, adding that the state's 53,000 beds fell drastically short of the estimated 140,000 beds needed.

The Federal Emergency Management Agency on Tuesday shipped 2,000 ventilators to New York from the national stockpile and plans to send another 2,000 on Wednesday, Mr. Pence said on Fox News.

His comments came after Mr. Cuomo criticized the federal government for not shipping more ventilators, reflecting a rise in partisan tensions.

"You want a pat on the back for sending 400 ventilators," the New York governor said. "What are we going to do with 400 ventilators when we need



Emergency medical technicians helped a patient who has the new coronavirus into an ambulance in New York City on Tuesday.

Coronavirus Daily Update

As of 10:49 p.m. ET March 24

55,041 U.S. cases

790 U.S. deaths

422,652 World-wide cases

18,901 World-wide deaths

108,349 World-wide recoveries

Source: Johns Hopkins Center for Systems Science and Engineering

30,000 ventilators? You're missing the magnitude of the problem, and the problem is defined by the magnitude."

Nearly 800 people have died in the U.S. due to the coronavirus, including Terrence McNally, the Tony Award-winning playwright known for plays and musicals like "Master Class" and "Ragtime." He died Tuesday in Sarasota, Fla., at age 81.

In the Los Angeles suburb of Lancaster, a teenager became the first known American under 18 to die from Covid-19 on Monday, according to local officials. Los Angeles Mayor Eric Garcetti said the teen didn't have any previous health conditions.

A 31-year-old man in New Jersey became the first immi-

grant in the custody of U.S. Immigration and Customs Enforcement to test positive for the new coronavirus, one day after a federal court ordered a man held in Washington state who was at risk of contracting the virus to be released from detention.

Immigration advocates have been calling on the Trump administration to release immigrants with no criminal histories, expressing concern that the virus could spread quickly through crowded ICE facilities if one detainee becomes infected.

The number of coronavirus cases in the U.S. is now the highest of any country except China and Italy, according to Johns Hopkins University.

Though New York has reported at least 20,000 more

cases than any other U.S. state, Mr. Cuomo warned other states of what could come.

"New York is the canary in the coal mine," he said. Several U.S. states urged residents Monday to stay home.

On Tuesday, Washington, D.C., Mayor Muriel Bowser said she would close nonessential businesses in the district. Yellowstone and Grand Teton national parks will also close until further notice. Some local communities have discouraged people from visiting national parks, in an attempt to prevent the spread of the virus in nearby small towns.

The Trump administration was set to use the Defense Production Act for the first time amid the coronavirus pandemic to procure about 60,000

test kits, but at the last minute deemed it unnecessary, despite mounting calls for Mr. Trump to use the law to resolve severe equipment shortages.

Health-care workers around the country continue to face a critical shortage of medical supplies, including masks, ventilators and other equipment. Mr. Trump issued an executive order earlier this month invoking the Korean War-era law, which gives the president the power to require businesses to produce goods tied to defense, among other actions. The president has resisted calls to use it, expressing his concerns about nationalizing U.S. businesses.

Meanwhile, Mr. Trump telephoned South Korean President Moon Jae-in to ask if South Korea could send medical equipment to the U.S. to help these efforts.

The request came as the State Department said it has asked U.S. missions to scour the world for sources of medical and protective supplies and to determine which countries have extra capacity to manufacture and export supplies.

—Wenxin Fan and Giovanni Legorano contributed to this article.

President Wants U.S. To Reopen Quickly

WASHINGTON—President Trump said he hopes to have the country reopened in just over two weeks, much sooner than what many public-health experts have recommended to help contain the coronavirus pandemic.

By Rebecca Ballhaus, Stephanie Armour and Alex Leary

"I would love to have the country opened up and just raring to go by Easter," Mr. Trump said on a Fox News town hall filmed in the White House Rose Garden on Tuesday. Easter falls on April 12.

He said that once the 15-day period in which the government has urged Americans to practice social distancing ends next week, "we'll stay a little bit longer than that," but that he wants the effective shutdown of the country to end "very soon." He said Americans could continue to practice some form of social distancing while also going back to work.

In a second Fox News interview on Tuesday, Mr. Trump said he was concerned that keeping the U.S. shut down longer would make it more difficult for the economy to bounce back.

Mr. Trump's comments marked the extension of a complicated debate, both inside and outside the White House, over how to balance the public-health benefits of coronavirus restrictions against the broad economic pain those measures are causing.

The president has been pushed by advisers and business leaders to boost an economy beset by deepening job losses nationwide as state and local governments have directed people to stay home, people familiar with the discussions said. Financial markets have taken a steep dive in recent weeks. Unemployment claims, which are reported Thursday, are expected to have soared.

Among those who have pressed Mr. Trump to get the economy running are Treasury Secretary Steven Mnuchin and Domestic Policy Council director Joe Grogan, people familiar with discussions said.

Other aides, particularly public-health advisers, have cautioned Mr. Trump against easing the guidelines.

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, said in an interview on NBC on Friday that it would be at least several weeks before the coronavirus outbreak in the U.S. begins to abate. "I cannot see that all of a sudden, next week or two weeks from now it's going to be over," he said.

Other public-health experts have also called for greater caution. More than 130 million Americans are being urged by cities and states to stay at home.

Marc Short, the vice president's chief of staff, said Tuesday afternoon that it was a goal to reopen the country by Easter, but that the president would "continue to take counsel from his health-care experts on that."

"I don't think it should be interpreted necessarily as you know, one day we're on stop sign, the next day we're on a green light," he said. "There's a lot of different ways to do transition phases to get to that point."

Workers, Businesses to Soon Feel Economic Pinch

By JUSTIN LAHART

The American economy is in a race against time.

With measures to halt the spread of the virus intensifying, the U.S. is embarking on its sharpest downturn since at least the end of World War II. The states where nonessential businesses are shut down account for more than 40% of U.S. gross domestic product.

Many of those workers and businesses will face severe constraints quickly, surveys suggest. In two weeks time—the period of a typical paycheck—many workers will struggle to make ends meet. After a month, more than half of them could be in trouble. At that point, a fifth of small businesses with lost sales could be on the brink.

The stimulus the Federal Reserve announced will help. So would the fiscal spending package from Congress.

For the economy, the most important questions are how soon help will arrive, how ample it will eventually be and, above all, how long the coronavirus crisis will last. Between the big stimulus and plans by lenders to extend loans or offer grace periods on payments, consumers

and businesses can manage a shutdown lasting several weeks.

Beyond that is uncharted territory. Most economists think the economy will shrink more than 10% in the second quarter, at an annual rate. But most are assuming that by the start of summer, the spread of the virus will have been contained and activity will begin to bounce back. That is no sure thing.

Small businesses, which account for about half of U.S. employment, according to the Small Business Administration, are among those most at risk. In a 2016 study, researchers at JPMorgan Chase Institute found that the median small business had a cash balance that would last just 27 days. Some were operating closer to the edge. The median retailer had a cash buffer that would last 19 days. The median restaurant's would last 16.

Many consumers can't last very long without a paycheck, either. In a survey conducted last year by research organization NORC at the University of Chicago, 31% of working adults said missing a single paycheck would mean that they couldn't cover necessities. An additional 20% said they couldn't miss

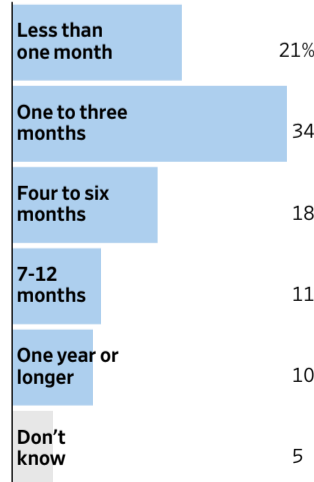
more than one paycheck.

Many households also carry substantial debt. This month, the Federal Reserve reported that overall household debt stood at a record \$16.1 trillion at the end of the quarter. While overall debt to income ratios are down, that is because mortgages have fallen since the financial crisis. Lower-income households, which are less likely to have mortgages, have higher levels of debt than before the crisis.

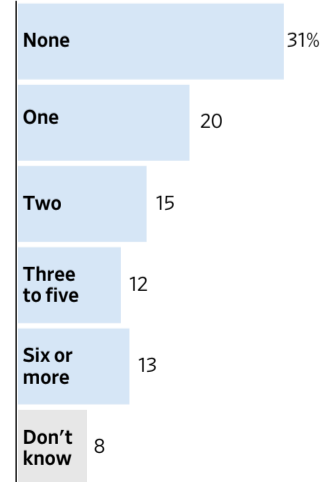
Industries employing low-wage workers play a big role in the economy. Food and beverage stores have seen a surge in sales and won't be affected by a shutdown. But they employed a seasonally adjusted 3.1 million workers as of February. Restaurants and bars, many of which have been ordered closed, employed 12.3 million.

Even a giant stimulus might not quickly temper the downturn because government payments could take significantly longer to arrive than the two weeks the Treasury Department has forecast. Evercore ISI strategists and former White House and Treasury officials Sarah Bianchi and Ernie Tedeschi suggest six weeks is more realistic.

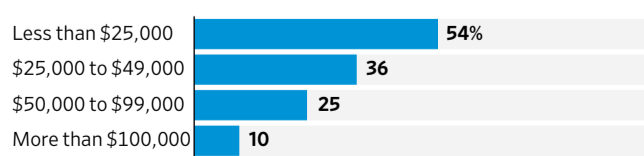
How long small businesses say they would survive if sales stopped completely



Number of paychecks workers can miss before dipping into savings



Share of people, by annual income, who say they couldn't come up with \$2,000 for an unexpected need within the next month.



Notes: Data don't add up to 100 due to rounding (businesses); missing responses (paychecks) Sources: Womply survey of 2,300 U.S. business owners in Sept.-Oct. 2018 (small businesses); NORC at the University of Chicago's online and phone survey of 1,010 respondents from Jan. 31-Feb. 4, 2019; m.o.e. +/- 4.29% (paychecks); TIAA Institute and George Washington University online survey of 1,008 U.S. adults in Jan. 2019 (cash for unexpected need)

THE CORONAVIRUS PANDEMIC

Test-Kit Mandate Was Nearly Issued

By REBECCA BALLHAUS AND ANDREW RESTUCCIA

WASHINGTON—The Trump administration was set to implement a Korean War-era defense mobilization law on Tuesday to expedite the production of test kits, but at the last minute deemed it unnecessary, in spite of mounting calls to use the law to resolve severe equipment shortages.

For much of the day, the administration sent conflicting signals on whether it was using the Defense Production Act. On CNN Tuesday morning, Federal Emergency Management Agency administrator Peter Gaynor said the law would be used to meet the demand.

Mr. Gaynor said the federal government was inserting Defense Production Act language into its mass contract for 500 million masks.

But President Trump, speaking Tuesday evening at a White House news conference, said the act hadn't been used, and the government hadn't "found it to be the case" that the law was needed.

Mr. Gaynor's comments surprised some in the White House, according to an administration official.

Shortly after the president's remarks, FEMA spokeswoman Lizzie Litzow said: "At the last minute we were able to procure the test kits from the private market without evoking the DPA." She said the Defense Production Act language in the mask contract was "still being worked through" and remained a possibility.

The back-and-forth caps days of confusion about the White House's position on the law.

Mr. Trump initially invoked the law last week in an executive order, but the administration stressed that he would only use it if companies weren't voluntarily stepping up to produce additional medical supplies.

On Friday, he was equivocal about whether he had used the law. "I invoked the Defense Production Act, and last night, we

put it into gear," he said, but declined to offer specifics. Over the weekend, Mr. Trump went back to his initial position, arguing that companies were taking unprecedented steps to produce masks and ventilators on their own—without government mandates.

On Tuesday at 8 a.m., Mr. Trump tweeted: "The Defense Production Act is in full force, but haven't had to use it." Minutes later, Mr. Gaynor made his comments about implementing the law. On Fox News that afternoon, Vice President Mike Pence suggested it wasn't necessary to invoke the law, saying companies were stepping forward voluntarily. And at a 5:45 p.m. briefing at the White House, the president said the government hadn't used the law.

Mr. Trump is said to be deeply resistant to using the law, according to people who have been briefed on the matter, because major business groups have warned that it could hurt companies.

Governors have called on the president to invoke the law to control production and distribution of critical supplies, saying states are having to compete against each other for equipment.

"Only the federal government has that power. Not to exercise that power is inexplicable to me," New York Gov. Andrew Cuomo said. "Voluntarism is nice, and it is a beautiful thing, and it's nice that these companies are coming forward and saying that they want to help. That is not going to get us there."

Some of Mr. Trump's advisers privately echoed concerns raised by outside business groups, such as the U.S. Chamber of Commerce, that using the law to mandate production of medical supplies could further harm the economy.

Health-care professionals have pleaded with the administration to use the act, pointing to the severe shortages in masks, respirators, gowns and diagnostic testing supplies.



White House Director of Legislative Affairs Eric Ueland said government aid to the airline industry was among the final issues.

Deal Is Expected on Stimulus

By ANDREW DUEHREN AND JOSHUA JAMERSON

WASHINGTON—Senate negotiators and the Trump administration worked to clear remaining hurdles for a deal on an estimated \$2 trillion stimulus package, a massive bill designed to shield the U.S. economy from the most drastic consequences of the coronavirus pandemic.

Stocks rallied on the news that a deal was near, with the Dow Jones Industrial Average surging more than 11%, its best day since 1933.

Lawmakers, administration officials, and aides said issues surrounding \$500 billion in industry assistance loans and expanded unemployment insurance had largely been resolved, leaving a narrow set of unresolved items left to agree to. Early in the day, some lawmakers predicted a deal was just hours away.

But Republican senators left an afternoon meeting with administration officials saying the process had been bogged down as both sides put agreed-upon concepts into writing. No deal emerged as negotiations continued past midnight.

Eric Ueland, the White House legislative affairs director, said that government aid

to the airline industry was among the final issues. "Some people have discussed loans, others have discussed grants. We continue to kind of work through that," Mr. Ueland said of aid for airlines.

The Senate could move to quickly vote on the package if an agreement is reached.

"I believe we're on the 5-yard line," Senate Majority Leader Mitch McConnell (R.,

President Trump, who attacked Democrats several times on Twitter during the negotiations Monday night, at one point asking whether the Democrats "want the virus to win."

The president on Tuesday morning said Congress "must approve the deal, without all of the nonsense, today."

Disagreements still slowed the progress of talks. In addition to differences in airline industry aid, Republicans and Democrats remained at odds on agricultural and food assistance, according to people familiar with the matter. House Speaker Nancy Pelosi (D., Calif.) said that she was concerned about the deal lacking an increase for the Supplemental Nutrition Assistance Program.

The two parties were also battling over funding for Customs and Border Protection and Immigration and Customs Enforcement as Democrats resisted GOP attempts to provide more money to the agencies.

Though Mrs. Pelosi introduced her own legislation on Monday, adding a possibly complicating factor to the talks, she had indicated she would review the eventual Senate agreement. Mr. Schumer said he was in touch with Mrs. Pelosi.

Mrs. Pelosi said Tuesday

that she was satisfied with the changes Senate Democrats had secured to the bill and predicted that the two sides could reach an agreement in hours.

She said that the House could approve the bill quickly by unanimous consent, though one lawmaker could object and slow down the process. Several House Republicans indicated that they may not agree to pass the bill unanimously, presenting a possible challenge to approving the eventual deal in the House.

The two sides were approaching an agreement on one of the primary remaining sticking points: oversight on \$500 billion that Republicans had proposed to allocate to aid distressed businesses. Democrats had sought controls on those funds, which include loans made directly by the Treasury Department and a backstop for losses in Federal Reserve lending facilities.

Mr. Mnuchin and Mr. Schumer had agreed on additional oversight of the funds, according to several people involved in the talks. A senior administration official and Mrs. Pelosi said the agreement would create an inspector general and an oversight board for the funds.

Hopes for Aid Bill Fuel Stocks

Continued from Page One
7417.86. All three indexes are still down at least 24% from their mid-February highs.

The rally continued overseas with Japan's Nikkei up 5.7% at midday Wednesday, while South Korea's Kospi was up 4%.

A string of emergency measures by the Federal Reserve to support credit markets and ensure funding for U.S. businesses and homeowners have also helped alleviate some of the most pressing concerns among investors.

At the same time, markets remain sensitive to reports of fresh outbreaks of the virus and the damage caused to the economy by measures to stem the contagion.

Speculation about the breadth and depth of an impending global recession continue to weigh on investors.

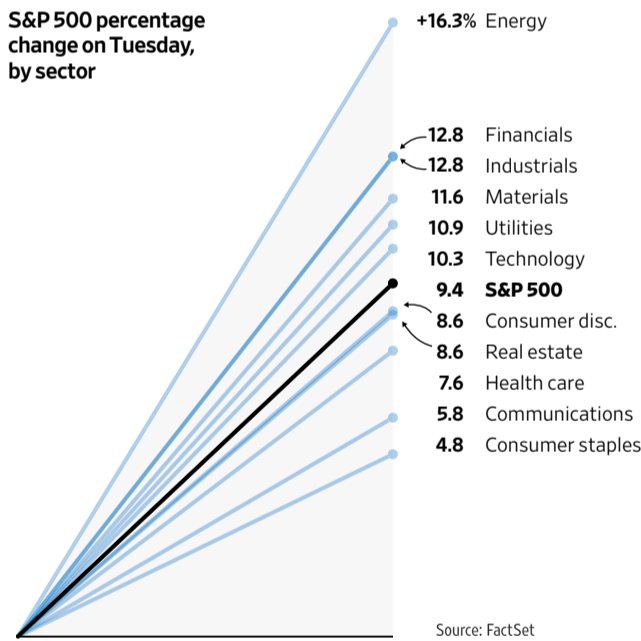
"This is classic bear-market moves," said David Coombs, head of multiasset investments at Rathbones Investment Management. "It doesn't feel like there's massive relief and confidence out there."

Some Wall Street analysts have stepped up discussions on whether the markets have hit bottom.

Credit Suisse said in a research note Tuesday that it expected the S&P 500 to hit 2700 by year's end, which would imply a 10% gain from where it closed Tuesday.

The key to such a bounce would be tangible progress in battling the coronavirus pandemic, the bank's analysts wrote. "Markets should quickly regain their footing once newly reported cases peak," they wrote. "While entirely necessary, government relief efforts alone will not be enough to establish a market floor."

Beaten-down energy stocks were the best-performing sector of the S&P 500. Shares of **Chevron** rose \$12.33, or 23%, to \$66.55, making it the best performer in the Dow, as the oil company said it would slash capital spending by \$4



billion to shore up its balance sheet amid a deep slump in oil prices.

Airlines, which are expected to benefit from the stimulus bill, were also among Tuesday's winners. Shares of **American Airlines Group** surged \$3.67, or 36%, to \$13.92, though they have still lost more than half their value this year.

Investors snapped up shares of restaurant chains, many of which have been forced to close their cafes. **Darden Restaurants**, owner of Olive Garden, soared \$12.86 a share, or 31%, to \$53.89. Shares of **McDonald's** jumped \$24.85, or 18%, to \$161.95.

Economic data have begun to show the extensive impact of the pandemic and sweeping lockdown measures that have curtailed business activity in the U.S. and abroad.

An indicator measuring U.S. manufacturing and services activity dropped at its steepest rate in over a decade. IHS Markit's flash reading for the U.S. Composite Output Index fell to 40.5 in March from 49.6 last month—its sharpest drop since October 2009 and a sign that the U.S. is likely already in a recession, the data provider said Tuesday.

March figures for the manufacturing and services sector in Germany and the eurozone also pointed to a contraction.

"It's an unprecedented medical emergency, which requires an unprecedented response from policy makers,"

said Florian Hense, an economist at Berenberg. "As we are trying to contain the medical emergency, we are trying to pull down economic activity. We are consciously, voluntarily pulling down economic activity."

Gold futures rose 5.9%—their best one-day performance since 2009—in a move that some investors saw as a return to normal market functioning.

The price of the precious metal usually rises in times of uncertainty. But last week it fell amid a broad selloff in assets as panicky investors dumped stocks, bonds and commodities in a rush for cash.

There are some early signs that the global measures to contain the virus are working, or at least helping flatten the rate of new infections, though that may change, investors said.

"It's still very early days," said Justin Onuekwusi, head of retail multiasset funds at Legal & General Investment Management. "There's a chance that once you get the arc down, the arc goes up again, and that's why the market isn't pricing that in."

The WSJ Dollar Index, which tracks the currency against a basket of others, fell 0.8%. On Monday, the gauge hit its highest closing level since 2002. Currencies including the euro, U.K. pound and Japanese yen strengthened against the dollar.



THE SECRET MUSE ANDREW WYETH



Revered artist. Legendary series. Beloved subject. This original watercolor by the master Andrew Wyeth hails from the artist's famed series, "The Helga Pictures." These images of his neighbor were composed in secret over a 15-year period, only being revealed in 1986. Today, they are regarded among the finest, most intimate works he ever composed, and this example is one of the very best. Signed (lower left). Circa 1973. Paper: 27 1/2" h x 21" w; Frame: 37" h x 30 5/8" w. #31-1282

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THE CORONAVIRUS PANDEMIC

Intensive-Care Bed Shortage Looms

The need for intensive-care beds for older Americans, the population hardest hit by Covid-19, may outstrip the supply in some regions of the U.S., a Wall Street Journal analysis shows.

By Tom McGinty, Mark Maremont and Melanie Evans

The Journal examined the number of beds in intensive-care units available for every 100,000 people aged 60 and older in 306 U.S. health regions. Although the national average is 116 ICU beds per 100,000 people 60 and older, nearly one in five regions have fewer than 75, and six have fewer than 50. The analysis was based on data from the Centers for Medicare and Medicaid Services and the U.S. Census Bureau.

New data from the Centers for Disease Control and Prevention show those 60 and older have so far accounted for about three-fifths of Covid-19 ICU patients in the U.S., while just one-fifth of the country's population is in that age group.

The Journal's analysis suggests that hospitals in some communities likely won't have enough beds available for the sickest patients of any age if the pandemic spreads more widely.

New York Gov. Andrew Cuomo said Tuesday morning that the state, currently the epicenter of the country's Covid-19 outbreak, soon could need 40,000 ICU beds given the trajectory of infections. "Those are troubling and astronomical numbers," he said.

The Journal analysis shows that the state has about 3,800 beds, or 96 per 100,000 older residents, putting it slightly below the national average. The Manhattan health region, which includes Brooklyn, Staten Island and part of Queens, had about 1,100 ICU beds before the crisis.

Areas ranking near the bottom in ICU beds per older resident in the Journal analysis include the Hackensack, N.J., Fort Myers, Fla., and Santa Cruz, Calif., regions.

"We are working nonstop to protect our elderly," said Florida's top hospital official, Mary Mayhew, secretary of the state's Agency for Health Care Administration. She said the state is working with hospitals to convert surgical beds to work as ICU beds, and has sent out guidance for hospitals to test every symptomatic elderly person to keep those infected from returning to senior homes.

Hospital association and state officials in New Jersey and California said expansion efforts would add thousands of beds overall.

The findings also show vulnerabilities in areas that have both low levels of ICU beds and higher levels of older people with underlying health conditions such as asthma and diabetes, which are associated with higher risk from the coronavirus.

Hackensack, currently a Covid-19 hot spot, had a higher rate of hospital visits for diabetes than 74% of the regions, but had just 64 ICU beds per 100,000 older residents, well below the national average.

The Binghamton, N.Y., region ranks well below the national average in ICU beds per older resident, but had a higher rate of hospital admissions for asthma and chronic obstructive pulmonary disease among 65-to-74-year-olds than 80% of all U.S. hospital regions.

A spike in coronavirus patients where too few ICU beds exist could result in otherwise preventable deaths among the elderly, health experts said. "It's pretty ominous," said David Wallace, a researcher on hospital capacity at the University of Pittsburgh and a physician in the transplant intensive-care unit at UPMC Montefiore, one of 42 hospitals operated by the Pittsburgh-based system.

Many hospitals are trying to expand numbers of ICU beds, clearing room for more critically ill patients by sending home those who can be cared for elsewhere and canceling procedures that can wait. State and federal aid efforts are also adding beds in tents and other temporary locations. Those factors could help address some of the shortcomings revealed by the Journal's analysis.

The CDC analyzed 2,449 Covid-19 patients with known age in the U.S. through March 16. Although many hospitalizations and ICU admissions in-



A nurse in the intensive-care unit of MedStar St. Mary's Hospital in Leonardtown, Md., above, checks the fits on protective gear. Hackensack, N.J., right, is currently a Covid-19 hot spot.

involved those younger than 55, the rates sharply increased with patient age, with a majority of ICU admissions and more than 80% of deaths among those 65 and older.

Using the CDC data, the Journal calculated that Covid-19 patients aged 60 and older were more than twice as likely to be admitted to the ICU than those in younger age groups.

Cities and states are racing to add hospital beds. California is moving to open as many as four temporary hospitals. Florida and Washington have appealed for federal aid for about 6,000 total additional beds, and New York City is converting nursing homes into hospitals, officials said.

A Harvard Global Health Institute data analysis released last week looked at several scenarios to estimate how hospitals in each of the U.S. health regions could cope with a surge of Covid-19 patients. It focused on all adults, while adjusting for likely higher admission rates for the elderly. The regions it showed might have the biggest shortfall in ICU capacity



were consistent with those in the Journal's analysis.

The Journal analysis used a broad definition for ICU beds, including units usually used for burn, surgical and coronary patients. The 306 health regions used by the Journal were created by the Dartmouth Atlas Project, which groups hospitals according to where their patients generally come from.

Several regions of Florida, home to a large elderly population, are among those with the fewest ICU beds per elderly resident, the Journal analysis showed. The most populous of those areas is Fort Myers, with about 470,000 residents over

60, and 268 ICU beds.

Lee Health, the largest hospital chain in the Fort Myers area, has 60 additional beds that could be converted to ICU-type beds, and "we are very confident of our ability to meet the needs of our community in these unprecedented times," a spokeswoman said.

The region around Santa Cruz, Calif., has 22 ICU beds serving an area with nearly 300,000 people, about 20% of them age 60 or older, giving it one of the lowest ICU-capacity rankings in the Journal analysis.

A spokeswoman for the largest hospital in the area, Dignity

Health Dominican Hospital, said it currently has the equipment and supplies to manage any Covid-19 patients, and is updating its "surge capacity policies" that could include triage tents, using other space inside the hospital or transferring patients to nearby health systems.

If the number of Covid-19 patients exceeds bed capacity, the hospital spokeswoman said, Santa Cruz County would be responsible for taking action in coordination with state and federal officials. A county health spokesman said it has a mobile hospital that could be deployed, "but nobody has adequate beds for this."

Seattle and New York hospitals already were nearing capacity over the weekend as cases surged, even after they moved aggressively to empty beds.

"Our ERs are full," said Rebecca Bartles, an epidemiologist and executive director of infection prevention for Providence, which has eight hospitals in the Seattle area. "Our beds are full."

The hospital system, one of the largest in the U.S., with 51 hospitals across seven states, prepared for an influx by clearing out entire hospital units to dedicate for treatment of coronavirus patients, she said. "That strategy was great, initially," she said. "But the demand is exceeding that as well."

Washington's outbreak is so far the deadliest in the U.S., with 35 of 74 total deaths in Seattle and King County tied to one nursing home. The Journal analysis shows ICU capacity in the Seattle area is close to the national average.

Despite the expected shortfalls, the U.S. has more ICU beds per capita than most other nations. The U.S. has about 78,000 beds, or 24 beds per 100,000 inhabitants of all ages, according to the Journal analysis. That compares with about 29.2 in Germany, 12.5 in Italy and 3.6 in China, according to academic studies.

Measures of beds don't account for how many beds are typically full, which can fluctuate by time of day or season, according to researchers and hospital executives. The Journal analysis showed that the average annual ICU-usage rate before the coronavirus struck was 64% in the U.S.

ICU patients in the U.S. stay an average of 3.3 days, according to a 2014 study. Covid-19 patients who survive often stay in the ICU for 20 to 25 days or more, said Paolo Pelosi, director of the intensive-care unit and anesthesia at a 1,600-bed hospital in Genoa in Italy, which has tripled its ICU capacity to cope with a surge of seriously ill people.

"When patients are admitted to the ICU, the duration is very long," Dr. Pelosi said, "and it is very difficult to discharge the patients."

New York's Hospitals Struggle To Staff Up

By MELANIE GRAYCE WEST

As New York City hospitals face a surge of patients with the novel coronavirus, they are being asked to double capacity for future weeks. How that additional capacity will be staffed is an open question for some health systems.

An emergency-room doctor in the NYU Langone Health system said some physicians have been too scared to come to the emergency department because they don't want to be exposed to the coronavirus. Some smaller tasks that could be offloaded haven't yet been transferred to nonemergency-care doctors, this person said.

"If these ER docs don't get any sort of breather, we are not going to be ready for the onslaught to come," the doctor said.

New York state has more than 25,000 confirmed cases of coronavirus, with more than 3,200 people hospitalized. Nearly one-quarter of those hospitalized are in an intensive-care unit.

Gov. Andrew Cuomo said Tuesday that the rate of infection in the state has doubled every three days, and he expects cases to peak in two weeks.

The governor has said the state is desperately trying to increase hospital capacity, even turning Manhattan's Javits Center, usually used for large conventions, into a makeshift hospital. He estimated the state could need as many as 140,000 beds, compared with the current 53,000.

Mr. Cuomo issued an emergency order on Monday mandating hospitals increase their capacity by 50%. He said he didn't think it was unreasonable for hospitals to try to reach 100%. "Once you secure the bed, you have to secure the staff," said Mr. Cuomo. "You are going to have staff that are getting sick and need to be replaced."

Mr. Cuomo and others have said one possible pipeline for additional staff is former doc-

Gov. Cuomo said he expects coronavirus cases in the state to peak in two weeks.

tors; he called on retired doctors to reach out to former employers and has said the state would fast-track certifications. Medical students could also be pressed into service, he said. New York City health officials are bringing on thousands of members of the Medical Reserve Corps, a volunteer group of former medical professionals.

Officials at some hospital systems are now rolling out their plans to shift staff. Employees at Bellevue Hospital, part of NYC Health + Hospitals system, are being asked to volunteer to take on more shifts and would be trained and directly supervised by specialists during each shift. The volunteers' work would include triage and assessment of respiratory conditions in patients and treating Covid-19 patients, according to an email viewed by The Wall Street Journal.

Students at Icahn School of Medicine at Mount Sinai are being trained and deployed to do nonpatient-facing tasks, including pharmacy support, helping with blood donations and telehealth services.

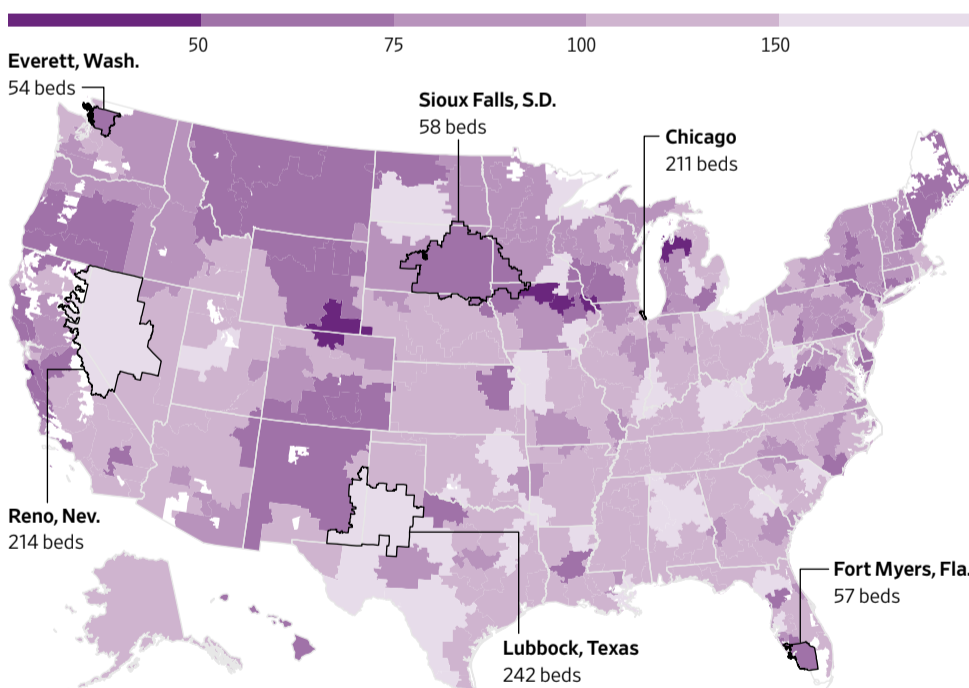
Hospital for Special Surgery in Manhattan has shifted nine of its nurses to the NewYork-Presbyterian system for a two-week shift, according to a spokeswoman. More will be deployed in the coming week, she said.

In an effort to unburden emergency departments throughout the NYU Langone Health system, virtual urgent care has increased from 50 patients daily to 1,000 patients, said Robert Femia, chair of the Ronald O. Perleman Department of Emergency Medicine. While overall volume of patients in the emergency departments is down, patients requiring mechanical ventilation is up, he said.

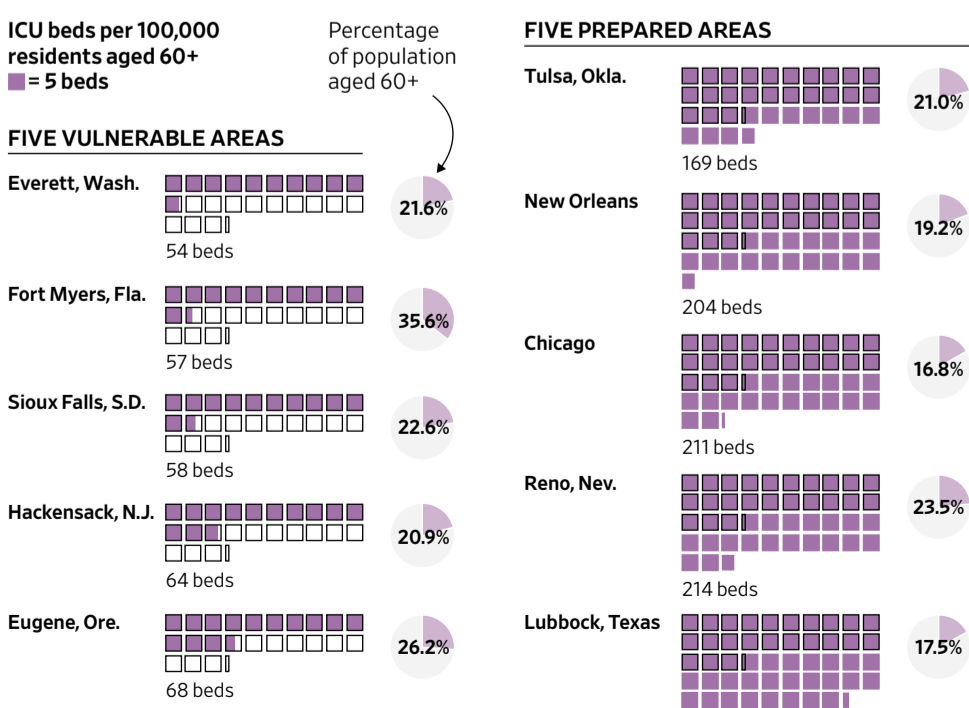
Critical Conditions

The average hospital region in the U.S. has 116 intensive-care beds per 100,000 residents who are aged 60 or older, but many regions fall well short of that mark.

ICU beds per 100,000 people aged 60 and older, by hospital referral region



These regions, each of which has at least a half million residents, show the wide variation in the number of ICU beds available to confront the Covid-19 pandemic.



Note: ICU bed counts include burn, surgical, and coronary intensive-care beds. Source: Wall Street Journal analysis of 2017 data from the Centers for Medicare and Medicaid Services and the U.S. Census Bureau

THE CORONAVIRUS PANDEMIC

Global AIDS Warrior on the Front Lines

Deborah Birx is a central player in the Trump administration's fight against the virus

By BRETT FORREST

Deborah Birx was leading an AIDS conference in Johannesburg on Feb. 27 when she received a call from the State Department summoning her to Washington to help combat a new disease that was about to change the way that all Americans lived.

In less than a month, Dr. Birx has become a central player in the Trump administration's fight against the pandemic and a mainstay in the coronavirus task force's public White House briefings, urging people to recognize the severity of the threat.

"Can we communicate effectively enough so that the American people take these guidelines seriously?" Dr. Birx asked in an interview with The Wall Street Journal. "Because that's the only thing that's going to change the course of this pandemic."

As the U.S. coronavirus response coordinator, Dr. Birx has been a regular presence at the White House, invariably wearing colorful scarfs that she said she has collected along her international travels and that are representative of

"the global community response that's needed now."

A global-health expert on immunology and vaccine research, Dr. Birx has spent decades combating the spread of HIV/AIDS. Since 2014, she has served as ambassador-at-large in the State Department as the U.S. global AIDS coordinator, managing an effort across multiple government departments.

"It's why they sought her out for this particular role," said Brian Honermann, the deputy director of public policy for Amfar, an AIDS research foundation, who has worked closely with Dr. Birx. "The ability to coordinate across different agencies."

Dr. Birx, 63 years old, grew up in Philadelphia and earned a medical degree at Pennsylvania State University. Her father was an electrical engineer, her mother a nursing professor—an apt background for a daughter who ultimately would apply mathematical models to public-health problems, using numbers to combat illness.

Dr. Birx served 20 years as an Army doctor, attaining a colonel's rank while working on immunology and vaccine research at the Pentagon and the National Institutes of Health. She led the military's HIV research program at Walter Reed Army Medical Center before leaving the service in 2005 to join the Centers for Disease



Deborah Birx, seen with Jerome Michael Adams, is an expert on immunology and vaccine research.

Control and Prevention.

The George W. Bush administration had recently established the President's Emergency Plan for AIDS Relief, or PEPFAR, to coordinate the aid and assistance that the U.S. government disbursed internationally to combat and contain the disease.

As the director of HIV/AIDS initiatives at CDC, Dr. Birx administered about half of PEPFAR's program, and in the process built a far-reaching network of global public-health officials.

"She's a very good manager,"

said Tom Frieden, who was CDC director from 2009 to 2017. "She's politically very savvy. She works hard. And she's very focused on achieving results."

In 2014, Dr. Birx effectively received a promotion when then-President Obama appointed her to lead PEPFAR as the fourth U.S. global AIDS coordinator. Still serving in that position, she oversees a budget of \$4 billion.

"She drives a hard program," Mr. Honermann said. "She expects outcomes. She has a vi-

sion of what needs to happen."

Dr. Birx is one of the few remaining Obama appointees in the Trump administration.

When the coronavirus appeared in China last year, Dr. Birx was particularly concerned about its possible spread, according to a senior coronavirus task force official. She had worked in that country during the SARS epidemic of 2002-03 and had witnessed the troubles it had wrought. She also realized that the subsequent increase in interna-

tional travel among upwardly mobile Chinese might exacerbate the scattering of this new virus, the official said.

After the virus jumped China's borders, Dr. Birx was in touch with officials on the newly formed White House coronavirus task force.

The task force, then led by Health and Human Services Secretary Alex Azar, was charged with developing the administration's program to mitigate the spread of the virus. Dr. Birx began feeding general epidemics and modeling data to her colleagues to assist the effort, the task force official said.

As the epidemic began to take root in the U.S., President Trump installed Vice President Mike Pence to lead the task force. Dr. Birx was quickly on a plane from Africa.

As the administration has at times struggled to maintain a consistent message, Dr. Birx occasionally has been caught in the middle. During a White House briefing on March 13, she held up a flow chart illustrating a Google project that Mr. Trump said was imminent. However, the announcement was premature, given the project isn't complete. The White House had previewed the announcement with Google to ensure accuracy, a person familiar with the matter said. Google representatives didn't respond to a request to comment.

EPA Plans to Waive Some Compliance Requirements

By TIMOTHY PURO

WASHINGTON—The Environmental Protection Agency is planning to waive compliance requirements and deadlines for a range of industries, including oil refiners, water utilities and sewage plants, as it seeks to help businesses affected by the coronavirus pandemic, according to Trump administration officials.

The biggest change likely will be to waive or postpone coming deadlines to switch to cleaner-burning summer-grade

gasoline, said administration officials and a business lobbyist.

Several states have issued waivers or said they won't enforce them, an analyst said. And many have asked EPA to clarify nationally, according to one administration official.

The EPA is preparing to act following an onslaught of requests from businesses and state regulators seeking help, said the administration officials, who expect the decision to be announced this week.

Any action is expected to be

scrutinized by environmental groups concerned that the EPA and business groups will take advantage of the situation to skirt environmental regulations. Under President Trump, the EPA has moved to amend environmental policies that the White House views as overly harmful to business.

"It's no surprise that Trump's EPA is acting to protect corporations at the expense of public health in the middle of the biggest public health crisis in a century," said

Bruce Baizel, the energy program director at the environmental group Earthworks.

The EPA said it is "in the process of developing guidance regarding enforcement during the COVID-19 outbreak."

Among the measures under consideration are changes that could give companies and regulators short-term compliance relief while they deal with staffing shortfalls and an economic downturn, administration officials said.

The annual gasoline

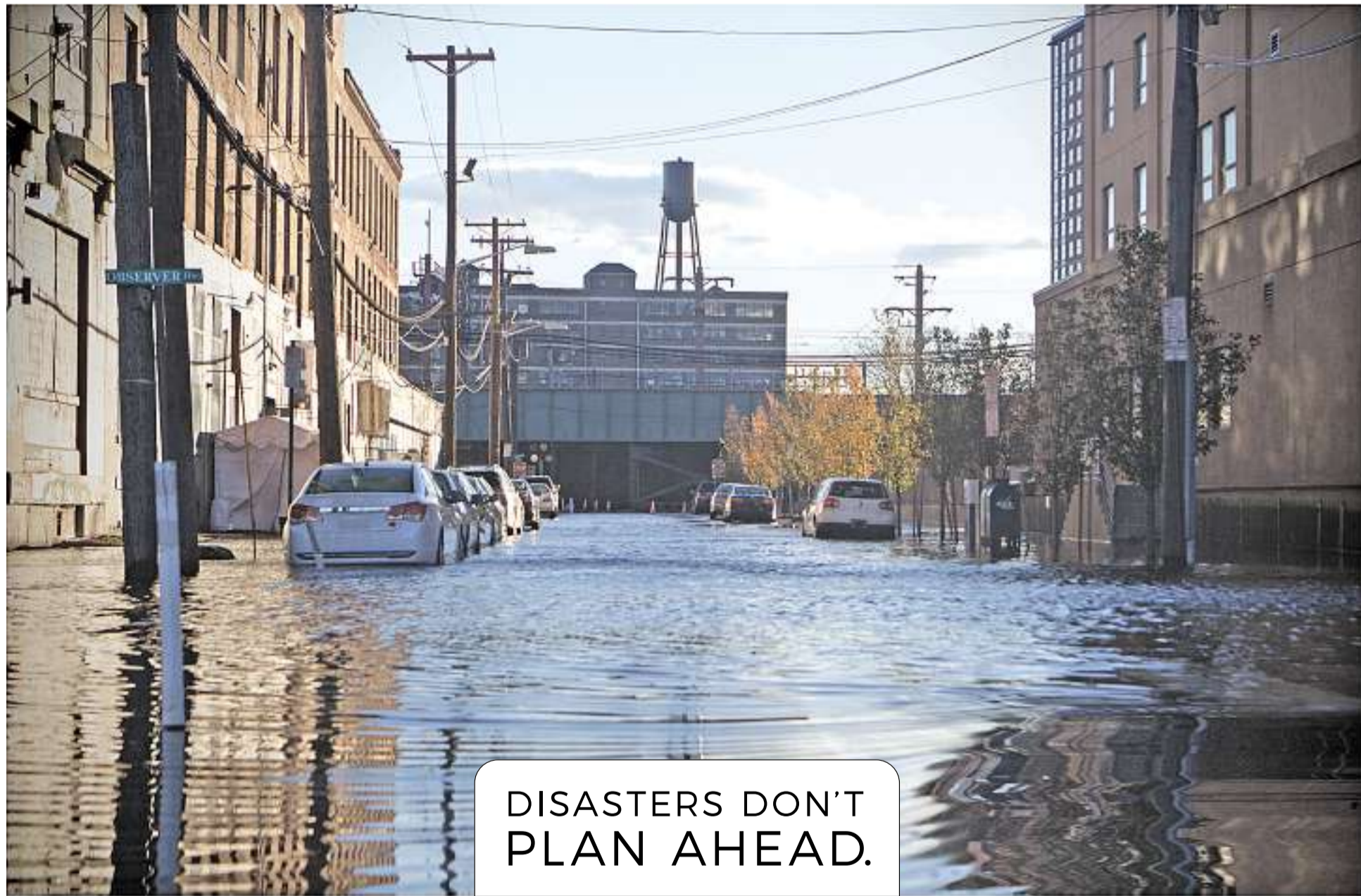
changeover is aimed at preventing air pollution from rising in the hotter months. Gasoline demand is plummeting because of the spreading virus, leading the energy industry to warn that full storage tanks might not be drained of their winter-grade supply in time to make the switch.

Tom Kloza, the top analyst at IHS Markit Ltd.'s Oil Price Information Service, said gasoline and jet fuel are backing up in distribution and storage systems around the U.S., potentially leav-

ing winter-grade fuels clogging the system after an April 1 deadline when many can't be used.

Mr. Kloza expects April gasoline demand to drop to levels unseen since the 1960s, off seasonal norms by more than 40%.

The oil industry's largest trade group, the American Petroleum Institute, sent a letter to EPA Administrator Andrew Wheeler on Monday asking for blanket, "temporary relief" for the whole industry through enforcement discretion, waivers and delayed deadlines.



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THE CORONAVIRUS PANDEMIC

India Steps Up Lockdown to Slow Spread

By RAJESH ROY

NEW DELHI—Indian Prime Minister Narendra Modi ordered all nonessential government offices and private businesses to shut and all Indians to remain at home for three weeks as the world's largest democracy ramps up efforts to slow the spread of the new coronavirus.

India, a country of 1.3 billion, has 519 confirmed cases of Covid-19, the disease caused by the coronavirus, and 10 deaths as of Tuesday, according to data from the federal Ministry of Health and Family Welfare.

In a televised address to the nation, Mr. Modi also announced the government would allocate 150 billion ru-

pees (\$2 billion) to set up health-care infrastructure such as isolation wards and to buy ventilators, testing kits and other necessary equipment.

"I appeal with folded hands, don't come out of your homes during the lockdown," Mr. Modi said in the address.

The lockdown will extend at least until April 14.

India has recently seen a sharp increase in Covid-19 cases and the government has scrambled to stay ahead of the spread.

On Sunday, the government ordered a one-day lockdown of the country and said all long-distance train service would be suspended across the country. All domestic and most international flights will also be suspended.

Schools in some cities had begun closing earlier, as well.

The country is one of several large developing nations that are somewhat off the main thoroughfares of global trade and transportation, which seemed to have delayed arrival of the virus.

Foreign tourists and Indians returning from abroad accounted for the bulk of the cases until last week, when officials began to acknowledge that the virus had started to spread among the domestic population.

India is also for the first time moving to allow private companies to provide testing for the coronavirus, after confining all testing to government labs. That, and the country's tight restrictions on who

was tested, had resulted in some of the lowest testing rates of any country.

Mr. Modi said essential services, grocery stores and banks offering limited services would remain open.

The prime minister underscored how some of the world's leading economies have strained to contain the pandemic, despite their robust health-care systems, so it was imperative to take lessons from them.

"Social distancing seems to be the only option to combat coronavirus. There is no other way to be safe," Mr. Modi said.

Yet achieving the sort of distancing that countries like Italy and China have maintained will be challenging for India, many of whose citizens

live in tightly packed slums in megacities such as Mumbai and Delhi. Many of the country's poorest earn the money they need to buy food the day they eat it.

Mr. Modi's announcement of the lockdown led to panic buying of groceries and medicines in several parts of the country.

The prime minister said in a tweet the federal and provincial governments would ensure availability of essential commodities.

To mitigate the economic impact of the pandemic, the federal government is working on an economic package that will be announced soon, Finance Minister Nirmala Sitharaman said in a televised press conference on Tuesday.

Most of the state governments in India have drawn up plans to provide free or subsidized food to millions of poor beneficiaries, as well as providing advance pensions payments and financial support to the poor for several months.

"We are front-loading our expenditure...to ensure people have sufficient money during this tough time," Thomas Isaac, finance minister of the southern state of Kerala, told The Wall Street Journal.

The federal government has also asked states to dole out cash incentives to around 35,000 workers in the construction industry who might be rendered jobless or have to stay at home because of the lockdown.

Wuhan Tactics Not Yet Used

Continued from Page One

result, many doctors and experts say the recent lockdowns in the U.S. and Europe may slow the rise in new infections—if properly enforced—but still won't be enough to stop it or prevent many hospitals from being overwhelmed, as they were initially in Wuhan.

"A lot of the lessons have been lost," said Devi Sridhar, professor of global public health at the University of Edinburgh. "A lockdown helps buy time: The only way it will work is if you actually backtrack and start figuring out who has the virus."

The U.S., Britain and some European countries will ultimately, like Wuhan, have to establish multiple makeshift hospitals and quarantine centers to isolate more cases if they are to bring the virus under control, she said.

"Absent of divine intervention, I don't think there's any other way out of it," she said. "We're heading in that direction: We're just doing it too slow."

In New York City, federal authorities plan to set up mobile hospitals, with a total capacity of 1,000 beds, at the Jacob K. Javits Convention Center in Manhattan. New York has also been looking into converting entire hotels into hospitals, but it is unclear how many beds will be made available.

Zhang Jimong, head of the emergency department at Wuhan's Xiehe Hospital, said the most important thing was to separate the infected from the healthy, and recommended hotels as quarantine centers where people could be isolated in separate rooms.

"You just need to turn off the central air conditioning," he said.

He also said that in recent days he saw a handful of patients who had developed antibodies to the virus without knowingly being infected. That suggested to him that Wuhan might have already developed a level of "herd immunity."

More than 50,000 confirmed cases of coronavirus have been identified in Wuhan—61% of China's total—since it was first detected in December, according to Chinese health authorities. Early cases mostly involved people connected to a food market selling wild animal meat.

The virus had killed 2,524 people in the city as of Tuesday, representing 77% of China's national toll, and a mortality rate of almost 5%.

Since late February, however, the official number of new confirmed cases in Wuhan has been declining. In the past six days, it has reported only one, prompting Chinese authorities to close all temporary hospitals and start relaxing the lockdown.

China said on Tuesday that from Wednesday it would relax its mass quarantine to allow healthy people to leave the central province of Hubei, except Wuhan, its capital, where travel restrictions would be similarly eased on April 8.

Many foreign governments that initially ruled out lockdowns, saying they wouldn't work in democracies, are now implementing similar, though less draconian, restrictions,



Health-care workers from Xi'an International Medical Center Hospital bid farewell to their colleagues before setting off for Wuhan in early February.

but without corresponding efforts to identify and isolate cases.

Some foreign experts and officials are skeptical of Wuhan as a model. They cite local authorities' early efforts to cover up the scale of the problem, and the fact that more than five million people were able to leave Wuhan in the run-up to the lockdown.

Some also still have doubts about China's official figures. Wuhan's health commission said on Monday that asymptomatic cases were being isolated in quarantine centers but not included in the public tally of confirmed cases, even if they tested positive.

Others think China could suffer a big second wave of infections if it continues to relax curbs on travel and work, and that the Chinese approach would be too economically costly to replicate.

Among doctors and residents in Wuhan, meanwhile, some feel the lockdown of the city was too sudden and strict, as well as too late, and contributed to the high mortality rate there as hospitals were ill-prepared for the flood of patients that followed.

Many medical workers were also infected because they initially lacked protective gear and infectious disease training, doctors and nurses in Wuhan say.

Still, the more systematic quarantine and testing regime in Wuhan after Feb. 2 is similar to measures that also appear to have been effective in South Korea and Singapore, according to many experts.

South Korea, which has tested more people than any other country, originally tried to hospitalize all confirmed cases. But as wards became overloaded, from March 1 it divided coronavirus patients into four categories: asymptomatic, mild, severe and critical.

Only severe and critical cases were hospitalized, while mild and asymptomatic cases were placed in makeshift hos-

Turning the Tide

Massive testing and strict quarantines helped Chinese authorities overcome the coronavirus epidemic in Wuhan.

New cases by day



Source: China's National Health Commission

New deaths by day



pitals known as "residential treatment facilities."

In Singapore, all suspected cases have been isolated in hospitals, while close contacts of confirmed cases have been systematically tracked and quarantined in government-run facilities or at home.

Mike Ryan, the World Health Organization's emergency head, warned on Sunday that lockdowns wouldn't be enough to control the pandemic and urged governments to focus on identifying and isolating infected people and their contacts.

"It's not just about physical distancing, it's not just about locking down," he said. "In China, and in Singapore, in Korea, they really focused on having that comprehensive strategy."

Ian Lipkin, an infectious disease expert at Columbia University who visited China in January and has been advising health officials there, says the U.S. should immediately implement a nationwide stay-at-home policy and then move to a "stratified isolation system" until a vaccine is ready.

"We must isolate separately those with disease who need immediate medical attention, those known to be infected who have no or only mild dis-

ease, those who are suspected to be infected based on exposure history, and those who have no known exposure and are well," he said.

Chinese authorities did aim to filter cases when it first locked down Wuhan on Jan. 23. Confirmed and suspected cases were supposed to be quarantined in hospitals, with close contacts self-isolating at home.

The problem was that local hospitals, which had just

home without being tested.

By early February, there were 20,629 people quarantining themselves at home having visited fever clinics—and that excluded sick people who hadn't yet visited a hospital, Hu Lishan, the city's vice party secretary, told a news briefing.

"We feel very worried and distressed," he said, likening the pent-up demand for hospital space to a "dammed lake." The critical change came on Feb. 2, when Wuhan's health authorities tasked community leaders with dividing cases into different categories, sending only confirmed patients to hospitals, and others to makeshift hospitals or quarantine centers.

Under the new policy, which took some two weeks to implement, suspected cases were also quarantined separately from other categories such as those recently discharged from the hospital and those who had close contact with confirmed cases, local officials and doctors say.

Some 12,000 people ended up staying in temporary hospitals.

"When you have the opportunity to isolate all suspected patients and close contacts, this is the turning point of the outbreak here in Wuhan," said Du Bin, head of the intensive care unit at Peking Union Hospital, who has been working in Wuhan in recent weeks.

He also echoed the World Health Organization in stressing the importance of testing. "Apart from testing, I just have no idea how you can identify the suspected cases and how to quarantine the close contacts."

Another critical factor was the deployment to Wuhan of thousands of extra doctors and nurses from elsewhere in China. Among them was Meng Xinke, a doctor from the intensive care department of the No. 2 People's Hospital in Shenzhen.

He arrived in Wuhan on Feb. 9 and was put to work in

an exhibition center newly transformed into a makeshift hospital with 40 doctors and 1,461 beds, for confirmed mild coronavirus cases. Separating milder cases "is a great way to save resources," he said, adding that five doctors were able to look after 400 patients during each shift.

His daily routine included checking patients' vital signs, giving them medication, conducting tests, and identifying those developing severe symptoms. After about two weeks, he said, his team noticed that about 10%-15% of patients discharged from some makeshift hospitals were later testing positive again—a possible indication they hadn't fully cleared the virus.

On Feb. 22, Wuhan required all discharged patients to go to quarantine sites for another two weeks instead of heading home.

Health experts say other countries short of testing kits can also learn from Wuhan's experience. Unable to test thousands of suspected cases, on Feb. 4, health authorities allowed doctors to use chest scans to make coronavirus diagnoses in Hubei.

That resulted in a spike in confirmed cases, stunning the outside world. By Feb. 19, however, the number of newly confirmed cases in Wuhan had dropped into the hundreds and by March 11, it was down to single digits. The number of deaths has declined steadily since Feb. 18.

A recent study led by doctors at Wuhan's Tongji Medical College estimated that the reproduction number of the virus—the average number of people infected by each infected person—was about 3.68 in Wuhan before the lockdown began on Jan. 23.

That number, which has to be reduced to below one to stop an epidemic, dropped to 0.32 between Feb. 2 and 18, the study found.

—Fanfan Wang and Qianwei Zhang in Beijing contributed to this article.

THE CORONAVIRUS PANDEMIC

Outbreak Puts Spain On Its Heels

This month, tens of thousands marched in Spain to commemorate International Women's Day, defying warnings that such large gatherings could spread the new coronavirus, which had already infected hundreds of people in the Mediterranean country.

By *Giovanni Legorano*
in Rome and
Xavier Fontdegloria
in Barcelona

Four days later, two government ministers who participated in the march were diagnosed with the virus and the number of known infections in Spain had quintupled to almost 3,000. Prime Minister Pedro Sánchez's wife, who also attended the demonstration, tested positive.

Now, the country has almost 40,000 cases and more than 2,700 deaths, the world's third-highest death toll after Italy and China.

Over the past two weeks, Spain has suffered one of the fastest-growing outbreaks of the coronavirus in the world, because of what experts say is a combination of the government's slow response to the pandemic, Spaniards' active nightlife and resistance to government-ordered lockdowns. The situation is so serious that authorities found elderly people unattended and dead in their beds in more than one nursing home.

Less than a week after the women's day march, Mr. Sánchez's government called a state of emergency and placed the country under lockdown for two weeks in an attempt to stop the virus's spread.

Spaniards are barred from leaving their homes except to buy food, medicine and other

essentials. The lockdown, which the government wants to extend until April 11, also makes exceptions for emergencies and for people to go to work.

"They should have developed containment strategies much earlier," said Oriol Mitja, an infectious disease specialist and researcher at Hospital Germans Trias i Pujol in Barcelona.

The virus is still spreading fast in Spain and showing little signs of peaking. The disease has reached most of the country, especially hitting the country's aging population, which is more likely to die of the disease than young people, and putting its hospitals under severe strain. Eighty-seven percent of those who have died were 70 or older, echoing similar trends in Italy.

This week, authorities in Madrid began using a large ice-skating rink as a morgue, with funeral homes struggling to accommodate the dead.

Spanish lifestyle and culture made the acceptance of social distancing slower and more difficult. Spaniards are loath to give up a deeply ingrained late-night culture, especially in cities like Madrid or Barcelona, where central squares, bars and restaurants were crowded until late at night on many days of the week.

Since the lockdown has started, authorities have found around 60,000 people failing to respect the ban on going out and have arrested around 500. Last weekend, the police found a group drinking and partying in a closed bar in the southern area of Almería, arresting one person who resisted an order to stop.

But most Spaniards say they are following the lockdown rules despite their difficulty accepting them.



The rapid spread of coronavirus has put a strain on mortuary employees in Madrid, above, and nursing-home staff in the capital.



"It all went so quickly that it really took us by surprise," said Cristina Sans, a 46-year-old civil servant in Barcelona. "Our lives as Spaniards are very social. We are always out and about. Now my social life is on WhatsApp."

Mr. Sánchez has rebuffed criticism that he reacted too late, arguing that he followed the advice of scientific experts, which changed rapidly over the week after the women's march.

His government is also resisting calls to harden the lockdown by banning all nonessential activities, which would close many offices and factories and could compound the economic

pain wrought by the virus.

"Our measures are among the most drastic taken in the European Union," Health Minister Salvador Illa told reporters on Monday. The challenge, he said, is to ensure Spaniards comply with existing restrictions. "We know it's tough but it is the only path to the defeat of the virus."

The pandemic caught the Spanish national health system in an already fragile state, weakened by crisis-era budget, said Mariano Sánchez, spokesman for an association of health-care workers. Hospitals in the hardest-hit areas quickly ran out of beds in intensive-

care units. By Tuesday, more than 2,600 coronavirus patients were in intensive-care units.

Some hospitals had to set up improvised intensive-care units after hospitals ran out of space, for instance establishing a 5,500-bed military hospital in a Madrid conference center.

Some fear older patients haven't received enough care. "In normal conditions, we could have saved their lives," a 23-year-old nurse in Madrid said. "But now there is not enough space in the intensive-care units."

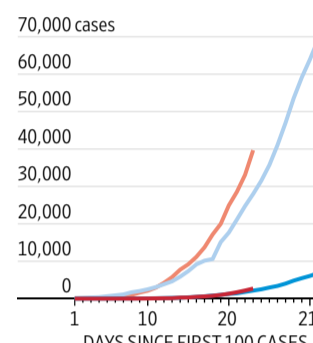
Authorities deny coronavirus patients have died because of the lack of space in inten-

Grim Toll

Spain is suffering one of the fastest-growing outbreaks of the coronavirus in the world.

Confirmed cases and deaths

Spain cases Spain deaths
Italy cases Italy deaths



Note: Italy data through March 24, Spain data through 6:30 a.m. ET March 24. Sources: Italian government (Italy); Spain's Health Ministry (Spain); Johns Hopkins CSSE (Spain cases and deaths for March 7 and March 8)

sive-care units. "Some units are under a lot of stress, but we haven't reached that point in Spain," said Ricard Ferrer, chairman of the Spanish Society of Intensive and Critical Care Medicine.

Spain's Health Ministry didn't reply to a request to comment.

Right now,
We all need the right facts.
About handwashing.
The changing price of hand sanitizer.
Facts on how a virus spreads.
How it doesn't.
Facts that help you to prepare, not panic.
Facts on the market.
How it can recover.
About making investments,
To debunk myths.
Facts that are researched.
And challenge rumor.
Facts which have been fact-checked.
That provide context.
The facts are needed every day.
They have never been more important.
We have the facts you need.



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THE CORONAVIRUS PANDEMIC

Escalating Crisis Puts the Brakes to Traveling Nurse's Plans

MAKING IT WORK

As the new coronavirus forces big changes in how we

work, *The Wall Street Journal* is looking at how different people are coping with the stresses and risks. For earlier articles in the series, visit wsj.com/makingitwork.

By JOHN D. STOLL

Emily Gundlach's stint at a Los Angeles-area pediatric hospital was originally slated to be a three-month gig. A Louisianian with wanderlust, she recently signed on as a "traveling nurse" so she can spend a couple of years jumping around the U.S. in temporary roles.

As the coronavirus crisis escalated, Ms. Gundlach's plans changed. Instead of going to New York City for a fresh assignment at the end of April, the 26-year-old pediatric nurse will stay in Southern California an additional four weeks.

"I feel a little bit uncomfortable picking up and mov-

ing across the country during a pandemic," Ms. Gundlach said during a phone interview following her shift Monday morning.

New York isn't Ms. Gundlach's only spoiled plan. She had intended to be an itinerant nurse for two years, then go back to school to become a nurse practitioner. But no one can predict how long the current crisis will last.

"This makes me really nervous for what the future holds," said Ms. Gundlach, a self-described worrier. "I really like plans. I like to have an idea of what's next."

A surge of coronavirus patients and nursing shortages has boosted demand for traveling nurses, which represent a small slice of the total nursing workforce. Companies like San Diego-based Aya Healthcare, with whom Mr. Gundlach works, recruit these nurses and connect them to hospitals looking for short-term contract help.

Her assignment puts her near Los Angeles, a city with a relatively high number of confirmed cases. Those under her



Emily Gundlach's planned move to New York City is on hold for now.

hospital's care are young, and Ms. Gundlach said there have been no confirmed cases at the hospital through Monday, although certain patients won't have a coronavirus diagnosis ruled out until tests are completed.

The hospital, which Ms. Gun-

to discern between the natural congestion that comes with reactions and potential signs of the new virus, such as a fever, cough or shortness of breath.

Coronavirus has cast its cloud over the intensive-care unit she serves. Most of her patients are too young to understand the threat, but adults need a steady hand. Right now, empathy is important: "This affects my bedside manner when it comes to the parents." Ms. Gundlach often needs to break the news that hospital policy now restricts in-room visitors to one parent at a time.

"That can be kind of hard to have a conversation with parents," she said. "If they get frustrated I say 'I'm very sorry this is making things more difficult for you.'"

Ms. Gundlach is young but battle-tested. During her first two years as a nurse in New Orleans, she sometimes found herself among the most experienced.

One thing she didn't worry about in New Orleans: Conserving mission-critical supplies so

the hospital doesn't run out.

"I usually change my mask every time I go into a patient's room," she said. Now, however, she hangs onto the mask the entire 12-hour shift, placing it in a Ziploc bag between uses.

Reuse of disposable mesh gowns that cover Ms. Gundlach's uniform requires the skills of a contortionist. "I have to take my gloves off and dispose of them and then slip out of the gown without really touching it. Then wash my hands," she said.

Ms. Gundlach suspects she may eventually come in contact with someone infected by coronavirus, and her hospital will also have to treat the infection. For now, the feeling of not being in control weighs on her.

This is her first time in California, but she can't partake in the outdoor activities that many locals rely on for stress reduction.

Instead, she's watching her share of Netflix. She also paints and wants to dive back into a favorite activity: reading. "I've got a lot of books I want to get through."

Workers Thrust to Front Lines

Continued from Page One making sure that merchandise prices ring up properly at the registers. In the coronavirus crisis, everybody does everything, from stocking shelves to bagging groceries. The supermarket chain has bumped the hourly pay of current union workers, including Ms. Babineau, by 10% and will offer extra paid sick time if they must self-quarantine.

Ms. Babineau is accustomed to New Englanders rushing the store for milk and bread before blizzards. Panicked shoppers these days are different, she said. They have waited early outside for the store to open. Some nearly ran down aisles to fill their carts to overflowing.

On a recent day, an elderly couple stared at a shelf bare of toilet paper. The woman seemed on the verge of tears. "I'm scared," she said.

Ms. Babineau marched toward a shopper with two loaded carts and pressed the woman into giving up one package for the couple.

Then Ms. Babineau went to the break room and cried. "It's very emotional," she said. "This is for, how long?"

Her worries extend to her

They see their job, supplying water to Raleigh, N.C., as fundamental.

young grandson, Ms. Babineau said. She visits the boy far less than she would like, afraid of accidentally passing the virus. Her husband of nearly 40 years is also at risk. He is a 76-year-old retiree with chronic obstructive pulmonary disease. "What if I bring it home?" she said.

At the end of her 9-hour workday, Ms. Babineau heads home. She throws her clothes in the washer and showers before greeting her husband.

Train operator Dennis Smith, a 30-year veteran of the Massachusetts Bay Transportation Authority, stays motivated by looking at the faces of his subway passengers boarding Boston's Blue Line, many of them wearing janitor uniforms or nursing-aide scrubs. He knows they have jobs as essential as his—both to the public and to keeping up their own households.

"They are paycheck to paycheck," said Mr. Smith, 54. "If they didn't go to work, they probably wouldn't have anywhere to live in a couple of weeks."

Ridership is way down, and there are fewer trains running. Mr. Smith's train smelled strongly of disinfectant. It reminds riders about the risks of public transit, the enclosed public spaces where germs can live for days on every surface.

"If someone on the train is sneezing, it could be coming on me," Mr. Smith said, glancing at the vent in his driver's



Kay Willis, a supervisor at a water treatment plant in Raleigh, N.C., above. Vince Haynie checks his next food delivery in Chico, Calif.

compartment. "What can you do? I'll keep coming in until they tell me not to."

At the E.M. Johnson water-treatment plant in Raleigh, N.C., workers check water quality, clean filters and track the delivery of chemicals. They no longer hold daily meetings. Now, they send email from one end of the sprawling facility to the other. They take their lunch breaks alone.

Kay Willis, a 49-year-old supervisor, misses working face-to-face with the people she calls the team behind the tap. "It's like being in a ghost town," she said.

She shuffles work shifts to accommodate changing child-care needs of employees. For herself, she installed in-home cameras to keep watch over her 70-year-old mother, who is recovering from a long illness.

Ms. Willis's team has trained for storms, a dam break and water contamination. Pandemics were never covered. Ms. Willis is prepared to stay at the plant if necessary. She keeps a sleeping bag and clothes in her locker.

She and her crew see their job, supplying most of the water to Raleigh, as fundamental.

"They say, 'It's just a glass of water,' but it's not. It's so important," she said. "Not everything is about getting patted on the back. Some people do it because it has to be done."

Vince Haynie, 56, of Chico, Calif., said working as a per-



sonal aide isn't easy, even in normal times. He is guided by knowing that if he doesn't show up, Teddy Lyon, an elderly disabled man, would likely go without food, a clean house or a ride to the pharmacy.

Workers providing in-home services to the elderly and disabled are among those facing danger for themselves as well as the people they serve.

Mr. Haynie, a pastor to a small congregation, believes his Christian faith shields him from sickness, even in a pandemic. He washes his hands regularly as a precaution, and

he takes off his shoes when he enters Mr. Lyon's house.

Half the job, Mr. Haynie said, is listening to the older man's fears, knowing he has no family to care for him. He sometimes lends the older man money, he said, or buys Mr. Lyon groceries on weekends, a time when he is off the clock.

"He pushes the envelope," Mr. Haynie said. "He knows I don't work on the weekends, but he's texting me."

After wrapping up his in-home care work, Mr. Haynie delivers food to people around Butte County, the site of the

deadly 2018 Camp Fire. He carries meal orders for DoorDash and other app-based delivery companies.

Mr. Haynie said his faith keeps him going: "I have a covenant that keeps me protected."

The coronavirus adds another layer of stress to the work of prison guard Richard Ferruccio. He arrived last Wednesday for a 3 to 11 p.m. shift, and the 900-plus inmates at John J. Moran men's medium-security prison in Cranston, R.I., were on lockdown. Three inmates had flu-like symptoms. One of them

Deliveryman Brings Home the Bacon

Many feel lucky to be getting a paycheck, even if it is well south of six figures. Nick Lawrence, a delivery worker, hopes to crack that barrier.

He is working around the clock in San Francisco, going in and out of supermarkets and stores, scouring shelves and hunting aisles to bring groceries to the homes of customers who order from app-based shopping companies Instacart and Shipt.

Each day, Mr. Lawrence juggles how best to stay healthy in dozens of interactions with clients, shoppers and store clerks while trying to earn as much as he can.

That requires him to make the most of every moment. He has memorized store aisles and the best travel routes to deliver the goods in his 2017 Mazda CX-5.

Mr. Lawrence, 39 years old, attended City College of San Francisco, hoping to become an engineer. He dropped out in 2012 when his mother died. In the years that followed, he toyed with the idea of starting a dog-adventure or dog-treat business, he said, then "shopping kind of took over my life."

He is on track to make \$100,000 this year, he said. The money is good but he has no health insurance and can barely afford to live in the city, one of the most expensive in the U.S.

"You don't want to burn yourself out," Mr. Lawrence advised. "You don't want to get sick."

—Alejandro Lazo

took a test for the coronavirus disease, which came back negative.

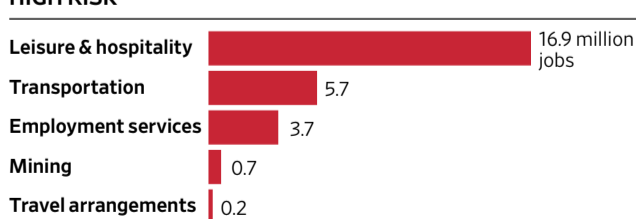
The prison lifted the lockdown. Yet guards remain on alert, ushering inmates to the recreation yard in small groups to let them keep a few feet of distance.

Prisons in several states, including Rhode Island, have suspended family visits, as well as such activities as in-person GED classes and Bible study. "Working in the prison you get prepared for all kinds of stuff," said Mr. Ferruccio, 55. "But this takes things to a whole new level."

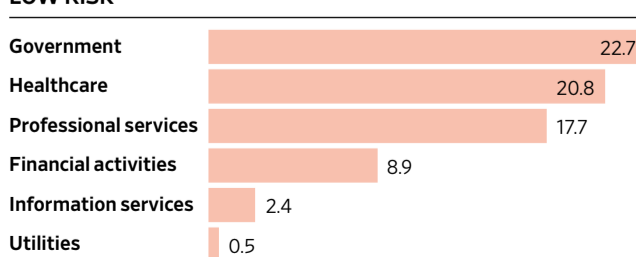
Jobs at Risk, Jobs in Need

Job-loss risk from Covid-19*

HIGH RISK



LOW RISK



*estimate from February
Sources: Department of Labor (Jobs); Moody's Analytics (risk)



Train operator Dennis Smith checks for passengers at a Boston subway stop.

THE CORONAVIRUS PANDEMIC

Coronavirus Strikes at the Italian Family

Tradition puts older generations at greater risk; 6,820 have died, most were over 60

By MARGHERITA STANCATI

ROME—The first call came on March 11. That's when Roberto Biglioli says he found out that his 81-year-old mother, Giuseppina, had passed away after battling the new coronavirus.

The second call came six days later, says Mr. Biglioli, a medical worker from near Bergamo, a northern Italian city hit hard by the pandemic. "A call that, while expected, no one would ever want to receive in their lifetime," he said. "My dear dad has also left us."

Italians across the peninsula are terrified their own parents or grandparents will be next. They have reason to worry. Covid-19, the respiratory disease caused by the new coronavirus, has killed more people in Italy than anywhere else in the world, and the victims were overwhelmingly over 60.

Now, the whole country is hunkering down to protect them. The severe restrictions placed on daily life are shaking the very bedrock of Italian society: The Italian family.

Italy's way of life makes it unique in the West. It also left the country more vulnerable to the pandemic.

Two or three generations often live under the same roof, more so than in other parts of Western Europe. It's common for grandparents to look after their grandchildren on a daily basis, and for their adult children to look after them, once they become older. Now, efforts to combat the virus are putting an enormous strain on this social safety net.

"Our habits need to change, and they need to change now," Prime Minister Giuseppe Conte said on March 10, when Italy became the first Western country to impose a nationwide lockdown. "We all need to give something up for the good of Italy. When I speak of Italy I speak of the people who are dear to us, our parents, our grandparents."

'We live in terror'

Italy's 60 million residents are forced to stay at home unless they can prove they need to be out, for instance to work or to buy essential goods, like groceries or drugs. Italians over the age of 65—around 14 million people, nearly a quarter of the population—are discouraged from doing even that. Everyone else has been told to stay away from them.

Umberto Cremasoli, 77, and his wife used to see their twin granddaughters almost every

day. After doctors discovered a coronavirus infection near their hometown of Casalpusterlengo on Feb. 20—the first in Italy's outbreak—the elderly couple saw the two toddlers even more than usual.

The government responded to the outbreak by shutting down all schools and nurseries in their area. So the elderly couple looked after the two toddlers while their parents worked. As the number of sick in the surrounding region of Lombardy continued to rise, even seeing the children became too risky.

These days, no one is allowed into their apartment, not even their grandchildren, as they too could be carriers. The couple never go out. They have groceries and drugs delivered to their front door.

"We live in terror," said Mr. Cremasoli. "You may have it and you may infect me." That's the feeling we all have.

Before the outbreak, Mr. Cremasoli and his wife had an active social life. His wife, Maria Antonietta Scarioni, 68, used to meet up with friends at a local cafe almost daily. She also took Spanish language classes and ballroom dancing lessons at a community center for the elderly.

She knows of at least three people from the community center who got sick, two of whom died.

"It turned our life upside down because we are forced to stay at home," she adds. "But we have to follow the rules."

Global data shows that the new coronavirus is much deadlier for the old than it is for the young. That's particularly troubling for Italy, which has the world's second-oldest population after Japan.

Fatalities climb

Of the nearly 69,200 people who are known to have been infected with the virus in Italy, 6,820 have died. So far, the disease has spared children and teens, with zero deaths recorded under the age of 20, according to data from Italy's National Health Institute, the country's top disease-control body.

The number of dead starts climbing rapidly after the age of 60. In Italy, some 16% of people in their 70s who have tested positive to the coronavirus so far have died. For those in their 80s, the percentage is even higher, 24%.

The true fatality rates are likely lower, even within those age groups, since testing for the virus is mostly limited to those who show clear symptoms, meaning a possibly vast number of cases are not being counted, according to health experts.

In Lombardy, the northern region at the heart of Italy's outbreak, the health-care system is so overstretched that doctors aren't able to treat all patients who need care. In towns such as Bergamo and Brescia, doctors have been forced to choose who to give the last available beds in intensive-care units, privileging the younger and healthier patients over the older and frailer ones.

Aware that their older relatives might get only limited medical treatment, the priority for many Italian families is to make sure they never get sick at all.

Gianna Besson, 70, has been housebound for over two weeks, ever since her two sons



'When the world turned against me, they were always there for me.'

Michele Biglioli, 28, whose grandparents, pictured below, died within days of one another.

forbade her from leaving her flat in Rome's Trastevere neighborhood. One of her sons lives in her same building, but is frantic about not coming near her. He leaves food and medicine for her outside her door, rings the bell and disappears before she has a chance to open it. The cleaning lady no longer comes.

"They decided I have to remain cooped up in my flat because I am more at risk than they are. I am reluctantly complying with their orders," says Ms. Besson.

Loneliness has been the hardest thing to get used to for Ms. Besson. "I feel the need to have physical contact with someone. It doesn't even have to be a hug, it could just be the touch of a hand," she says. "I'm very tempted to leave the house with the excuse of hav-

ing to go to the pharmacy. I'm very tempted. If I didn't have children, I would've gone out."

In the northern city of Turin, in the foothills of the Alps, 64-year-old Anna Marcone is doing everything she can to insulate her 94-year-old mother from the outside world. The physiotherapist had to suspend their twice weekly sessions. The hairdresser, who came once a week, has stopped coming, too. Medical checkups have also been put on hold.

These days, it's Ms. Marcone who helps her mother with physiotherapy and who does her hair. "I've become a perfect coiffeuse," says Ms. Marcone, who has lived with her mother for decades. Until two years ago, so did her son Paolo.

"She's been such a big part of my life that I don't even

consider her my grandmother. She's more than that," says Paolo Mussa, 31, who until last week would join his grandmother for regular meals.

"The least you can do is to protect them," says Ms. Marcone. "We are very conscious of what they did for us, so we are happy to be doing this for them. Love makes everything easier."

Generations together

Multigenerational households like Ms. Marcone's are much more common in Italy than in other Western countries. In Italy, around 23% of between the ages of 30 and 49 live with their parents, compared with just 6.4% in the U.S., 5.2% in the U.K or 1% in neighboring France, according to data compiled by the University of Bonn.

Such living arrangements risk increasing the exposure of the elderly to the virus. Close contact between members of different generations in Italy could help explain why so many old people here are dying, according to a new research paper on the transmission of Covid-19, which found a correlation between countries where multigenerational households are common and higher fatality rates.

"If you share a house, it's very likely that other people will get it. But it applies more generally: What role do grandparents play in everyday life, in the organization of families?" says Christian Bayer, a professor of economics at the University of Bonn who co-wrote the paper. "It's not that



Angelo Biglioli and Giuseppina Oggioni photographed last year by their grandson. Their family says both were ill with coronavirus.

WORLD WATCH

AFGHANISTAN

U.S. to Cut Aid Until Officials End Dispute

President Ashraf Ghani said he would ask the Trump administration to reconsider its vow to immediately cut \$1 billion in aid to Afghanistan because of a political standoff in Kabul.

Secretary of State Mike Pompeo announced the cut after he failed to broker a diplomatic deal during a trip to Kabul on Monday meant to inject new momentum into the U.S.'s efforts to extricate itself from the war in Afghanistan.

Mr. Pompeo was unable to

bridge a divide between Mr. Ghani and Abdullah Abdullah, the country's former chief executive who ran for president last year and refused to accept defeat amid widespread allegations of fraud. The impasse has undercut the U.S.'s three-week-old deal with the Taliban that lays out a timetable for the U.S. to withdraw its troops year.

Instead, Mr. Abdullah declared himself president and is trying to set up a parallel government operating out of a palace next to Mr. Ghani's compound.

In an effort to put pressure on the Afghan leaders to compromise, Mr. Pompeo said the U.S. would immediately cut \$1 billion in

aid, a heavy hit for a country that relies on foreign money to pay three-quarters of its expenses.

Mr. Pompeo suggested the U.S. would be willing to reconsider if the Afghan leaders work out a compromise. But there were no signs on Tuesday that Mr. Ghani and Mr. Abdullah were ready to set aside their differences.

—Ehsanullah Amiri

MOZAMBIQUE

Dozens of Migrants Found Dead in Truck

More than 60 undocumented migrants believed to be Ethiopians were found dead in a cargo

truck in Mozambique's northwestern Tete province.

The truck entered Mozambique from Malawi and was stopped early Tuesday at a checkpoint in Moatize, near the Zambezi River, according to Zitamar News.

When authorities heard pounding noises coming from inside the container, they ordered the driver to open it and they found 14 survivors inside as well as the bodies.

The deceased died from a lack of oxygen, according to officials.

The Mozambican driver later admitted he had been hired to smuggle the migrants from Ma-

lawi to Mozambique.

The survivors will be screened for the coronavirus and quarantined, health officials told Zitamar.

Mozambique is a transit route for African migrants trying to reach South Africa, one of the continent's largest economies, according to the International Organization for Migration.

So far this year at least 200 illegal migrants, mostly from Ethiopia, Malawi, Egypt and Somalia, have been arrested for attempting to enter Tete province and all indicated that their destination was South Africa, according to Zitamar.

—Associated Press

FRANCE

Asterix Creator Albert Uderzo Dies

Albert Uderzo, one of the two creators of the comic book character Asterix, who captured the spirit of the Gauls of yore and grew a reputation world-wide, died. He was 92.

The French press quoted family members saying Mr. Uderzo died of a heart attack in the Paris suburb of Neuilly. Asterix, portrayed as a short man with a droopy mustache wearing a helmet with wings, was created by Mr. Uderzo and René Goscinny.

—Associated Press

FRANCESCA VOLPI FOR THE WALL STREET JOURNAL (2)

THE CORONAVIRUS PANDEMIC

Tokyo Summer Games Postponed

Delay until next year leaves world's biggest sporting event and elite athletes in limbo

By PETER LANDERS
AND RACHEL BACHMAN

TOKYO—The Tokyo 2020 Olympic Games were postponed until 2021 as the coronavirus pandemic spreads world-wide, an unprecedented shifting of the world's largest sporting event that casts a universe of athletes, broadcasters, sponsors and sports organizations into a period of protracted uncertainty.

Prime Minister Shinzo Abe of Japan and International Olympic Committee President Thomas Bach agreed in a phone call on Tuesday to delay the Games, previously scheduled to start July 24, for around one year. No new date was set, and the postponement throws into question how athletes will qualify for the rescheduled event and what the newly rebuilt Summer Games might look like.

Although a joint statement from the IOC and the Tokyo 2020 organizing committee on Tuesday said the Games "must be rescheduled to a date beyond 2020 but not later than summer 2021," there are no guarantees that the Games could be held even then. The 1918 influenza pandemic, which killed an estimated 50 million people world-wide, lasted more than a year and included three waves, according to the federal Centers for Disease Control and Prevention.

The joint statement cited the World Health Organization's assessment that Covid-19, the disease caused by the novel coronavirus, is accelerating, with more than 375,000 cases now recorded world-wide and in nearly every country. It added that the Games must be rescheduled "to safeguard the health of the athletes, everybody involved



Olympic rings float on a barge in Tokyo Bay. Though the delay is expected to hurt the economy, most Japanese support the decision.

in the Olympic Games and the international community."

The decision to postpone an event as massive, expensive and logistically complex as the Olympic Games will cause major disruption to a long list of constituencies.

Athletes' yearslong training regimens, timed to peak this summer, will have to be re-plotted, and some may not be able to wait another year.

Questions include how qualification processes will change once a new plan is set. The three men and three women who qualified for the U.S. Olympic marathon team in that event's Feb. 29 trials, for instance, must wait another year or more to compete in the Games.

Trials for the U.S. Olympic swimming and track & field squads originally set for June—with thousands of competitors and lasting more than a week each—must be pushed into next year. Organizers of the track trials indicated on Tuesday they would stay in

Eugene, Ore., but couldn't say when they would be held. A statement from USA Swimming on Tuesday didn't indicate what would happen to those trials, which had been booked for Omaha, Neb.

Broadcasters like NBCUniversal and Discovery Inc., which together paid more than \$1 billion to show the 2020 Games to audiences in the U.S. and abroad, will have their schedules thrown into chaos. Sports organizations that depend on the Olympics to fund their activities every four years will be financially stretched.

The Japanese government and the city of Tokyo have invested \$7 billion in the Games, including more than \$1 billion on a new national stadium. Japanese companies, meanwhile, have provided more than \$3 billion in sponsorship toward the total Olympic budget of \$12.6 billion. While costly, a delay would allow those companies to recoup some of their investment and give the stadium its chance for the spotlight.

American Simone Manuel, a four-time medalist at the Rio 2016 Olympics, said the IOC's decision came as a relief during a time when training had been upended even for top contenders. After the Stanford University pool where she was training closed about two weeks ago as a virus precaution, she had been swimming in a nearby backyard pool.

"Obviously it's a huge bummer but it's the best decision for the health of everyone," Ms. Manuel said. "I'm just glad a decision is made so that us athletes aren't in limbo anymore."

The agreement to postpone the Games ends a weekslong drama in which the IOC and Japanese organizers insisted the event would go on.

The WHO declared the novel coronavirus a pandemic on March 11, and professional sports leagues and American college sports—including the NCAA basketball tournaments and the National Basketball Association—quickly postponed games and suspended opera-

tions. Nations closed borders, air travel dropped and non-essential businesses closed.

But even as Olympic trials events were postponed around the world and the U.S. Olympic & Paralympic Committee closed its training facilities, the IOC maintained it was too soon to make a decision about the Summer Olympics.

But calls for a postponement mounted. One of the first came from a member of the Tokyo organizing committee for the Games, Haruyuki Takahashi, who told The Wall Street Journal on March 10 that a delay of one or two years would be the best option if the coronavirus made it impossible to hold the Games with spectators this year.

After the decision came on Tuesday, USOPC CEO Sarah Hirshland wrote in a letter to American athletes that "my heart breaks for you" and others around the world, and that "the work of planning a new version of the Tokyo Games is now officially under way."

Decision To Wait Leaves Big TV Firms At a Loss

The postponement of the Tokyo Olympics to 2021 will have important ramifications for media giants Comcast Corp. and Discovery Inc., depriving them of at least a billion ad dollars this year and taking away a critical launchpad for their other programming.

By Lillian Rizzo,
Benjamin Mullin
and Suzanne Vranica

Comcast's NBCUniversal, which has the U.S. rights to the Olympics, said it sold nearly \$1.3 billion in ad revenue for the 2020 Games that were set to take place in July. Now that the event is expected to take place a year later, NBCU will most likely have to renegotiate the deals with advertisers, according to ad buyers.

"NBCU cannot assume all the 2020 Olympic ad commitments will just roll over to 2021," one ad buyer said.

"Who knows what the world will look like next year," another ad buyer said. "There will likely be a full-blown recession and industries will likely have to be bailed out." That may make brands more reluctant to spend money on advertising, the person said.

NBCUniversal "is actively working with our advertising partners to navigate this postponement, and we're exploring all options to best serve their brands and our consumers this year, and into 2021," a spokesman said on Tuesday.

NBCUniversal, paid about \$1 billion for the rights to the Tokyo Olympics, said it understood the decision to postpone the Games.

The move will also put a dent in Comcast's marketing for its coming streaming service, Peacock, whose July launch was heavily tied to the Olympics as a major selling point.

While Peacock will launch in April only to cable subscribers of Comcast and Cox Communications, the service will be available to anyone in the U.S. in July.

"The Olympics was most likely the centerpiece of every Peacock presentation," said Craig Moffett, an analyst at MoffettNathanson. "So what really matters is if they will be able to get advertisers, and if it will be a lot harder without the Olympics."

Economic uncertainties aside, advertisers still hold the Olympics in high regard and are drawn to the event. Companies have flocked to the Games in search of large audiences, which are harder to come by nowadays as consumers spend more of their time with non-ad supported content providers such as Netflix Inc.

Consumer-goods giant Procter & Gamble Co., one of the world's largest advertisers, said it supported the decision to postpone the Tokyo Games. The maker of Tide detergent, Pampers diapers and Gillette razors declined to comment further about its specific ad plans.

Discovery, which paid \$1.45 billion in 2015 for the rights to show the Games in Europe between 2018 and 2024, declined to say how much advertising it had already sold for the Games.

Discovery has less exposure to lost ad revenue than NBCUniversal because nearly two-thirds of the company's Olympics-related revenue comes from sub-licensing the Games to other programmers in Europe, a person close to the company said. Discovery also plans to attract additional advertising dollars by packaging the postponed summer Games with the 2022 winter Games in Beijing, the person said.

On an earnings conference call earlier this year, Discovery Inc.'s finance chief, Gunnar Wiedenfels, said that decreased expenses associated with producing the Games would offset the decreased revenue from advertising.

The Tokyo Games are slated to be a watershed moment for Discovery's growing bet on live sports. Its 2015 Olympic deal marked the first time the International Olympic Committee has agreed to sell a large portion of the European rights to the Games in a single deal to a media company.

Delay Deals New Blow to Japan's Economy

By ALASTAIR GALE
AND PETER LANDERS

TOKYO—The delay of the Tokyo Olympics to 2021 deals a new blow to the weakening Japanese economy but should ensure Shinzo Abe has a farewell moment in the international spotlight as prime minister.

The question of whether the Olympics would have to be postponed because of the coronavirus pandemic—after seven years of preparations for a July 24, 2020, start—has dominated headlines in Japan for days as other major international events have been scrapped or shelved. Now that Mr. Abe has taken the initiative and secured a one-year delay, Japan faces the fallout.

Hotels, theme parks, restaurants and travel companies are among businesses that had been banking on hundreds of thousands of foreign and Japanese tourists to travel to the Games this summer. As they reel from the collapse of international travel during the coronavirus pandemic, the postponement of the Olympics further darkens their outlook.

"With the Games being postponed, you can say goodbye to 55-65% of tourism in 2020. This is going to be a huge hit to private consumption," said Nicolas Sopel, an analyst at Fitch Solutions, a risk-analysis company.

Japan's economy was already contracting before the coronavirus outbreak, hit by the impact of a sales-tax increase

and weakening exports. The coronavirus outbreak has added to the misery.

Nomura Securities estimated the Olympics would help bring

Hotels, restaurants and theme parks had been banking on robust tourism.

in around \$2 billion in tourism revenue for Japan in 2020. Theme parks had hoped to take advantage of the wave of visitors, such as Universal Studios Japan in Osaka, which plans to open a Nintendo-themed area

of its park in the summer.

Japan's largest theme park, Tokyo Disney Resort, also has a \$700 million extension planned before the Olympics, including a new "Beauty and the Beast"-themed ride.

Other economists said the impact of the coronavirus was more significant than any effect from the postponement of the Games. "With only four months until the Games, construction investment has already peaked, and most projects have probably been completed," economists at UBS wrote in a note. "The sharp falloff in foreign visitors to Japan due to Covid-19 will overshadow any impact" from changes to the Olympic schedule, they said.

Costs directly related to the

Olympics will pile up for Japan because of the delay. Tokyo organizing committee Chief Executive Officer Toshiro Muto said it was hard to say how much they would be or who would bear them, but they would include the burden of changing bookings for privately owned arenas and other facilities for the new date for the Games.

Under one estimate, costs related to a one-year delay of the Olympics would be around ¥640 billion, or \$5.8 billion. The forecast, from Katsuhiko Miyamoto, an emeritus professor at Kansai University in Osaka, includes maintenance costs for stadiums, new qualification events for Japanese athletes and advertising costs for the rescheduled Games.

The Olympics Can Move. I'll Keep Believing. And Training.

By KATE COURTNEY

I have spent years imagining the 2020 Olympics: standing on the start line at the cross-country mountain bike race in Izu, Japan, on July 28. Now, because of the coronavirus pandemic, the Games will be postponed until 2021. Even though I believe deeply that this is the right decision, the news is devastating.

The Olympics have an unparalleled power to inspire. I remember being a young girl cheering for athletes who seemed like superheroes. Their achievements expanded my vision of what's possible, fueling me as I started to pursue mountain bike racing a decade ago. When I failed to make the United States team for Rio, Tokyo became my obsession. I set out to earn the honor of representing my country on the world's biggest stage—not just to make the team, but to qualify automatically and compete for a medal. In 2019, a strong ride at the World Championships secured my spot at the Olympics. I structured the 2020 season around peaking in Tokyo. It was really happening.

And now, suddenly, it isn't. When I first heard of the coronavirus in the news, I could have never imagined what it would mean. My race

schedule slowly began to evaporate. I started to worry, not just about canceled events, but about my family and friends. In the past few weeks, I have felt the entire range of human emotion. At times, I am fearful and uncertain, not just about suspended dreams, but about our suspended world. What is the point of training in a time like this? Though I can ride my bike and train in a makeshift home gym, my mind is loud and questioning where it is usually quiet and resolved. I've tried to stay focused, pushing hard and thinking "all in for Tokyo," only to find my mind consumed with panic and disappointment rather than strength and motivation.

The rational side of my brain knows that my dreams aren't canceled—they're just on hold for the moment, as the world copes with an unprecedented challenge. There are so many people struggling just to survive right now that my heartbreak feels indulgent, unfair and unjustified.

After all, the impact of this pandemic goes far beyond any athletic competition. People all around the world are getting sick and dying. I have elderly grandparents, a mother with asthma and know countless others at real risk. I fear not only for my future, but for



Kate Courtney in action during the UCI Mountain Bike World Championships in Lenzerheide, Switzerland, in 2018.

the future of those I love and those I don't even know. No one is physically, emotionally or economically immune to the impact of this disease. There is fear in every interaction. Everyone is grieving something: the loss of a job, a loved one, or a dream.

For me, it comes and goes in waves. Some moments, I am grateful for the opportunity to create and learn in a world that has slowed to take a deep breath. Other times, I feel heartbroken and discouraged.

But as my mind rages against the possibilities, my heart whispers tiny messages of hope. All will be revealed. This too shall pass. While we wait patiently for the revealing and the passing, the best thing I think we can do is to be kind to each other—and gentle with ourselves.

There have been silver linings. Amid the social isolation, I have never felt more connected. I am in touch with people around the world coping with this crisis. The cy-

cling community feels strong and united. Recently, I planned to ride in the opposite direction as a training partner and friend—just so we could wave at each other as we passed by. I've found myself laughing uncontrollably at "dinner" with my parents over FaceTime. I've traded workouts on social media and shared rides on virtual platforms. Everyone is reaching out generously with their gifts. Moments of grace like these remind me that we are all in this together.

The Olympics are a celebration of the human spirit. They are about striving in the face of uncertainty, about relentless competition and global unity. They are a test of resilience, an opportunity to grow and transform by doing hard things. This is a hard thing.

For now, my only solid plan is to look inward, keep my head down, and focus on taking the next right step. I have to keep believing that, on the other side, I will stand on that Olympic start line. Hope and heartbreak can live side-by-side.

Kate Courtney, of Marin County, Calif., is the reigning UCI World Cup series champion in women's cross-country mountain biking, the 2019 World Champion in the same discipline, and a member of the U.S. Olympic Team.

SPORTS

JASON GAY

An Inevitable Move to Delay Games

A common sense decision to postpone the 2020 Olympic Games in Tokyo has implications beyond this summer



Think of an Olympic athlete right now. Over the past few turbulent weeks, the fate of the 2020 Summer Olympic Games in Tokyo has been characterized primarily as a public-health story, a government story, a money story, a media story. It is all those things, because the Olympics are about all those things, sometimes unpleasantly so.

But at the soul of the Olympics—and, yes, there's still soul left in this imperfect, corruptible event—are the athletes. And they're the ones who will be most disrupted by Tuesday's inevitable but painful decision to postpone the Games until 2021.

Think of all those athlete calendars, the dates July 24 to Aug. 9, 2020, circled—not for months, or weeks, but years. Think of the young athlete in his or her living room, watching Michael Phelps in Beijing, or Jessica Ennis in London, and doing the calculation that maybe—maybe, if everything went just so—the Olympic team they could qualify for would be in 2020.

Those two weeks have loomed large, for a long time. Dates on the calendar become fuel for an athlete—inspiring them, challenging them, and occasionally, tormenting them. Sometimes, the dates seem so far away, almost hard to render. Other times, they feel like they're coming too fast.

If the athlete is prepared, healthy, and a little bit lucky, it all feels like it's coming together at exactly the right moment. That's when great things often happen.



Think of all those athlete calendars, the dates July 24 to Aug. 9, 2020, circled—not for months, or weeks, but years.

So that's what I'm thinking about today. The Olympic athletes who look at those incredibly important, life-defining two weeks in late July 2020...and suddenly see just two weeks.

Yes, perspective is needed here. The Games are being moved, not canceled. There are far more urgent, life-or-death matters confronting the planet right now than Olympians being forced to reconstruct their schedules. The attention of the world needs to be on battling the

coronavirus.

I don't think any Olympian would disagree.

Here's an obvious truth about Olympic athletes: We like to think of them as larger-than-life world-beaters, but most of the athletes competing, they're barely household names in their own households. For every Wheaties box contender, there are hundreds of competitors for whom getting there, to the biggest stage in sports, is the main accomplishment, the culmination of

so much dreaming and hard work.

Very few get to do this for big money or adulation. Their Olympic journeys are more personal. Most of them go unnoticed. It's lonely work. Sacrifice and solitude are basically requirements.

I've written before that one of the things I admire about the Olympics is that, every day, you see the best moment of someone's life—how often can you say that? And if I can be more specific, the best moment isn't necessarily winning a

medal or hearing one's national anthem played triumphantly. It may be as simple as entering the arena.

Entering the arena will have to wait. A recalibration is necessary, and it isn't as easy as it seems. What's happening now isn't as simple as hitting the Big Olympics snooze button until next summer. It will require athletes to do a lot of mental and physical repositioning; just because you were on target for 2020 doesn't mean it will all fall into place for 2021. A whole lot of work and preparation has flown out the window, with no outlet.

Make no mistake: There were athletes out there for whom this was all coming together at exactly the right moment, for potentially great things. And it isn't guaranteed that they can summon that feeling 12 months down the road. Or be on the team at all.

There will be a period of grieving. The mental side is probably going to be harder than the physical one.

The Games will rise again. That's the good news. There's a whole lot of motivation to make them happen, and make them happen on a full scale, with fans, the entire experience. Though I roll my eyes at how Olympic routinely proclaim each subsequent Olympics "The Best Games Ever," Tokyo 2021 has a chance to feel like a spectacular emotional crescendo after a very bleak period of history.

But for now, the Olympics are on hold. Those two weeks starting in late July are now just two weeks. Think of an athlete. They're feeling this the most.

Athletes Remain in Qualifying Limbo

By JOSHUA ROBINSON AND LOUISE RADNOSKY

Athletes around the world breathed a sigh of relief on Tuesday when the International Olympic Committee finally confirmed that the Tokyo Games would be postponed for around a year due to the coronavirus pandemic.

Their training schedules were a mess and their focus was slipping. And for the thousands who didn't even have a berth yet, the stress was even worse.

Only 57% of the 11,000 or so athletes expected to compete in Tokyo had secured their spots at the time global sports came grinding to a halt. That still left a sizable minority without a clear road to the Olympics. The good news for them now is that the time pressure will ease.

But there is still a problem that will shape international sports for the 12 months to come: No one yet

knows how to solve the qualifying conundrum.

"We will also expedite our current review of the Olympic qualification system, in cooperation with the IOC, and release any changes to the process as soon as possible so athletes know where they stand," said World Athletics, the governing body for track and field.

The uncertainty may even concern more than just the would-be Olympians hunting the 43% of slots remaining. The IOC didn't immediately address whether or not athletes who had already qualified would see their berths protected. It raised the possibility that some sports could choose to start over for what is in some ways a new Olympics.

"Anybody suggesting the Marathon Trials be re-run, just stop," tweeted runner Des Linden, who missed out on Tokyo by finishing fourth in the U.S. women's race. "There are 6 athletes who actually

have so much to celebrate during this tough time, please don't crap on their parade."

The key decisions are largely out of the IOC's hands. They will trickle down instead to the individual bodies for each of the 33 Olympic sports and the national federations. The biggest questions they face are whether or not to change the number of slots allocated by country and how to organize future qualifying events safely at a time when the virus is still spreading in many parts of the world.

"It is worse for all the athletes who have planned their seasons for this event," said road cycling world champion Mads Pedersen of Denmark, "but I am glad the organizers have made this decision now rather than at the last minute."

Most federations are likely to mirror the approach taken by one of the Summer Olympics' highest-profile sports with the most complex qualifying structure: gymnastics.



Galen Rupp, center, won the U.S. Olympic marathon trials in Atlanta on Feb. 29.

While the sport's world governing body, the FIG, isn't saying anything firm right now, it will likely do its best to keep qualifying processes identical to those for 2020, from country allocation to age eligibility criteria.

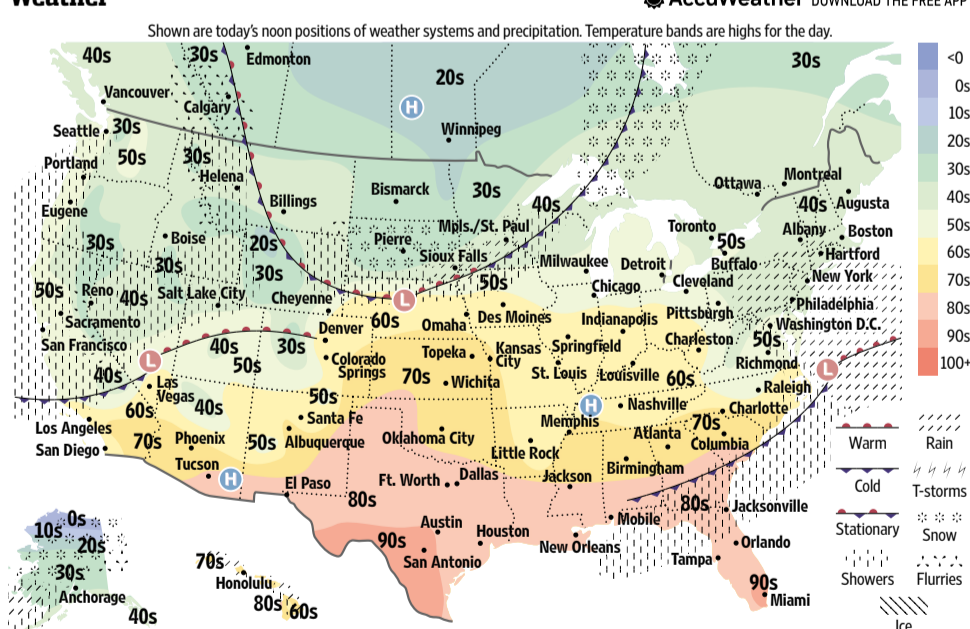
The organization would "take the time to assess all the implications," the FIG said.

Inside the U.S., gymnasts had been divided on what should happen to the Games. In a USA Gym-

nastics survey of its senior national teams, 62% of the 56 athletes who responded backed a postponement and wanted USA Gymnastics to push for it, largely because of training disruptions and concerns for global health.

The remaining 38% preferred to see the Games go ahead on the original schedule, citing the toll on their finances and bodies in waiting another year, the organization said.

Weather



U.S. Forecasts

s., sunny; pc., partly cloudy; c., cloudy; sh., showers; t., storms; r., rain; sf., snow flurries; sn., snow; L, ice

Table with 3 columns: City, Today (Hi, Lo, W), Tomorrow (Hi, Lo, W). Lists major cities and their weather forecasts.

International

Table with 3 columns: City, Today (Hi, Lo, W), Tomorrow (Hi, Lo, W). Lists international cities and their weather forecasts.

Today

Table with 3 columns: City, Today (Hi, Lo, W), Tomorrow (Hi, Lo, W). Lists international cities and their weather forecasts.

The WSJ Daily Crossword | Edited by Mike Shenk

Crossword puzzle grid with numbers 1-70 indicating starting positions for clues.

CLIMBING THE WALLS | By Evan Kalish

- 1 CPA, e.g.
7 The calm before the second half of the storm
10 Physics focus
14 Incredibly hard to believe
15 La-Z-Boy locale, often
16 Yearning
17 Caught
18 Suffers humiliation
20 Casual greetings
21 Janis who had a hit with "At Seventeen"
23 "Grey's Anatomy" creator Shonda
24 Member of a select crowd?
26 Response to an intrusive question
27 Join the banquet
28 Overhead bin item
33 It begins on the 15th of Nisan
35 Avignon affirmative
36 Jane who arrives at Thornfield Hall
37 Ransom Olds's middle name
38 Saving grace?
41 Non-direct flight word
42 State with certitude
44 Lil ___ X ("Rodeo" rapper)
45 More spacious
47 Standing in the office?
50 Dumbbell exercise
51 Pastoral poem
52 "Unable to make it, sorry"
54 "The Robots of Dawn" writer
57 Show shot at 30 Rock
58 Performed, as karaoke
61 Cheese made from sheep's milk
63 "This is concerning..."
65 Accomplishment for a multitalented performer, slangily
66 Physics focus
67 Brand often served with a lime wedge

- 68 Reasonable
69 Wall climber
17 30- and 34-Dawn
70 Auto unlocker, often
29 Perching place
30 Owing to
31 Daughter of King Triton, in a Disney movie
32 Reverse, e.g.
33 Pod fill
34 Second Tudor monarch
39 Racecourse fence
40 Flaky rock
43 Motion-sensing Nintendo controller
46 Becomes completely depleted
48 Olfactory sensation
49 Passive principle of Chinese philosophy
53 Seriously wallop
54 Primatology subjects
55 Sonic the Hedgehog's company
56 Clickable symbol
57 PlayStation producer
59 Billionth: Prefix
60 Seize
62 Remembrance Day mo.
64 Groundbreaking tool

Previous Puzzle's Solution

Grid showing the solution to the previous crossword puzzle.

► Solve this puzzle online and discuss it at WSJ.com/Puzzles.

GREATER NEW YORK

Contagion Spreads at Rikers Island Jail

Officials urge release of at-risk inmates, as dozens of staff and prisoners are infected

By BEN CHAPMAN

The new coronavirus is spreading quickly through the Rikers Island jail complex in New York City, killing one Department of Correction employee and infecting dozens of inmates and staff who go in and out of the facility, said jail and health-care officials.

As of Monday, 50 inmates at Rikers Island had tested positive for the virus, accord-

ing to the city's Department of Correction and its regulator, the Board of Correction. Thirty jail workers also had tested positive for the disease, city officials said. Just two days earlier, on Saturday, only 12 corrections workers and 19 detainees had tested positive, city officials said.

A Department of Correction investigator died March 15 after contracting the coronavirus, city officials said.

Overall, 14,776 people have tested positive for the virus in New York City, resulting in 131 deaths, city officials said Tuesday morning. Federal officials said the New York metro area had become a hot spot for the

spread of the virus.

The outbreak has prompted Rikers Island officials to take new steps to fight the disease, including barring visitors to inmates.

Mayor Bill de Blasio coordinated with the city's district attorneys for the release of hundreds of inmates deemed at-risk for the virus. Some of the city's district attorneys, including prosecutors in Manhattan and Brooklyn, said they would stop prosecuting low-level offense to help stop overcrowding in jails.

But some jail officials and defense attorneys warned that the steps aren't enough to ensure the safety of staff and in-

mates at city jails, including the main facility at Rikers Island, where roughly 5,300 people are incarcerated, mostly while awaiting trial.

Ross MacDonald, chief physician of Rikers Island and chief medical officer of the New York City Health + Hospitals' Correctional Health Services, has urged officials to release as many inmates "as you possibly can."

"We cannot socially distance dozens of elderly men living in a dorm, sharing a bathroom," Dr. MacDonald wrote on Twitter on March 18. "Think of a cruise ship recklessly boarding more passengers each day."

Health officials warned city correctional officials in early March about Rikers' potential to become an incubator for coronavirus. Before the outbreak picked up speed this month, more than 5,000 inmates were housed in Rikers regularly.

Defense attorneys, union officials and members of the Board of Correction called for releasing inmates and safer working conditions for jail employees.

In a letter to prosecutors and correction officials on Saturday, interim Board of Correction Chair Jacqueline Sherman urged them to "rapidly decrease" the jail city population and "immediately remove from jail all people at high risk

of dying of Covid-19 infection."

New York's largest criminal-defense organization, the Legal Aid Society, filed a lawsuit in New York State Supreme Court on Tuesday on behalf of 32 individuals in pretrial detention or being held on parole violations.

The suit seeks the immediate release of the inmates on the grounds that continuing to incarcerate them constitutes deliberate indifference to the risk of serious medical harm in violation of the 14th Amendment and state constitutional rights to due process.

The city Law Department didn't respond to a request for comment on the suit.

Potential \$15 Billion Revenue Hit in N.Y.

By JIMMY VIELKIND

State revenue could fall by as much as \$15 billion as a result of the novel coronavirus and its effect on the economy, New York's top budget official said.

New York State Budget Director Robert Mujica, an appointee of Gov. Andrew Cuomo, said the state expects gross domestic product to shrink in the second quarter of this year and possibly beyond.

Last week, Comptroller Thomas DiNapoli estimated state revenue would decline by \$4 billion to \$7 billion; Mr. Mujica said his latest estimate is a decrease of \$9 billion to \$15 billion.

The drop comes as state lawmakers work to develop a new spending plan before the state fiscal year ends on March 31. In January, Mr. Cuomo proposed a \$178 billion budget, of which \$105.8 billion covered operations. It assumed roughly \$88 billion in state revenue, mostly from personal income taxes.

In an interview Monday with The Wall Street Journal, Mr. Mujica said the Democratic governor's original proposal is "no longer viable," absent massive assistance from the federal government to maintain planned outlays for school aid and public-worker salaries.

As a result of the continued uncertainty caused by the coronavirus pandemic, Mr. Mujica said, the governor is seeking legal authority from state legislators to make unilateral budget adjustments during the fiscal year if revenue declines.

"I think what's critical in the budget is for the legislature to give us the tools to be able to stabilize our finances and make the decisions in the budget to bridge us through this," Mr. Mujica said.

Spokesmen for Assembly Speaker Carl Heastie and Senate Majority Leader Andrea Stewart-Cousins didn't respond to a request for comment about Mr. Mujica's statement.

Budget negotiations were already contentious before the virus struck. Mr. Cuomo set up a task force to reduce Medicaid spending by \$2.5 billion to help bridge a \$6.1 billion deficit. He also said he would change the state's new bail law—which eliminated cash bail for most misdemeanor and nonviolent felony offenses—and legalize recreational marijuana as part of the budget.

Mr. Cuomo said Monday that he would still like both items included in the budget. State Sen. Liz Krueger, a Democrat from Manhattan who sponsors a bill to legalize marijuana, said there were still disagreements about how to distribute new revenue and that lawmakers might be better off waiting to try to negotiate a solution.

The governor's task force on Medicaid recommended decreasing the reimbursement rates for hospitals and nursing homes.

Some legislators are calling for raising taxes to plug the existing deficit. Mr. Cuomo said last week he opposed any tax increases. Mr. Mujica said state income taxes are disproportionately paid by the highest-earning New Yorkers, who were severely affected by downturns in the stock market.

"With negative growth, taxes don't appear to be the answer," Mr. Mujica said. "You can't get blood from a stone."

Hospital Employees Are Tested in the Bronx



ON THE LINE: Hospital staff with flu-like symptoms were tested Tuesday for coronavirus before they entered the main emergency department at St. Barnabas Hospital. New York state has more than 25,000 confirmed cases, with more than 3,200 people hospitalized. Nearly one-quarter of those hospitalized are in an intensive-care unit.

Mayor Tightens Budget, as Finances Squeezed

By KATIE HONAN

New York City Mayor Bill de Blasio called on city agencies to make cuts to services as revenue drops and the cost to fight the novel coronavirus rises.

Mr. de Blasio this week said he is looking to trim \$1.3 billion through the agencywide cuts. The city's budget office on Tuesday began working with agencies to establish cost-savings plans.

It is a rare budget trimming for the mayor, who has grown the city's budget each year since taking office in 2014. But with the state also expecting a big drop in revenues, and without guaranteed help from the federal government, New

York City will have to look out for itself, he said.

"We are on our own at this moment trying to sort it out," Mr. de Blasio said. "We know the state's going through a real tough time, so we have to take actions to protect our most vital services."

The city is hoping to avoid layoffs with other cuts, the mayor said.

Comptroller Scott Stringer released a report Monday that predicts the city could lose between \$4.8 billion and \$6 billion in city tax revenues, depending on how long the pandemic lasts, as well as the restrictions put in place to stop its spread.

The biggest losses will

come from personal incomes, sales, hotel, business incomes and other taxes, he said.

"We are staring down a fiscal emergency and need the

'We are on our own at this moment trying to sort it out,' Mr. de Blasio said.

federal government to step up by injecting as much funding into our city's economy as possible—our health-care system, infrastructure, transit network, and so much more

depend on it," the mayor said.

Property taxes—the biggest revenue generator in the city—are due April 15. Mr. de Blasio said this week that the city badly needs the revenue, but on Tuesday he reminded property owners about aid programs such as a deferral-payment program for those who qualify.

"Revenue is being stressed very, very deeply," he said Sunday. "It is not my instinct to take away other forms of revenue because we literally will not be able to pay for basic services."

The independent watchdog group Citizens Budget Commission called on the mayor to increase the target for savings

to \$3 billion, as the city faces unprecedented uncertainties.

"It needs to be much bigger than what's been done in the past and it needs to be focused on efficiency," said Maria Doulis, of the CBC. The current economic pause and shutdown is different than anything the city has ever seen, she added.

In January, Mr. de Blasio presented his \$95.3 billion preliminary budget, which was in the process of being evaluated by the City Council when the virus began to spread.

The council canceled its budget hearings because of the crisis. The final executive budget must be approved by the end of June.

MTA Cuts Bus, Subway Service Amid Worker Shortage

By PAUL BERGER

New York's Metropolitan Transportation Authority will reduce subway, bus and commuter-rail services as ridership plummets and the new coronavirus crisis causes worker shortages.

Sarah Feinberg, the MTA's head of subway and bus systems, said Tuesday that staff shortages that morning had caused 800 subway trains to be delayed as the authority suspended service on three of its 27 lines—the B, W and Z—and switched other lines to local from express.

Beginning Wednesday, the authority will maintain rush-hour frequency on the subway, while reducing overall service by 75%, MTA officials said. The B, W and Z lines won't run weekdays. The authority will implement similar reductions on buses beginning Thursday.

The Long Island Rail Road and Metro-North Railroad also will reduce service this week, officials said.

New York City sits at the epicenter of the nation's coro-



Subway ridership is down 87%, so officials don't believe service reductions will lead to crowding.

navirus crisis. Transit officials have emphasized that running a full service helps critical workers get to hospitals and grocery stores. It also helps alleviate crowding at a time when people are being told to

keep 6 feet apart.

The schedule has become increasingly difficult to maintain as train and bus operators, supervisors and other workers have become infected with the virus or have been

quarantined.

MTA Chairman Patrick Foye said Tuesday that 52 workers have tested positive for the virus, up from 23 five days earlier. He said he didn't know how many workers have been

quarantined. In a recent interview, Ms. Feinberg said there had been dozens of instances when workers were told to stay home because a colleague was believed to have the virus.

The subway carries about 5.5 million riders on an average weekday.

Mr. Foye said that with subway ridership down 87%, officials don't believe service reductions will lead to crowding. "We didn't experience or see any crowding today," he said.

But some commuters said they did experience crowding Tuesday. Christina Shaw, an office manager at an accounting firm, said passengers were crammed shoulder-to-shoulder into her Q train.

Ms. Shaw, 59 years old, said if she had known about the service reductions, she would have left home earlier to avoid crowds. "There's no communication," she said.

The decision to reduce services was taken in consultation with leaders of critical industries, such as utility companies and hospitals, Mr. Foye said.

GREATER NEW YORK

Upstate
Areas Tell
City Folk:
Stay Home

BY AMBER BURTON

The coronavirus outbreak has led three upstate counties to encourage New York City residents, many of whom have second homes in the area, to remain in their primary homes.

Sullivan, Greene and Delaware counties, all in the Hudson Valley north of New York, have urged their residents to remove short-term rental listings online and suggested that people with second homes in the area consider staying away.

"I want them to be aware of what they're putting themselves into," said Shaun Groden, Greene County's county administrator, who referred to people seeking to stay in the area to get away from the virus.

"Our concern is that we don't have a hospital," said Mr. Groden. "The mountains have what we call the 'Mountain Top,' which is where the majority of second homes are. It has like two doctors."

About 30% of the homes in the area are second homes, Mr. Groden noted.

He pointed to a rush of people who already have come to the area and overwhelmed local grocery stores because they are hoarding. Many stores were unprepared in what is usually a quiet time before tourism revives in the summer.

Sullivan County Public Health Director Nancy McGraw said in an email that "our message was a plea to consider the ramifications and resources before leaving one community for another."

The county has one hospital with two locations in a primarily rural area.

Ulster County, which includes the towns of Woodstock, New Paltz and Kingston, hasn't discouraged visitors and has no plans to, said County Executive Pat Ryan.

Athletes Train 'Together' Virtually

BY LEE HAWKINS

Before becoming nationally ranked high-school athletes, Riverdale Country School track stars Tobias Wolfson and Aaron Miller became best friends as pre-kindergartners, while playing touch football on Riverdale's playground.

Aaron, a sprinter, chuckles when thinking back to the mohawk Tobias wore back then, a haircut that—despite his frequent pleadings—his parents wouldn't allow their curly haired son to mimic.

"He'd be the quarterback and I was the wide receiver," Aaron said of the long-distance runner. "We'd always have a great connection with each other, but we never dreamed we would end up at the same school running track together."

This year, the 18-year-olds are facing two of the most challenging tests of their track careers together: Both already have committed to Yale University's 2020-21 track team as they grapple with the fact that their highly anticipated final season at Riverdale may be canceled due to the growing novel coronavirus sweeping the nation.

The Bronx school, which closed March 9, has yet to confirm a reopen date. New York City's Department of Education has set a tentative date of April 20 to open its public schools.

Aaron and Tobias have responded with more preparation and by reflecting on the lessons student athleticism has taught them about life—with a little help from Riverdale coaches.

With the season still up in the air, the athletic department at the private K-12 college-prep school has designed a "remote athletics" program to help the 270 upper-school athletes participating in spring sports stay in shape in the event that the season isn't canceled. They will train together virtually, because public-health mandates require them to stay apart.



Aaron Miller, a senior at Riverdale Country School, has been training in Great Barrington, Mass.

"It will be pretty devastating to lose my last season of track," Tobias said. "Not only just because I won't be able to chase the times or win the stuff I want, but even more so because it's my last season of high school athletics."

On Monday, Riverdale Athletic Director John Pizzi's coaching staff will start holding four meetings a week with the upper school's 17 spring sports teams on the Google Meet videoconferencing app.

Individual and team goals also will be tracked on Strava, a GPS cycling and running app, and on shared Google documents.

"We're going to continue fully training as if there is no type of restriction," Tobias said. "We might not be doing the workouts with our teammates, but every day we're still getting a workout plan of exactly the things we need to do."

Aaron said he has been staying at a house his family owns in Massachusetts and found a track at a nearby high

school where he can work out. "I don't have to be at a specific track," he said. "There are thousands and thousands of tracks, and I can pick any one and do this training program."

Riverdale, which came in second among New York's private schools in 2018, believes that Tobias and Aaron, and

during his spring 2019 season, which could have ended his track career.

And in September, he was injured again, albeit less seriously. After enduring a painful rehabilitation process, Tobias won two USA Track & Field national championships in the summer of 2019. After his injury in the fall, he won the New York State Association of Independent Schools Championship in the 1600-meter, boosting his confidence that he could be state champion in 2020.

Aaron was last year's runner-up in the New York State Association of Independent Schools championship's 400-meter event. This year, he is the league's top-ranked 400-meter runner. Before the coronavirus struck, he vowed that he would be among the fastest in Riverdale's Ivy Preparatory League and beyond.

"I wanted to be state champion in the 400 meters and place in the top three or four in the 200-meter," he said. "I felt like I was on track to be in

a position like that and then perform nationally and be in the top 20 in the country for the 400 meters."

They both feel for their junior year teammates such as Kevin, who could lose their prime recruiting year. "His [2019] times don't represent the type of athlete he really is and the work ethic that he puts in," said Aaron, who may major in architecture at Yale. "I've seen so many juniors who truly want it, and it's a type of passion that some seniors really don't have."

Mr. Pizzi, who also serves as executive secretary of athletics for the 195-school New York State Association of Independent Schools, which oversees private-school sports, said the organization has established dates for when the season could start if schools reopen.

Remote training is meant to give students "some normalcy in their daily routine," and provide mental and emotional health support as the program goes through the interruption, Mr. Pizzi said.

For former playground comrades Tobias and Aaron, having landed spots at Yale is a buffer. But in conceding that his high-school career may be over, Tobias draws on the wisdom he gained after his first injury made him feel like he had "lost a lot of purpose in life."

"I realized that I really needed to not let track define who I am, to realize that I'm a person beyond that," he said.

At Yale, Tobias plans to study economics, inspired partly by his involvement in "Zawadi," Riverdale's microfinance club. "We make real loans to entrepreneurs, specifically women in developing countries without access to credit or banks, to give them capital," he said.

A Swahili word, Zawadi means "gift."

Doing workouts solo has "taught me that I have to adapt and innovate my way out of any situation," Tobias said. "I have to be able to do more with less."

Students at a Bronx
high school work out
remotely to stay in
shape amid crisis.

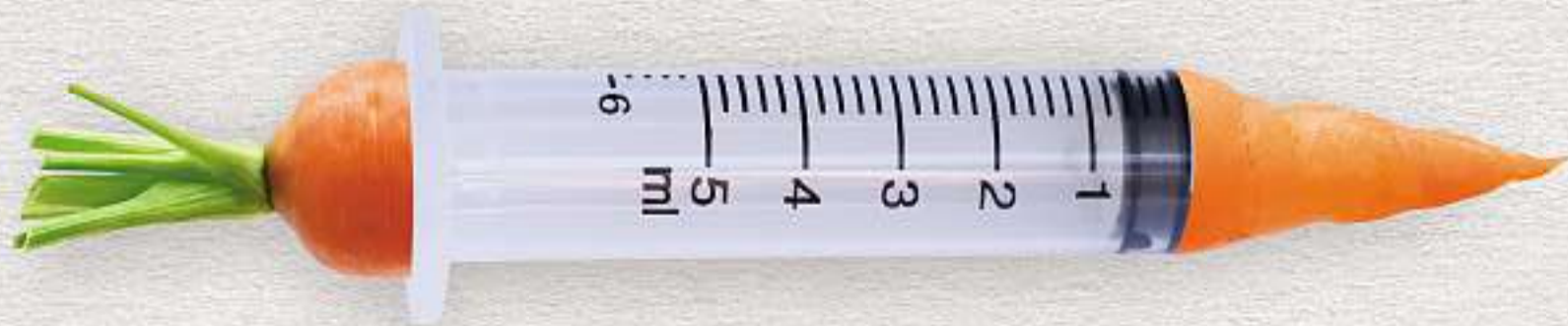
breakout younger athletes such as junior sprinter Kevin Pepin, could lead the team to a state title.

Tobias and Aaron still have lots to prove. Tobias, who initially joined the track team only to stay in shape for lacrosse and soccer, has rebounded from injuries. The most serious was a stress fracture in his left tibia


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LIFE & ARTS

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Strike a Work-Food Balance

Top nutritionists suggest healthy eating habits as social distancing keeps many people at home

BY HILARY POTKEWITZ

Working from home is no picnic—or at least, it isn't supposed to be. But for many newly remote employees, working steps away from a (now) fully stocked kitchen looks a lot like an all-day buffet. Social distancing could keep many of us indoors for weeks with larders full of bread, pasta and frozen pizza. Now is the time to establish healthy habits. We asked top nutritionists and chefs how to cook, shop and snack smarter in the weeks ahead.

Elisabetta Politi, nutrition director, Duke Diet & Fitness Center

One of the biggest pitfalls of working from home is grazing, or "eating mindlessly as you work," says Elisabetta Politi, nutrition director at the Duke Diet & Fitness Center in Durham, N.C. She strongly suggests establishing a meal schedule.

"Make mealtimes very clear, so everybody knows there is a time to eat and time to not eat," she says.

Recent clients improved their eating habits by agreeing they would only eat if they laid down a tablecloth, for example. Table linens may be a little fussy for some, so Ms. Politi suggests alternatives: deciding that food may only be eaten over a place mat, or while sitting at the kitchen table.

"Create a change of scenery, so you realize it's a different moment," she says.

During the recent weeks of frenzied shopping, she noticed fresh produce went largely untouched. "I think people are afraid of buying fresh fruits and vegetables, but some are much less perishable," Ms. Politi says. Her list of hearty produce includes: bell peppers, broccoli, cauliflower, carrots, potatoes, bananas, apples and citrus fruit. Try infusing water with a squeeze of fresh lemon or grapefruit to boost vitamin C and encourage hydration.

For those trying to maintain a low-carbohydrate diet, Ms. Politi recommends snacks such as turkey jerky, sugar-free Jell-O, pork rinds or Parmesan crisps. "Grate some Parmesan cheese onto a baking sheet, bake in the oven and they'll pop," she says.

Pro Tip: It is important to integrate a favorite treat into your daily routine, she says, especially in times of stress. Be selective.

Whether it's a cookie or a piece of chocolate, apportion the treat ahead of time, she says. "Then ask yourself, at what time of day do I

feel most vulnerable, when I would really enjoy eating this?"

Alex Guarnaschelli, celebrity chef, Food Network star

In uncertain times, people often turn to Italian-American food, says New York City-based chef Alex Guarnaschelli.

"Cooking is a way of coping," she says. "I think we never tire of those belly-warming dishes made from some cheese, pasta and canned tomatoes."

There is nothing wrong with using boxed noodles and jarred sauce, she says, as long as you up

the nutrition content. "The trick is to be clever about inserting protein. My mother used to make tomato sauce and stir in canned tuna," she says. Other protein-rich add-ins include anchovies, canned chickpeas, minestrone or chicken meatball soup, and cooked lentils or quinoa.

But Ms. Guarnaschelli admits that even pasta has its limits. "Don't eat pasta too many days in a row or you'll get tired of it," she says. Alternate dishes with a mixed-bean chili or a hearty lentil soup with bacon.



Alex Guarnaschelli

Pro Tip: Instead of seeking items everyone is stockpiling, Ms. Guarnaschelli says focus on ingredients still on grocery shelves. "Aisles have no strawberry jam, but they are brimming with frozen okra, fresh parsnips and dried beans," she says. Try different combinations with pantry ingredients on hand; "it can be an amusing way to play 'Chopped' at home," says Ms. Guarnaschelli, a frequent judge on the Food Network show.

Kristin Kirkpatrick, dietitian, Cleveland Clinic Wellness Institute

The total disruption of routines is an opportunity to set new ones, says Kristin Kirkpatrick, a dietitian at Cleveland Clinic Wellness Institute.

"Now is a great time to try out some periodic fasting techniques," she says. The practice involves limiting food consumption to an eight- to 12-hour daytime window. Ms. Kirkpatrick doesn't eat breakfast until 11 a.m., and finishes family dinner by 7 p.m., she says. Someone else may feel more comfortable with a 10-hour food window, from 9 a.m. to 7 p.m.

Such changes can lower the appetite, she says, and studies show that people tend to consume fewer



Kristin Kirkpatrick

calories when they have fewer eating hours in the day. She cautions that periodic fasting should only be considered by healthy adults, and isn't appropriate for anyone who is diabetic, pregnant or has a history of disordered eating.

For snacking, Ms. Kirkpatrick is anti-pretzel. If you're craving crunchy, go for nuts or chopped veggies, she says. Their higher nutrient density makes them more filling. "Most pretzels, all you're getting is white flour and sodium—not a great combo," she says, suggesting popcorn instead.

Whole-grain bread is always better, but white bread isn't the end of the world, she says. For sandwiches, choose baked or grilled chicken rather than processed deli meat. Natural or low-sugar peanut butter is also a great staple. Always be thinking of multiple uses: Fresh berries can be frozen and used in smoothies. So can spinach. Bananas can become banana bread. "And eggs are the perfect food. A great source of protein," she says.

Pro Tip: For those leery of fruit with high-carb content, Ms. Kirkpatrick suggests stone fruits, apples and berries, which are lower on the glycemic index. A bowl of frozen dark cherries makes a sweet dessert. "I defrost them a little in the microwave and cut them in half," she says. "Kids love them."

Mark Hyman, medical director, the UltraWellness Center

"The trap I see people falling into right now is, 'the end of the world is coming so let's just eat crap,'" says Mark Hyman, medical director and founder of the UltraWellness Center in Lenox, Mass. A better exercise, he says, is thinking about which foods can help us fight infection. "We know that sugar and starch worsen your immune function," he said.

Dr. Hyman would prefer people stock up on beans and whole

grains instead of pasta and processed bread. "Keep the pasta in the pantry. If the world ends, you'll want it," he says. "But while you're able to, cook real, whole food."

He recommends eating some form of protein with every meal, citing protein deficiency as a risk factor for infections. Nuts, seeds and protein powders can do the trick, but he also recommends canned salmon or sardines, and frozen chicken, fish or beef. In the deli section, Dr. Hyman suggests only salami or cured meats.

Pro Tip: "People tend to forget about spices, and many of them have antimicrobial, anti-inflammatory and anti-viral qualities," Dr. Hyman says, putting garlic, onions, turmeric, ginger and oregano on his must-have list. He also recommends probiotic foods like sauerkraut, kimchi, pickles, miso and kefir, a fermented yogurt.

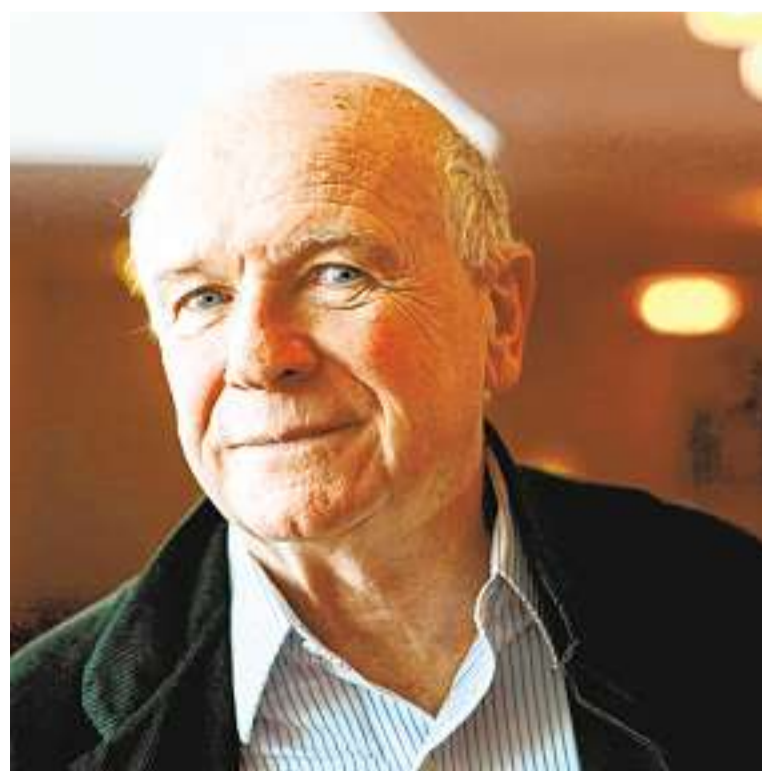
APPRECIATION

A Playwright at Once Serious and Satirical

BY TERRY TEACHOUT

The coronavirus has claimed its first well-known theatrical victim—one who, in the most brutal of ironies, lived through an earlier plague that laid waste to the American stage. Terrence McNally, who died on Tuesday in Sarasota, Fla., at the age of 81, belonged to the generation of gay men who survived the AIDS epidemic and lived long enough to marry their partners. He was one of the very first playwrights to write forthrightly about life in New York's gay community, which meant almost by definition that he had frequent occasion to write about AIDS, first in "Lips Together, Teeth Apart" (1991) and the Tony-winning "Love! Valour! Compassion!" (1994) and later in "Andre's Mother" (1990) and "Mothers and Sons" (2013), a pair of plays about a gay-hating mother whose son dies of AIDS.

Not that Mr. McNally had only one subject. He was one of the true professionals of American theater, a hugely prolific playwright who also wrote the books for numerous musicals, the most successful of which were his stage versions of "Kiss of the Spider Woman" (1992) and "Ragtime" (1996). Few seasons went by when a show of his wasn't running on or off-Broadway—or both. When not in a rehearsal hall, he was more likely than not to be at the opera,



Terrence McNally, whose Tony-winning work included dramas about AIDS and comedies mocking the stage world, died at age 81 from the coronavirus.

and many of his plays, most famously "The Lisbon Traviata" (1989), the story of two men who prefer opera to life, and "Master Class" (1995), a dramatization of the master classes that Maria Callas gave at Juilliard in 1971 and 1972, portrayed various aspects of

the claustrophobic world of opera and its obsessive fans.

Given the fact that Mr. McNally came along when he did, I was struck by how cheery a playwright he usually was. He was a funny man who loved to give pleasure, and I felt almost guilty for not lik-

ing more of his work more than I did. Part of the problem was that his talent to amuse could lead him astray, most strikingly in "Master Class," whose teaching scenes are believable—he knew all there was to know about Callas—but in which he elsewhere sugared the pill thickly with over-obvious humor of his own. Similarly, his jokey book for "The Visit" (2001), a musical based on Friedrich Dürrenmatt's ferociously sardonic 1956 play, softened Dürrenmatt's savage ironies to the point of near-blandness.

Needless to say, Mr. McNally had good reason to be angry, but when his anger got into his shows, it sometimes turned into smugness. Katharine, the title character of "Mothers and Sons," grew up in a *déclassé* New York suburb, married a Texan and moved with him to Dallas, and Mr. McNally stacked the deck against her so high that she never had a chance to be believable. Not only does she hate gay people, but she doesn't much care for Texas, and what she says about it sounds more like what her creator might have said: "My mistake was letting Mr. Gerard sweep me off to Texas. He told me there were nice, cultured people there. He was wrong on both counts."

He was, I think, at his best in comedy. To be sure, "The Ritz" (1975), his first hit, was a sloppily wrought mistaken-identity farce about high jinks in a gay bath-

house that was successful mainly because of its then-startling subject matter. But while Mr. McNally was far from the most elegant of farceurs, his one-liners were usually sharp enough to make up for the lack of dramaturgical discipline. "It's Only a Play" (1982), a backstage farce set at the opening-night party for an unsuccessful play, was revived on Broadway in a deservedly popular 2014 production whose cast was led by Nathan Lane and Matthew Broderick. Yes, the first act sagged in the middle, but if I hadn't been on duty, I probably wouldn't have noticed, seeing as how I was laughing so hard.

The best of his operatic plays, "Golden Age" (2009), is full of sharp-elbowed digs at the silliness of stage performers. It's a satire, but a loving one, and Mr. McNally portrayed the singers who dominate the cast of characters with just the right blend of amusement and compassion. That blend was his strongest suit as a playwright, and while I suspect that his serious plays will be remembered mainly as heart-on-sleeve portraits of life in the terrible age of AIDS, I think it just as likely that his best comedies will continue to be revived for the finest of reasons, which is that they can still make us laugh.

Mr. Teachout is the Journal's drama critic.

LIFE & ARTS



EMILY BERG FOR THE WALL STREET JOURNAL (4)

MY RIDE | A.J. BAIME

This T-Bird Has Seen Its Share of Showbiz Royalty

The classic Ford owned by an L.A. rocker has quite a back story

Lonny Paul Johnson, 50, a musician and songwriter, on his 1955 Ford Thunderbird, as told to A.J. Baime.

My wife, Jody Hamilton, who is a daughter of Carol Burnett, and I love classic cars and we love our home of Los Angeles. We already had a 1929 Ford Model A, and one day I asked her, "What is your favorite classic?" She said, "I always loved the early T-Birds." I started doing research and I fell in love with the 1955.

Model year 1955 was the first of the Thunderbird. Ford created it as direct competition to

Chevrolet's Corvette. It's funny. Even today, you have two kinds of classic car fans: people who love Corvettes and people who love Thunderbirds, and they rarely cross over. I have a friend who owns 30 Corvettes and zero T-Birds.

One day a friend told me, "Hey, I found your Thunderbird. It's perfect, flawless. You won't have to do any work on it." So we went to see it, and the moment we did, my heart skipped a beat. I knew it was the one. It's small; I'm small. It's

black and kind of dark. Everything on it looked pretty original, down to the nuts and bolts.

The car had been restored in 2008, and when the man who restored it passed away, his daughter inherited it. I bought the car from her this past January for roughly what a new BMW sedan would cost. The car had a fascinating history.

According to a pamphlet that came with the car, the first owner was Maxene Andrews of the singing group the Andrews Sisters, who had purchased it new from Santa Monica Ford. After her, Friz Freleng—ani-



Lonny Paul Johnson, top, with his 1955 Ford Thunderbird, photographed on March 4 in Los Angeles. Above, the car's interior, and detail of its styling. The symbol on the left signifies the car's V-8 engine. The Thunderbird's nose, left. Mr. Johnson and his wife, Jody Hamilton, also own a 1929 Ford Model A.

mator of many early Warner Bros. cartoons—owned this car. [Freleng either created or developed many famous Looney Tunes and Merrie Melodies characters, such as Bugs Bunny and Porky Pig.]

I did some research myself and while I was not able to find any family members of Maxene Andrews [who died in 1995], I did find Freleng's grandson and his wife, and the couple confirmed that Freleng had owned a black 1955 Thunderbird and that they had heard that Maxene Andrews

had owned the car before him.

The T-Bird has drawn a lot of eyes at local car shows—Friday nights at Bob's Big Boy in Burbank, and Supercar Sunday at Pierce College in Woodland Hills. Until recently [before the coronavirus lockdown], I would drive it up and down Hollywood Boulevard and tourists would take pictures with their cell-phones. If I was a tourist in Hollywood, that is what I would want to see on Hollywood Boulevard.

To me, everything about this car is cool.



Wave of Canceled Events Hope for a Second Chance in Fall

By NEIL SHAH

FOR WEEKS, Americans have watched an unprecedented number of cultural institutions cancel or postpone events due to the coronavirus pandemic.

In recent days, the opposite problem has arisen: Many high-lights of the cultural calendar that formerly stretched through spring and summer—from the Kentucky Derby and Coachella and Bonnaroo music festivals to the French Open—are now being rescheduled to a single season: the fall.

New dates in the fall, of course, could end up being re-jiggered as well. It is too soon to say when large gatherings will be considered safe again from a public-health standpoint. But for now, event planners agree, the scramble to reposition in the autumn is like nothing many of them have seen before.

The resulting traffic jam poses logistical challenges for festivities that were already set for the fall, as well as organizers still trying to rebook. It also could present consumers with an unparalleled deluge of sports events and concerts.

"Everyone wants to move to the fall," says Peter Shapiro, an independent concert promoter for mid-size venues such as the Capitol Theatre in Port Chester, N.Y.

Such an exodus of events from spring to fall has never occurred. "There is no 'How did this work before?'" Mr. Shapiro says. "This is new territory."

It remains unclear when the outbreak of the new coronavirus will peak, and for how long public-health emergency measures will be required. With an economic recession now expected, subsequent belt-tightening will probably reduce spending on all kinds of leisure activities, including sports events, concerts, theater and travel.

Still, for the moment, across the worlds of sport, music and art, not to mention other types of cultural events, this fall is shaping up to be one of the busiest ever.

The Kentucky Derby, which has run every year since 1875, has announced it is moving from its customary first Saturday of May to Sept. 5. Since 1901, the famous horse race in Louisville, Ky., has always happened in May—except once. (It was moved to June in 1945 during World War II.)

"The Kentucky Derby is almost like a holiday," says Bill Carstanjen, chief executive of Churchill Downs, which owns and operates Churchill Downs Racetrack, where the Derby is held. "This was a really big deal in this region to even talk about moving the dates, because there was no collective memory of the last time that had happened."

"We did anticipate that other events might move to September and the fall," Mr. Carstanjen says. "There are only so many weekends. I don't think there is enough space for everybody."



The Kentucky Derby, almost always held in May, is tentatively set for Sept. 5.

The French Open, normally held in late May and June, has been postponed to Sept. 20 to Oct. 4. That puts it one week after another major tennis tournament, the U.S. Open, which lasts until Sept. 13. The French Open now clashes with the Laver Cup in Boston, which is in late September.

The Boston and London marathons have moved to Sept. 14 and Oct. 4, respectively. The Los Angeles Times Festival of Books is now set for Oct. 3-4. Smaller observances have rescheduled, too, like the St. Patrick's Day Parade in Yonkers, N.Y., to Sept. 19, and the

annual gala of the Gordon Parks Foundation, to Oct. 12.

One of the sectors hardest hit so far is live music. Coachella, held in Indio, Calif., has announced it would move from April to October, along with its sister festival, the Stagecoach Country Music festival. Bonnaroo, held in Manchester, Tenn., will decamp to Sept. 24-27. Atlanta's Shaky Knees will now be held Oct. 16-18. The New Orleans Jazz & Heritage Festival, too, has announced it will move to the fall, but no date had been set yet.

Some big music stars have announced rescheduled concert dates

in the fall, but the majority of this year's marquee summer concert tours in North America—Billie Eilish, the Rolling Stones and others—remain a question mark.

Concert promoters Live Nation Entertainment and AEG Presents declined to comment.

Music-awards shows have been postponed as well. The Academy of Country Music Awards has been rescheduled for Sept. 16. The Rock & Roll Hall of Fame in Cleveland has postponed its annually televised induction ceremony from May 2 to Nov. 7.

Mr. Shapiro, the concert promoter, says 10 different artists have wanted to play at Capitol Theatre on the same day, Friday, Oct. 9. Musicians "are going to be on top of each other," he says. "I'm almost wondering—do I do multiple shows a day?" Mr. Shapiro says he expects weeknight bookings to become much more popular.

For some fans, there could be a potential bounty, once restrictions on public gatherings are lifted. In commercial terms, live music tends to be resilient in hard economic times. But competition between artists, booking agents, promoters and venues will be intense, and weaker ventures may fail.

"Making plans for a busy fall reflects a bit on human nature. We're putting these plans in place now, even while the fires are burning," Mr. Shapiro says.

"We want to believe things will be better again."

BRIAN SPURLOCK/REUTERS

LIFE & ARTS

CULTURAL COMMENTARY

All the Empty Palaces



The Metropolitan Museum of Art, above, and the Tenement Museum, below, are just two of the arts institutions being impacted by the coronavirus

By ADRIAN ELLIS

THOUGH the medical impact of the coronavirus is of paramount concern, how both the arts and their institutional infrastructure cope with what's ahead still matters. The sector is economically significant—we have the data on all those jobs created; on the new investment the arts attract to urban areas; and on those high-end cultural tourists seduced into spending more, staying longer and coming back again. The sector is also socially significant and is, at its core, the custodian of the world's material and intangible culture. So how are things looking for it?

Challenging. The arts are premised on dense physical contact. Even the more private art forms like poetry now revel in readings and slams. But this is obviously off the agenda, and the sector has pretty well shut up shop.

Consequently, organizations are scrambling to boost their online presence. But very few of these have any prospect of a business model to support them, and even fewer have one that could remotely substitute for the loss of revenue for live performance or attendance, or that could make full use of the expensive physical infrastructure that was, until two weeks ago, an essential part of most institutions' economic model and *raison d'être*.

Boards and management—sitting at their kitchen tables in endless pixelated teleconferences—are therefore trying to make sense of a landscape transforming daily. The provisional consensus seems to be that how arts organizations fare in the immediate future depends on one cluster of factors, but how they fare in the longer term may depend

on a completely different set. Building a bridge from the reasonably well-defined short term to the very misty longer term is the challenge the sector faces.

There are three drivers to which all organizations are giving their attention in the short term. The first is their balance sheets—working capital, reserves, endowment and debt. Like businesses everywhere, they are quickly facing cash-flow problems. A 2018 report from SMU DataArts—the most recent and most authoritative information we have—found that the average U.S.-based arts organization has less than two months of working capital; the average orchestra some 15 days.

Generally, the longer you have been around and the bigger you are, the stronger your balance sheet—and the better placed you are to leverage it through (very low interest) borrowing. For example, the Metropolitan Museum of Art in New York, celebrating its 150th anniversary this year, has an endowment of several billion dollars. Smaller, hardscrabble organizations with meager endowments, less wealthy boards and little collateral for securing lines of credit are hitting a cash crunch much faster.

The second driver is the underlying business model, which in this context the arts sector views through two metrics: the ratio of earned income to contributed income—grants, donations, galas,

etc.—and the ratio of fixed to variable costs. Performing-arts organizations are much more reliant on earned income in general and specifically on ticket income—the former is over 60% of total income as opposed to under 30% for museums. So in a crisis like this, the performing arts are hit much more quickly. There are exceptions: According to a report last week in the New York Times, the Tenement

ample larger symphony orchestras.

But the cuts that are easiest to make to alleviate fiscal stress in the short term—such as reduced non-protected staff—may not take institutions in the direction they need to head in the long term. Even setting aside the human cost in the gig economy, where curators and artists are on short-term contracts, and the vaunted responsibilities of arts institutions as civic anchors, the price of losing talent and institutional expertise can be considerable. Finding a defensible path between the cavalier and the sentimental; protecting the underlying assets for the long-term while living up to those aspirational value-statements on the website; and reaching a consensus between the hawks and the doves on the team is a—perhaps the—



Museum in Lower Manhattan, which has a very high ratio of earned to contributed income, has already laid off 20% of its staff.

On the expenditure side, the higher your ratio of variable to fixed costs, the better you can manage your situation, as you can control a larger proportion of your expenses in the short term. Organizations with extensive real estate-related costs, absolutely and as a proportion of the total budget, are disadvantaged—the sector has been on a decades-long “physical infrastructure” binge—as are those with onerous labor agreements, for ex-

ample larger symphony orchestras.

The third driver is the capacity and willingness of stakeholders—boards, foundations, government—to fund short-term cash demands that can't otherwise be met. It is unclear how quickly boards are acting. But foundations are moving to provide liquidity. Last Friday a coalition of over a dozen announced their “NYC Covid-19 Response and Impact Fund” of \$75 million to provide general operating liquidity and interest-free loans to New York City cultural institutions with annual operating budgets of below \$20 million. Similar initiatives will be an-

nounced and foundations around the country are relaxing conditions on grants already made. The sector is lobbying for earmarks in the current federal rescue package. Federal tax filing delays may also allow the deadline for donations reflected in the 2019 tax year (when many people will have had significant gains) to be extended.

So in the short term, the sector is trying to buy time by applying working capital; lobbying for easements of restricted funding; fundraising; and borrowing, as it did after 9/11 and in 2008. It knows the drill. But it needs to use that time wisely, which means it needs to see where it is heading in the longer term.

Shuttered arts institutions will find a way out of this crisis—but it won't be easy

Crises accelerate trends already under way, and the sector has been grappling with changes in demographics, tastes and competitive demands on leisure time. People are looking for more informal experiences, and ones where they have greater agency, often mediated in some way by technology. These have all put the arts on notice. In response, the sector has progressed over the past two decades from sales and marketing to audience development to outreach to “engagement,” in increasingly expensive and ambitious attempts to remain relevant to a changing world. These moves have been encouraged heavily by funders, sympathetic to and supportive of the underlying ambitions of arts organizations but often frustrated by the sector's slow progress. The cultural sector in general—and larger “legacy” institutions in particular—risk losing their collective grip on the philanthropic imagination and conscience when set alongside other social imperatives. (Tellingly, the NYC Covid-19 fund was created to benefit social-service organizations, too—and in the press release that sector was mentioned first.)

The crisis also raises entirely new scenarios that arts leaders are having to think through. One that is looming large is a lingering presence of the virus pending the availability of a vaccine. This raises the specter of reluctance, especially among older audiences, to attend social functions or enter crowded spaces; of younger audiences, eager to socialize and re-engage in person, looking for less formal, more interactive contexts; of nonessential international travel effectively off the agenda for a year or two, transforming for example cultural tourism and festivals.

Arts leaders and funders sufficiently clear-eyed to see the situation as it is and nimble enough to adapt will regard this moment as an opportunity to ease and accelerate transitions, to examine more critically the impediments to organizational agility, and to ensure that resources are ultimately focused on stewarding creativity and access to it—not simply supporting institutional superstructures. For everyone it is a profound threat to business as usual.

Mr. Ellis is a director of AEA Consulting and the chairman of the Global Cultural Districts Network.

By LARRY BLUMENFELD

KASSA OVERALL calls himself “a backpack jazz producer—something like a cross between a jazz musician, a backpack rapper and a bedroom producer,” he told me in an interview. Thus, “I Think I'm Good” (Brownswood) was created in both solitude and on the run, at spots throughout his adopted hometown, New York, and on the road.

Some of the material was improvised on bandstands at jazz clubs, some in recording studios and the homes of his colleagues. All of it was chopped up and recombined using the skeletal music studio Mr. Overall carries in his backpack, whenever and wherever inspiration struck, including, yes, his bedroom. He rode his bicycle to the apartment of Morgan Guerin, a brilliant multi-instrumentalist whose voice, via electric bass, drums and various woodwind instruments, is one of the album's defining elements. The Steinway at pianist Sullivan Fortner's home provided a basis for two tracks—the ominous “Please Don't Kill Me” and the pent-up “Halfway House.”

The album Mr. Overall ended up with sounds intimate and personal, its sung and rapped lyrics embedded with dark confessions and hopeful pleas. It is also a community project, involving 23 fellow musicians; like Mr. Overall, who is 37 years old, all of them are on the ascending side of careers defined more by musical curiosity and personal affiliations than by genre and

Hip-Hop in the Jazz Club

style. (The pianists alone include Vijay Iyer, Craig Taborn, Aaron Parks, Courtney Bryan and Mr. Fortner.)

Mr. Overall's combination of live performances, studio recordings and remixes and his bridging of jazz and hip-hop cultures are nothing new. Musicians such as Kendrick Lamar and Flying Lotus have made these approaches something of a lingua franca just now. But Mr. Overall possesses a rare balance of skills and experience on both sides of the equation. He lives in both worlds. Early on, he was a drummer displaying savvy technique and uncommon sensitivity in pianist Geri Allen's band. He was also a rapper/producer, combining force and tenderness in collaboration with the hip-hop collective Das Racist. He flashed irrepressible charm alongside pianist Jon Batiste's band on “The Late Show With Stephen Colbert” and rapped stark lyrics about societal ills as a member of drummer Terri Lyne Carrington's Social Science band. His previous release, “Go Get Ice Cream and Listen to Jazz,” fur-

thered a jazz/hip-hop/neo-soul blend that trumpeter Roy Hargrove pioneered (and featured Hargrove, as recorded six months before his untimely death).

As an undergraduate at Oberlin College, Mr. Overall once confronted faculty that endorsed his jazz stud-

ies but disapproved of his passion for hip-hop “beat-making.” He has long since reconciled that schism through his music. While in college, he also experienced manic episodes that required brief hospitalization; he ended up overmedicated. He now seeks to integrate his private struggles into the narratives of his songs.

On his previous album, Mr. Overall rapped: “What's the best stocks? Prison and pharmaceuticals.” Here, his allusions to pain and paranoia—“I hope they let me go tonight,” during “Visible Walls,” and “When I lay down to rest and it feel like a plot,” in “I Know You See Me”—blur the personal with the political. They can be heard as statements about incarceration or metaphors for imprisonment of the mind. The line, “I can't breathe when I get down,” in “Please Don't Kill Me,” might be shouted at a Black Lives Matter protest march or whispered over the phone by a depressive.

Like his lyrics, Mr. Overall's music is richly textured yet utterly ac-



Kassa Overall's new album is 'I Think I'm Good'

cessible. Both lyrics and music are packed with references lent new meaning. The catchy melody of “Darkness In Mind” is Chopin's (from Prelude No. 4, as played by Mr. Fortner). The harmonies of “Please Don't Kill Me” are lifted from Coltrane's “Naima.” Mr. Overall quotes liberally from lyrics by folk singer Phil Ochs and rapper André Benjamin. Yet his original commentary, sung and rapped, is riveting. His songs are memorable, sometimes constructed from seeming fragments. For “Find Me,” he seized upon an improvisation by pianist Aaron Parks, as recorded during Mr. Overall's extended residency at Manhattan's Jazz Gallery. He “chopped and cropped” that passage, along with looped tracks of his own drumming. At a later performance, he triggered recorded samples of that material to stimulate new ideas. Then, back into the backpack studio, resulting in what he calls “a song upon a song upon a song.”

One final track, “Was She Happy (For Geri Allen),” performed in duet with Mr. Iyer, is in tribute to his former employer, who died in 2017, and who was a brilliant yet enigmatic presence. “She was on a quest, she was on a journey,” the lyrics declare. Mr. Overall's new album questions his own state of mind and whatever we might mean by “happy.” It also begins to chart his journey, headed somewhere rewarding and new.

Mr. Blumenfeld writes about jazz for the Journal.

OPINION

The Happy Few Are the Cured



**BUSINESS
WORLD**
By William W.
Jenkins, Jr.

The giddiest among us soon will be those who tested positive and now have it behind them. The world will be their oyster. A Craigslist page will soon appear for coronavirus antibody-positive personal services. People will get paid hundreds of dollars an hour if they can document their immunity. Starbucks is opening up again in Wuhan. In the U.S., Seattle or New York will get the first antibody-positive Starbucks: Every barista will be able to prove they've had the coronavirus.

Half facetiously, we need infection camps where millennials can go and get exposed and frolic for two weeks and then come back and go to work. You may think all we are doing is about protecting them and you from getting the virus. No. Our "flatten the curve" strategy is premised on all of us being exposed to the infection; some of us will die. We are crushing our economy simply to meter out how quickly these consequences fall on our exhausted health-care workers.

Singapore and the U.S. had one thing in common before the coronavirus crisis: more than 8,000 daily visitors from China. A recent Lancet review of Singapore's experience concludes laconically that "local

clusters . . . are expected in countries with high travel volume from China before the lockdown of Wuhan."

Hence my own intuition that testing and isolation were always destined to be peripheral in the U.S. response, given a country of 330 million where clusters are free to expand undetected amid tens of millions of seasonal flu cases. The big mistake for which we will kick ourselves is not immediately upping the capacity of our health-care system. It's awful for this burden now to fall on our medical personnel. It's a reason for each of us to do our part, by trying not to spread the disease and taking special care of the elderly and infirm (who should also be taking special care of themselves).

But I repeat: We are slowing the economy to a crawl to slow the rate of a thing happening that will have to happen anyway.

It will be years before we can make sense of our experience. Path dependence—small contingencies that determine the flow of events—may explain why 2020 wasn't 1918, 1957, 1968 or 1977, when pandemics didn't cause global depressions. The mesmerizing apparition of China suppressing the virus, after first hiding its existence, may turn out to be a misdirection—the invention of the idea that a flu-like disease can just be stopped.

Nobody has yet satisfactorily explained how lockdowns can end if most of the population is uninfected, there's no

vaccine, and the virus is not extinct. The vague premise of our actions may be in doubt if, as reported this week, the disappearance of the disease from Wuhan is because China stopped counting cases that don't require hospitalization.

Far and wide has arisen the recognition that a full stop to our economy will also be costly in health and well-being terms (especially in a rational

Now let's get on with saving the economy while protecting the vulnerable.

medical industry's preferred measure, lost years of quality life). Thank goodness for belated favors. Political and legislative give-and-take have been sidelined; the emergency is being run from the hip pockets of governors and health officials. Their motives may be pure—or purely based on an understanding that being seen putting a price on lives saved is politically untenable even though all ethical reasoning begins with acknowledging trade-offs.

I suggested in January, after the Wuhan lockdown, that New Yorkers should not think the disease wasn't already among them and spreading. I wrote about the inevitability of social distancing, about the danger of panic, in the three weeks before Sen. Richard

Burr sold \$600,000 in hotel and other stocks.

National Public Radio, which has fluffed the Burr story for all its worth, had reported for weeks on the horrors of Wuhan and America's own 1918 flu pandemic. Giving people actionable information is what the news business exists to do. Yet his stock sale, to a large part of journalism, was a more hair-on-fire story than the euthanasia of America's livelihoods.

In a day when California, New York and other states were ordering 70 million citizens to shelter in place, CNN spent the afternoon making a controversy of the fact that Mr. Trump said he hoped chloroquine-related treatments would help and Dr. Fauci saying trials would be needed.

One CNN performer accused Mr. Trump of telling people that antimalarials left over from their foreign travels would protect them from coronavirus.

He said no such thing. A day later, New York Gov. Andrew Cuomo, whose performance in the crisis has been universally lauded, revealed that he had already arranged with the FDA for special permission to begin putting a large shipment of the drugs to experimental work in his state.

Because of the circumstances, I find myself watching CNN quite a bit lately. As usual, Donald Trump is a liar: CNN is much worse than he says. Surely this is somehow part of the problem too.

BOOKSHELF | By Moira Hodgson

Self-Portrait Of a Lady

Lady in Waiting

By Anne Glenconner
(Hachette, 325 pages, \$28)

Lady Anne Glenconner, the 87-year-old daughter of the Earl of Leicester, came from a generation and a class that were not brought up to express emotion. "There were no heart-to-hearts" and no self-pity was allowed, she writes in "Lady in Waiting: My Extraordinary Life in the Shadow of the Crown." You didn't "dwell." You kept the proverbial stiff upper lip. And, as her stalwart and disarmingly honest book testifies, that is what she did. Nevertheless, emotion resonates through this delightful memoir, which offers a candid, humorous look inside the royal family and the daft world of the British aristocracy.

Born Anne Veronica Coke, she grew up in one of Britain's greatest manor houses, Holkham Hall, a North Norfolk estate she couldn't inherit because she was female. (It went to a cousin.) Her father, she writes, "was not affectionate or sentimental, and did not share his emotions. No one did, not even my mother." In 1939, at the outbreak of war, he was posted to Egypt with the Scots Guards. Anne and her younger sister, Carey, were sent to live with their cousins in Scotland. They didn't see their parents for three years. Her mother never knew that Anne's governess bound her hands to the back of the bed every night (the woman was eventually sacked, not for child abuse but because she was a Roman Catholic).

At Holkham Hall, Anne began a close friendship with Princess Margaret when, as children, they would jump out from behind the curtains to scare the footmen. Reunited at Anne's coming-out

dance in 1950, they chatted until the sun rose over the front portico. Three years later, Anne was picked to be one of six maids of honor at Queen Elizabeth II's coronation, a ceremony Anne describes with stary-eyed detail (ivory silk dresses with gold piping). The archbishop of Canterbury offered them brandy during a recess and, later, the queen sat down on a red sofa, her skirt billowing, "and when she kicked up her legs for total joy, we did the same. It was the happiest of moments."

Anne then fell "madly in love" with the charming Johnnie Althorp, but she made the mistake of introducing him to her friend Lady Fermoy, who, like a character out of Trollope, snapped him up for her own daughter. He vanished without telling her that the engagement was off. (Later he would become the father of Diana, Princess of Wales.) On the rebound, Anne married Colin Tennant, eventually Lord Glenconner, a millionaire with a castle in Scotland whose family fortune had come from the invention of bleach powder in 1798. Her father disapproved: Tennant was "nouveau riche." On a Holkham pheasant-shooting weekend, where guns were "placed by rank," an enraged Tennant was made to follow behind the lords, dukes and marquesses, walking with the beaters, the men who flush out the birds with sticks.

Anne describes the charismatic Tennant as "terribly handsome." He was fun and endearing and "liked to shock people," wearing garish outfits to attract attention. Eccentricities ran in the family: bacon rashers used as bookmarks; horses ridden into the house. Tennant's idea of a hilarious dinner-party joke was to reach into his trousers and pull out a pair of paper underpants, which he proceeded to eat.

She was Princess Margaret's attendant for 30 years. Part of her duties included turning the garden hose on their neighbor's despised cats.

Their wedding night was not a success. No surprise, since all Anne's mother had told her about sex was, "Do you remember Daddy's Labrador getting on top of Biscuit? Well, that's what happens when you get married and have sex, except that you will probably be lying down in a bed."

The newlyweds arrived at their Paris hotel in the middle of the night and when Tennant saw that their room contained two single beds he became "absolutely furious." His shouting woke up the other guests and a dirty, sagging double mattress was dragged up several flights of stairs from the basement. "Colin climbed onto the bed and was snoring within minutes." The following night he took Anne to a "filthy, run-down hotel, with a funny smell," to watch a couple having sex. "They asked her if she'd like to join in. 'That's very kind of you, but no thank you,' she replied. 'This honeymoon is going to continue for six months. Six months. How am I going to cope?'"

But cope she did, even though during their 54 years of marriage Tennant was to lose his temper many times, often lying on the ground in a fetal position and howling. Nevertheless, Anne insists, he was "never boring." When she asked him why he kept screaming at people, he answered: "I like making them squirm. I like making them frightened." Why did he marry her? He said he knew she would never give up.

In 1958 Tennant bought the island of Mustique in the Caribbean for £45,000 and developed it into a playground for millionaires and aristocrats. As a wedding present, he gave Princess Margaret and Antony Armstrong-Jones a piece of land where she built a villa, Les Jolies Eaux. After Margaret's marriage broke down, she created a scandal by staying there with her young lover, Roddy Llewellyn.

Anne was made lady in waiting in 1971, a role she held for nearly 30 years. She was devoted to the princess, whom she feels was much maligned. Margaret was rude when she was bored, but she was also capable of great kindness. Anne saw to all her needs, accompanying her on royal tours and even living with her for a year in Kensington Palace, where one of Anne's duties was to turn the garden hose on the cats of their neighbor Princess Michael of Kent.

In the final part of Anne's memoir, the mood darkens. Of her five children, two sons died tragically, one from AIDS and the other from the aftereffects of heroin addiction. Her third son had a devastating motorcycle accident that left him disabled.

As for Tennant, even after his death in 2010 he had a nasty surprise for his wife. He had willed everything to a former manservant. After Anne found out, she stood on the balcony of the house in Mustique that no longer belonged to her. Only then did she break down. "Going against everything my mother had always taught me, I let emotion take over and I screamed and screamed and screamed into the pitch-black night."

Now ensconced in a farmhouse near Holkham Hall, she writes: "I am very much at my happiest and intend to live to a hundred, although still always wondering, 'Whatever next?'"

Ms. Hodgson is the author of "It Seemed Like a Good Idea at the Time: My Adventures in Life and Food."

Covid-19 Relief Should Bar Stock Buybacks



**POLITICS
& IDEAS**
By William
A. Galston

As Covid-19 spreads and the economy falls off a cliff, a debate has erupted about public assistance to large corporations. Defenders of a generous response argue that although big companies find themselves in need of help, it is not their fault. To slow the spread of the disease, government has driven down demand—to near zero in many cases. So government isn't bailing anyone out, as many believe it did in 2008 and 2009; it's compensating corporations for the harm that nature and public policy have inflicted on them.

This story is true. But it's not the whole truth. Since the end of the Great Recession (a name we may have to reconsider if current trends continue), S&P 500 corporations have engaged in an orgy of cash-draining stock buybacks, much of it financed by increased debt. A 2019 Bank of America study found that over the preceding five years, buybacks by these corporations totaled \$2.7 trillion while their debt rose by almost as much—\$2.5 trillion. Between the summers of 2018 and 2019, buybacks exceeded free cash flow (cash earnings minus capital expenditures and interest payments). As a result, nonfinancial corporations drained their cash reserves by \$272 billion.

This strategy of leveraged

buybacks works fine while everything is going well. The number of shares outstanding shrinks, earnings per share increase, and stock values soar—all financed with low-interest debt courtesy of the Federal Reserve. In 2018 alone, according to Bank of America, buybacks increased reported earnings per share by 21%.

The problems start when the music stops. As demand for goods and services collapses, corporations are forced to do everything they can to preserve cash, a task made more difficult by the unrelenting pressure of debt service. As buybacks dwindle, so does demand for equities. The dynamics that accelerated the rise in stock values during the bull market now accelerate their decline.

Some of the most profitable firms in the land now say that they cannot hold out for more than a month without access to government-provided credit. For the sake of their employees and economic recovery, they should get it, if it's backed by sound collateral, with taxpayers at the front of the line of creditors—and if they agree not to engage in further buybacks until government funds are repaid. When the dust settles, we need to discuss the long-term impact of the buyback orgy on the health of the economy.

Small businesses are another matter altogether, because they did nothing to increase their vulnerability to the existential threat so many of them face. To understand

what's happening at ground level, I called an acquaintance, Jed Webber, who started a restaurant 15 years ago in Massachusetts and is now a co-owner of five. As Gov. Charlie Baker shut down his state's eateries, Mr. Webber and his co-owners were forced to lay off almost all their 750 employees, no longer paying them but keeping them on company-funded health insurance.

Large corporations have piled on debt, making themselves vulnerable to shocks.

I asked Mr. Webber how he intends to manage his way through this crisis and emerge with at least some of his business intact. His reply: "Everything now is about holding onto the cash." Fortunately, Mr. Baker declared a three-month moratorium on restaurants' payments of the state meals tax. But because he did not waive the tax outright, these enterprises will have to make good on back payments when the moratorium ends.

But with drastically reduced revenue, monthly rents become unaffordable, unless landlords can be persuaded to provide temporary rent reductions or payment delays. Mr. Webber hopes to negotiate some form of forbearance, but there's no guarantee.

When I asked this successful restaurateur to name the most

important thing government could do to save his sector, his answer surprised me: Get insurance companies to cover Covid-19 damages under the "business interruption" policies that he and many other owners purchased years ago. This won't be easy. Insurance companies are taking the position that their policies do not extend to pandemics. In the wake of the 2002-03 SARS outbreak, some of them changed their policies to make this explicit, while the rest say that the existing language is already clear on this point.

Lawsuits contesting this stance are already being filed. Meanwhile, a bipartisan group of 18 members of Congress has asked the property-insurance industry to assume responsibility for business interruption losses. Unsurprisingly, the insurers declined, on the grounds that their policies "do not, and were not designed to, provide coverage against communicable diseases such as Covid-19." As a legal matter, they are probably right, even though their policies typically include provisions protecting policyholders from losses incurred when a civil authority prohibits access to the insured's property.

When an economic crisis is pervasive, neither the private sector nor civil society is equal to the challenge. What was true in 1933 is true today: Only government can do the job—which is why Democrats and Republicans are converging on the largest economic intervention by far in our history.

Expose First Responders to the Coronavirus

By Michael Segal

Among many grim scenarios coming out of the coronavirus pandemic, here's one that deserves immediate attention: What if cities run out of emergency responders?

The possibility is looming in New York. Some 150 Fire Department employees are in quarantine after being exposed to the virus, including dozens of emergency medical service professionals. These numbers will increase as the virus spreads. A former associate director of the city's EMS division told the press that the city will have to "make decisions on what responses they are going to send ambulances to, and what they are not," an ugly prospect. The same problem may unfold in hospitals with doctors and nurses at high risk of exposure.

Many workers could end up in quarantine multiple times, which would reduce the number available to work. It isn't

prudent to cut corners on the quarantine criteria because of the danger that some infected workers would remain on the job and endanger colleagues and the public.

There is some hope for fighting the virus using available medications—antimalarial drugs, for example. Some drugs that patients are taking

Young workers who have to quarantine could volunteer to build immunity.

for other conditions may be making matters worse and need to be discontinued. But we can't count on breakthroughs. The American health system needs to be prepared for the scenario playing out now in Italy. That means having enough emergency responders on the job in the next several months.

An approach that could work: Emergency responders who are entering quarantine after exposure could be allowed to volunteer for deliberate infection, provided they are at low risk of complications. For people in their 20s and early 30s without a known risk factor, most will have a mild illness or no symptoms at all. Some will need medical care, but few will die. After about three weeks of quarantine, antibody testing could show that these volunteers have built immunity and testing for coronavirus RNA could demonstrate that they are no longer infectious. Anyone so certified could return to duty, free of further restrictions.

Those who choose this option could spend the quarantine in resorts that are currently closed, with internet, restaurants, and access to all the facilities that help keep them strong such as a gym, pool and steam rooms. Since emergency responders are among the most responsible

young people, there would be little need to worry they'd try to leave while still infectious. And of course, the finest medical care would be available.

It would take some courage for government to allow such a plan because of liability concerns, and it is unlikely we have found every risk factor that makes someone more likely to be hit hard by the virus. But this is an emergency, and such legal and ethical issues must be weighed against other risks.

Many young emergency responders would take the offer. There are numerous reports of young people wanting to bust out of restrictions meant chiefly to protect older people. Let's offer this opportunity first to the most responsible young people as a form of national service. These are the folks needed to protect the country from chaos if no silver bullet of innovation arrives in time.

Dr. Segal is a neurologist and neuroscientist.

OPINION

REVIEW & OUTLOOK

From Shutdown to Phase Two

Our editorial last week on the costs of our government-mandated national economic shutdown struck a chord with readers, including perhaps at the White House. President Trump is now saying he wants the country back to normal by mid-April. While this is right as a direction, the shift to a sustainable health and economic strategy will require a transition and a credible explanation to the public.

The shift will have to be a transition, and will have to be explained.

The initial 15-day national period of mass social distancing ends Monday, which is a chance for reconsidering the anti-virus shutdown strategy. The challenge will be finding a balance between protecting against the virus and resuming commerce and business that is crucial to getting people back to work.

The current at-home quarantines across the country are buying time to slow the coronavirus spread, as well as to surge masks, protective equipment and ventilators to hospitals and hot spots. This hospital surge is crucial to saving lives and reassuring the public that America's cities aren't on a path to Italy's scenes of tragic triage. New York, Seattle and perhaps New Orleans will have to cope in coming days and weeks with hundreds and perhaps thousands of critically ill Covid-19 patients. Americans will want to know how a sustainable strategy prevents similar scenes around the country.

Mr. Trump and other leaders will also have to be candid about the limitations of what we know. Because of the lack of widespread testing, we don't know how many people are infected with few or only mild symptoms. This information would help us get a better fix on the real death rate, not least by group and health status, and thus to know how under siege our hospitals will be over weeks and months. More accurate testing data will also reassure the public.

Some degree of social distancing and self- or mandated quarantines will also have to continue. This is especially true for the elderly and those who are immuno-suppressed. The public education on those points can't let up.

The health experts will have a vital role here, especially when it comes to different distancing regimes by region or by demographic group. The public-health goal is to limit the virus spread now and later this year if there is still no vaccine or better treatments. The public-education goal is to assure Americans that we can reduce the virus threat even as millions of Americans return to work.

But sooner rather than later, Mr. Trump and governors will have to explain the huge human and economic cost of continuing the shutdown. Those costs will start to appear Thursday when initial jobless claims are likely to record one of the biggest one-week leaps in history. They will rise by the millions as the shutdown goes on.

Congress may ease some immediate pain if it passes the Senate's \$1.8 trillion spending bill this week, but no amount of public money can compensate for the trillions of dollars in lost private employment and production. Low-income workers who had recently begun to see wage gains will suffer the most. These workers need employ-

ers back in business and finding customers and revenues again. Government loans can only maintain these businesses for so long, and even then they will burden the companies with more debt for years.

The human cost will be the greatest. The economic and social-science literature is replete with studies that document the harm to people from recessions and economic hardship—including higher rates of suicide, opioid abuse, alcoholism and domestic violence.

A Lancet study found "4,983 excess suicides" between 2007 and 2009 (that is, before and during the recession) based on population and economic data from 2000-2011. A 2013 study in the BMJ medical journal found similar suicide increases, especially in men: "Rises in national suicide rates in men seemed to be associated with the magnitude of increases in unemployment, particularly in countries with low levels of unemployment before the crisis."

A 2019 study in Clinical Psychological Science found "individuals who had experienced even a single financial, job-related, or housing impact during the recession still had higher odds of symptoms of depression, generalized anxiety, panic, and problematic substance use 3 or 4 years after recession had ended." And a St. Louis Federal Reserve study in 2013 found that drug-abuse rates were 10 points higher among the unemployed.

* * *

None of this will surprise readers who have watched friends or loved ones spiral down after a bankruptcy or job loss. The point here is that the policy tradeoff for Mr. Trump and the governors isn't between saving lives and a higher stock market, as our editorial's critics asserted. And it isn't a choice between pandemic expert Anthony Fauci and economists in the White House. There is great public-health damage from both the virus and from mass unemployment and recession.

The challenge for political leaders is to consider both and make decisions in the larger national interest. This is what Mr. Trump means when he tweeted Tuesday, in his unsubtle fashion, that "We can do two things together. THE CURE CANNOT BE WORSE (by far) THAN THE PROBLEM!"

The urgent choice isn't pitting public health against financial health. Both matter, and the latter is essential to the former. The country needs a sustainable strategy for both.

Where Is Joe Biden's Leadership?

Amid the coronavirus lockdown, Joe Biden is now running a digital front-porch campaign. In a video streamed from his home in Delaware on Monday, Mr. Biden said he would focus on "what we should do to get this response fixed."

The remarks that followed weren't encouraging. He characterized the Senate's coronavirus relief bill as "a plan that let big corporations off the hook," and "a \$500 billion slush fund for corporations, with almost no conditions." This rhetoric about slush funds is straight from the antibusiness left.

Does Mr. Biden not understand the problem that companies are facing? They have to figure out how to remain solvent until the health crisis ends, otherwise nobody will be left to turn the lights back on. Under Nancy Pelosi's coronavirus bill, companies that take federal aid would be put under a permanent \$15 minimum wage. Adding such strings to emergency funding will make businesses reluctant to accept the relief, even if they really need it.

Mr. Biden went on to insist that "Social Security checks need to be boosted now" and "student debt should be forgiven for now." He

had more details in a Sunday tweet, saying that any coronavirus relief legislation "should forgive a minimum of \$10,000/person of federal student loans, as proposed by Senator Warren and colleagues."

Why is Mr. Biden working so hard to make himself look like a junior partner of the congressional wing of his party? He ought to be trying to show voters he is capable of leading the country with his own vision.

Admittedly, Mr. Biden is in a tough political spot. President Trump is doing live coronavirus briefings from the White House, standing next to the government's top emergency managers. Mr. Trump rambles on too much at his briefings, but Americans see him in action. Fifty percent of Americans say Mr. Trump has done a "good job" handling the virus, and only 45% say a "bad job," according to a Monmouth poll this week.

Mr. Biden is stuck in Delaware, trying to get attention. Here's a thought. He could tell the progressive wing of his party to quit playing games with the coronavirus aid. Aside from making real news and showing voters his independence, it would help the country.

Parks and Virus Recreation

Officials seeking to slow the spread of coronavirus have imposed sweeping restrictions on roughly one in four Americans. Several states have closed churches, restaurants and bars, gyms and other businesses. Some governors and mayors are now moving to limit access to parks and other outdoor spaces. The goal as always is to slow the virus's spread, but with cabin fever raging for shut-ins, we have to wonder whether closing down large open spaces does more harm than good.

Public-health experts recommend that individuals maintain a six-foot distance. After witnessing the high turnout at New York City parks on Saturday, Governor Andrew Cuomo warned "there is a density level in NYC that is wholly inappropriate" and told Mayor Bill de Blasio to come up with a plan to thin the crowds.

Mr. Cuomo also suggested opening some streets to pedestrians only. Increasing the amount of outdoor space would be helpful in highly populated cities like New York, and it's feasible now that vehicle traffic has fallen amid the shutdowns. But other officials have threatened or acted to decrease the amount of outdoor space.

In Seattle the average apartment size last year was a claustrophobic 682 square feet, ac-

cording to the apartment-search website RentCafe.com. At the city's Cal Anderson Park this weekend, police officers used loudspeakers to separate residents, with one cop warning that the "lack of voluntary compliance could result in a full closure of all parks, which will eventually result in trespasses, and possibly criminal prosecution," the Seattle Times reported.

North Carolina has closed some of its state parks, and New Mexico, Illinois, Oregon and Florida have prohibited public access to all of them. Public playgrounds are closed in Ohio, Boise, Idaho; Clinton, New Jersey; and Oakland County, Michigan. Several cities in Florida have shut public beaches, and California's Three Sisters Falls and Cedar Creek Falls hiking trails are off-limits. The list grows daily.

Surely some middle ground can be found between asking for public compliance with personal distancing and then making large public spaces inaccessible. Compared to grocery stores or pharmacies, outdoor spaces are lower-risk for contagion. Especially in big cities, people can't be expected to stay cooped up in their tiny apartments indefinitely. The phrase "strir crazy" comes to mind. If officials push too far, many people will ignore both reasonable and unreasonable restrictions.

LETTERS TO THE EDITOR

U.S. Leads the World in Acute-Care Quality

Your editorial "America's Intensive-Care Dividend" (March 17) points out that the U.S. mix of private medical care and health insurance combined with Medicare and Medicaid produces an abundance of intensive-care units and beds. Other countries with government-run health systems have fewer ICU beds, which are crucial for treating respiratory stress brought on by the coronavirus; and that shortage of beds is, in large part, a result of rationing of intensive care in socialized systems.

America's more complex system is criticized for being too expensive and having too many uninsured people visiting emergency rooms, but the coronavirus response may show that we get what we pay for and redundancy in critical-care capabilities is a blessing, not a curse, in a pandemic.

You contend that: "the U.S. is currently better equipped to handle the pandemic because private insurers reimburse hospitals at higher rates than government-run systems elsewhere."

In the midst of a pandemic and in a presidential election year, can we count on an objective appraisal of U.S. health-system results relative to those of nationalized systems? It seems more likely that the comparison that will get most media play is the U.S. system versus perfection: immediate quarantines, tens of millions of coronavirus tests in a week, a vaccine in a month and no wait times for urgent care. If the standard is quality of care in the U.K., France and Italy versus the U.S., America's system ought to shine in a crunch; but if the media standard is a flawless version of a government-run health system that doesn't exist, voters may be

swayed toward making drastic changes in the U.S. system.
RYAN GRAHAM
Melbourne, Fla.

Regarding William A. Galston's "America Wasn't Prepared for This Crisis" (Politics & Ideas, March 18): A major reason for the underfunding of public-health initiatives is the overfunding of acute-care initiatives. The U.S. spends a far greater portion of its GDP on acute care than any other developed country, yet it has some of the worst public-health outcomes for a developed country.

The overspending on acute care crowds out expenditures for public health. Decision makers in government tend to see public-health threats as more remote threats. The neglect of public-health initiatives leads to poorer outcomes in acute care. For example, many acute patients present with decreased lung function due to environmental or workplace pollution, or from smoking tobacco or other substances. Further, the U.S. population is one of the most overmedicated in the world, spending billions of dollars that could be better used for public-health initiatives. Failure to address principles of public health such as poor lifestyle choices in nutrition and hygiene leave us more vulnerable to Covid-19.

Mr. Galston indicates that we have been caught short on both acute care and public health. That is true, but the overspending on acute care has been a factor in diminishing public health. Medicare Part D and Obama-Care are at least partly responsible for the overspending on acute care.

GREGORY O. GINN, PH.D.
Austin, Texas

Be Fair in Covid-19 Generation Gap Coverage

I'd like to provide some context for a March 11 photo of Colorado College seniors that ran with "Generation Gap Widens as Cases Spread" (The Coronavirus Pandemic, March 18). Five days before the photo, I called our campus coronavirus hotline to report someone who might be infected. Less than 24 hours before, President Trump said, "stay calm and it will go away." Fourteen hours before, the remainder of our college experience was abruptly (albeit necessarily) cut short. Twenty minutes before, an email urged us to move our belongings before we departed campus—for many of us, that afternoon.

With tears in my eyes, I stood atop the flagpole platform on my sudden last day of college to pop Champagne; I was relieved no older individuals were present. At that time, "social distancing" was hardly a thing. We had all just come from class. For Colorado College seniors, the last-day-of-class tradition

of Champagne showers means more than partying "carefree youths." It represents four years of hard work, perseverance, promise of the future, and a culmination of shared experience. But this year it represented even more: fear, uncertainty, gratitude and a final opportunity to celebrate together. It symbolized everything we had yet to experience, including graduation—the most important milestone of many of our lives until now, and something my classmates and I care deeply about missing. I can promise you we are anything but carefree.

The photo was taken before social-distancing guidelines were in place. We weren't actively defying rules; we were living in a moment that stood for so many un-lived moments.

We are at war with Covid-19; we cannot afford to be at war with each other.

CATIE McDONALD
Los Alamos, N.M.

A Silver Lining in the Dark Covid-19 Cloud

I've been looking for the bright side to the tremendous kick in the pants the coronavirus has so far provided. Matt Burr and Becca Endicott have come up with not one, but two solutions to persistent dilemmas that have become endemic to modern city living in the U.S. ("Coronavirus Will Permanently Change How We Work," op-ed, March 17).

My wife recently drove from Pasadena to Anaheim for a required meeting. Normally this takes an hour and 40 minutes, moving across the greater Los Angeles/Orange County conurbation, but this trip took only 40 minutes. People have been asked, begged, cajoled or told to work at

home. This has yielded an enormous improvement in traffic flow, reduced exhaust pollution and ameliorated all the other less desirable attributes of the commute.

Southern California has been troubled as much by the homeless epidemic as most of the U.S. All these soon-to-be-closed office spaces might offer an answer. The buildings exist, and a relatively modest capital expenditure could reroute architecture and plumbing to reconfigure these now useless structures into affordable living spaces.

This is California, so we'll need to make an effort not to overload the transformation process with rules and mandates that will drive the costs back out of control. An opportunity presents itself as a world transforms. Let's take advantage.

DING KALIS
Pasadena, Calif.

Cuba Likely Underperforms On Medical Schools, Too

Paul E. Peterson's "Cuba Is an Academic Fraud" (op-ed, March 17) raises doubts about the quality of the Cuban educational system since that country refuses to participate in international testing that most countries use to gauge their schools compared with their international peers. The high failure rate of most Cuban doctors attempting certification in the U.S. and in South American countries to practice as physicians would tend to corroborate watered-down Cuban academic standards.

The recent gushing over Cuban schools by the American Association of School Administrators casts a shadow over that organization's objectivity and agenda as it would almost certainly demur from allowing private, charter and home schools to claim high student accomplishments based only on their internal testing results.

JAMES W. BENEFIELD
Dunedin, Fla.

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CORRECTION

The genetic material of coronaviruses is RNA. This was misstated in the March 21 op-ed "The History of Pfizer and Penicillin, and Lessons for Coronavirus."

Pepper ... And Salt

THE WALL STREET JOURNAL



"It's from the 1800s and still has a lot of the original dust."

OPINION

Is Covid-19 as Deadly as They Say?

By Eran Bendavid
And Jay Bhattacharya

If it's true that the novel coronavirus would kill millions without shelter-in-place orders and quarantines, then the extraordinary measures being carried out in cities and states around the country are surely justified. But there's little evidence to confirm that premise—and projections of the death toll could plausibly be orders of magnitude too high.

Fear of Covid-19 is based on its high estimated case fatality rate—2% to 4% of people with confirmed Covid-19 have died, according to the World Health Organization and others. So if 100 million Americans ultimately get the disease, two million to four million could die. We believe that estimate is deeply flawed. The true fatality rate is the portion of those infected who die, not the deaths from identified positive cases.

Current estimates about the coronavirus fatality rate may be too high by orders of magnitude.

The latter rate is misleading because of selection bias in testing. The degree of bias is uncertain because available data are limited. But it could make the difference between an epidemic that kills 20,000 and one that kills two million. If the number of actual infections is much larger than the number of cases—orders of magnitude larger—then the true fatality rate is much lower as well. That's not only plausible but likely based on what we know so far.

Population samples from China, Italy, Iceland and the U.S. provide relevant evidence. On or around Jan. 31, countries sent planes to evacuate citizens from Wuhan, China. When those planes landed, the passengers were tested for Covid-19 and quarantined. After 14 days, the percentage who tested positive was 0.9%. If this was the prevalence in the greater Wuhan area on Jan. 31, then, with a



A line at a Brooklyn, N.Y., emergency room March 19.

population of about 20 million, greater Wuhan had 178,000 infections, about 30-fold more than the number of reported cases. The fatality rate, then, would be at least 10-fold lower than estimates based on reported cases.

Next, the northeastern Italian town of Vò, near the provincial capital of Padua. On March 6, all 3,300 people of Vò were tested, and 90 were positive, a prevalence of 2.7%. Applying that prevalence to the whole province (population 955,000), which had 198 reported cases, suggests there were actually 26,000 infections at that time. That's more than 130-fold the number of actual reported cases. Since Italy's case fatality rate of 8% is estimated using the confirmed cases, the real fatality rate could in fact be closer to 0.06%.

In Iceland, deCode Genetics is working with the government to perform widespread testing. In a sample of nearly 2,000 entirely asymptomatic people, researchers estimated disease prevalence of just over 1%. Iceland's first case was reported on Feb. 28, weeks behind the U.S. It's plausible that the proportion of the U.S. population that has been infected is double, triple or even 10 times as high as the estimates from Iceland. That also implies a dramatically lower fatality rate.

The best (albeit very weak) evidence in the U.S. comes from the National Basketball Association. Between March 11 and 19, a substantial

number of NBA players and teams received testing. By March 19, 10 out of 450 rostered players were positive. Since not everyone was tested, that represents a lower bound on the prevalence of 2.2%. The NBA isn't a representative population, and contact among players might have facilitated transmission. But if we extend that lower-bound assumption to cities with NBA teams (population 45 million), we get at least 990,000 infections in the U.S. The number of cases reported on March 19 in the U.S. was 13,677, more than 72-fold lower. These numbers imply a fatality rate from Covid-19 orders of magnitude smaller than it appears.

How can we reconcile these estimates with the epidemiological models? First, the test used to identify cases doesn't catch people who were infected and recovered. Second, testing rates were woefully low for a long time and typically reserved for the severely ill. Together, these facts imply that the confirmed cases are likely orders of magnitude less than the true number of infections. Epidemiological modelers haven't adequately adapted their estimates to account for these factors.

The epidemic started in China sometime in November or December. The first confirmed U.S. cases included a person who traveled from Wuhan on Jan. 15, and it is likely that the virus entered before that: Tens of thousands of people traveled from Wuhan to the U.S. in December. Ex-

isting evidence suggests that the virus is highly transmissible and that the number of infections doubles roughly every three days. An epidemic seed on Jan. 1 implies that by March 9 about six million people in the U.S. would have been infected. As of March 23, according to the Centers for Disease Control and Prevention, there were 499 Covid-19 deaths in the U.S. If our surmise of six million cases is accurate, that's a mortality rate of 0.01%, assuming a two week lag between infection and death. This is one-tenth of the flu mortality rate of 0.1%. Such a low death rate would be cause for optimism.

This does not make Covid-19 a nonissue. The daily reports from Italy and across the U.S. show real struggles and overwhelmed health systems. But a 20,000- or 40,000-death epidemic is a far less severe problem than one that kills two million. Given the enormous consequences of decisions around Covid-19 response, getting clear data to guide decisions now is critical. We don't know the true infection rate in the U.S. Antibody testing of representative samples to measure disease prevalence (including the recovered) is crucial. Nearly every day a new lab gets approval for antibody testing, so population testing using this technology is now feasible.

If we're right about the limited scale of the epidemic, then measures focused on older populations and hospitals are sensible. Elective procedures will need to be rescheduled. Hospital resources will need to be re-allocated to care for critically ill patients. Triage will need to improve. And policy makers will need to focus on reducing risks for older adults and people with underlying medical conditions.

A universal quarantine may not be worth the costs it imposes on the economy, community and individual mental and physical health. We should undertake immediate steps to evaluate the empirical basis of the current lockdowns.

Dr. Bendavid and Dr. Bhattacharya are professors of medicine at Stanford. Neeraj Sood contributed to this article.

Flatten the Coronavirus Curve at a Lower Cost

By John H. Cochrane

The bill for the government response to coronavirus will be astronomical. The trillion-dollar "stimulus" is a lot of money, and it will eventually have to be paid for with taxes. The economic shutdowns are even more expensive. The U.S. economy produced about \$21 trillion in 2019. If "essential" businesses still open are even half of that, each month of a national shutdown costs the economy almost a trillion dollars. The damage will become harder to fix as businesses fire workers and close forever.

OK, governors had to call a sudden economic stop to get a handle on an out-of-control situation. These precious weeks can bend the curve and buy some time to prepare the health-care system. But governors must also use this time to work with businesses on a plan for reopening the economy in a way that mitigates health risks. The White House is reportedly discussing ways to ease restrictions as early as next week, but local and state officials will have to produce well-considered plans to open up the economy in a relatively safe way.

A total shutdown could cost the economy \$1 trillion a month. We need more tailored measures.

A blanket lockdown can't go on. Keeping every business closed and every worker at home until a vaccine is available won't work. Replacing the private economy with borrowed federal money for months on end won't work. If this were the plague, with 50% of the infected dying, it might be a different story. But people won't put up with losing many trillions of dollars to flatten the curve of this virus.

Government officials should mandate safety measures, but those regulations need to be more tailored than a total shutdown of "nonessential" companies. Businesses were doing a good job already: announcing sanitation, social distancing and other protocols to keep operations safe and reassure customers. Visit any airline's website.

State and local governments need to work with businesses to figure out a satisfactory combination of personal distance, self-isolation, frequent testing, stricter rules for those who must interact with customers, cleaning protocols and so on. Each industry will likely be different. Even onerous rules, which can be eased as officials and businesses gain information and experience, are better than a blanket ban.

The massive cost of a shutdown justifies costly measures to avoid it.

For instance, send some of the rivers of federal cash to purchasing more beds, ventilators, test kits, masks and gowns. Even \$100 billion is cheap compared with \$1 trillion a month. President Trump said on Friday he will use the Defense Production Act to spur companies. Some on the left, such as New York Gov. Andrew Cuomo, have pushed for the White House to nationalize relevant industries. Forcing production is unnecessary and inefficient. Just pay a premium for the needed medical supply. So what if companies profit? Profit makes a great incentive. General Motors has already shifted to producing ventilators to meet demand. Compulsion isn't necessary—either to save money or to get industry to produce.

Government officials need to work with a scalpel, not a sledgehammer. Isolate old people and those with pre-existing health conditions, who are much more likely to end up needing emergency care, while letting the young and healthy get back to work, carefully. Retired people have income streams that aren't as disrupted by the virus. They can stay home. Lock down hotspots, but not entire states. Follow the Taiwan, South Korea and Singapore models: extensive testing, contact tracing, detailed people tracking. But keep the economy open, subject to stringent safety rules.

That approach may be expensive and onerous, but it's better than destroying Americans' livelihoods. It is time to craft a much more detailed, thoughtful, and cost-efficient policy to deal with the coronavirus pandemic.

Mr. Cochrane is a senior fellow at the Hoover Institution and an adjunct scholar at the Cato Institute.

Minorities Bear the Lockdown's Economic Brunt

UPWARD MOBILITY
By Jason L. Riley

We know the coronavirus doesn't discriminate by race or ethnicity. We also know the harm it imposes on American society will be unequal in the extreme. It so happens that lower-income minorities have been on a pretty good run economically in recent years. The consensus among economists is that this trend is set to end.

A decade ago this month, in the aftermath of the financial crisis, the black jobless rate hit a 27-year high of 16.8%. By May 2018 it had plummeted to 5.9%, the lowest level since the government started keeping track in 1972. Moreover, the gap between black and white unemployment shrank to less than 3 percentage points for the first time on record. Among Hispanics, both poverty and unemployment reached all-time lows in the past three years, and pay rose for all groups, with low-wage workers leading the way. The unemployment rate last month was 3.5%, and there were far more jobs available than job seekers. But if this is the economic record that President Trump intended to ride to re-election, he'll need a backup plan.

The health scare has already claimed millions of jobs, and infections aren't expected to crest in the U.S. until May or June. Some people will be able to work from home for now, but the low-income minorities who benefited most from our decade-long economic expansion aren't likely to fall into that category. Many of them lack a college degree, which correlates strongly with employment prospects. And many of them work for employers who have been or-

dered by the government to cease operations.

These are people who hold service-sector jobs, in retail or hospitality. They work at furniture stores and bus stations and hotels. They man concession stands at sports arenas and wait tables at restaurants. According to the Bureau of

They disproportionately work in industries, and for employers, that have been ordered closed.

Labor Statistics, Hispanics are only 17.6% of the workforce but make up 30% of those working in construction trades and close to 40% of those in jobs related to agriculture and forestry. Blacks comprise 12.3% of the workforce but account for 19% of department-store employees and 20% of employees in the transportation industry.

That's worth keeping in mind as we hear reports that large manufacturers like General Electric have begun laying people off, or that the airlines are drafting plans to shut down all passenger flights. Walmart and Amazon, to their credit, are moving to hire hundreds of thousands of hourly workers. That can offset unemployment to some extent, but not nearly enough to keep these vulnerable groups from being the early casualties of a cratering economy.

Nor are the concerns of black and Hispanic families merely economic. "The likelihood we're at right now is that we lose the whole school year," New York Mayor Bill de Blasio said earlier this week. That's a body blow to parents who are concerned about

child care, and to anyone else who cares about closing the academic achievement gap. As in other large cities, black and Hispanic public-school students in New York already score several grades below their white and Asian peers in reading and math. Not all homes are equipped with laptops and other technology necessary for distance learning, which has never been tried on this scale in any case. This means that the extended time away from a formal classroom setting is likely to do far more educational damage to some groups than to others, even if all the kids have been kept home.

One byproduct of ordering people to stay indoors has been a reduction in street crime. But more than a dozen states are now freeing "low level" and "nonviolent" inmates to protect against an outbreak in jails and prisons, so who knows how long the lull will last. The move is being applauded by prisoners-rights advocates, who seldom show the same

level of empathy for crime victims. These prisoners are most likely to return to the same communities that produced them, and if authorities guess wrong about which ones have turned over a new leaf, it will be black and Hispanic neighborhoods that pay the price.

The White House is eager to get people back to work, and the administration will have to weigh the costs of further economic paralysis against the continuing and very real public-health concerns. But sending people checks is an election-year gimmick that, in and of itself, will do little to address the deeper problems we face. The administration and Congress would do better to focus on making sure businesses big and small have the liquidity they need to prevent additional job cuts now and to hire again once the recovery begins. The people who will bear the brunt of the pandemic need their jobs back far more than they need another cash-transfer scheme.

Coronavirus Brings Back Scarlet Fever Memories

By Angela Rocco DeCarlo

I contracted scarlet fever as a young girl. I remember the red quarantine sign tacked outside our front door stating we were confined to our home and no one was to be admitted. Now I live in California. Before locking down the whole state, Gov. Gavin Newsom asked seniors to "isolate themselves" from others. In my usual age-denying state, I still think of that cohort as meaning my parents or grandparents. I was shocked to realize Mr. Newsom's quarantine refers to my peers and me. So the task was to stock up on household supplies and hold the fort until this situation eases.

My son's pastor preached a sermon before the lockdown on the need to forestall "greed" and practice kindness. Those photos of people lined up around the block to get into big-box stores underscored the message.

Unconcerned, my husband went to the local grocery store for milk. He was shocked to see empty shelves—forget paper products. No milk either. I can't figure out what people are thinking when they buy months' worth of toilet paper.

Are they unhinged because Disneyland has gone dark? I miss the fireworks I usually stop to watch at 9:30 each evening. But the park and everything else will come back on eventually. Perhaps this situation is a case of way too much information

being broadcast 24/7 on the mysterious novel virus that incubated in China.

When I was confined to bed with scarlet fever, I knew nothing about the disease. My fertile little imagination took flight, and I believed I was going to die. I started believing it every time I got a sore throat. I was absent from first grade 100 days due to illness. In high school I flunked gym class for missing too much school; I had to take two gym classes as a senior. Yet by the grace of God, I lived to be in the Covid-19 high-risk group.

My friend John R. Powers, a Chicago novelist, was supposed to fly to Los Angeles in 1979 but decided to skip his flight. It crashed on takeoff at O'Hare International Airport, killing everyone aboard. He told a reporter his death hadn't been averted, only postponed. He was 67 when he died of a heart attack in 2013.

Let's follow the pastor's advice and try to bring more kindness and less greed to the current situation. Yes, wash your hands often. But see if you can help those who are alone and need assistance.

I guess I'm not going to be getting another red quarantine sign for my front door. This situation will pass. Everything does. Meanwhile, be nice.

Ms. DeCarlo covered entertainment, culture, travel for the Chicago Tribune, Las Vegas Review Journal and Disney Magazine.

THE WALL STREET JOURNAL.

PUBLISHED SINCE 1889 BY DOW JONES & COMPANY

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Occidental Cuts Pay as Much as 30%

By RYAN DEZEMBER AND REBECCA ELLIOTT

Occidental Petroleum Corp. is cutting salaries for its U.S. employees by up to 30% in a bid to slash expenses, according to an internal email reviewed by The Wall Street Journal.

The Houston company is facing plunging oil prices, high debt from an ill-timed acquisition and falling demand due to a halt in economic activity because of the new coronavirus.

Chief Executive Vicki Holub's salary will be cut by 81% and the oil-and-chemical company's top executives' pay will

be cut by an average of 68%, according to the email.

Employee bonuses and perks, such as gym memberships and commuter subsidies, are set to end in April.

The company said it was taking the drastic steps in the face of an extraordinarily swift change in oil prices.

"The coronavirus pandemic has led to an unprecedented decline in demand for oil on a global basis," the email said.

"On top of that, the price war between Saudi Arabia and Russia has further exacerbated the situation. We must take immediate and unprecedented actions for our company."

Occidental released a statement confirming it was taking steps to "ensure the health of the company while protecting jobs."

The company said it was reducing compensation for all of its employees but didn't comment on the specific salary cuts.

The entire U.S. oil industry has been badly battered in recent weeks.

Occidental, whose \$38 billion acquisition of Anadarko Petroleum Corp. last year left it deeply indebted, has been among the hardest hit.

Its share price, which began the year trading in the lows \$40s, closed on Tuesday

at \$10.72.

Earlier this month, the company slashed its prized dividend 86% and reduced this year's capital budget by about a third, or roughly \$1.7 billion.

Dozens of U.S. shale companies also have slashed spending. **Chevron Corp.** and **Royal Dutch Shell PLC** cut their capital budgets and suspended share buybacks, but neither took the step of across-the-board salary cuts.

Meanwhile, Occidental is nearing a truce with Carl Icahn that would bring the billionaire activist into the oil company's boardroom, The Wall Street Journal reported. Please turn to page B5

Facebook Use Leaps but Ad Sales Weaken

By JEFF HORWITZ AND SUZANNE VRANICA

Facebook Inc. said usage of its products was skyrocketing because of the coronavirus pandemic but warned that increased activity wouldn't shield the company from the online-advertising pullback roiling Silicon Valley and Madison Avenue alike.

In a post on Tuesday afternoon, Facebook said total messaging across the platform's services has increased 50% in countries hit hard by the virus, with video messaging more than doubling.

In Italy, which has undertaken some of the strictest restrictions on public life of any country outside China, group video calling is up by more than 1,000% from a month ago and usage of all Facebook apps is up 70%.

Facebook also owns Instagram as well as the popular messaging service WhatsApp.

The company said the higher usage wouldn't protect it from expected declines in digital advertising across the globe.

"We don't monetize many of the services where we're seeing increased engagement, and we've seen a weakening in our ads business in countries taking aggressive actions to reduce the spread of COVID-19," wrote Alex Schultz, Facebook's vice president of analytics, and Jay Parikh, vice president of engineering.

The company didn't provide official earnings guidance, but the executives said "our business is being adversely affected like so many others around the world."

Facebook detailed steps the

company is taking to increase capacity and reduce the strain that heightened video-calling and calling traffic puts on communications structure. The announcement is in keeping with others by advertising-based tech platforms and media of reduced financial targets.

Twitter Inc. on Monday said its financial performance would fall short this quarter as a result of the pandemic.

Google parent Alphabet Inc. is also in a perilous spot. Alphabet makes almost all of its money from online advertising in areas like search, maps and video, and its biggest clients seem sure to pull back. In one early warning sign, travel conglomerate Booking Holdings Inc.—one of the world's biggest online advertisers—said Monday it would "dramatically" pare back its marketing costs.

Google has also pinned its future on making more from advertising connected to "real-world" queries, such as turn-by-turn direction searches and as a paid go-between for individuals looking to find local businesses like plumbers. Many consumers, however, are now confined to their homes.

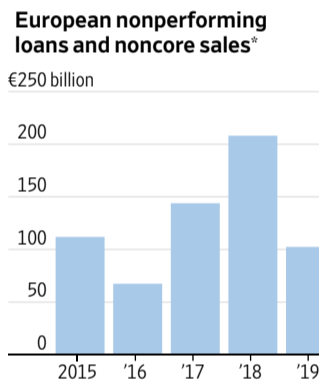
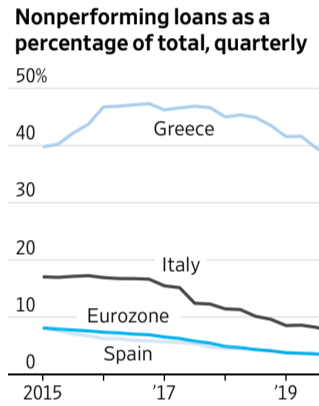
Alphabet doesn't give guidance on coming earnings, and a spokesman didn't respond to a request for comment.

"Marketers are cutting spend across the board," analysts at RBC Capital Markets wrote Monday. "Want another datapoint? Type 'Las Vegas Hotels' in your Google search bar. We're seeing 0 paid ads. Can't ever recall seeing that."

As companies begin to pull back on advertising spending because of the coronavirus pandemic, Facebook detailed steps the

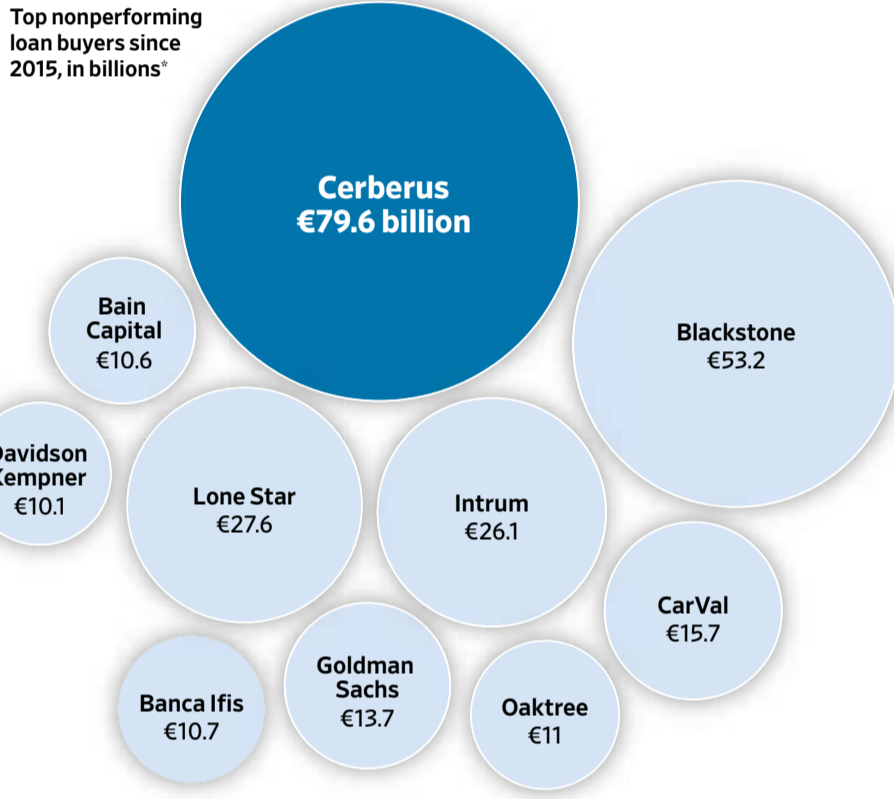
Coronavirus Crisis Derails What Was One of Finance's Hottest Bets

European banks have sold over €600 billion in bad loans to investors hungry for good returns. But as the coronavirus outbreak stalls economies, banks will struggle to sell, and new souring loans will pile up on top of old ones. B8



*Amounts are gross book value. €1 billion=\$1.0854 billion

Sources: European Central Bank (percentage of total); Debtwire (top loan buyers, nonperforming loans and loan sales)



E-Commerce Winners Include Basics, Sweatpants

By SUZANNE KAPNER

The coronavirus pandemic has led many retailers to close stores temporarily and millions of Americans to do nearly all their shopping online. It is a digital future that many have predicted—but one that isn't working at the moment for some chains.

Particularly crippled have been retailers that haven't embraced e-commerce or sell nonessential items such as fashion. Online sales for apparel and footwear retailers plunged in the first two weeks of March, compared with the same period a year ago, falling 37% on March 11 alone, according to Rakuten Intelligence, which tracks electronic receipts.

By contrast, online sales at general-merchandise retailers have soared, jumping 50% in one day, March 13, compared with a year ago. Giant sellers such as **Amazon.com Inc.** and **Walmart Inc.** have struggled to keep up with the surge in demand, and those two companies are among about a dozen large retailers looking

to hire roughly 500,000 people in coming weeks.

The reliance on e-commerce is poised to grow as efforts to stem the virus have darkened stores and limited travel. Foot traffic to U.S. stores fell 58.4% in the third week of March, according to ShopperTrak, which uses cameras to count traffic, and Citigroup analysts. For apparel, the decline was 78.9%.

The pandemic is the biggest shock to the retail economy since the 9/11 terrorist attacks, with one big difference: In 2001, e-commerce accounted for about 1.5% of retail sales. As of the beginning of March, it was about 16% of sales and has jumped to 20% recently, said Craig Johnson, president of Customer Growth Partners, a consulting firm.

Roughly one-third of 300 households surveyed by Gordon Haskett Research Advisors said they used online grocery pickup or delivery during the week that ended March 13. Of that group, more than 40% tried it for the first time. The biggest beneficiaries were Walmart, Whole Foods, its parent, Amazon, and Target

Corp., according to the survey.

Analysts and retail executives said the bump in online orders won't replace all the lost sales.

"Impulse purchases will be lost," said Allen Questrom, the

former chief executive of **J.C. Penney Co.**, **Neiman Marcus Group** and other retail chains. "Walmart and Target will do well as people stock up on supplies. But fashion retailers will be hurt."

One exception is lounge wear. As more people work from home, they are stocking up on comfy clothes including sweatpants and robes, according to Edited, which tracks

Please turn to page B2

Nike Posts Rebound In China

By KHADEEJA SAFDAR

Nike Inc. said business has rebounded in China following the outbreak of coronavirus and the sportswear company was able to offset much of its lost store sales with online orders, a strategy executives said they expected to follow in the U.S. and Europe.

"We are seeing the other side of the crisis in China," Chief Executive John Donahoe said on an earnings conference call Tuesday. "We now have a playbook we can use elsewhere."

Nike sales plunged when many stores closed in February but demand jumped online, Mr. Donahoe said.

Roughly 80% of the 7,000 stores that sell its products have reopened in the country. Nike recently reopened one of its stores in Wuhan, the city where the outbreak first emerged.

He said the company is also seeing early momentum in South Korea and Japan, two other countries where the virus prompted temporary store closures.

Shares of Nike, which had tumbled roughly 30% in the last month along with the broader market, rose 10% in after-hours trading to \$79.55.

Mr. Donahoe cited the strategy in China to explain how Nike will recover sales in other parts of the world.

He said Nike closed its stores in China immediately and doubled down on digital sales as consumers were confined to their homes.

The pivot helped Nike accelerate sales through its apps and website.

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Americans are avoiding stores after the biggest shock to the retail economy since 9/11.

INSIDE



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Walter Robb, a GE executive who helped recruit Jack Welch, dies from Covid-19. B4



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Traders face personal virus risk amid the wildest conditions since 2008. B12

INTELLIGENT INVESTOR | By Jason Zweig

Before Investing, Consider Your Job And if You Are Like a Stock or a Bond



Investing, once a necessity, has become a luxury. "In the 1930s we had the Great Depression, in 2008 we had the start of the Great Recession and now we are facing the Great Cessation," says John Cammack, a private investor and former executive at **T. Rowe Price**

Group Inc. in Baltimore. The global economic lockdown to combat the spread of coronavirus, he says, is "stopping the many small actions that make up Adam Smith's marketplace dead in their tracks."

Yet Twitter and the internet are full of urgings to invest now, on the belief that the economy will eventually recover and stocks will

bounce back, as they always have in the long run.

And the long-term future returns on stocks are becoming more attractive: Since the beginning of February through Tuesday's close, stocks have become 26% cheaper, as measured by their market price divided by average earnings over the past 10 years, both adjusted

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U.K. carriers are being encouraged to first pursue all other commercial avenues for funds before the government would step in.

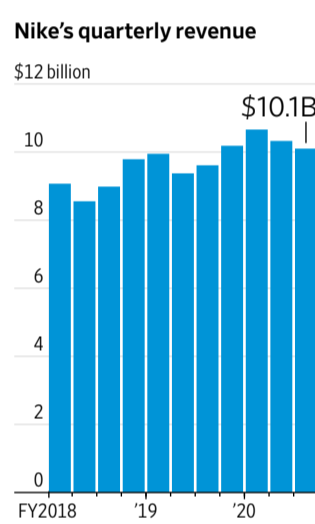
LUCY NICHOLSON/REUTERS

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Nike Posts Rebound In China

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Eventually it reopened stores, foot traffic returned and digital sales remained strong as well. "We expect the next several weeks to be a challenging period for those living in the U.S. and Europe," he said, but the company's experience in Asia "gives us confidence we will see the other side of this crisis in the near future."



Mr. Donahoe said Nike will continue to pay its workers during the store closures. The sneaker company is also designing personal protective equipment for doctors and nurses, including face shields, he said. "This is a moment in society where the private sector has a major role to play." Executives said Nike would reopen U.S. and European stores on a location by location basis. Online orders have surged in these markets in March as retail stores have shut. Andy Campion, Nike's finance chief, said online sales in the U.S. this week were comparable to the peak holiday season. Digital sales rose 36% across the globe, including a 30% gain in Greater China in the third quarter. Nike's latest financial results cover the three months ending Feb. 29. They capture the economic slowdown in

China, where the outbreak first emerged, but not Nike's decision on March 16 to close most of its stores outside China, Korea and Japan. Nike said Greater China sales fell 5.2% to \$1.51 billion as a steep sales decline in February wiped out double-digit growth in the first two months of the quarter. Overall, the company said quarterly sales rose 5% from a year ago to \$10.1 billion. Revenue in Nike's North American market, which accounts for the majority of total sales, rose 4.4% to \$3.98 billion. Mr. Campion said the company expects Greater China sales to be flat in the fourth quarter compared with a year ago and are on track to return to growth in the next fiscal year. —Kimberly Chin contributed to this article.

Financing Collapses For Building Sale

By KONRAD PUTZIER
Real-estate company SL Green Realty Corp.'s agreement to sell the former New York Daily News headquarters for \$815 million has collapsed after the buyer's financing pulled out, according to people familiar with the matter. New York property investor Jacob Chetrit signed a contract in the fall to buy the 37-story building on East 42nd Street, which was the newspaper's headquarters for many years and was featured in a Superman movie as the headquarters of the fictional Daily Planet. After Mr. Chetrit's main lender, Deutsche Bank AG, backed out this month, Mr. Chetrit called off the purchase, these people said. The sale's demise is a blow to SL Green, the office landlord whose shares have fallen more than 40% this month and which was counting on the

proceeds during a difficult period for real-estate owners. Financing property deals has become more difficult. The market for commercial mortgage-backed securities, a source of funding for property investors, is frozen. Mr. Chetrit and his partners were in advanced discussions with Deutsche Bank for a mortgage to finance the acquisition, according to people familiar with the matter. The loan would be packaged into commercial mortgage-backed securities. But the German lender backed out of the deal amid turmoil in debt and bond markets. Mr. Chetrit couldn't be reached for comment. SL Green President Andrew Mathias confirmed that the transaction was off and noted that the firm retained Mr. Chetrit's deposit, which people familiar with the matter say totaled \$35 million.

Britain Rejects Full Airline Bailout

By BENJAMIN KATZ AND STEPHEN FIDLER

LONDON—The U.K. is balking at a full-scale bailout of its airlines, telling British carriers to seek out private-sector remedies first and making clear the uneven hurdles the global aviation industry faces in finding ways to survive the fallout of the coronavirus outbreak.

Airlines around the world have furloughed workers, cut pay and canceled flights—some grounding nearly all of their flying capacity—to weather a collapse in demand by travelers and a patchwork of travel bans by governments aimed at containing the spreading virus. The International Air Transport Association said Tuesday it expects carriers to lose some \$252 billion in revenue this year—more than double a worst-case estimate of \$113 billion given earlier this month. Air traffic is expected to drop 38% for the year, the trade body said. It doesn't expect a fast recovery. Amid that crisis, govern-

ments are approaching assistance for the industry differently, making the contours of a path for a global recovery more difficult to see. Norway, Denmark and Sweden, for instance, have promised cash to national and regional carriers. The French and Dutch governments have said they are prepared to do what is necessary to secure the survival of Air France-KLM. Deutsche Lufthansa AG is in talks with Germany and the governments of other countries where its network airlines are based for similar financial support. The U.S. Congress has been considering various proposals for how to aid airlines as well as other industries, part of a massive stimulus package that could be finalized Tuesday. Airlines have asked for about \$58 billion in grants and loans, though administration officials initially favored granting credit over cash, The Wall Street Journal has reported. China, meanwhile, has subsidized some carriers to keep them providing some basic services. The U.K., home to carriers

like British Airways and Virgin Atlantic, is so far going in a different direction. In a letter to airlines and airports on Tuesday, Rishi Sunak, the country's chancellor of the Exchequer, akin to the Treasury secretary in the U.S., said the government is prepared to enter into negotiations with individual companies but only as "a last resort." Airlines are being encouraged to first pursue all other commercial avenues, including raising capital from existing investors or renegotiating payment terms with financial stakeholders, according to the letter. In the U.K, trade bodies have been calling for an injection of cash. Virgin Atlantic, part owned by Delta Air Lines Inc., had previously called for the government to provide as much as £7.5 billion (\$8.8 billion) for the sector. In his letter, Mr. Sunak outlined measures he has previously announced for the wider economy, including offering payroll relief, and allowing companies with investment

grade ratings or the equivalent to access working capital via a Bank of England loan facility. The government is looking at options for companies in the aviation sector that can't access such financing. The chancellor said any individual package would need to be structured to protect taxpayers' interests. A U.K. government official said economic relief measures outlined by Mr. Sunak last week would apply to airlines, too, including deferred taxes. "We are reviewing the letter from the chancellor alongside the measures announced last week for businesses," low-cost carrier easyJet PLC said in a statement. "Our immediate focus is on liquidity and protecting jobs and we are working with the government to make best use of these measures." A spokeswoman for International Consolidated Airlines Group SA, the owner of British Airways, said the company had received the letter, but declined to comment further. A Virgin Atlantic spokeswoman declined to comment.

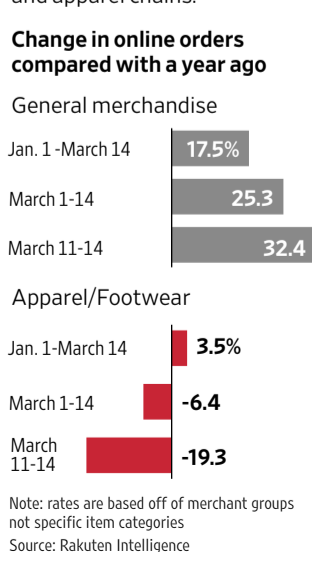
Basics Via Web Sales Are Winner

Continued from page B1
more than two billion items on the websites of U.S. and U.K. retailers.

The number of sold-out track suits rose 36% from Jan. 1 through March 16, compared with the same period a year ago. The number of sold-out sweatpants is up 39%, while the number of bathrobes that are out of stock rose 29%. Even retailers that have fledgling e-commerce businesses are seeing huge growth. Rite Aid Corp. Chief Executive Heyward Donigan said the drugstore chain's online sales have grown tenfold in recent weeks.

The company, which is just building out its online operations, put limits on high-demand items such as face masks and hand sanitizer after single buyers snapped up thousands of dollars of the products. "We're trying to build up our capabilities," Ms. Donigan said. "We want everyone to have the opportunity to get at least something."

A Dressing Down



Some retailers that appear to have well-oiled e-commerce machines have been overwhelmed by demand. Grocery delivery time slots are hard to find at Walmart and Amazon in many markets, and home delivery of nongrocery items has slowed, as the companies struggle to keep products in stock and meet demand. Walmart is making more deliveries than usual in the midst of a leap in demand, a spokesman said. Delivery time slots have filled up regularly in many areas, including parts of Georgia, Iowa, Tennessee, Pennsylvania, Nevada and North Carolina, according to checks of Walmart's grocery website. Amazon has said it would prioritize shipments from its warehouses of essential items. It aims to hire 100,000 people to fill warehouse and delivery roles to meet demand. Some nonfood retailers

have started discounting products to clear out excess goods. In the 10 days to March 18, there were 43% more discounted items offered online by a range of chains, compared with the same period a year ago, according to LovetheSales.com, which scrapes the websites of more than 1,000 retailers daily. There were 41% more women's jeans on sale and 29% more men's polo shirts. For luxury items, the number of discounted products jumped 123% from a year ago.

For now, most shoppers are staying away from stores unless they are buying groceries or other essential items. "Shopping is the last thing on my mind, unless it's for basic necessities," said Cindy Lai, a 34-year-old physical therapist. The Manhattan resident said that once the virus is contained she plans to resume her normal shopping habits, which don't include many online purchases. —Sarah Nassauer and Sharon Terlep contributed to this article.

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BUSINESS NEWS

Boeing CEO Would Oppose Aid Tied to Government Stake

By ANDREW TANGEL

Boeing Co. Chief Executive David Calhoun suggested he would decline taxpayer aid if lawmakers require the government to take an equity stake in the beleaguered aerospace giant.

"I don't have a need for an equity stake," Mr. Calhoun said in a Tuesday interview on Fox Business Network. "If they forced it, we'd just look at all the other options, and we have got plenty."

Mr. Calhoun's comments came as Congress was negotiating details of an aid package of more than \$1.6 trillion aimed at blunting the economic fallout from the worsening novel coronavirus outbreak.

The package could benefit businesses including Boeing and U.S. airlines and provide support for workers.

The Treasury Department took equity stakes in banks as part of the Troubled Asset Relief Program during the banking crisis in 2008.

Instead of the government taking an equity stake in Boeing, Mr. Calhoun expressed support for taking out taxpayer-funded loans and repaying them with interest.

"I want them to support the credit markets, provide liquidity, allow us to borrow against our future, which we all believe in very strongly," Mr. Calhoun said.

To ease its cash crash, Boeing has suspended its dividend and drawn down a credit line.

It is seeking at least \$60 billion in public and private aid for itself, its suppliers and the broader aerospace industry.

On Monday, Boeing said it would halt production in the Seattle area for two weeks to curb the spread of the coronavirus.

navirus.

Mr. Calhoun acknowledged air travel is already virtually grinding to a halt, but expressed confidence the aviation industry would recover more quickly than more dire forecasts predict.

Major U.S. airlines are drafting plans for a potential voluntary shutdown of virtually all passenger flights across the U.S., according to industry and federal officials, The Wall Street Journal reported.

Government agencies also are considering ordering such a move and the nation's air-traffic control system continues to be ravaged by the coronavirus contagion.

No final decisions have been made by the carriers or the White House, these officials said.

On Tuesday, the International Air Transport Association offered its latest forecast for global airline traffic, saying it would fall 38% in 2020 and cost carriers \$252 billion in revenue.

That is double its prior estimate of the impact of the coronavirus as it intensifies efforts to persuade governments to provide financial support for the industry.

The near-grounding of many airlines' service as demand collapsed has forced them to park thousands of planes and left many carriers running out of cash, triggering job cuts as governments continue to expand travel restrictions.

"We need a full-speed rescue package now," Alexandre de Juniac, IATA's chief executive, said on a call with reporters.

Industrywide, airlines are looking for around \$200 billion in support to cover their fixed costs.

—Doug Cameron contributed to this article.



The oil company is cutting \$2 billion from shale drilling, primarily in the Permian Basin. A facility near Midland, Texas.

JESSICA LUTZ/REUTERS

Chevron Chops Spending 20%, Aiming to Maintain Dividend

By CHRISTOPHER M. MATTHEWS

Chevron Corp. is cutting \$4 billion from its capital budget as it confronts plummeting petroleum demand and an oil-price rout, the latest major energy company to axe its spending to shore up its balance sheet.

The oil giant said Tuesday it would reduce its 2020 spending by 20% to about \$16 billion, with the biggest cut to come in the largest U.S. oil field, the Permian Basin in West Texas and New Mexico.

Chevron will also suspend stock buybacks but promised to protect its dividend and said oil production would be flat.

Chief Executive Mike Wirth said the dual shock of the oil demand-sapping coronavirus pandemic and an increase in supply due to the oil-price war between Saudi Arabia and Russia necessitated drastic

measures.

"To see these two things happen simultaneously is really unprecedented," Mr. Wirth said in an interview. "We can't control that, but we're focused on making the moves that will preserve the strength of our company."

Chevron's announcement follows similar austerity measures by its peers and other large industrial companies.

On Monday, Royal Dutch Shell PLC halted its \$25 billion share-buyback program and cut its capital expenditures by 20% in 2020 to \$20 billion from \$25 billion.

Total SA said Monday it planned to trim spending by \$3 billion, halt \$2 billion in buybacks and borrow \$4 billion to make up for a \$9 billion shortfall created by low oil prices.

ExxonMobil Corp. said last week it planned to make significant cuts to its spending.

The industry faces its biggest challenge in decades.

Analytics firm IHS Markit forecast the largest-ever glut of oil this year if current market dynamics continue.

Globally, there could be as much as 10 million barrels a day of oil in excess of demand for the next several months, the firm said.

U.S. producers would be among the hardest hit, cutting as much as 4 million barrels a day of production during the next 18 months, it said.

Such a pullback would have dramatic consequences for the economies of oil-rich states, including Texas and North Dakota, where the industry supports hundreds of thousands of jobs.

Chevron said it would cut \$2 billion from shale drilling, primarily in the Permian Basin, which will result in 20% lower oil production there

than Chevron previously forecast.

Such cuts would likely lead to layoffs at Chevron. Mr. Wirth said Chevron had already planned reductions to its workforce before the virus took hold.

"That remains the reality today," he said.

Chevron's priority is maintaining its dividend, which Mr. Wirth said it hadn't cut since the Great Depression nearly a century ago.

The company can pay the dividend from its cash flow at current oil prices but cannot also cover its capital expenditures, he said.

If oil prices remain below \$30 a barrel, the company would draw on its balance sheet to cover both, according to Mr. Wirth.

"We may need to lean on the balance sheet if prices remain in that range, which is why we have it," he said.

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GE Official Recruited, Mentored Welch

By JAMES R. HAGERTY

Walter Robb, a former General Electric Co. executive who helped recruit Jack Welch to the company and later was chosen by Mr.

OBITUARY **WALTER ROBB 1927-2020** Welch to revive GE's medical-equipment business, died Monday of Covid-19 at a hospital in Schenectady, N.Y. He was 92.

Mr. Robb, who earned a doctorate in chemical engineering from the University of Illinois at Urbana-Champaign in 1951, visited the university less than a decade later with a GE colleague and recruited Mr. Welch.

Mr. Welch, who died March 1, became CEO of GE in 1981.

In his memoir, "Jack: Straight From the Gut," Mr. Welch recalled that in his

early days at GE Mr. Robb often called to offer "support, gossip and advice." Part of that advice: Be more patient.

In mid-1973, Mr. Robb was promoted to head GE's chemical and metallurgical division. A few months later, Mr. Robb, then head of GE's components and materials group, shocked Mr. Robb by asking him to take on a different challenge as head of medical products, including X-ray equipment and heart monitors, a far smaller and unprofitable operation based in Milwaukee.

Mr. Robb said he was happy where he was, but Mr. Welch insisted medical products was a huge opportunity. "He took the job, intrigued by the technology and some of my own BS," Mr. Welch wrote later.

One of Mr. Robb's urgent tasks was to deal with the commercial threat to X-rays



Mr. Robb died from Covid-19.

posed by new technology in the form of computed tomography, or CT, scanners. GE researchers produced their own CT scanner in a crash program and began selling them in the

mid-1970s at \$650,000 apiece.

The medical business, which also made magnetic resonance imaging, or MRI, equipment, became a star performer at GE. Mr. Robb headed that business until 1986, when he became head of GE's research laboratories.

He retired at the end of 1992. President Clinton awarded him a National Medal of Technology in 1993 for his role in developing medical-diagnostic equipment.

After retiring from GE, Mr. Robb remained active as a consultant and investor in startup companies. He also owned minor-league hockey and arena football teams in Albany, N.Y.

Mr. Robb checked into a hospital Friday after his family became concerned about his coughing. He was put on a ventilator but his condition

worsened rapidly.

Walter Lee Robb was born April 25, 1927, in New Bloomfield, Pa. His father was a school principal and insurance agent. One of Mr. Robb's early ambitions was to be a sportscaster. Instead, he majored in chemical engineering at Pennsylvania State University before earning his master's and doctoral degrees in that field at the University of Illinois.

He joined GE in 1951 and soon met Anne Gruver, a GE secretary, at a YWCA dance in Schenectady. They married in 1954.

His early research at GE included nuclear power, polymers and gas-permeable membranes. Among other things, his research led to an artificial lung used to sustain people during surgery. Life magazine wrote about that project and

featured his picture.

Mr. Robb is survived by his wife, three sons, five granddaughters, a brother and a sister.

He was a director of the Double H Ranch, which provides outdoor programs in New York's Adirondacks region for children suffering from serious illnesses. At age 69, he climbed Mount Kilimanjaro with his sons.

In a visit to the University of Illinois five years ago, Mr. Robb told students he worried big companies had become too risk-averse and reliant on buying startups to acquire technology rather than developing their own.

"As I look back on my own career," he said, "all of my real successes were because somebody took a risk with me and I took a risk doing something to be different."

Facebook Expects Hit on Ads

Continued from page B1

pandemic and growing economic uncertainty, digital and local media companies are more vulnerable to such retrenchment in the short-term, ad buyers said.

Unlike national television ads, which are often purchased many months in advance and are harder to cancel, most digital ad buys can be canceled within days, buyers and industry analysts say.

"If you're Marriott, you don't get to cut your budget to TV," said Laura Martin, a senior analyst for Needham & Company. "Where you can cut immediately is digital."

Indeed, the New York Times was among the first companies to warn that the virus was causing an ad slowdown.

The company cut its first-quarter advertising-revenue



A library in Jonesboro, Ark., is posting videos during the shutdown.

forecast at the beginning of March, citing a slowdown in international and domestic ad bookings because of uncertainty and anxiety about the virus.

Another issue facing publishers and digital media com-

panies, such as Facebook and Twitter, is that some advertisers are trying to avoid news content that has turned even more negative amid the spread of the coronavirus.

Many companies "are leery of news outlets and social me-

dia sites because there is so much negative content right now," said one ad buyer.

Brands have been burned several times in recent years when their ads have appeared next to inappropriate or offensive content, including fabri-

cated news or racist content.

Categories of digital advertising at the highest risk include staples for Facebook: Travel, entertainment, retail and consumer packaged goods account for 45% of mobile advertising, said Ms. Martin, and broadly equate to Facebook's revenue.

Under normal circumstances, the increased time that cooped-up Facebook and Instagram users spend on the platform would allow the company to profit from selling more advertising inventory. But the increased usage that the company has noted is paired with decreased advertising demand, meaning that auction prices for Facebook ads would likely plummet unless the company chooses to restrict the supply.

With fewer advertisers competing for Facebook users' attention, each impression would be worth less across the board, unless the company chooses to cut back on the number of ads shown.

How Facebook would address its increased supply and reduced demand isn't clear, Ms. Martin said, given a choice

between selling more advertising at lower rates or trying to maintain prices but running fewer ads overall.

Facebook's stock is down 28% year to date, slightly more than the Nasdaq index but slightly less than the S&P 500.

Reductions in advertiser demand could also affect the

Prices for ads would likely plummet unless the company restricts the supply.

content creators that have built audiences on the platform. Klear, which provides analytics for Instagram influencer marketing, said Tuesday that the number of Instagram stories posted and engagement per post were both up sharply over the past week.

However, Klear found, the number of sponsored posts labeled with #ad dropped by 25%.

—Rob Copeland contributed to this article.



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BUSINESS NEWS

Ford Will Help Make Antivirus Supplies

By MICAH MAIDENBERG

Ford Motor Co. is working with **3M Co.** to produce respirators and with **General Electric Co.** to make ventilators to help combat the coronavirus pandemic.

Employees at the car maker and 3M are working to boost manufacturing of 3M's respirators, the companies said Tuesday.

3M's respirators use a waist-mounted, battery-powered blower to send filtered air into a hood, providing respiratory protection for those wearing it, according to the St. Paul, Minn., manufacturer.

The companies are also working to develop a new respirator, which could be produced in a Ford plant, the car maker said.

Separately, GE's health-care unit and Ford are working to expand production of a simplified version of a GE ventilator that could help patients with respiratory problems tied to Covid-19, the disease caused by the coronavirus, the companies said.

Ford also said Tuesday one of its design teams is developing face shields for medical workers, 1,000 of which will be tested this week at hospital systems in the Detroit area. It expects to make about 75,000 of the shields this week at a factory in Plymouth, Mich.

The car company said it is also developing disposable respirators for health-care workers and expects to initially produce 1,000 of them a month once they are approved by health officials.

Distillers Pivot to Hand Sanitizer

Spirits companies get authorities' green light to fill health-care need but price can be steep

By SHARON TERLEP

Distillers around the country are using their alcohol supply to churn out hand sanitizer as Americans scramble to find the cleaner, a tool in fighting the coronavirus.

U.S. consumer demand for hand sanitizer outpaced supply weeks ago, as Americans raced to stock up and the biggest U.S. brand—**Gojo Industries Inc.'s Purell**—focused its supply on hospitals and other establishments.

"We have the processing equipment, and we know the skill sets, and we have the people," said Chad Butters, chief executive of **Eight Oaks Farm Distillery** in New Tripoli, Pa. "Let's get to work making this. We are just going to push it out."

Eight Oaks recently turned its production line from whiskey and vodka to hand sanitizer. The company is giving out its hand sanitizer to local nonprofits and community members for a donation.

The distillery joins a growing number that have set up sanitizer-making operations, either using excess alcohol or temporarily halting production of their spirits. Companies in towns from Portland, Ore., to Durham, N.C., are churning out sanitizer.

In the U.S., the Food and Drug Administration regulates production of sanitizer and generally requires the product be inspected before it is sold to the public. The Centers for Disease Control and Prevention recommends hand sanitizer contain at least 60% al-



Instead of bourbon, a 1,250-gallon batch of hand and surface sanitizer is blended at Heritage Distilling in Gig Harbor, Wash.

cohol, a far greater concentration than liquor sold to consumers.

The Alcohol and Tobacco Tax and Trade Bureau has exempted spirits companies from getting authorization typically required to manufacture hand sanitizer. The FDA said last week that it wouldn't take action against any company that produces alcohol-based hand sanitizers for use by consumers or health-care personnel.

Distillers had been finding ways to work around restrictions, including donating rather than selling sanitizer, or calling it something other than hand sanitizer.

For instance, Los Angeles

spirits maker Amass was selling "alcohol-based hand wash" on its website, alongside dry gin and Copenhagen Vodka. The company will now call the product hand sanitizer.

"It needed to go to market immediately," said Morgan McLachlan, Amass co-founder and chief product officer.

Ms. McLachlan is eight months pregnant and got the idea to make sanitizer a few weeks ago when she was unable to find any in stores for herself.

The company, which specializes in botanical-based spirits, was already preparing to launch a personal-care line, so making the jump to sanitizer was easy, she said. A 16-

ounce bottle costs \$38, compared to an 8-ounce bottle of Purell, which costs about \$3 at major retailers.

Tito's Handmade Vodka, based in Austin, Texas, spent weeks warning consumers against using the liquor to protect against the coronavirus because it is only 40% alcohol. On Sunday, it said it is working to begin production of hand sanitizer.

At least one larger competitor is making the change as well. **Pernod Ricard SA**, the French spirits giant, is making sanitizer at its plants on both sides of the Atlantic and supplying alcohol for others to make the product. The effort includes whiskey distilleries

for the brands Rabbit Hole in Kentucky, Smooth Ambler in West Virginia and TX Whiskey in Texas.

Other unexpected industries are also dedicating production lines to making hand sanitizer. Lawrence Rosen, chairman of **LaRose Industries LLC**, said his toy company, which makes products such as Cra-Z-Art slime and glue, is converting some liquid-filling machines at factories to make hand sanitizer packaged under the LaRose brand.

"It's in tremendous demand from all retailers," Mr. Rosen said.

—Austen Hufford and Paul Ziobro contributed to this article.

Health Experts Warn About Virus Drugs' Outlook

By JONATHAN D. ROCKOFF AND BRIANNA ABBOTT

A federal health official sought to tamp down mounting excitement in some quarters over the potential for antimalarial drugs to treat the new coronavirus, though a Trump administration adviser voiced more optimism.

Doctors, patients and researchers have been looking for treatments that can tackle the virus as it spreads across the world.

Speaking at The Wall Street Journal's Health Forum, held remotely by videoconference on Tuesday, Amy Abernethy, principal deputy commissioner of the Food and Drug Administration, said antimalarial drugs like chloroquine and hydroxychloroquine must be tested to determine whether they can fight off the deadly respiratory illness.

"We need to ask in a judicious way, what are the data that support this particular intervention, and also support this invention over other potential interventions?" Dr. Abernethy said.

Public-health officials around the world have sounded warnings and urged caution in

recent days about administering antimalarial drugs in efforts to fight the coronavirus, especially after President Trump touted the drugs.

A treatment for malaria might be effective in combating the coronavirus if used early on, Jeff Colyer, chairman of the national advisory committee on rural health and human services, said at the forum. Before being appointed to the panel by the Trump administration last month, Dr. Colyer, a surgeon, served as the Republican governor of Kansas from 2018 to 2019.

Dr. Colyer mentioned using hydroxychloroquine, along with Zithromax Z-Pak, **Pfizer Inc.'s** brand name for the antibiotic azithromycin.

"We are not suggesting that this is a magic bullet, but the data that we have seen so far, it perhaps could be effective," he told the audience.

A study in China testing hydroxychloroquine in 30 patients with mild forms of the disease didn't confirm a benefit, and researchers recommended further investigation.

Study subjects given more conventional treatment cleared the virus at a rate of 93%, compared with 87% in patients who received the antimalarial drug

along with the conventional treatment, according to an abstract published recently in a Chinese medical journal. CT scans, however, showed the disease progressed in five patients who received the drug, compared with seven patients given the conventional treatment alone, and all patients showed improvement in follow-up exams.

Researchers have been scrambling to test a variety of potential coronavirus treatments to see whether they could make a difference. Among them are drugs already approved and on sale for other uses, because they could be quickly dispatched if proved to work.

One of the latest efforts to explore repurposing an off-shelf therapy involves a rheumatoid-arthritis drug from **Roche Holding AG**. The drug-maker plans to begin testing the drug next month in patients with severe pneumonia caused by the coronavirus, said Alexander Hardy, chief executive of Roche's Genentech business.

"What we're really missing is a clear level of evidence to really inform what the correct role of Actemra is in treating the disease in its most serious stage," he said at the conference.

The study will take months, Mr. Hardy indicated. Meantime, Roche is providing Actemra to doctors on the front lines of treating virus patients, and has sent 10,000 vials to the U.S. government's strategic stockpile for further use, he added.

Trevor Mundel, president of global health for the Bill & Melinda Gates Foundation, said by



Amy Abernethy, an FDA official, spoke at the health forum via videoconference.

the end of this year or early next year studies might point to a vaccine that is safe and shows signs of preventing infections, but more testing will be needed before it could be used broadly. If everything works out, a vaccine could be ready for use by the end of 2021, he said.

"We certainly will need a much larger safety database and efficacy database to really move a vaccine forward," Mr. Mundel said, noting some vaccines developed for severe acute respiratory syndrome, or

SARS, didn't work and made things worse.

The coronavirus pandemic dominated discussion at the health forum. Howard Zucker, New York state's health commissioner, said fending off the virus is triggering urgent, creative efforts to address the many challenges.

New York is looking into tactics such as splitting up one ventilator for use by two patients, he said. "I think that what we are doing here in New York is preparing for challenges we have never seen before," Dr. Zucker said.

Dr. Zucker stressed the importance of social distancing to delay transmission and lessen the strain on the health-care system. He said there likely won't be stricter enforcement beyond what the state is doing already, despite some people not adhering to recommendations.

Meantime, Dr. Zucker pleaded for more federal support for state-level virus-fighting efforts. "Many of the resources that are needed need to come from the federal government. We are doing what we can," he said.

—Allison Prang and Jared S. Hopkins contributed to this article.

Occidental Cuts Pay Up to 30%

Continued from page B1
Wall Street Journal reported Sunday.

A settlement would mark the end of a protracted fight with Mr. Icahn, who took aim at Occidental after the company outbid Chevron for Anadarko.

The company's market capitalization has since plunged below \$10 billion, from more than \$46 billion at the time of the offer.

Occidental had staved off Mr. Icahn for months but had to give up significant ground as oil prices plunged below \$25 a barrel due to a price war between Saudi Arabia and Russia and depressed demand because of the coronavirus pandemic.

The company also has brought back former Chief Executive Stephen Chazen back as chairman.

Ms. Hollub, who presided over the Anadarko deal last year, is expected to keep her job—albeit at a much lower salary.

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Moonlynn Tsai, who owns a restaurant, had to lay off 22 employees after choosing between keeping staff and paying the rent.

Businesses Hit Wall on Rent

Delaying obligations during pandemic poses threat to commercial mortgage market

By KONRAD PUTZIER AND ESTHER FUNG

Shortly after James Wacht shut down his two gyms for children in Brooklyn last week, he sent letters to his landlords asking for rent relief.

He has a successful business, he wrote to the building owners, but only limited cash reserves. To continue paying staff, he needed a break on his rent bill.

As the spread of the coronavirus upends the economy, forcing restaurants, movie theaters, gyms and offices to close, many businesses across the country are likely to stop paying rent on April 1.

Delaying or skipping rent payments offers a lifeline to struggling businesses and could ward off some bankruptcies and layoffs. Some, like Mr. Wacht, will try to renegotiate their leases. Many others won't mail in their rent checks, daring landlords to evict them when finding another tenant is almost impossible, and a number of U.S. cities have put a moratorium on evictions. Still others are simply liquidating.

But if missed payments could help keep some businesses alive and employees paid, they could come at a price for the banking sector and economy. Lacking rental revenue, many property owners could default on their mortgages—forcing banks, already struggling with the pandemic's fallout, to write down loans and raise capital to

cover for their losses. Real-estate stocks have been among the hardest hit in the recent market rout, reflecting investor concerns that property values could fall. Commercial mortgage debt has increased to nearly \$3 trillion, up by 33% from its low eight years ago and well above its 2008 levels, according to the Federal Reserve Bank of St. Louis.

Some of the market's big-name investors are now zeroing in on commercial mortgages as a stress point in the financial system.

"You're going to have this blow up, too, and nobody's even looking at it," billionaire investor Carl Icahn said on CNBC earlier this month, referring to commercial real estate. He is shorting bonds tied to commercial mortgage debt, and the surge in these property loans in recent years reminds him of the pre-2008 housing bubble, he added.

Thomas Barrack, chief executive of real-estate fund manager **Colony Capital Inc.**, warned of a "potential blockage" in the commercial mortgage market as stable properties suddenly no longer generate cash flow.

"Addressing this major looming crisis in liquidity in a coordinated manner will be essential in averting a crisis in credit and a long-term economic recession," Mr. Barrack wrote in a Medium blog post on Sunday.

The difficulties aren't confined to retail. Landlords and brokers say they are also seeing a flood of office users asking for rent relief, particularly among small businesses.

For his part, Mr. Wacht was just trying to keep his gym classes going. But when New

York City closed public schools on March 16, he and his son Evan, who together run the gyms for infants to 7-year-olds, shut the doors as well.

Then Mr. Wacht made a choice: "We're going to keep staff on payroll as long as we can, but we can't do that and pay full rent," he said.

Mr. Wacht, who also serves as president of real-estate services firm **Lee & Associates NYC**, sent letters to his landlords that same day. He said one responded that he needs time to think about it. The other hadn't responded as of Friday.

"There's no retail tenant who hasn't contacted their landlord already," said Bradley Mendelson, vice chairman at real-estate brokerage Colliers International. Many landlords, he said, have a similar response: "If you don't pay your rent, I can't pay my mortgage."

Some business owners said they had to make tough decisions between keeping their staff or paying their April rent. Moonlynn Tsai, who owns **Kopitiam NYC**, a restaurant selling Malaysian food, said her landlord rejected her request for relief.

"They're not helping out. I was told to wait another month to see how it goes. We had to let go of our entire team," said Ms. Tsai, adding that she has set up a takeout window but sales aren't enough. She had to lay off 22 full-time and part-time employees.

Still, brokers say tenants have plenty of leverage in times of economic distress, and it helps that some cities are putting a moratorium on evictions.

Lease contracts often contain clauses that allow tenants to skip rent payments if they can't access their space, said Jeffrey Schwartz, a lawyer at SSRGA. Some may make this argument if a government order forces them to stay at home. Insurance policies may pay for some losses, but brokers and landlords say they generally don't cover pandemics.

Some landlords said they are considering flexible payment options, including allowing delayed payments in exchange for something in return. This could be an extension of the existing lease, more details about the retailer's cash flow and financial records, or a modification of something that isn't landlord-friendly in the existing lease.

"I hope everyone will look at this from a partnership point of view," said Chris Weilminster, chief operating officer of Urban Edge Properties, a shopping center landlord.

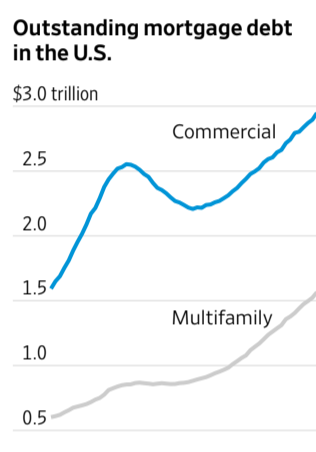
U.S. banks face crushing losses from commercial real-estate loans damaged by the Covid-19 economic crisis, but the pain might not be as great as in the years following the 2008 crash, according to a new analysis by data firm Trepp LLC.

Commercial real-estate loans made by banks will suffer as much as a 2.5% loss rate over the next five years, according to the analysis of 12,500 loans now on the books of banks ranging in size from small community banks to the largest banks in the country. If that were applied to the \$2.3 trillion of outstanding commercial real-estate bank loans, then losses would amount to \$57.5 billion, Trepp says.

By comparison, loss rates last year were less than 0.1%. Banks, along with most of the rest of the real-estate industry, benefited from a strong economy, low interest rates and healthy values of most property types.

But the default rate on loans might be less this time than during the last financial crisis, according to the analysis, which is expected to be released this week. Between 2008 and 2011, the peak default rate was 4.4%, according to Trepp. That default rate will hit a peak no higher than 2.7% in the expected Covid-19 downturn, Trepp said.

Defaults this time probably won't soar so high partly because bank portfolios were in relatively strong shape leading



Note: Commercial refers to nonfarm, nonresidential mortgages. Source: Federal Reserve Bank of St. Louis

Nonbank Lenders Battered as Value of Holdings Plummet

By KONRAD PUTZIER

A mortgage-lending company sponsored by private-equity giant TPG RE Finance is delaying dividend payments and said it is in danger of running out of money if market turmoil continues, a fresh sign that nonbank lenders are getting squeezed.

Private-equity firms, hedge funds and real-estate investment trusts took over the market for riskier commercial real-estate loans in recent years, filling a void left by banks after the 2008 global financial crisis. Less regulated than banks, these lenders issued billions of dollars in high-yield construction loans and other mortgages and bought bonds backed by property debt.

They funded these deals with the help of cheap bank debt facilities, which were in turn secured by their loan and bondholdings and corporate guarantees.

But now that the value of these holdings is plummeting from the coronavirus pandemic and as the U.S. economy grinds to a standstill, banks are demanding more collateral and some nonbank lenders are in danger of running out of money.

TPG RE Finance Trust Inc. owns \$960 million in investment-grade commercial mortgage bonds, which it financed with \$760 million in short-term revolving repurchase facilities from **JPMorgan Chase & Co.**, **Wells Fargo & Co.** and **Goldman Sachs Group Inc.**, according to the company and public records.

But as the bonds fell in value, TPG RE Finance had to post more cash as collateral for these loans. The company said on Monday it may have to post more cash collateral in the future if market volatility continues, and if that happens there

is "no certainty" it will be able to keep doing so. The company is delaying first-quarter dividend payments until July to preserve cash.

TPG RE Finance's stock fell almost 30% on Monday, 13% Tuesday and is down 79% since the beginning of March.

TPG RE Finance isn't the only mortgage trust to come under pressure. **AG Mortgage Investment Trust Inc.**, which is managed by Angelo, Gordon & Co., said it "received an unusually high number of margin calls from financing counterparties" and missed the deadline for some of them on Friday.

Share prices for other mortgage REITs have also tumbled amid investor concerns over the property market. The shares of many of these companies are trading at just 30% to 40% of the net book value of their holdings, according to Steven DeLaney, an analyst at JMP Securities.

"That's insane," he said. "That's recession pricing."

While TPG RE Finance is under immediate pressure from its bond investments, the company's direct real-estate lending could become a problem in the medium term. The company holds \$5.1 billion in real-estate loans, also partly financed with debt facilities from banks. In its release, the company said certain credit events could force it to post more collateral to secure these facilities.

REITs held \$105.5 billion in commercial and multifamily mortgages in the fourth quarter of 2019, according to the Mortgage Bankers Association, an increase of 11.6% compared with a year earlier. Meanwhile, private real-estate debt funds had \$181.2 billion in assets under management as of June 2019, according to Preqin, up from \$33.5 billion at the end of 2010.



Losses set at \$57.5 billion on commercial loans over next five years.

Rate of Losses to Soar For Real-Estate Loans

By PETER GRANT

U.S. banks face crushing losses from commercial real-estate loans damaged by the Covid-19 economic crisis, but the pain might not be as great as in the years following the 2008 crash, according to a new analysis by data firm Trepp LLC.

Commercial real-estate loans made by banks will suffer as much as a 2.5% loss rate over the next five years, according to the analysis of 12,500 loans now on the books of banks ranging in size from small community banks to the largest banks in the country. If that were applied to the \$2.3 trillion of outstanding commercial real-estate bank loans, then losses would amount to \$57.5 billion, Trepp says.

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Defaults this time probably won't soar so high partly because bank portfolios were in relatively strong shape leading

up to 2020, said Matthew Anderson, a Trepp managing director. In the lead-up to the 2008 crash, "lending and transaction volume was very high and underwriting standards had slipped significantly," he said.

Mr. Anderson emphasized that the current crisis is without precedent and it is impossible for anyone at this point to predict how long the health and economic shock waves will continue. The analysis, rather, is based on the most "extremely adverse" scenario contemplated by the Federal Reserve in the regular stress tests that it administers to U.S. banks.

Under that scenario, unemployment reaches 10% and the most pain is in the first year, he said. "There are lingering effects that drag on for another year. And then things bottom out after two years, and then they ramp back up again," he said.

Real-estate losses will result partly from defaults by owners facing soaring vacancy and declining rents. Also, values of many properties will fall, making it very difficult for many landlords to refinance when loans become due.

Hotels and shopping centers will likely be the hardest-hit property type with cumulative default rates over five years of 34.8% and 16%, respectively, according to Trepp. Rental-apartment buildings and industrial property will be hurt the least with respective default rates of 3.3% and 3.0%, the analysis said.

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THE PROPERTY REPORT

Mortgage-Market Slump Weighs on Banks

By Peter Grant and Katherine Sayre

The market for issuing securities backed by commercial mortgages has frozen up, leaving some of the biggest names on Wall Street stuck with billions of dollars of loans that are rapidly deteriorating in value.

This market usually enables lenders to owners of offices, hotels and other commercial buildings to unload their debt into a financial market and reduce their exposure. But it has stopped functioning properly since the novel coronavirus pandemic caused financial markets to go into a tailspin.

The malfunctioning of the market for commercial mortgage-backed securities is weighing on recent debt deals. One of the biggest is the \$2 billion loan made in February by a bank group led by Citigroup Inc. and backed by the MGM Grand and Mandalay Bay resorts and casinos in Las Vegas. The borrower was a ven-

ture of Blackstone Group Inc.'s nontraded real-estate investment trust and an MGM spinoff, which purchased the properties just before the loans were made.

The bank group had been planning to sell most of the debt in the \$500 billion commercial mortgage-backed securities market. But that debt market has become one of the many victims of the global financial system's volatility and sharp selloffs.

Property owners rely heavily on the ability to borrow money. But if financial institutions can't sell commercial mortgage securities to investors, they are going to stop making new loans to landlords.

Already, the volume of new loans and demand for commercial mortgage securities in the secondary market have fallen sharply. The spread between the most highly rated securities and Treasury bonds widened to 3.29 percentage points late last week, from



One of the biggest loans, for \$2 billion, is backed by the MGM Grand and Mandalay Bay in Las Vegas.

0.86 percentage point at the end of January. That was the widest level since the 2008 global financial crisis, according to Trepp LLC.

The upshot is that new issues can't be sold without the underwriters taking unacceptable losses. The only exception are pools of apartment-building loans by mortgage-finance

giants Fannie Mae and Freddie Mac.

The sale of new securities backed by other types of commercial property "ground to a halt" last week, said Dave Bragg, managing director of Green Street Advisors, a real-estate research firm.

Representatives for Citigroup and other members of

the bank group, which includes Barclays PLC, Deutsche Bank AG and Société Générale SA, declined to comment or didn't respond to requests for comment.

The shutdown of the new-issuance market is one of the many cracks appearing in the commercial real-estate world. Owners with properties that have gone dark during the nationwide economic shutdown, such as hotels and malls, are almost completely cut off from debt, market participants say.

Loans "that looked great two weeks ago don't look great today," said Willie Walker, chief executive of Bethesda, Md.-based real-estate finance firm Walker & Dunlop Inc. "They all just evaporated."

The loan backed by the MGM Grand and Mandalay Bay is especially vulnerable because Las Vegas has been hit hard by the rapid deterioration in tourism because of the pandemic. The Blackstone venture that borrowed the money

is counting on annual rent starting at \$292 million from MGM Resorts International, the owner of the casino resorts occupying the real estate.

But MGM Resorts, along with nearly every commercial and tribal casino in the U.S., has closed, affecting about 642,000 workers and billions of dollars in revenue.

Earlier this month, Moody's Investors Service gave the loan a tentative investment-grade rating. The report based its preliminary rating on the corporate guarantee that MGM Resorts made to back up the deal. That support looks much shakier with the collapse in the travel and leisure business.

MGM shares plunged by 72% from a high of \$33.66 on Feb. 12 to \$9.15 on Monday. The stock rose Tuesday to \$12.18. The company had \$11.3 billion in debt and \$2.3 billion in cash at the end of 2019, the company said.

A spokeswoman for MGM Resorts declined to comment.

Your Career Figures Into Investing

Continued from page B1 for inflation, according to data collected by Yale University finance professor Robert Shiller. That's one of the steepest declines in so short a period since the start of such data in 1881.

That's good news for those with the cash and courage to begin buying into the decline. One of the most basic rules of investing is that as current prices fall, future returns rise—all else being equal.

But all else isn't equal

right now. In this Great Cession, entire industries are shutting down before our eyes, and millions of people could be thrown out of work. If your paychecks might disappear, you shouldn't be spending money to buy stocks when you might soon need it for necessities.

The first question all investors should be asking themselves now is: Am I more like a stock or a bond?

Every investor's total portfolio consists of two big buckets. The one we always talk about is your financial capital: the stocks, bonds, mutual funds, exchange-traded funds, real estate, cash and other marketable assets you hold.

The one we seldom talk

about is your human capital: the value of the current and future earnings from your career.

A fortunate few people have safe human capital that offers a lifelong steady stream of payments.

A justice on the U.S. Supreme Court, with lifetime job security, is a walking, talking, gavel-wielding bond—with zero risk of default.

Other people's human capital is also bond-like, although not riskless: You're unlikely to be fired or laid off if you're a federal civil servant, a tenured professor at an amply funded university, a police officer, a physician or an emergency medical professional, a member of the military or the clergy.

And, just like bonds, the

human capital in such fields generates stable income but seldom a lot of growth. The potential for enormous boosts to your salary is relatively limited.

Other people's human capital makes them much more like a stock. And the past month should have reminded everyone alive that stocks are not low risk.

They offer the potential for high returns over the course of decades, but that comes at the cost of bone-shattering drops along the way. For many of us, careers are like that too: rewarding over a lifetime, but with harrowing detours and disruptions at unpredictable intervals.

That risk can be latent, too, lurking below a seemingly safe exterior. Just ask anyone in the energy indus-

try today, or in housing 10 years ago, or in Silicon Valley 20 years ago.

People who work in riskier industries often—but far from always—have the potential to earn a lot more when they themselves take more risk.

The return on their human capital, like the return on stocks, can vary wildly: An oil wildcatter drilling in untapped basins could sink dry holes or strike it rich, or a health-care executive could fail from company to company until finally founding a successful firm of her own.

Especially if you're young, you can protect and even turbocharge the value of your human capital by acquiring new languages or other skills, technical training, graduate degrees or

other professional credentials.

That's even more important if, like so many people in industries like hotels or restaurants, your career has just been sucked into a black hole.

Online and other remote training programs could continue to make that possible even in a global economic lockdown. For many people, that's the first place any spare cash should go at a time like this.

For now, adding more money to stocks—unless you're more like a bond yourself—might have to wait.

To be able to bolster your financial capital in the long run, you first have to rebuild your human capital in the short run.

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SITE 3	6994 SKY POINTE DR. (3.78± AC) Zoned: Commercial • Various types of uses possible
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MONEY & INVESTING

Coronavirus Derails a Hot Bet in Finance

By PATRICIA KOWSMANN AND MARGOT PATRICK

Europe's banks were only halfway through cleaning up €1.2 trillion (\$1.3 trillion) of loans that turned sour in the last crisis when disaster struck in the form of the new coronavirus.

For the past six years, as Europe recovered from its sovereign-debt crisis, U.S. private-equity firms and fund managers went on a buying spree for as much as €600 billion in bad loans from strapped banks.

Buyers made money by buying the loans cheap and recovering payments through debt-collection companies and courts. Many were after the homes and commercial buildings backing the loans, from

mortgage holders that had defaulted or real-estate companies that had collapsed. They would force foreclosure or renovate the spaces, selling them for big profits as the property market in Europe got stronger.

As more buyers jumped in, prices of the loans rose, making selling them even more attractive for banks and aiding their recovery. But now the market for nonperforming loans, or NPLs, is in disarray as investors brace for recession in Italy and other coronavirus-hit countries such as Spain and Portugal. It is a sharp turn of events that could leave investors with a pile of overvalued assets and banks struggling with new sour loans on top of old. For Europe's already fragile banks, that spells trouble.



One of the last deals was a sale of 13,000 Spanish home loans by Banco Santander to an investment company of the Canada Pension Plan.

People in the industry estimate up to 50 deals that were being marketed or set to launch in the next several months are

being put on hold, including a €2.8 billion portfolio sale by Bank of Cyprus Holdings that was delayed by the deepening crisis this month. Final terms had been agreed but everything changed because of coronavirus, a person familiar with the matter said.

"Right now, it is impossible to price anything," said an investor at a U.S. private-equity firm.

One of the last deals was a March 6 sale of 13,000 Spanish home loans by Banco Santander SA to Amitra Capital Ltd., an investment company of the Canada Pension Plan. Spain is currently under a lockdown that has brought its economy close to a halt. "The whole environment is going to be disruptive to the market. Buyers and sellers are pausing and waiting to see," said David Edmonds, who heads portfolio lead advisory services at Deloitte.

Europe's banks saw swaths of their loan books sour during the economic crisis that hit the continent in 2010 and lasted through 2014.

With the loans threatening to eat through banks' capital buffers, regulators pressured

them to sell NPL portfolios, no matter the price.

Those sales, totaling around €600 billion face value in loans, were at the heart of southern Europe's recovery in recent years since they let banks free up capital for new lending. Buyers were attracted by improving economic conditions that pushed up the value of homes and commercial real estate—the main assets backing NPLs—encouraging a virtuous circle.

People in the industry estimate up to 50 deals are being put on hold.

Loans to buy the portfolios were cheap and easy to get from other banks.

NPLs at eurozone banks were 3.4% of their total loan books as of September, down from over 8% in 2014, according to latest figures from the European Central Bank.

A parade of U.S. private-equity giants have been the big-

gest buyers. Cerberus Capital Management bought almost €80 billion in NPLs around Europe since 2015, followed by Blackstone Group Inc. with €53 billion and Lone Star Funds with €28 billion, according to Debtwire.

Some bought NPLs to get a hold of the collateral, including office buildings, apartments and hotels in prime locations in capitals like Madrid, Milan and Lisbon that were rising in value. Many made improvements to the real estate to sell on at a profit. Others made money by negotiating with borrowers to recover some payments. And others just held the portfolios, betting their value would rise.

Records show buyers have paid anything between one and 40 cents on the dollar for the bad loans. Typical returns are between 10% and 20%, according to people in the industry.

In Italy, where NPLs still make up 7% of loan books—down from 17% at their peak—two banks are speeding up the sale of some existing portfolios on fears they will be soon hit by a new wave of loans gone bad, according to a person familiar with the deals.

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Amazon's Bezos, Other CEOs Sold Their Shares Just In Time

Top executives at U.S.-traded companies sold a total of roughly \$9.2 billion in shares of their own companies between the start of February and the end of last week, a Wall Street Journal analysis shows.

By Susan Pulliam, Coulter Jones and Andrea Fuller

The selling saved the executives—including many in the financial industry—potential losses totaling \$1.9 billion, according to the analysis, as the S&P 500 stock index plunged about 30% from its peak on Feb. 19 through the close of trading March 20.

The Journal examined more than 4,000 regulatory filings related to stock sales between Feb. 1 and March 19 by corporate officers of companies traded in the U.S. Avoided losses for the seller are based on the change in the value of each stock between when it was sold and March 20.

By far the largest executive seller was Amazon.com Inc. Chief Executive Jeffrey Bezos, who sold a total of \$3.4 billion in Amazon shares in the first week of February, shortly before the stock market peaked, allowing him to avoid paper losses of roughly \$317 million if he had held the stock through March 20, according to the Journal analysis.

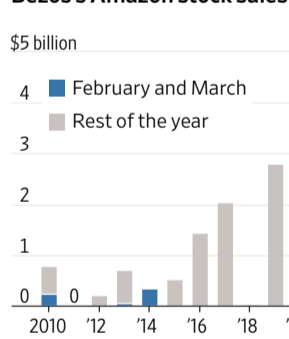
The sales represented roughly 3% of Mr. Bezos' Amazon holdings, according to the most recently available regulatory filings. He sold almost as much stock during the first week in February as he sold during the previous 12 months.

Amazon didn't provide a comment on behalf of Mr. Bezos. There is no suggestion that the executives sold shares based on any inside information. The stock market hit an all-time high in February, and executives often sell shares early in the year for tax and other reasons, including preset trading strategies. But the amount of stock sold by executives and officers of U.S.-listed companies was up by roughly one-third from the

Selling at the Peak

In 2020, CEO Jeffrey Bezos has already sold more Amazon stock than in any prior year. He sold a total of \$3.4 billion in Amazon shares between Feb. 3 and Feb. 6.

Bezos's Amazon stock sales



Amazon.com share price



Note: 2020 sales through March 19. Sources: SEC filings (Bezos sales); FactSet (share price)

comparable periods in the previous two years, according to the analysis of regulatory filings and data from S&P Global Market Intelligence.

During the same period in February and March 2019, corporate officers sold about \$6.4 billion worth of stock.

While Mr. Bezos' sales accounted for more than a third of the 2020 sales, thousands of other insiders sold stock. More than 150 executives and officers individually sold at least \$1 million worth of stock in February and March after having sold no stock in the previous 12 months, the Journal analysis found.

Wall Street executives also sold large dollar amounts, including Laurence Fink, CEO of BlackRock Inc., who sold \$25 million of his company shares on Feb. 14, pre-empting potential losses of more than \$9.3 million and Lance Uggla, CEO of IHS Markit Ltd., a data and analytics firm, who sold \$47 million of his shares around Feb. 19. Those shares would have dropped in value by \$19.2 million if Mr. Uggla had retained them. A spokesman said the shares were sold under a preset plan.

A spokesperson for BlackRock said Mr. Fink's sales were a small percentage of his holdings and that he sold \$18 million in stock around the same time last year. The sales were about 5% or less of Mr. Fink's holdings, ac-

ording to his latest filing.

Some of the nation's most vulnerable industries are reeling because of the coronavirus pandemic, and the trading by top executives meant less in the way of personal stock losses.

Some of the selling was prompted by government-sanctioned trading plans that allow executives and directors to set in advance the sale of stock for certain prices or dates.

Last week, several members of Congress drew fire because they sold stock after the lawmakers met to discuss the threat of coronavirus.

Sen. Richard Burr (R, N.C.) and his wife sold as much as \$1.7 million in stock on Feb. 13. Sen. Kelly Loeffler (R, Ga.) also sold shares. Ms. Loeffler said she was unaware of the trades and that they were handled by advisers. Mr. Burr said he relied on public news reports in making his trading decisions.

Ms. Loeffler's husband, Jeffrey Sprecher, chief executive of Intercontinental Exchange Inc., owner of the New York Stock Exchange, sold \$18 million in shares of the company during the period.

If he had held the stock, it would have declined by about \$3 million in value, according to the Journal analysis. Intercontinental Exchange said Mr. Sprecher's sales were part of a pre-scheduled trading plan.

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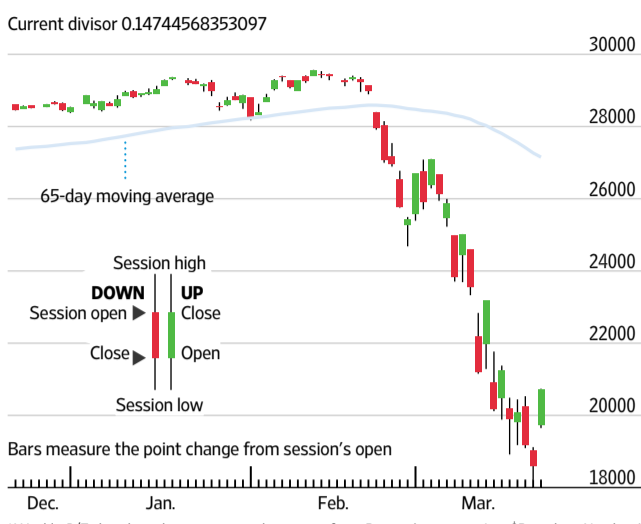


MARKETS DIGEST

EQUITIES

Dow Jones Industrial Average

20704.91 ▲ 2112.98, or 11.37%
High, low, open and close for each trading day of the past three months.



S&P 500 Index

2447.33 ▲ 209.93, or 9.38%
High, low, open and close for each trading day of the past three months.



Nasdaq Composite Index

7417.86 ▲ 557.18, or 8.12%
High, low, open and close for each trading day of the past three months.



Major U.S. Stock-Market Indexes

Table with columns: Index, High, Low, Latest Close, Net chg, % chg, 52-Week High, Low, % chg, YTD, % chg 3-yr. ann. Includes Dow Jones, Industrial Average, Transportation Avg, Utility Average, Total Stock Market, Barron's 400.

Table for Nasdaq Stock Market with columns: Index, High, Low, Latest Close, Net chg, % chg, 52-Week High, Low, % chg, YTD, % chg 3-yr. ann. Includes Nasdaq Composite, Nasdaq 100.

Table for S&P Indexes with columns: Index, High, Low, Latest Close, Net chg, % chg, 52-Week High, Low, % chg, YTD, % chg 3-yr. ann. Includes 500 Index, MidCap 400, SmallCap 600.

Table for Other Indexes with columns: Index, High, Low, Latest Close, Net chg, % chg, 52-Week High, Low, % chg, YTD, % chg 3-yr. ann. Includes Russell 2000, NYSE Composite, Value Line, NYSE Arca Biotech, NYSE Arca Pharma, KBW Bank, PHLX Gold/Silver, PHLX Oil Service, PHLX Semiconductor, Cboe Volatility.

Late Trading

Most-active and biggest movers among NYSE, NYSE Arca, NYSE Amer. and Nasdaq issues from 4 p.m. to 6:30 p.m. ET as reported by electronic trading services...

Most-active issues in late trading

Table of most-active issues with columns: Company, Symbol, Volume (000), Last, Net chg, After-Hours % chg, High, Low. Includes SPDR S&P 500, VanEck Vectors Gold Miner, General Electric, Invesco QQQ Trust I, iShares Russell 2000 ETF, iSh iBoxx \$ Invnt Gr Cp Bd, VanEck Vectors Jr Gold, Direxion Jr Gold Bull 3X.

Percentage gainers...

Table of percentage gainers with columns: Company, Symbol, Latest Session Close, Net chg, % chg, 52-Week High, Low, % chg. Includes Iovance Biotherapeutics, Nike Cl B, Ally Financial, JetBlue Airways, Cedar Fair Dep Rec, At Home Group, VIX Short Term, ING Groep ADR, Avaya Holdings, ProSharesULVIXST.

Trading Diary

Volume, Advancers, Decliners

Table of trading diary data with columns: NYSE, NYSE Amer. Includes Total volume, Adv. volume, Decl. volume, Issues traded, Advancers, Declines, Unchanged, New highs, New lows, Closing Arms, Block trades.

Table of percentage losers with columns: Company, Symbol, Latest Session Close, Net chg, % chg, 52-Week High, Low, % chg. Includes Milestone Pharmaceuticals, MFA Financial, Direxion Jr Gold Bear 3X, Invesco Mortgage Cap, Baudax Bio, Direxion Daily En Bear 3x, Direxion Gold Miner 3x Br, Two Harbors Investment, Redwood Trust, Micro US Big Banks 3X Inv, ProShs UltraPro Shrt Finl, IQ 50% Hdg FTSE Japan, Bank7, Oaktree Acquisition C I A, Albant Acquisition C I A, FT ETF EqCompass Tactical, WisdomTree Intl Multi, iShares Russell Top 200, ClearBridge LC Growth ESG, Rubicon Technology.

International Stock Indexes

Table of international stock indexes with columns: Region/Country, Index, Close, Net chg, Latest % chg, YTD % chg. Includes World, Americas, EMEA, Asia-Pacific.

Percentage Gainers...

Table of percentage gainers with columns: Company, Symbol, Latest Session Close, Net chg, % chg, 52-Week High, Low, % chg. Includes U.S. Gold, ThermoGenesis Holdings, Indonesia Energy, Dave Buster's Ent, Chefs' Warehouse, Golden Entertainment, Cimpriss, Stellus Capital Invnt, American Axle Mfg, Air Lease, Bloom Energy, Eldorado Resorts, Direxion Homebldr Bull 3X, Carvana Cl A, Ruth's Hospitality Group.

Most Active Stocks

Table of most active stocks with columns: Company, Symbol, Volume (000), % chg from 65-day avg, Latest Session Close, % chg, 52-Week High, Low. Includes SPDR S&P 500, Velocity 3x Lg Crude ETN, Finl Select Sector SPDR, Bank of America, Ford Motor, VanEck Vectors Gold Miner, Chesapeake Energy, General Electric, ProSh UltraPro Shrt QQQ, Advanced Micro Devices.

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Percentage Losers

Table of percentage losers with columns: Company, Symbol, Latest Session Close, Net chg, % chg, 52-Week High, Low, % chg. Includes Milestone Pharmaceuticals, MFA Financial, Direxion Jr Gold Bear 3X, Invesco Mortgage Cap, Baudax Bio, Direxion Daily En Bear 3x, Direxion Gold Miner 3x Br, Two Harbors Investment, Redwood Trust, Micro US Big Banks 3X Inv, ProShs UltraPro Shrt Finl, IQ 50% Hdg FTSE Japan, Bank7, Oaktree Acquisition C I A, Albant Acquisition C I A, FT ETF EqCompass Tactical, WisdomTree Intl Multi, iShares Russell Top 200, ClearBridge LC Growth ESG, Rubicon Technology.

Volume Movers

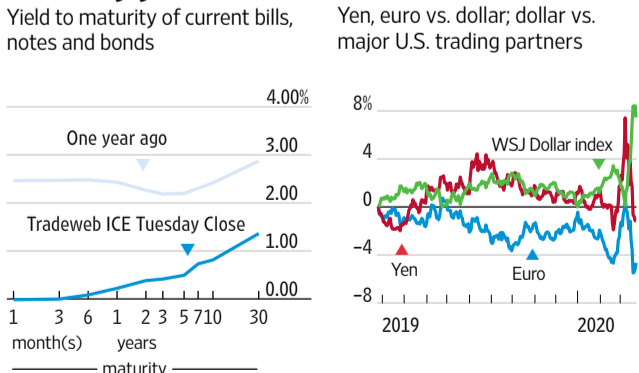
Table of volume movers with columns: Company, Symbol, Volume (000), % chg from 65-day avg, Latest Session Close, % chg, 52-Week High, Low. Includes Milestone Pharmaceuticals, IQ 50% Hdg FTSE Japan, Bank7, Oaktree Acquisition C I A, Albant Acquisition C I A, FT ETF EqCompass Tactical, WisdomTree Intl Multi, iShares Russell Top 200, ClearBridge LC Growth ESG, Rubicon Technology.

CREDIT MARKETS

Consumer Rates and Returns to Investor

U.S. consumer rates: A consumer rate against its benchmark over the past year. Includes charts for Prime rate, New car loan, and table of interest rates for Federal funds rate target, Prime rate, Money market, Five-year CD, 30-year mortgage, 15-year mortgage, Jumbo mortgages, Five-year adj mortgage, New-car loan.

Treasury yield curve



Forex Race



Corporate Borrowing Rates and Yields

Table of corporate borrowing rates and yields with columns: Index, Close, Yield (%), 52-Week High, Low, Total Return (%). Includes U.S. Treasury Barclays, U.S. Treasury Long, Aggregate, Fixed-Rate MBS, High Yield 100, Muni Master, EMBI Global.

CURRENCIES & COMMODITIES

Currencies

Table of U.S.-dollar foreign-exchange rates in late New York trading. Includes Americas, Europe, Asia-Pacific, Middle East/Africa.

Commodities

Table of commodity prices with columns: Commodity, Close, Tuesday Net chg, % Chg, High, 52-Week Low, % Chg, YTD % chg. Includes DJ Commodity, TR/CC CRB Index, Crude oil, Natural gas, Gold.

COMMODITIES

WSJ.com/commodities

Futures Contracts

Table of Metal & Petroleum Futures including Copper-High, Gold, Palladium, Platinum, Silver, Crude Oil, Light Sweet, NY Harbor, Gasoline, and Natural Gas.

Table of Agriculture Futures including Corn, Soybeans, Soybean Meal, Soybean Oil, Rough Rice, Wheat, Wheat (KC), Cattle-Feeder, Cattle-Live, Hogs-Lean, Lumber, and Milk.

Table of Interest Rate Futures including Ultra Treasury Bonds, Treasury Bonds, Treasury Notes, Treasury Bills, 30 Day Federal Funds, 10 Yr. Del. Int. Rate Swaps, Eurodollar, and Japanese Yen.

Table of Index Futures including Canadian Dollar, British Pound, Swiss Franc, Australian Dollar, Mexican Peso, Euro, and Mini DJ Industrial Average.

Cash Prices | WSJ.com/commodities

Tuesday, March 24, 2020

These prices reflect buying and selling of a variety of actual or "physical" commodities in the marketplace—separate from the futures price on an exchange, which reflects what the commodity might be worth in future months.

Table of Cash Prices for Energy, Metals, Fibers and Textiles, Grains and Feeds, and Fats and Oils.

KEY TO CODES: A=ask; B=bid; BP=country elevator bids to producers; C=corrected; E=Manfra,Tordella & Brooks; G=ICE; H=American Commodities Brokerage Co; M=monthly; N=nominal; n.a.=not quoted or not available; R=S&L Energy; S=Platts-TSI; T=Cotlook Limited; U=USDA; W=weekly; Z=not quoted. *Data as of 3/23

Exchange-Traded Portfolios

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BANKRATE.COM® MMA, Savings and CDs

Table of Average Yields of Major Banks and High Yield Savings rates, categorized by term and bank.

Bonds | WSJ.com/bonds

Tracking Bond Benchmarks

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Table of Bond Benchmarks including Broad Market Bloomberg Barclays, U.S. Corporate Indexes Bloomberg Barclays, Mortgage-Backed Bloomberg Barclays, and U.S. Agency Bloomberg Barclays.

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Table of Global Government Bonds showing yields and spreads for various countries and maturities.

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Table of Corporate Debt spreads and yields, including investment-grade spreads that tightened and high-yield issues with the biggest price increases.

BIGGEST 1,000 STOCKS

How to Read the Stock Tables

The following explanations apply to NYSE American, NYSE Arca, NYSE and Nasdaq Stock Market listed securities. Prices are composite quotations that include primary market trades as well as trades reported by Nasdaq BX (formerly Boston), Chicago Stock Exchange, Cboe, NYSE National and Nasdaq ISX. The list comprises the 1,000 largest companies based on market capitalization.

Underlined quotations are those stocks with large changes in volume compared with the issue's average trading volume.

Boldface quotations highlight those issues whose price changed by 5% or more from their previous closing price was 5% or higher.

Footnotes:

- N**—New 52-week high.
- n**—New 52-week low.
- dd**—Indicates loss in the most recent quarter.
- FD**—First day of trading.
- H**—Does not meet continued listing standards.
- IF**—Late filing.
- Q**—Temporary exemption from Nasdaq requirements.
- N**—NYSE bankruptcy.
- V**—Trading halted on primary market.
- W**—In bankruptcy or receivership or being reorganized under the Bankruptcy Code, or securities assumed by such companies.

Wall Street Journal stock tables reflect composite regular trading as of 4 p.m. and changes in the closing prices from 4 p.m. the previous day.

Tuesday, March 24, 2020

Stock	Sym	Close	Net Chg	Stock	Sym	Close	Net Chg
ABB	ABB	16.83	1.98				
ACADIA Pharm AC	ACAD	3.06	3.06				
AECOM	ACM	28.56	3.14				
AEIS	AES	12.66	0.77				
AFL	AFL	29.11	3.43				
AGNC Invnt	AGN	11.01	0.69				
Ansys	ANSS	27.43	9.08				
ASSTech	ASX	3.63	0.45				
ASML	ASML	202.17	20.06				
AT&T	T	28.09	1.32				
AVX	AVX	21.69	0.23				
AbbottLabs	ABB	69.67	4.87				
Abbvie	ABBV	67.49	2.99				
Abiomed	ABMD	34.81	11.33				
AccellerPharma XLRN	AXLN	80.14	9.32				
Accutane	ACC	15.65	13.16				
ActionStar	ASTK	54.43	-2.04				
Adobe	ADBE	312.92	2.73				
AdvanceAuto	AA	86.38	7.88				
AdvMicroDevcs AAMP	AMD	46.22	4.58				
Aegion	AEQ	25.7	0.23				
AegionTechs A	ATG	67.00	3.69				
AgricoProducts AEM	ADM	44.68	6.23				
AirGroup	AIQ	19.47	17.69				
Alkerm	ALK	49.30	4.44				
AlliantEnergy LNT	LNT	43.82	4.87				
Allstate	ALL	72.97	4.69				
AllyFinancial ALY	ALY	14.27	2.14				
AllyPharm ALY	ALY	19.78	0.61				
Alphabet A	GOOG	1384.77	8.44				
Alphabet C	GOOGL	1384.77	8.44				
Altria	MO	21.28	1.84				
Altiac	ATO	22.84	1.84				
Alto	ALTO	5.06	0.53				
AlexandriaARE	ARE	129.51	14.49				
AlexionPharm ALX	ALX	85.93	4.80				
Allog	BABA	18.55	9.41				
AllogTech	ALG	16.52	27.56				

Stock	Sym	Close	Net Chg	Stock	Sym	Close	Net Chg
Fairisaac	FICO	26.31	38.17				
FasterFuel	FAT	3.17	3.19				
FedEx	FDX	76.08	9.41				
Fidelity	FI	18.25	1.38				
Ferrari	F	149.55	15.45				
Fiat	FIAT	10.51	0.66				
Fitch	F	20.42	1.34				
Fidelity	FI	18.25	1.38				
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NewsCorp A	NWSA	8.68	0.45				
NexGenEnergy NEE	NEE	26.53	2.87				
Nielsen	NLSN	13.28	1.34				
Nike	NKE	92.33	9.54				
Nisource	N	21.94	1.08				
Nokia	NOK	29.4	0.29				
NomuraHolds	NMHR	4.29	0.53				
Nordson	NDSN	119.95	19.59				
NorfolkSouthern NS	NS	140.23	21.95				
NorthTrust	NTS	69.86	6.78				

Stock	Sym	Close	Net Chg	Stock	Sym	Close	Net Chg
PulteGroup	PHM	22.08	3.34				
Qiagen	QGEN	39.89	1.76				
Qorvo	QO	78.79	8.43				
Starbucks	SBK	44.88	3.33				
Stamps.com	SCS	37.23	2.28				
StateStreet ST	ST	48.57	3.36				
SteelDynamics	STLD	20.87	2.98				
Sterylce	SRCL	41.20	0.51				
Steris	STE	118.11	10.35				

Stock	Sym	Close	Net Chg	Stock	Sym	Close	Net Chg
Toro	TTC	59.13	4.85				
ToroDomBot	TD	38.64	4.37				
Total	TOT	32.97	4.17				
TycoMotor	TM	116.35	5.25				
TractorSupply	TSCO	80.02	1.96				
TradeDesk	TD	194.07	17.33				
Tradeweb	TW	30.25	3.71				
TraneTech	TT	76.81	5.55				
TransDigm	TDG	25.68	24.15				

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AGNC Invnt	AGN	11.01	0.69				
Ansys	ANSS	27.43	9.08				
ASSTech	ASX	3.63	0.45				
ASML	ASML	202.17	20.06				
AT&T	T	28.09	1.32				

Stock	Sym	Close	Net Chg	Stock	Sym	Close	Net Chg
FordMotor	F	9.95	0.18				
FordNext	FN	29.73	13.68				
Forsite	FTS	19.92	0.75				
Fortive	FTV	49.92	7.91				
FortRandHomes	FHRS	40.27	5.94				
FortySeven	FVSX	94.11	1.12				
FoxA	FOXA	22.29	0.70				
FoxB	FOXB	21.65	0.94				
FordNext	FN	29.73	13.68				
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Forsite	FTS	19.92	0.75				
Fortive	FTV	49.92	7.91				
FortRandHomes	FHRS	40.27	5.94				
FortySeven	FVSX	94.11	1.12				
FoxA	FOXA	22.29	0.70				
FoxB	FOXB	21.65	0.94				
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MONEY & INVESTING

Wildness Reigns on Wall Street

Traders, worried about catching virus, are navigating difficult market conditions

BY JULIA-AMBRA VERLAINE
AND BEN EISEN

Deutsche Bank traders in Brooklyn sit side by side while managers work in glass-enclosed offices. At a **Royal Bank of Canada** trading floor in Queens, employees crowd the shared lunch buffet. **JPMorgan Chase & Co.** has assigned staffers to hold doors and press elevator buttons.

Wall Street traders are navigating the wildest market conditions since the financial crisis. They are doing it on trading floors and at backup sites dotted throughout the New York City metro area—the latest coronavirus disaster zone—worried that they will catch the virus in crowded offices or while commuting to them.

But as the number of confirmed novel coronavirus cases in New York skyrocketed, a rift is growing between the rank and file and senior managers, who are trying to preserve liquidity in a fragile market. A **UBS Group AG** trader said his wife refused to let him return to the office. A **Goldman Sachs Group Inc.** salesperson walked out of the office in the middle of the day and didn't return.

Markets have melted down at the fastest pace on record, creating an all-hands-on-deck moment unseen since the financial crisis. Banks—like other big employers in the city—have sent many of their employees to work from home and closed thousands of retail branches. But the pandemic poses a logistical challenge on trading floors designed to facilitate the kind of face-to-face



Firms are fielding a flurry of requests to work from home.

communication that allows deals to close in seconds.

JPMorgan executives told sales and trading employees they can't close up shop because the bank makes up at least 20% of the market in some sectors, according to people familiar with the matter. Market conditions, they said, would decline markedly were the bank to shut down its trading floor.

Regulators have eased some of the strict requirements that make it difficult for traders to work remotely. Still, traders need multiple computer monitors, recorded phone lines and Bloomberg terminals—an environment that is tough to replicate in a home office.

Typical bank policy has been to split up groups of traders and send them to multiple locations. The idea is that if the virus infects staffers at one location, those working at other sites will be able to keep trading.

Wall Street firms are fielding a flurry of requests to work from home now that colleagues are testing positive for the virus in larger numbers. A Goldman spokesman said the bank encourages employees to work from home as they see fit. "What matters most is that each of you do what feels right for you and your family," Chief Executive David Solomon wrote in a firmwide memo on March 8.

Several employees at JPMorgan's Manhattan headquarters were diagnosed with the virus last week, according to people familiar with the matter, including some on the floor where the bank's equity traders sit. While the bank sent home employees in the same row as the confirmed cases, staffers across the aisle were told to stay in the office, the people said.

A JPMorgan spokesman said the bank's protocol goes beyond the guidance from the Centers for Disease Control and Prevention to maintain at least 6 feet between employees to reduce the chances of transmission. "We have spread traders out within floors and across buildings," the spokesman said.

Deutsche Bank moved traders at its Brooklyn backup site further apart Monday, according to a person familiar with the matter.

On **Bank of America Corp.**'s trading floor, word that a colleague had tested positive for the virus angered employees who wondered why the lender hadn't told them of the diagnosis or why they weren't sent home, according to people familiar with the matter.

The bank's policy when a staffer tests positive is not to spread the word widely. It informs managers and their employees in the colleague's immediate area and asks them to quarantine, and deep cleans the area, a spokeswoman said. She declined to comment on whether anyone who works on the trading floor has tested positive for the coronavirus.

For large banks, sending traders home to do their jobs is much harder than for employees in other parts of the lender. One of the biggest problems is the phone lines.

Sales teams rely on turrets, two-foot-long switchboards

that can field hundreds of client calls, and they communicate directly with traders around the world over internal intercoms known as squawk boxes.

While modern turrets are available with remote login capacity, some banks haven't upgraded them in years.

RBC is working to equip trading staff to work from home, but the effort is slow going. Meanwhile, traders have been showing up to work at the bank's Long Island City backup site, where space is tight for the rank and file, according to a person familiar with the matter. While the bank allows traders to work from home, some feel pressured by their managers to stick it out in the office, the person said.

An RBC spokeswoman said the bank is continually making adjustments to prioritize health and safety while supporting clients. "The vast majority of our employees are now working from home, and we expect that number to increase," she said.

The pandemic also is highlighting a generational divide. For many veteran traders, making markets when times are tough is just part of the job. Traders who haven't been through a crisis said they are routinely reminded of this by their more experienced colleagues and managers.

For smaller shops, it is easier to move operations. Mike Kerensky, a futures trader at **R.J. O'Brien & Associates LLC**, said employees of its New York office have been working from home since March 16. He and three colleagues set up shop at the dining-room table in his Long Island home. One of them is staying over at his house and two others drive out each morning.

—Dana Mattioli contributed to this article.

SEC Gives Mutual Funds Relief

Mutual funds facing stress from the market turmoil caused by coronavirus will be able to tap their parent asset-management companies and other affiliates for funding under relief announced this week by the Securities and Exchange Commission.

By Dave Michaels,
Justin Baer
and Paul Kiernan

The move gives the \$19 trillion mutual-fund industry another tool to deal with large swings in redemptions, including borrowing money from the firm that manages the portfolio, according to an SEC order made public late Monday.

The SEC's order, which it said would provide the flexibility until at least June 30, shows how Wall Street's regulator is rushing to aid firms threatened by the coronavirus shock. While the SEC's role in a crisis is narrower than the Federal Reserve's, it plays a key role in gauging market conditions and adjusting rules for brokers, investment advisers, and exchanges. As investors step up the pace of withdrawals, mutual funds could be forced to unload assets at a loss to meet redemptions.

"This order is extremely helpful," said Marc Ponchione, a partner at Debevoise & Plimpton LLC's investment-management group. "It provides a source of liquidity for funds and should free things up quite a bit."

Managers and their attorneys had highlighted their concerns with rules limiting loans between funds in a series of weekend conversations with SEC officials, Mr. Ponchione said.

Investors pulled \$40 billion from taxable bond funds last week alone, and net outflows have totaled \$55 billion in the past month, according to Morningstar Direct.

"This is pretty extraordinary that the whole mutual-fund industry is able to do this," said Rajib Chanda, a partner at Simpson Thacher & Bartlett LLP.

Goldman Shores Up Two Money Funds

BY DAVE MICHAELS

WASHINGTON—**Goldman Sachs Group Inc.** intervened to shore up two of its money-market mutual funds after the Federal Reserve created a backstop to stem a wave of investor redemptions from the products.

Goldman bought \$729 million of securities from the Goldman Sachs Financial Square Money Market Fund, bringing the total cash injected last week to \$1.4 billion, according to regulatory filings. It also bought \$391 million of assets from the Goldman Sachs Financial Square Prime Obligations Fund.

Investors last week yanked \$76 billion from the GS Financial Square Money Market Fund, whose assets were down to \$8.9 billion on March 20, and \$1.4 billion from the GS Financial Square Prime Obligations Fund, whose assets declined to \$5.4 billion, according to Crane Data.

The funds' stable, \$1 share price reinforces the appearance of safety.

"These actions underline our commitment to the GSAM funds providing liquidity to clients focused on the near-term implications of the current market environment," said David Fishman, head of the liquidity solutions portfolio management team within Goldman's asset management arm.

The injections involve so-called prime money funds that invest in short-term debt issued by banks and are aimed at sophisticated investors. They were intended to ensure the funds don't come close to breaching an important liquidity threshold.

If liquid assets fall below 30%, money funds can charge shareholders a fee for pulling their cash or even suspend redemptions.

Some analysts say the possibility that funds will temporarily close a "gate" on redemptions can prompt investors to accelerate withdrawals.

Goldman's injections raised the share of the funds' portfolios considered weekly liquid

assets to well above 40%, according to data posted on the bank's website. Liquid assets include cash and securities maturing within five business days.

Goldman isn't the only sponsor to inject money into one of its funds. Bank of New York Mellon Corp. last week bought almost \$2.2 billion in securities from one of its prime money funds, the Dreyfus Cash Management fund, which was approaching the 30% threshold, according to data from the fund's website.

Money funds are popular because investors generally view them as safe places to park cash. Their stable, \$1 share price reinforces the appearance of safety, even though the value of portfolio assets may fluctuate slightly.

Some regulators fear that the \$1 pricing convention has made money funds susceptible to runs because investors will pull out if the per-share market value of fund holdings drops below \$1, an event known as "breaking the buck."

That is what happened in 2008, when the share price of the \$62.6 billion Reserve Primary Fund fell below \$1, triggering a run and prompting the Treasury Department to set up a facility to backstop money market mutual funds.

Another small Dreyfus fund that invests in short-term debt issued by New Jersey municipalities and the Port Authority of New York and New Jersey reported Monday that its share price had dropped below \$1. That \$51 million fund is open to individual investors.

Dreyfus's General New Jersey Municipal Money Market Fund Inc. reported a per-share net asset value of \$0.9968, according to its website and SEC filings. The company hasn't disclosed the reason, but prices for municipal bonds cratered last week after a week of tumult.

A spokesman for Bank of New York Mellon, Dreyfus's parent, declined to comment.

More disclosures of asset managers shoring up their money funds are likely in coming days, stemming from actions they took late last week, said Pete Crane, president of Crane Data and publisher of Money Fund Intelligence. Because the Fed's lending facility went online Monday, however, such support should abate, he said.



A bond backed by mortgages on Syracuse's Destiny USA mall was downgraded from triple-A to single-A.

Bond Downgrades Begin Amid Economy's Freeze

BY CEZARY PODKUL
AND GUNJAN BANERJI

Credit-ratings firms have issued a wave of downgrades for corporate and government bonds as they reassess the ability of borrowers to repay their obligations amid the coronavirus slowdown.

Credit-ratings firms like **S&P Global Inc.** and **Moody's Corp.** have stripped away some pristine triple-A marks or moved other supposedly safe investment-grade bonds into junk territory.

The moves reflect what Moody's has called a "severe and extensive credit shock across many sectors, regions and markets." S&P has said that "the global recession is here and now." Fitch Ratings is bracing for "abrupt interruptions happening simultaneously across all major economies" as a result of the coronavirus pandemic.

The downgrades themselves can add to the turmoil in bond markets, causing damage well beyond the change in ratings for the bonds.

Seeking to stop the negative momentum in markets, the Federal Reserve on Monday broadened its efforts to include plans to purchase corporate bonds with high ratings. It is unclear, however, whether the moves will stem further downgrades.

Among the bonds facing potential downgrades are those tied to shopping malls, hotels,

airlines, risky corporate borrowers and local governments. The reviews by ratings firms come after years of easing rating assumptions across various sectors.

Even in the face of such a severe stress, a triple-A grade should stay put since the rating is meant to indicate the debt is as riskless as a Treasury bond. But some triple-A bonds are already failing that test.

On Friday, S&P took away the triple-A grade from a \$215 million bond backed by two mortgages on a giant mall in upstate New York. Local officials had ordered the mall, Destiny USA, and others in the area to be closed to slow the spread of the coronavirus. Other states are taking similar steps.

S&P's move was part of a larger downgrade of 60 securities linked to various malls. The Destiny-linked triple-A bond is now rated single-A by S&P. A spokesman for Destiny didn't immediately respond to a request for comment.

Destiny's downgrade calls into question a popular transaction in which bond investors agreed to buy a deal backed entirely by mortgage payments from one property or borrower instead of a pool of loans. Last week Fitch placed all of its single-asset, single-borrower hotel deals on watch for possible downgrades.

By its own tally, S&P has now made more than 100

downgrades linked to the coronavirus, including on airlines like **JetBlue Airways Corp.**, **Southwest Airlines Co.** and **Spirit Airlines Inc.**

Companies that have already been struggling are seeing their woes worsen. On Monday, S&P downgraded office-share company **WeWork** deeper into junk territory, citing its mounting cash flow and liquidity pressure. The high-profile **SoftBank Group**-backed company was already under stress after its failed initial public offering last year prompted a previous round of rating downgrades.

On Friday, Fitch said it would stress-test all of its ratings on structured securities known as collateralized loan obligations, or CLOs, and warned it may put some on watch for negative rating actions. The deals often buy up loans from highly leveraged companies and sell bonds to investors backed by payments on those loans. S&P said it is reviewing 25 ratings from 15 CLO deals with large exposures to energy sectors for possible downgrades.

Municipal bonds tied to specific projects or taxes are also being downgraded. S&P recently cut the ratings on revenue bonds backed by a student housing project in Corpus Christi, Texas, by six notches, taking the debt from the lowest notch of investment-grade deep into junk territory.

Judge Backs Regulator On Coins

BY DAVE MICHAELS

WASHINGTON—The Securities and Exchange Commission prevailed in a key stage of its cryptocurrency enforcement crackdown, as a federal judge issued an injunction halting Telegram Group Inc. from distributing its digital coins.

U.S. District Judge P. Kevin Castel wrote the SEC had shown a "substantial likelihood of success" in prevailing against Telegram, which was accused of breaking investor protection laws when it sold \$1.7 billion in cryptocurrency. Dubai-based Telegram and other startups pushed forward with lucrative, unregulated fundraisings despite the SEC's warnings in 2017 they were subject to rules restricting how companies raise capital.

Telegram's argument that its deal was exempt from oversight because its investors were sophisticated venture capitalists didn't win over Judge Castel. The judge wrote that the success of the deal depended on allowing those investors to resell the digital coins to the public. The injunction halts that process while the litigation plays out. The judge didn't conclusively rule for the SEC, despite the agency's request that he do so.

The court fight carries high stakes for the SEC, whose enforcement division has mostly chased scammers that fleeced investors with fake crypto projects and startups that raised a few million dollars without following SEC rules. Telegram had the advice of a Wall Street law firm before raising funds, while the investors in its digital-coin sale included the Silicon Valley venture-capital firm Kleiner Perkins Caufield & Byers as well as executives from Fortress Investment Group and SoftBank Group Corp.

MARKETS

Norway Props Up Currency as Oil Plunges

By ANNA HIRTENSTEIN

The crash in energy prices has landed a direct hit on Norway, leading Western Europe's biggest oil producer to prop up its currency for the first time in two decades, according to foreign-exchange analysts.

CREDIT MARKETS
The Norwegian krone surged 5% Tuesday against the dollar, its biggest jump since March 2009. The move indicated that the country's central bank is intervening in

currency markets by buying up kroner in exchange for dollars.

Norges Bank declined to comment Tuesday, pointing to a statement it made last week that it was considering purchasing kroner due to the high levels of volatility in currency markets.

Magne Østnor, a foreign-exchange strategist at DNB, said the move was likely an indication that the central bank is now intervening.

The krone is the worst-performing of all currencies from

10 large industrialized countries tracked by currency traders, having lost more than a fifth of its value against the dollar this year.

As a major energy producer, Norway's currency often rises and falls along with the price of oil.

The currency has been hit by a combination of a more than 50% reduction in the price of benchmark Brent crude oil in 2020 and investors' preference for holding U.S. dollars during market turbulence.

This would be the first time Norway's central bank has bought its own currency since 1999, and shows how the global selloff is upending longstanding norms in financial markets.

Until 2001, Norway maintained an exchange-rate target relative to the euro and would buy and sell the krone to keep the value within a set band.

Several central banks regularly trade their own currencies to maintain a certain valuation, including the Swiss National Bank and the People's Bank of China.

Norway's pension funds have been exacerbating the krone's plunge by rebalancing exposures to derivatives they use to hedge their investment portfolios against moves in the currency, according to Joachim Bernhardsen, a global macro analyst at Nordea. This has also coincided with difficult trading conditions.

"If you look back to last week, the market was basically not working," Mr. Bernhardsen said. The bid-ask spread, or the difference be-

tween the prices that buyers and sellers were willing to accept in the foreign-exchange market was as much as four times that occurring in normal conditions. The central bank is likely stepping in to smooth out trading conditions and restore liquidity, he said.

The U.S. Federal Reserve moved last week to calm global foreign-exchange markets, opening dollar swap lines with 14 central banks including Norges Bank.

—Caitlin Ostroff
contributed to this article.

Gold Soars In Biggest Advance Since '09

By AMRITH RAMKUMAR AND JOE WALLACE

The price of gold and other precious metals shot higher Tuesday, lifted by robust demand for haven assets and a shortage of precious metals stemming from shutdowns at major refineries.

Front-month gold futures jumped 5.9% to \$1,660.20 a troy ounce in New York, extending a surge that began Monday.

COMMODITIES
Tuesday's advance was gold's biggest one-day increase since March 2009. Silver, platinum and palladium all rose at least 7.6%, paring some of their recent declines.

The rally is a reversal for the metals, which had tumbled in recent weeks with investors liquidating easy-to-sell assets to meet margin calls and raise cash. For investors who had used stocks as collateral to buy other securities, banks can demand repayment when the value of those positions shrinks dramatically, resulting in the forced sale of unrelated assets.

This week's surge has put gold back around a seven-year peak from March 9. Prices are up more than 30% from a low hit last April, with recent gains coming as traders brace for the coronavirus to tip the world economy into a recession.

"I've never seen anything like this," said George Gero, managing director at RBC Wealth Management. "The demand is huge."

Mr. Gero still expects prices to remain volatile, with investors often needing to sell liquid assets to raise cash when markets fall rapidly.

The big moves up and down in precious metals are another sign of market fragility. Stocks, bonds and commodities have all been extremely volatile in recent weeks with the coronavirus halting the global economy and many traders working remotely.

There are also concerns about shortages of gold bars and coins because of heavy retail buying and refinery shutdowns in Switzerland, a major refining hub.

"This is an environment when most people work from home, even traders, and airlines aren't flying, so there is some sort of discrepancy in the market," said Frederic Panizzutti, managing director at MKS Dubai, part of refining and trading company MKS PAMP Group Co. "The market is in panic."

One sign of stress: In the spot gold market, the gap between bid and offer prices has widened to around \$25 an ounce, according to Mr. Panizzutti, when it would normally range between 20 and 30 cents. Meanwhile, the gap between futures prices in New York and spot prices in London, the world's biggest wholesale gold market, jumped.

The London Bullion Market Association, the organization that oversees the U.K. capital's gold market, said volatility in U.S. futures prices on the Comex division of the New York Mercantile Exchange had caused liquidity to decline. The association was "working closely with COMEX...to ensure the efficient running of the global gold market," it said in a written statement.

Elsewhere in commodities Tuesday, U.S. crude oil added 2.8% to \$24.01 a barrel, trimming a sliver of its recent declines.

Closed-End Energy Funds Hit Hard by Crash

By SARAH TOY

The plunge in crude-oil prices is sending shock waves through closed-end funds tracking the energy sector, highlighting how the market turmoil is hitting products popular with ordinary investors seeking to boost returns during the long bull market.

Shares of the Goldman Sachs MLP and Energy Renaissance Fund have fallen 73% this month, while shares of both the Kayne Anderson MLP/Midstream Investment Co. and the Kayne Anderson Midstream/Energy Fund Inc. have fallen around 70%. Shares of the Tortoise Energy Infrastructure Corp. and the Tortoise Midstream Energy Fund Inc. have lost 79% and 89% of their value, respectively.

A closed-end fund is similar to a mutual fund, but its shares trade on an exchange. A professional manager oversees the fund's holdings, deciding what to buy and sell. Unlike mutual funds, closed-end funds issue a fixed number of shares, after which capital rarely flows in or out of the fund. Also unlike mutual funds, they tend to use leverage to juice their payouts—borrowing at short-term interest rates and investing the proceeds in longer-term securities that pay higher returns.

That is a tactic that makes them attractive to investors when things go well, but one that can also amplify losses when markets sour. There are laws that cap the funds' leverage, so when the value of their underlying securities falls, they often need to reduce their leverage by selling assets, as they cannot easily raise capital by issuing new shares.

That is what is happening now: As crude prices have plummeted, hurting shares of energy companies and the market value of the funds' holdings, several have been forced to reduce their leverage by selling securities. That has cut down on the amount of money available to pay investors, which likely will lead to funds cutting their distributions, asset managers say.

"The life blood of a closed-end fund is its yield," said Erik Herzfeld, president of Thomas J. Herzfeld Advisors, a boutique asset manager focusing on closed-end funds. "The last thing they want is to cut their dividend—that's what keeps people invested in them."

Last week, Fitch Ratings downgraded senior secured notes and preferred-shares ratings for several closed-end funds that invest in midstream companies, including funds



The funds linked to oil markets have been forced to sell securities as the price of oil has nosedived. A drilling rig in Brazil.

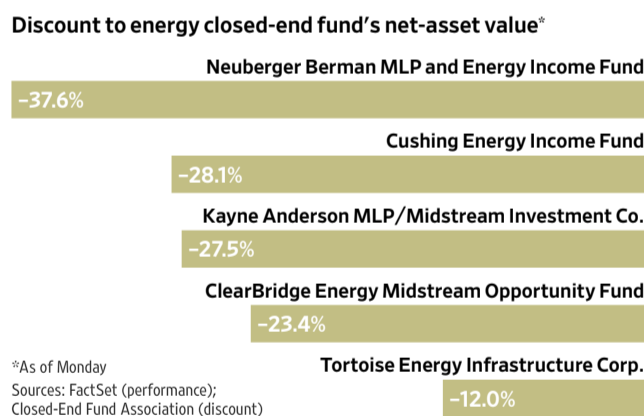
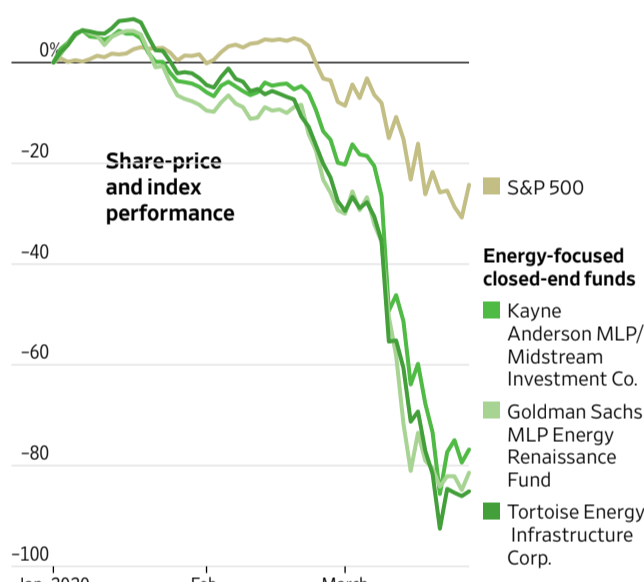
managed by Kayne Anderson and Tortoise, citing "unprecedented declines" in the per-share value of the funds' underlying securities. Even though the funds are selling securities to reduce leverage and increase cash, the forced selling has further exacerbated declines, according to Fitch.

Moody's Investors Service this week placed a negative outlook on closed-end funds, particularly those investing in riskier areas, including the energy sector. Among other worries, the ratings firm warned that big declines in the funds' assets placed them in danger of breaching regulations governing the amount of leverage they can employ.

U.S. crude prices have fallen more than 60% so far this year, as the coronavirus crisis wreaks havoc on demand for crude and a Saudi-Russian price war threatens to flood even more oil into an amply supplied market.

The price drop has wreaked havoc on companies throughout the industry, forcing them to cut spending and, in some cases, their dividends. Exxon Mobil Corp. shares have declined 31% this month. Shares of Pioneer Natural Resources Co. have lost about 41% of their value, while shares of Kinder Morgan Inc. have dropped 33% and Magellan Midstream Partners LP shares have fallen 46%.

Some closed-end funds have already been forced to cut their payouts. Investment firm Kayne Anderson said last week that it would be reducing the leverage of its two midstream-focused funds and that their March dis-



"Leverage is lovely when things are going up, and really awful when things are going down," said Rebecca Babin, senior energy trader at CIBC Private Wealth Management.

Shares of closed-end funds typically trade at a discount or premium to the per-share value of the funds' holdings, depending on investor demand. The Neuberger Berman MLP and Energy Income Fund Inc., the ClearBridge Energy Midstream Opportunity Fund Inc. and the Cushing Energy Income Fund all were trading at least 23% below the per-share value of their securities as of Monday, according to data from the Closed-End Fund Association, a trade group that represents the closed-end fund industry.

Some investors view that as an opportunity. If they buy fund shares at a discount and that gap narrows, they can make a profit. But if a fund's discount to net asset value widens, then investors can lose two ways: on the decline in value of its holdings and on the fall of its own share prices.

Investors looking for bargains should proceed with caution, said Timothy Parker, a partner at Regency Wealth Management. He is advising clients against buying energy closed-end funds in an attempt to take advantage of current discounts. Demand for crude is likely to remain limited in a global economy pummeled by the virus, hitting energy companies and probably their dividends.

"It might seem like it could be a great time to buy now, but who are you going to sell it to?" he said.

Fed Asks BlackRock to Direct Billions in Bonds

By DAWN LIM

The Federal Reserve on Tuesday asked BlackRock Inc. to steer tens of billions of dollars in bond purchases, reflecting the influence of the world's largest money manager.

BlackRock will purchase agency commercial mortgage-backed securities secured by multifamily-home mortgages on behalf of the Federal Reserve Bank of New York. The Fed will determine which securities guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae are suitable for purchase. BlackRock will execute the trades.

BlackRock also will manage two large bond-buying programs. It will be in charge of a Fed-backed facility to buy new investment-grade bonds from U.S. companies.

The firm also will oversee another vehicle for buying already-issued investment-grade bonds. Bond purchases will be

the focus of that effort. But the firm has latitude to buy U.S. investment grade bond exchange-traded funds, including its own. BlackRock is the largest provider of bond ETFs.

The Treasury Department is expected to inject \$10 billion in initial equity funding in con-

nection with each of the two facilities, according to a previous Fed statement.

The tasks place BlackRock in the position of implementing the administration's response to the spreading coronavirus pandemic. The firm's roughly \$7 trillion reach extends into everything from equities to

The firm will face scrutiny on how it prevents conflicts of interests.

bonds to private equity. The firm will face significant scrutiny on how it prevents conflicts of interests.

BlackRock will be working with the Fed through its financial markets advisory business, and not its asset-management arm. That financial markets unit advises governments on how to manage their balance sheets, assisting them in the purchase of investments and the unwinding of toxic instruments.

For the program that involves ETF purchases, BlackRock can't invest in more than 20% in any one ETF. Exchange-traded funds that mirror broad swaths of the market can sometimes be a more politically palatable way of pumping money into the fixed-income market than investing in individual securities. It doesn't require a manager to actively pick winners and losers, but simply track an index.

BlackRock will use Aladdin, a software system that assesses risks and prices investments, to monitor the assets. Aladdin watches over more than \$20 trillion in assets. BlackRock Chief Executive Laurence Fink is no stranger to turning his Rolodex and Aladdin into a powerful role for his firm in times of crisis. In the last financial crisis, the U.S. government tapped BlackRock to oversee assets once owned by Bear Stearns Cos. and American International Group Inc. after the two financial institutions collapsed.

That mandate put scrutiny on the firm, generated billions of dollars to the U.S. government and became a milestone that sealed BlackRock's influence in Washington.

Mr. Fink, in a recent market briefing to some clients, said the firm was working with regulators to ensure the smooth functioning of markets. He has told clients the current situation doesn't rise to the magni-

tude of a financial crisis, but it does mark a crisis of confidence that can be addressed with the help of prudent fiscal policy.

—Vipal Monga contributed to this article.

AUCTION RESULTS
Here are the results of Tuesday's Treasury auctions. All bids are awarded at a single price at the market-clearing yield. Rates are determined by the difference between that price and the face value.

52-WEEK BILLS	
Applications	\$67,057,257,800
Accepted bids	\$27,156,147,800
* noncompetitively	\$279,412,400
* foreign noncompetitively	\$303,200,000
Auction price (rate)	99.737111 (0.260%)
Coupon equivalent	0.264%
Bids at clearing yield accepted	72.31%
Cusip number	9127962F5
The bills, dated March 26, 2020, mature on March 25, 2021.	
TWO-YEAR NOTES	
Applications	\$99,862,493,700
Accepted bids	\$45,377,861,200
* noncompetitively	\$165,675,300
* foreign noncompetitively	\$10,000,000
Auction price (rate)	99.954228 (0.375%)
Interest rate	0.375%
Bids at clearing yield accepted	39.61%
Cusip number	9128282G8
The notes, dated March 31, 2020, mature on March 31, 2022.	

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY



Most assembly lines have stopped running. New vehicles sit parked outside an idled Fiat Chrysler plant in Detroit.

Shutdown Grips Autos

Industry expected downturn but not complete paralysis

The auto industry, and Detroit in particular, has been preparing for a downturn for years. What it got instead was something altogether less manageable: a shutdown.

Most car assembly lines across the Western world have stopped running over the past week in response to the Covid-19 pandemic. In the U.S., the moves were prompted by union pressure as staff started to worry about catching the virus in an environment where social distancing is near impossible. Given the slump in dealership traffic, though, it was only a matter of time before manufacturers might have had to stop production anyway. The U.K. joined Italy, France, Spain and U.S. states including California and New Jersey in mandating the closure of showrooms from Tuesday.

That leaves investors with one burning question: How long can auto makers survive without selling cars? **Ford**, the only Detroit auto maker to survive the previous crisis without public funds, suspended its dividends last week to conserve cash. **General Motors** said Tuesday it was “aggressively pursuing austerity measures” and intended to draw down roughly \$16 billion from its credit facilities to add to its \$15 billion-\$16 billion cash pile.

After years of strong sales and—at least at General Motors and **Fiat Chrysler**—cost-conscious management, Detroit is a much flusher place than it was when the 2008 crisis triggered an \$80 billion government bailout. An analysis of available liquidity by RBC analyst Joseph Spak, including cash plus undrawn bank facilities, suggests that GM can survive without revenue for at least 20 weeks and Ford for 18 weeks. Even **Tesla**, which has a poor record of cash generation, is in good shape after a well-timed stock sale last month.

So a scenario in which social-distancing measures aren’t relaxed for three or even four months might be just about manageable. Anything more—by which point much of U.S. industry might be on its knees—could require another round of bailouts.

Some companies may find an alternative purpose, and source of funds, by making essential medical supplies. On Tuesday, Ford said it would assemble plastic face shields at one of its plants and was also working on more complex products in partnership with manufacturers 3M and GE Healthcare. President Trump tweeted Sunday that GM, Ford and Tesla were being “given

go ahead” to make ventilators and other metal products.

In China, car plants are ramping up production again after roughly two months of down time, including the Lunar New Year break. Even if this relatively benign scenario plays out in the U.S. and Europe, though, it could leave lasting damage. Small suppliers are unlikely to have cash to ride out even a month of production stoppages. If they go under, the likes of GM and Ford won’t have parts necessary to restart assembly. Small car dealerships are equally important links in the chain.

The only certainty is that companies with stronger balance sheets can survive for longer without support. Stock-price moves since Covid-19 went global in late February reflect this to some degree. Japanese manufacturers, which tend to be well funded, have done best. There are some oddities, though: There is no good reason why shares in overstretched Daimler have (slightly) outperformed GM’s.

The most dispiriting aspect of the current economic standstill is how indiscriminate it is. After a few months, even good companies won’t stand a chance.

—Stephen Wilmut

Nike Investors Have Less Reason to Sweat

Apparel company is well-equipped to handle adversity, though China results spell trouble

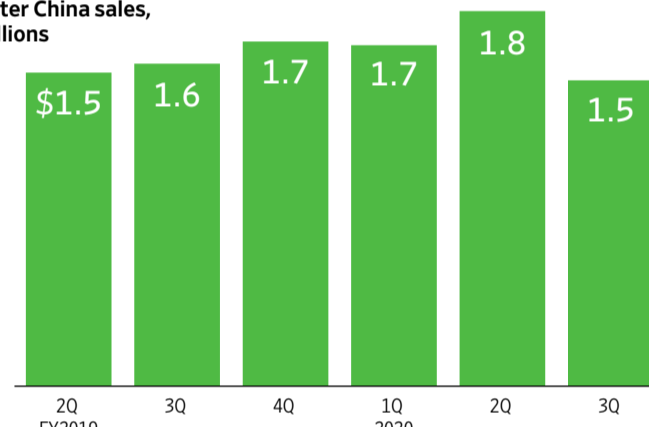
Investors have known for weeks that the coronavirus crisis would wreak havoc on the global economy. Fiscal third-quarter results from **Nike** out Tuesday were an early chance to survey the damage.

The apparel giant reported revenue of \$10.1 billion and earnings of 53 cents a share for the quarter which ended Feb 29. The virus-related lockdown of large parts of China, which began in late January, meant sales in that country fell 5% from a year earlier after 22 consecutive quarters of growth. Nike said in a news release that China sales were actually up double digits from a year earlier in December and January, which means the decline in February was massive.

That blow would sting on its own: In the fiscal second quarter, which ended last November, sales in China grew by 20% from a year earlier and accounted for nearly 18% of total company sales.

Unfortunately, investors can expect similar declines in other parts of the world during the months ahead as Covid-19 and ensuing lockdowns have become a global phenomenon. Nike closed its stores in the U.S., Canada, Western Europe, Australia and New Zealand on March 16.

Nike’s quarterly greater China sales, in billions



Source: the company

Additionally, professional sports leagues and big-ticket amateur events have shut down, effectively thwarting many of Nike’s best marketing opportunities. After all, it is hard to sell basketball shoes without basketball on TV. In the latest blow, the Summer Olympics in Tokyo have been postponed.

Nike’s shares have been punished along with the broad stock market, but the company is in excellent financial condition and can endure a weak period. It ended the quarter with \$3.2 billion in cash. It has just over \$6 billion in long-term debt and operating lease obligations on its books and doesn’t face significant debt maturities until 2023.

The company can free up more liquidity if needed by halting share buybacks—it spent \$957 million on them in the most recent quarter. That should give shareholders much-needed reassurance about Nike’s staying power as they wait for stores to reopen and ball games to resume. There is already some progress on that front: The company says nearly 80% of stores in China have reopened, and that the rate is higher in major Chinese cities. In both soccer and corporate finance, keeping a clean sheet can really pay off.

—Charley Grant

Banks Can Do More, But Let’s Be Careful

If the Federal Reserve’s latest round of massive liquidity injections don’t succeed in unclogging markets, it may be faced with another tough choice: whether to lift more constraints on banks.

Monday morning’s announcement of bond purchases and another bevy of measures to lend beyond banks and directly to credit markets to help facilitate small-business consumer lending appear to have calmed the market for the moment. Now the next “break-glass-in-case-of-emergency” maneuver might be altering some of the constraints put in place after the 2008 financial crisis.

As massive as the dollar figures have been for the Fed’s daily interventions in the repurchase agreement, or repo, market, at times they were like buckets of water being poured over a funnel: Only so much could reach their ultimate beneficiaries—companies and investors grasping for cash.

The funnel in this analogy is banks. The Fed’s daily repo operations, at times as much \$1 trillion on offer, have only seen a portion of those amounts taken up. That isn’t necessarily a good sign. The liquidity is still needed, but it is having a hard time moving through the system, having to pass first through the primary dealers, which include the likes of big banks such as **JPMorgan Chase**, **Bank of America**, **Wells Fargo** and **Citi-group**, as well as smaller firms that may use those banks for clearing.

These repo operations aren’t just paperwork. Dealers have to expand their balance sheets to take advantage. For example, though dealers may in many cases be taking on offsetting positions with the Fed and with clients, it still increases their total exposure relative to their capital—a form of leverage.

Banks have regulatory limits, their own limits and the market’s implicit judgment on how leveraged they can be, which in effect limits how much repo they can channel.

The Fed may ultimately need to

release banks from more constraints on their balance sheets, as it has done in some respects for their liquidity. Already, for example, banks that make purchases of assets from money-market funds to support them using money from the Fed’s backstop facility will be able to exclude those assets from capital calculations. This particular design makes sense, as those would now be essentially riskless assets with the government’s credit guarantee.

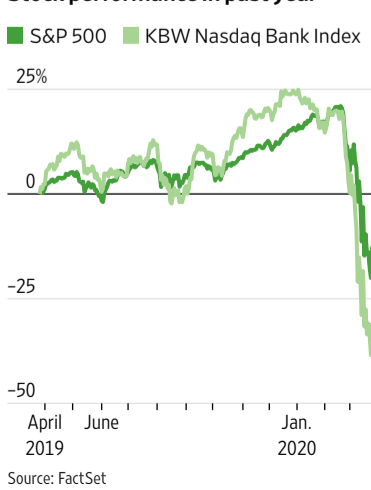
But to ensure that banks don’t themselves become new overleveraged problems, the Fed needs to keep making sure that whatever banks need to load onto their balance sheet for the sake of the system isn’t just compounding risk or leverage in the system.

For bank investors, relaxing leverage rules to buy government-backed assets is a mixed blessing. They can worry less about banks setting off regulatory alarm bells, but it also may mean they are taking on low-profit activities, like repo intermediation, that will cost them to administer. It will be extremely difficult to model banks’ profitability in the future.

But that certainly beats fretting about banks’ survival.

—Telis Demos

Stock performance in past year



Source: FactSet

OVERHEARD



Once upon a time, trainee stock brokers were expected to memorize the ticker symbol of every company in the S&P 500. Also once upon a time, people called actual human brokers to place orders that were then executed by a floor trader.

Now all one has to do is type the company’s name on the internet and a few clicks later buy shares of it in an online account. Retail trading has surged amid the advent of zero commissions. While the old way seems quaint and was more expensive, it occasionally saved investors money.

Take, for instance, those who wanted to make a killing recently from meetings and classes moving online because of coronavirus. Networking giant Cisco is a bene-

ficiary and had dropped by 25% between the start of February and Monday’s close, beating the market. Food-service company Sysco, whose restaurant clients are suffering, sounds the same but was off by 56%.

In at least one case, those who realized their error in time could have made money. Those who thought they were buying shares in a hot videoconferencing company but purchased ZOOM Technologies instead (ticker symbol ZOOM) made seven times as much as those who merely doubled their money in actual beneficiary Zoom Video Communications—as long as they sold by Friday. ZOOM Technologies lost more than half of its value on Monday.

JOHANNES EISELE/AGENCE FRANCE-PRESSE/GETTY IMAGES

Some Hedge-Fund Trades Go Haywire

When everyone runs for the exit at the same time, the stampede can be brutal. The recent market rout has turned some seemingly low-risk trades into hazardous traps.

One example is the relative-value trade, where investors buy one security while shorting another, trying to exploit pricing anomalies. Some trades are based on statistical analysis, while others rely on fundamental linkages between two instruments, such as futures and their underlying asset. These strategies are usually seen as market neutral—they can make money whether the market is up or down—because the net exposure is small. Data tracker Hedge Fund Research said \$877.3 billion of assets were managed under the relative-value umbrella as of December.

But when investors are scrambling for cash, the supposed pricing anomalies can be amplified, especially since no one is willing to step in to correct the valuation divergence. For example, in fixed income, the spreads between bond futures

and the underlying bonds have widened, perhaps because futures are the more liquid instrument of the two. That has driven some funds to liquidate their positions, which has further pushed the spreads out of whack and caused more funds to cut their trades in a vicious spiral.

Similarly in equities, funds, especially in Asia, would buy a stock and simultaneously short its parent or subsidiary to bet on the convergence of their values. These values, however, can diverge further when everyone is closing the same trades. In one extreme example, shares of Japanese wireless carrier **NTT DoCoMo** hit their highest price since 2002 on Thursday. The likely reason for the pop is that investors who had shorted the stock and bought its parent **Nippon Telegraph and Telephone** were unwinding the trade, pushing others to make the same move. Until last Thursday, DoCoMo had been up 12% this month, while its parent was down 4%.

Betting on the closing of a

merger—curiously named risk arbitrage—has also had some bad days. Such a strategy may be largely market-neutral in normal times, but the sudden economic downturn poses some real risks to the completion of deals, especially if they are funded by debt. Shares in casino operator **Caesars Entertainment** are now trading 35% below the acquisition price offered by **Eldorado Resorts**. The discount was as high as 61% last week, having been virtually zero in February.

The fact that many such trades are financed by leverage to juice returns has made the fallout worse. The use of debt to enhance yields is probably the reason why some theoretically more stable sectors like utilities have actually performed worse than the broader market in the current bear market, for example.

Some trades that make sense normally are turned upside down in a crisis, when traders don’t sell what they should but what they can.

—Jacky Wong