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# THE WALL STREET JOURNAL.

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**WSJ.com** 

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**Last week: DJIA** 19173.98 ▼ 4011.64 17.3%

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**OIL** \$22.43 **▼** \$9.30

#### Business ඒ Finance

Dozens of large companies have offered their employees a financial cushion unavailable to workers at small businesses with fewer resources amid the coronavirus crisis. A1

- **♦ The most** brutal stretch for global markets since the financial crisis likely isn't over yet, say investors and analysts. B1
- **♦ The fallout** from the coronavirus is expected to have a significant negative impact on U.S. economic prospects. A5
- ◆ Trump has joined Democratic lawmakers demanding any government aid to corporations include new restrictions on stock buybacks. A4
- **◆ Marriott** and a growing number of hotel owners are furloughing tens of thousands of workers or slashing staff as the pandemic progresses. B1
- ◆ Some WeWork directors are gearing up to fight Soft-Bank's move to back away from part of its bailout of the shared-office provider. B1
- **◆ Total is** implementing austerity measures as the energy giant deals with an oil-price rout and a demand-sapping pandemic. B2

## World-Wide

♦ U.S. lawmakers failed in their first bid to reach a deal on a federal stimulus package that could top \$1.3 trillion, as the number of confirmed coronavirus cases world-wide has more than doubled in a week to nearly 330,000. **A1, A4-A8, A10** 

**♦ Asymptomatic** people are carrying the virus without knowing it and might inadvertently be helping it spread. A1

- ◆ **Trump sent** a letter to North Korea's Kim offering U.S. help to fight the coronavirus, according to a statement by Kim's sister. A10
- ◆ **An evacuation** of American diplomats has hobbled the U.S. government's presence in China at a key moment. **A10**
- **♦ The Marine Corps** is pivoting from a focus on fighting insurgents in the Middle East to preparations in the Pacific with an eye to China. A1
- **◆ The board** overseeing Puerto Rico's finances said a push to restructure \$35 billion in debt would be paused. A3
- ◆ The U.S. raised pressure on Maduro's regime with the unsealing of criminal cases against two ex-officials at Venezuela's state oil monopoly. A8

## **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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Markets

Opinion.



## Partisan Clash Delays Rescue Bill Dispute over aid to



nation, religious leaders looked for alternatives to reduce gatherings, with many turning to online services. A12

## For CEOs, Radical New Landscape **Forces Tough Management Calls**

BY CHIP CUTTER AND JENNIFER MALONEY

The new coronavirus's spread in America has prompted corporations to close offices, factories and stores, sending tens of millions of people home, where a swath of the workforce—from customer-service representatives to chief executive officers—have had to figure out new ways to work.

A San Francisco apparel maker's CEO has spent hours taking business calls in a Toy-

ota Tacoma outside his home. A Seattle technology company chief spends the first five minutes of her remote staff meetings asking employees to describe their states of mind. A New York coconut-water maker's CEO led his first-ever virtual happy hour with staff on Thursday.

Another wave of workers will make the transition this week after California, New York and some other states have ordered statewide restrictions.

The result is perhaps the

most radical and swift change in U.S. business in living memory. That's posing a monumental management challenge of leading employees—those lucky enough to have kept their jobs-to sustain operations from home while also keeping them calm and safe.

"This is not business as usual," said NRG Energy Inc. CEO Mauricio Gutierrez, who is managing the power company from his New Jersey home.

Many CEOs, cut off from Please turn to page A6



Inmates freed in bid Investors fear worst is yet to come, B1

**IOC** considers postponing the Olympics, A14

**Big Employers Offer Cushion** 

need supervision. JPMorgan

## workers, bailout for companies stalls \$1.3 trillion package

Senate Democrats blocked a rescue package designed to blunt the economic impact of the coronavirus pandemic, after a dispute with Republicans over corporate bailout provisions and aid to dislocated workers.

> By Jennifer Calfas. Natalie Andrews and Lindsay Wise

Lawmakers and administration officials still hope to reach an agreement on a deal of as much as \$1.3 trillion to allow both chambers of Congress to approve it. Negotiations stretched late into Sunday night after Democrats said the GOP proposal favored corporations and didn't go far enough to aid individuals facing unemployment and loss of income. The motion to advance the legislation failed on a 47-47 vote. short of the 60 votes needed.

The number of confirmed U.S. cases of Covid-19, the disease caused by the virus, surpassed 33,000 on Sunday, a 10fold increase from a week earlier. For senators, the virus hit home, with Sen. Rand Paul, a Kentucky Republican, becoming the first to announce a positive test. He said he isn't feeling symptoms but will isolate himself.

Two other GOP senators who had closely interacted with Mr. Paul announced they would quarantine, narrowing the Republican majority in the Senate.

Shortly after the procedural vote failed, Dow futures fell 5%, hitting the trigger that halts trading, and overseas markets also sold off sharply.

Senate Republican and Democratic leaders blamed one another for the impasse, but vowed to continue working on

Please turn to page A4

## Apparently Healthy Fuel Spread of Virus

By Daniela Hernandez AND BEN COHEN

One night earlier this month, a 27-year-old man on a business trip in Oklahoma City felt sick. didn't go to work and was later tested for Covid-19, the disease caused by the novel coronavirus.

His positive result jumpstarted a series of events that led to the complete shutdown of American sports. Utah Jazz center Rudy Gobert was the first National Basketball Association player widely known to be infected, and his diagnosis has since led to the testing of eight teams and 13 more positives among players, coaches and staff members.

But those tests also revealed something curious. At least seven of them, including Brooklyn Nets star Kevin Durant, didn't report symptoms when they were diagnosed.

This small, accidental experiment echoes what more scientific studies are finding: People with no symptoms are carrying Please turn to page A6

By Lauren Weber Among the hard truths

the new coronavirus is revealing is this: A pandemic can be a good time to work for a big company.

As many small businesses operating with little cushion are laving off employees. dozens of large companies so far have extended pay and benefits to workers whose livelihoods are affected by the virus.

AT&T Inc. is offering up to 160 hours of paid time off to employees whose children are suddenly at home and

Chase & Co. is sending \$1,000 bonuses to certain branch and operations employees who can't work from home, to help allay costs like child care and transportation. Saks Fifth Avenue is closing its stores for two weeks and will pay employees for their scheduled shifts. Many other big companies are extending similar assistance. Apple Inc. has closed

stores outside of greater China indefinitely, saying hourly workers will continue to be paid. Facebook Inc.

said it would give full-time employees an additional \$1,000 in their next paycheck and would continue to send its legion of contractors, including content moderators, home with pay.

There are exceptions. Already, companies hit hard by travel restrictions, cancellations and anxieties, like airlines and hotels, have instituted unpaid leaves, furloughs and layoffs.

But generally, thus far, large companies' resilience has contrasted with the cut shifts and layoffs at many

Please turn to page A5

## Your (Socially) Distant Date

Crisis makes romance tricky, but not impossible

By Georgia Wells

Caroline Kravitz and her date settled in to watch an Orson Welles movie-"F for Fake"—on Monday night. This being the age of coronavirus, they were in separate homes about 15 miles apart in New York City. At an agreed upon moment, they pressed play on *Please turn to page A2* | Gen. David Berger, the Marine

## Marines Will Retool, With an Eye to China

By Michael R. Gordon

The Marine Corps is undertaking its most sweeping transformation in decades, pivoting from a focus on fighting insurgents in the Middle East to developing the ability to hop from island to island in the western Pacific to bottle up the Chinese fleet.

The 10-year plan to revamp the Corps, set to be unveiled this week, follows years of classified U.S. wargames that revealed China's missile and naval forces to be eroding American military advantages in the region. "China, in terms of military

capability, is the pacing threat,"

Corps commandant, said in an interview. "If we did nothing, we would be passed."

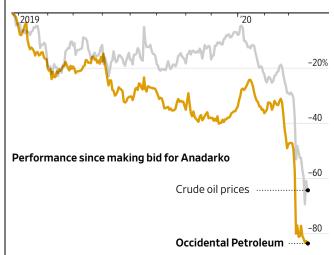
To reinvent themselves as a expeditionary force within budget limits, the Marines plan to get rid of all tanks, cut back on their aircraft and shrink in total numbers from 189,000 to as few as 170,000, Gen. Berger said.

"I have come to the conclusion that we need to contract the size of the Marine Corps to get quality," he said. The changes are part of a

shift by all branches of the armed forces, which are honing new fighting concepts and plan-Please turn to page A7

## Oil's Tumble Upends Occidental

Hammered by the sharp drop in oil prices, Occidental Petroleum struck a deal with activist investor Carl Icahn. B1



-100

## U.S. NEWS

THE OUTLOOK | By Harriet Torry

# Sick-Leave Gaps Raise Infection Risk



Light-touch regulation on U.S. employers is widely seen as a cornerstone of U.S.

businesses' dynamism. But economists say one trade-off is a risk of wider coronavirus transmission than in countries that provide sick leave to more workers.

Global health authorities are advising people to stay home if they fall ill. But that is financially challenging for millions of Americans without paid sick leave, who fear losing their paycheck or even their job if they don't go to work.

The U.S. normally leaves it to employers to choose whether to provide paid or unpaid sick leave, and many don't. Last year, according to the Labor Department, 24% of all U.S. workers, or 33.6 million, lacked the benefit. They were concentrated in lower-wage and front-line service-sector positions, such as grocery stores and retailers.

President Trump last week signed into law legislation temporarily requiring employers to provide two weeks of sick leave plus family leave at partial pay for workers who face child-care problems. But the measure doesn't apply to all employers or all employees. Neither

the Trump administration nor congressional staff provided estimates of how many workers still lack paid sick

> Many other governments, in contrast, require employers to offer some paid sick leave and some provide government subsidies as well.

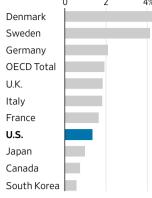
In China, where the new coronavirus emerged first, workers are entitled to sick pay ranging from 60% to 100% of daily wages during periods of illness, although the length of sick leave is contractual between workers and employers.

Government workers in China kept from their jobs due to the coronavirus quarantine are also being paid their full salaries plus benefits, according to the Ministry of Human Resources and Social Security.

early all European Union member states require employers to provide paid sick leave for varying periods. Workers are also protected from dismissal during sick leave in nearly every European country.

In Germany, workers are entitled to 100% of their salary for up to six weeks of illness-paid by the employer-then sick pay of 70% of their salary paid by public or private health insurance for over a year.

Public spending on incapacity as a percentage of GDP, 2015



Note: Spending due to sickness, disability and Source: Organization for Economic Cooperation

A law aimed at preventing the spread of infectious diseases means the state compensates the salaries of people put under quarantineincluding freelancers and gig-economy workers.

Labor law in Japan doesn't require companies to give their employees any paid sick days. But workers are entitled to up to 20 days of paid leave a year, and generally those who need to take a day or two off due to illness apply for annual paid

According to Japan's Ministry of Health, Labour and Welfare, those who are infected with the coronavirus

or suspected of being infected can apply for socalled sickness allowance, which existed before the current crisis and is covered by employees' health insurance, and amounts to roughly twothirds of income. The allowance will be paid for any sickness or injury causing a worker to take time off for

more than four days. The health risk in the American approach could make it harder to contain the spread of the coronavirus, economists say.

"If people don't have access to paid sick leave, or even unpaid sick leave, and they have to work several jobs—especially low-income workers, service-sector workers—they may go to work sick and spread diseases," said Nicolas Ziebarth, an associate professor specializing in health and labor economics at Cornell University.

The effects were severe the last time a pandemic hit. According to the American Public Health Association, an estimated seven million additional people were infected and 1,500 deaths occurred during the 2009-2010 swine flu H1N1 pandemic because contagious employees didn't stay home from work.

The conundrum all economies face is balancing the public-health interest in

mandating sick pay with the potential costs to businesses and the broader economy. With many companies curtailing service to limit the spread of the virus, many workers will see their pay

cut, leading to a drop in con-

sumer spending.

n recent years, some states and cities have been adopting new mandates on paid sick days, starting with Connecticut and now including Washington, D.C., Vermont, Rhode Island, Arizona, California, Maryland, Michigan, New Jersey, Illinois, Massachusetts, Nevada, Maine, Washington and Oregon. Other states have banned such mandates.

For employers, the downsides of providing paid sick leave are red tape, cost and fears of damage to business operations if paid-sick-leave days are abused.

Some research shows that in the longer term, providing paid leave saves on absenteeism costs and reduces employee turnover. A recent paper by economists Stefan Pichler and Nicolas Ziebarth found that mandates to allow employees to accrue sick leave through hours worked reduced the spread of infectious diseases, while having no significant effect on employment or wages.

## **ECONOMIC CALENDAR**

Data out this week are expected to reflect escalating economic damage from global efforts to contain the novel coronavirus pandemic.

Tuesday: Surveys of purchasing managers at businesses in the U.S., Europe and Japan are expected to record a sharp decline in activity during March as efforts to contain the pandemic hit service providers and manufacturers. Economists now expect to see deep declines in economic output during the first and second quarters. The PMIs will be the first global test of that view.

Wednesday: U.S. new orders for durable goods for February could signal supply-chain disruptions and early indications of waning demand as the virus's spread accelerated around the

Thursday: The Labor Department's weekly jobless-claims re**port** is expected to reflect the scale of coronavirus-related layoffs amid widespread business closures. Economists are forecasting new applications for unemployment benefits will jump to the highest level on record during the week ended March 21.

Friday: U.S. consumer-spending data for February will show whether households spent freely or started pulling back even before efforts to contain the coronavirus forced wide-scale closure of businesses.

The University of Michigan's consumer-sentiment survey for March will track household confidence—and potential willingness to spend—amid a darkening economic backdrop.

## U.S. WATCH

WASHINGTON

#### **Public Urged to Pass On Cherry Blossoms**

Officials urged the public to avoid the famous cherry blossoms in Washington, D.C., and are taking the unusual step of closing down public streets to keep visitors away and prevent possible coronavirus spread.

"To help flatten the curve, we strongly discourage any Tidal Basin visits because social distancing has not been possible due to visitor volume," the Metropolitan Police Department said.

Washington Mayor Muriel Bowser has instituted a series of restrictions, including a prohibition on most gatherings of 50 or more people.

The National Cherry Blossom Festival already had canceled several events because of coronavirus concerns. Organizers estimate 1.5 million visitors a vear come to the National Mall to see the cherry blossoms, along with the monuments that draw crowds year-

A live camera feed of the Tidal Basin and a video tour with narration about the trees and their history have been made available online

-Alexa Corse



Cherry trees were in bloom Sunday around the Tidal Basin in the nation's capital. Visits to the area are being strongly discouraged this year.

ARIZONA

#### **Suspect Sought in** Theft of Virus Tests

Police in Tucson said they were still searching for a man who stole 29 unused coronavirus test kits from a health center.

The suspect, disguised as a delivery driver, entered the El Rio Health Center building about 8 p.m. Friday and took the tests as employees were closing for the night, police said.

The stolen tests have since

been replaced and are essentially useless to the suspect because the kits can only be tested in a private lab equipped with the proper tools for testing and reading results, police said. But the theft has taken 29 testing kits out of the medical field for

thief and security video captured him fleeing in a vehicle.

**CALIFORNIA** 

## Quake Hits Off Coast, No Injuries Reported

A magnitude 4.7 earthquake struck Sunday morning off the coast of Northern California, the U.S. Geological Survey said.

The quake hit at 8:27 a.m. about 50 miles west of Ferndale, a coastal town of 1,300 people. A police dispatcher said there were no reports of damage or injury in the town just south of Eureka.

—Associated Press

## Scallop Catch Sank **Again Last Year**

Maine's scallop fleet caught fewer of the shellfish for the second year in a row despite nationwide trends toward increased catch.

Fishermen harvested about 415.000 pounds of scallop meat in 2019, down more than 200,000 pounds from 2018. And that year was a decrease from 2017, when nearly 800,000 pounds came in.

One of the reasons for the decline might have been the state's rotational management system, which closes off some fishing areas every year to allow young scallops to grow.

-Associated Press

## A Socially Distant Romance

Continued from Page One their devices. As the movie unfolded, they bantered over

The pair is still making plans for in-person meetings, but for now they are trying to make do with a remote ro-

The rules of dating are uncertain in the best of times. These days the parameters are shifting faster than ever.

Only a week prior, when Ms. Kravitz was just becoming aware that social distancing was important, she was debating whether she could kiss her date at the end of the night. The 23-year-old New Yorker opted for a modest embrace. 'Î think we did a full hug? Maybe my arms were crossed. I was freaking out the whole time," she said. "There was definitely a hug!"

Trying to build a relationship while reducing human contact during the coronavirus pandemic is tricky. "He's likely getting insight into my most crazy self during this time," said Ms. Kravitz.

Much of the country has been ordered to stay inside their homes, and most Americans have cut off in-person contact. In many cities, bars and restaurants are closed.

This leaves little room for romance. "People don't want to feel

alone, and they've already watched everything on Netflix," said Adam Cohen-Aslatei, CEO of S'More, a dating app that operates in New York, Boston, Washington, D.C., and Chicago.

The average number of daily users of S'More increased 28% the third week of March, Mr. Cohen-Aslatei said.

Users seem to be emphasizing apps' chat and video functions. The length of conversations on S'More has doubled. Mr. Cohen-Aslatei said.

Match Group, which owns popular dating apps, said it would make some paid features on Tinder free since more users are having longer conversations, and it would add a live-streaming feature for Plenty of Fish, according to a staff email.

Say Allo saw a 350% increase in video-date sessions in the early weeks of March. The app saw spikes of usage in some cities following news of more cases of infection, according to Zackary Lewis, the company's CEO.

Some daters are taking this in stride. "Welcome back to courtship, Brad," screenwriter and actor Kaitlyn McQuin wrote on Twitter, addressing a

generic dude. "Welcome back to talking to a gal for WEEKS prior to meeting." that's not For others,

enough. "With tech advancements.

you can be present with people and see them, but there is really nothing that replaces getting a hug," said Samantha Dascher, a 31-year-old who lives alone in New York City.

The advertising worker, now working from home, was set to meet a guy

## The app asks users whether they have washed their hands each evening.

she has been messaging on S'More for the first time last Monday. The meeting was supposed to happen live on Fox News as a part of a promo for the new app.

As the pandemic became more serious, he told her he needed to leave the city. "Obviously I'm a little disappointed," she said. "I'm trying to at least compartmentalize it for the time being. I don't really know this person yet!"

Lee Demarsh, 33, had planned to meet a guy she matched with on a dating app when everything in San Francisco began shutting down. He

opted for a phone call instead, and then hit the FaceTime button so they could see each

"I was like: OMG! But I am pretty easygoing, so I went with it." Ms. Demarsh said. She hadn't had time to put on makeup and was just walking down the street to run some errands.

She's trying to figure out if relationship can develop with someone remotely. Video chatting doesn't convey physical chemistry. "You can't get that at all," she said. "And we have no idea how long this will last!"

Knowing people will have extra time on their hands and likely be stuck at home, friends Daniel Ahmadizadeh and Christopher Smeder decided to make a dating app specifically for how we are living our lives now. Called Quarantine Together, the app asks users whether they have washed their hands at 6 p.m. each evening, and if they say ves, it introduces them to another user via text.

"We're in peak loneliness," said Mr. Ahmadizadeh. "We want people to know that regardless of how their day is going, at 6 p.m., people have an opportunity to have a social interaction, another at-

Plus, he figures users won't have many competing engagements. "You guys are literally at home," he said.

needed testing in the future. Police have a description of the

At least 104 Covid-19 cases have been reported in Arizona, leading to one death.

## -Associated Press

CORRECTIONS ゼ AMPLIFICATIONS

**PG&E Corp. has** agreed to put itself up for sale if it can't obtain court approval of its bankruptcy exit plan by June 30. A Business & Finance News article in some editions on Saturday about the company's chapter 11 plans incorrectly said it would have to exit bankruptcy by that date.

A "BBC Dad" video attracted more than 200,000 views on YouTube last week.

An Exchange article on Saturday about how shut-in families are spending their time incorrectly said the video had received around 100,000 views.

Simon Atadoga attends Minnesota State University in Moorhead, Minn. A U.S. News article on Saturday about communities preparing for flooding season incorrectly said he attends the University of Minnesota.

Readers can alert The Wall Street Journal to any errors in news articles by emailing wsjcontact@wsj.com or by calling 888-410-2667.

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# Incineration of Chemicals Stirs Concerns

Group sues to stop burning of compounds linked to cancers and other health problems

By Kris Maher

EAST LIVERPOOL, Ohio-From her backyard, Sandy Estell can see an incinerator—a white complex of buildings along the Ohio River—owned by a company with a Defense Department contract to burn more than 800,000 gallons of firefighting foam and related waste.

The aqueous film-forming foam, or AFFF, contains hardto-destroy chemicals once used in Teflon cookware and other products. The compoundsknown as forever chemicals because they take so long to break down-were also widely used for decades on military sites and elsewhere to smother fires. Ms. Estell and others say

they are concerned about incinerating the chemicals, known as perfluoroalkyl and polyfluoroalkyl substances, or PFAS, because they have been linked to several types of cancer and health problems like high cholesterol. Water contamination from

PFAS is a growing concern nationwide. Now communities in several states fear the chemicals could be in their air. You can't unburn it now."

Ms. Estell said of firefighting foam shipped to incinerators around the country.

The primary options for disposing of PFAS-containing materials are to put them in a landfill or to incinerate them, which has become increasingly controversial.

The federal Environmental Protection Agency said in August that incinerating PFAS "is not well understood" and that it is studying the process. Some experts worry that incomplete combustion could release toxic chemicals into the air.

PFAS aren't considered hazardous pollutants under the Clean Air Act, or listed as hazardous waste under federal law. The EPA said the extent to which PFAS-containing materials are incinerated also isn't well known.



The Heritage Thermal in East Liverpool, Ohio. Sandy Estell, below, lives near the plant and is worried about the health effects of burning firefighting foam and related waste.

The Defense Department has a stockpile of foam it can no longer use. There are more than 600 military installations nationwide with a known or suspected release of PFAS from firefighting foam into the groundwater, according to department data.

The department entered into two contracts in 2018 and one in 2019 to ship more than two million gallons of unused foam to hazardous-waste incinerators in a number of states, including Ohio, New York and Arkansas, according to contracts cited in a federal lawsuit.

Earthjustice, an environmental group, filed the suit on behalf of the Sierra Club and several community groups last month against the Defense Department, the Defense Logistics Agency and two waste-disposal companies.

The suit asks a judge to void the contracts and stop the incineration, arguing that the process is dangerous and

poorly understood and alleging that the contracts violate federal environmental law.

A spokesman for the Defense Department and Defense Logistics Agency declined to comment, citing the pending litiga-

Ali Alavi, senior vice president for regulatory affairs and general counsel of Heritage Environmental Services whose subsidiary Heritage Thermal Services Inc. operates the incinerator in East Liverpool, about an hour west of Pittsburgh, said it is common to burn soil and waste from manufacturers that use PFAS in products.

Heritage Thermal Services reported to the Ohio EPA in 2019 that it had burned 3,750 tons of materials potentially containing PFAS over the prior three years, according to emails reviewed by The Wall Street Journal. Some waste at the incinerator may contain up to 20% PFAS, the company said.

Mr. Alavi said the company



operates within federal law and that testing to ensure that PFAS are destroyed without creating byproducts is unnecessary. The company has yet to incinerate any foam under the defense contract cited in the

lawsuit, he added. He declined to comment on the lawsuit, in which the company is named as a defendant.

After opposition from residents and local and state officials, a facility in Cohoes, N.Y., said last month that it will stop burning PFAS-containing firefighting foam.

The company that runs the

facility said it complied with federal and state laws but that it wouldn't resume burning the foam until research by the EPA shows that incineration is the safest and most effective method of disposal for PFAScontaining material.

Jonathan Kalmuss-Katz, an attorney for Earthjustice, said the Cohoes facility has received more than 17,000 gallons of foam, based on information from the Defense Department.

Judith Enck, a former regional administrator for the EPA under the Obama administration, who lives about 10 miles from Cohoes, said she had focused on drinking-water contamination from PFAS and was shocked to learn that firefighting foam was being incinerated.

"I never thought a government agency or any private party would be so irresponsible to incinerate firefighting foam, she said. "By definition, it doesn't burn well. It's a fire suppressant.'

women, migrant detainees and

at the American Civil Liberties

Union's National Prison Project

said authorities should balance

public safety with civil rights,

such as access to libraries and

recreation, as well as visits with family. "If civil rights are

abrogated, it should be based

on science and revisited fre-

Some public-health officials

and prisoners' rights advocates

have proposed large-scale re-

leases of the incarcerated. In

Iran, 54,000 prisoners have

been temporarily released to

In Cleveland, more than 400

inmates have been moved out

of the Cuyahoga County Jail via

lowered bonds or quickly

reached plea deals, resulting in

release or transfer to state

prison. Judges and prosecutors

sought to reassure the public

that the nearly 25% reduction

in the county jail population

didn't mean they were releas-

iail doors and letting prisoners

leave," said Brendan Sheehan,

administrative judge of the

Cuyahoga County Common

Pleas Court. "We're looking at

lower-level nonviolent felons

and we're looking at our jail

cases who have a higher medi-

further apart and create space

for quarantines if necessary, he

Alex Villanueva said he has re-

duced the jail population from

17,076 to 16,459 since the end of

The goal is to keep inmates

Los Angeles County Sheriff

'We're not opening up the

ing inmates en masse.

slow the spread of the virus.

quently," she said.

Amy Fettig, deputy director

the mentally ill.

## Puerto Rico Debt Overhaul Is on Hold

By Andrew Scurria

board overseeing Puerto Rico's finances said a push to restructure \$35 billion in debt would be paused indefinitely as the U.S. territory struggles to contain the spread of coronavirus.

The oversight board said Saturday it wouldn't move forward on a controversial proposed write-down of bond and pension liabilities while Puerto Rico focuses on stopping the spread of Covid-19 cases.

The settlement proposal is backed by competing bondholder groups and representatives of public retirees and was scheduled to be debated in court in October. The oversight board said it would adjourn those court proceedings

'until further notice." Delaying the restructuring plan puts bondholders at risk of more severe write-downs on their claims if tax revenues are depressed in the fallout from the pandemic and restructuring terms are altered. Bondholders had become more optimistic in recent months about a possible end to the bankruptcy, which began in 2017, as the oversight board built support around settlement terms.

The proposed deal, backed by investment firms including GoldenTree Asset Management LP and Aurelius Capital Management LP, would write down \$35 billion in Puerto Rico debt by 70%, to \$11 billion. Public pensions would be scaled back, though a majority of retirees would collect full promised benefits. Some financial creditors, including bond guarantors with billions of dollars on the line, aren't supportive of the proposal.

The market turmoil stemming from the pandemic has rocked municipal debt, sparking a selloff even among bonds issued by financially-stable state and local governments.

# Inmates Freed in Bid to Curb the Outbreak

By Zusha Elinson AND DEANNA PAUL

Local governments across the U.S. are releasing thousands of inmates in an unprecedented effort to prevent a coronavirus outbreak in crowded iails and prisons.

Jails in California, New York, Ohio, Texas and at least a dozen other states are sending low-level offenders and elderly or sickly inmates home early due to coronavirus fears. At other jails and prisons around the country, officials are banning visitors, restricting inmates' movement and screening staff.

The 2.2 million people behind bars in the country, and the guards who work with them, face unique risks due to the tight spaces in crowded conditions and strained healthcare systems, according to experts.

"We're all headed for some dire consequences," said Daniel Vasquez, a former warden of San Quentin and Soledad state prisons in California. "They're in such close quarters—some double- and triple-celled-I think it's going to be impossible to stop it from spreading."

Prison staff in Pennsylvania, Michigan, New York and Washington state have tested positive for the virus, resulting in inmate quarantines. In Washington, D.C., a U.S. marshal who works in proximity to new arrestees tested positive for the virus, meaning dozens of defendants headed for jail could have been exposed. Two federal prison staffers have also tested positive.

On Saturday, the first federal inmate tested positive in a Brooklyn, N.Y., facility, according to the Bureau of Prisons. The same day, New York City's Board of Correction, an independent oversight agency, sent a letter to city and state officials urging them to rapidly reduce the jail population, with a focus on people at highest risk of infection, pointing to more than 30 inmates and corrections employees who have tested positive for the virus.

There have been no reported major outbreaks yet, but ex-



At least a dozen states are releasing some low-level offenders. New York's Rikers Island jail complex.

#### **Immigration System Sets Up Quarantine**

Government officials are preparing for a possible coronavirus outbreak in the immigration processing system as advocates call for the release of the approximately 38,000 migrants held in often-crowded detention facilities.

A letter from Vice President Mike Pence to President Trump dated Tuesday requests \$566 million for the Department of Homeland Security, with hundreds of millions of dollars earmarked for quarantine facilities along the Mexican border.

The budget request to Mr. Trump also calls for about

perts fear the coronavirus

could overwhelm correctional

facilities, particularly because

ever in the older demographic

number of people 55 or older in

than tripling from 1999, accord-

ing to the Pew Charitable

"Will they have the staff, the

and Customs Enforcement to convert at least four immigration detention facilities into quarantine facilities. Detainees and staff at ICE

\$249 million for Immigration

facilities are increasingly being quarantined, raising anxiety. A detainee at ICE's North-

west Detention Center in Tacoma, Wash., said she knew of at least two men who had been quarantined there.

ICE said Friday there are no detainees who had tested positive for the virus and that agents were grouping immigrants in cohorts at multiple facilities to stop potential spread.

"U.S. Immigration and Customs Enforcement takes very seriously the health, safety and welfare of those in our care,"

spokeswoman Danielle Bennett said. Earlier last week, 10 detainees were placed in cohorts at the Aurora Contract Detention Facility in Colorado after possible exposure, ICE said. On Friday ICE said a member of the medical administrative staff at the Elizabeth Detention Center in New Jersey had tested positive for coronavirus.

On Thursday, a group of more than 700 advocates, civilrights groups and religious organizations sent a letter to ICE's acting director calling on the agency to release all its detainees. Releasing all immigrants in detention would be unprecedented and would run counter to the Trump administration's hard line on enforcement.

–Alejandro Lazo

February by asking police to cite and release low-level offenders and by releasing inmates with fewer than 30 days left on their sentences. Arrests in the county-the most populous in the U.S.—have dropped to 60 a day from around 300, he said.

cal risk."

said.

"Our population within the jail is a vulnerable population just by virtue of who they are and where they're located," Sheriff Villanueva said at a Monday press conference. "We're protecting that population from potential exposure."

equipment, and the service to treat people?" asked Steve J. Martin, a corrections consulthere are more inmates than tant who serves as a federal monitor for the Rikers Island jail complex in New York City. that is at greater risk. The "And if they don't, are they gostate and federal prisons ing to send those folks out to reached 164,000 in 2016, more hospitals or where they can get adequate health care?

> To prevent the virus from spreading, the Centers for Disease Control and Prevention

suggests separating symptomatic individuals. In correctional facilities, however, that can be "virtually impossible," according to Homer Venters, former chief medical officer for New York City correctional health services.

Many jails and prisons already need to separate numerous types of inmates, he noted, including pretrial and sentenced individuals, men and

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P2JW083000-6-A00400-17FFF5178F

By Jacob M. Schlesinger

As Congress rushes to bail

out industries slammed by the

coronavirus pandemic, President Trump has joined Demo-

cratic lawmakers demanding

Rivals Agree Aid

Isn't for Buybacks

## THE CORONAVIRUS PANDEMIC



The president said invoking the Defense Production Act wasn't yet necessary, though he said 'we may have to use it someplace along the chain.'

# No Mandate to Make Masks

President says manufacturers on own are increasing output of medical supplies

By Andrew Restuccia AND REBECCA BALLHAUS

WASHINGTON-President Trump continued to resist calls to use a federal wartime law to mandate the production of additional medical supplies because he said he is concerned about nationalizing American businesses, as governors and health officials face shortages of masks, ventilators and other crucial equipment.

'We're a country not based on nationalizing our business," Mr. Trump said at a press briefing on Sunday. "The concept of nationalizing our businesses is not a good con-

He said sufficient numbers of companies were volunteering to manufacture masks and other protective gear, so invoking the Defense Production Act wasn't yet necessary, though he said "we may have to use it someplace along the

"If you go the nationaliza- ing the law. Administration of-

tion route, we're going to tell ficials said they see the threat the company to make a ventilator—they don't even know what a ventilator is," Mr. Trump said.

The Korean War-era law gives the president powers to require and provide incentives to businesses to produce goods tied to national defense, as well as control the distribution of those products. It doesn't authorize the government to take ownership of companies or industries.

In many cases, the federal law would allow the govern-

The law doesn't authorize the government to take ownership.

ment to direct companies to prioritize the production of equipment such as masks. It is less clear that the government would be able to direct companies to make a product it doesn't already produce or have the capability to produce.

Mr. Trump this month issued an executive order invok-

of using the law as leverage in negotiating with companies to produce more needed products. General Motors Co. and other companies have announced plans to manufacture more ventilators, among other

Government to nationalize the

medical supply chain," Mr. Cuomo tweeted Sunday. "Cur-

rently, states are competing

against other states for sup-

federal government has dis-

tributed hundreds of thou-

sands of respirators, masks,

surgical gowns and other

medical equipment to New

York, California and Washing-

ton-three states hit hard by

eral government also is coor-

dinating with the U.S. Army

Corps of Engineers and Fed-

eral Emergency Management Agency to build medical sta-

tions and care sites with thou-

sands of beds in those states.

He added that the federal gov-

ernment will cover the cost of

National Guard troops in

sense, we're at war," Mr.

"We're at war—in a true

The president also said he

was considering an executive

order that would release el-

derly nonviolent offenders

from federal prisons. "We are

actually looking at that, yes,'

In addition, Mr. Trump on

He also announced that the

USNS Mercy, a hospital ship,

will be deployed off the coast

of Los Angeles. FEMA Admin-

istrator Peter Gaynor said it

would be in place within a

working to return Americans

who are stranded in Honduras

and Peru due to coronavirus-

contributed to this article.

—Paul Kiernan

related travel restrictions.

Mr. Trump said the U.S. is

Sunday approved a disaster assistance request from Cali-

The president said the fed-

Mr. Trump said Sunday the

plies."

the outbreak.

states.

Trump said.

he said.

White House trade adviser Peter Navarro said the administration is using the president's authorities under the federal Defense Production Act to help companies repurpose manufacturing facilities to produce more medical supplies. But he said that they are stepping up voluntarily.

We're getting what we need without putting the heavy hand of government down," Mr. Navarro said. But that could change. "There will be possible cases down the road," he said.

Governors and health officials have urged Mr. Trump to mandate more production of medical supplies, arguing they are facing widespread short-

New York Gov. Andrew Cuomo called on President Trump to order manufacturers via the Defense Production Act to churn out gowns, masks, gloves and ventilators.

"I'm calling on the Federal

corporate aid include new restrictions on the stock buybacks that executives use to support the value of their "I am strongly recommending a buyback exclusion," Mr. Trump said on Saturday, laying

out his views on terms for government business assistance. "You can't take a billion dollars of the money and just buy back vour stock and increase the value." The president's comments

were strikingly similar to a pledge made the day before by his likely Democratic challenger in the November election, former Vice President Joe Biden. At his own briefing on Friday, explaining how he would handle the mounting economic calamity, Mr. Biden said companies getting federal money would "have to focus on making sure that any aid they get does not go to buying back their stock."

The rare moment of unity between the two frequently feuding politicians is the culmination of a yearslong campaign among progressive and populist politicians and academics to vilify the common-share buyback as a symbol of a corporate excess and a broken economy. In a buyback, a corporation borrows money or uses spare cash to purchase its own stock, reducing the number of shares outstanding and supporting the price or even driving it up.

Corporations justify such repurchases, a big business for Wall Street, as a way both to reward investors and incentivize executives paid in stock. But critics say cash used in these transactions may leave corporations unprepared to face emergencies such as the coronavirus pandemic. That opens them up to criticism that they prioritized share price-and executive rewards—over prudence and now need to be bailed out.

For now, it isn't clear if the sprawling emergency economic package racing through Congress will include such terms. The two top Democrats on Capitol Hill—House Speaker Nancy Pelosi (D., Calif.) and Senate Minority Leader Schumer (D., N.Y.)—have demanded business aid be conditioned upon buyback curbs. But such limits weren't included in the original draft legislation unveiled by Senate Majority Leader Mitch McConnell (R., Ky.), who kicked off the process.

And despite Mr. Trump's backing, most Republican policy makers and economists remain leery of imposing such government limits on how private companies manage their finances.

Many Democratic lawmakers said the tax cuts mainly benefited shareholders without spurring investment or lifting wages, as backers said they would.



Sen. Rand Paul (R., Ky.) became the first senator to test positive for the virus. Two others he had contact with went into isolation.

## Partisan $Clash\ Stalls$ The other \$425 billion could be used to make loans directly Virus Bill

Continued from Page One the plan. Senate Majority Leader Mitch McConnell said a second procedural vote would be held at 9:45 a.m. Monday, but Minority Leader Chuck Schumer (D., N.Y.) objected, effectively blocking it until noon.

Mr. McConnell accused Mr. Schumer of rattling the markets further. Mr. Schumer said he wanted to give both sides time to reach a deal.

House Speaker Nancy Pelosi said House Democrats planned to introduce their own legislation, saying there were big differences between what her cauwanted and what Republican were proposing. Should the two chambers each attempt to pass their own legislation first and then negotiate, it could significantly lengthen the time it takes Congress to pass a bill.

Democrats objected to Republicans' plan to provide \$500 billion for the Treasury secretary to make loans, loan guarantees or investments to support businesses, possibly along with states or municipalities. The sum is more than twice as much as Treasury had requested. Democrats also want to add

protections for workers, to expand unemployment insurance to four months at 100% pay and increase aid to hospitals, state and local governments.

"They're trying to advance a proposal that would be great for giant corporations and leave everyone else behind," said Sen. Elizabeth Warren (D., Mass.).

A big portion of the fundscurrently estimated at \$75 billion-would go to distressed companies, including in the areas of travel and critical infrastructure, according to a draft of the legislation reviewed by The Wall Street Journal. In addition, air carriers and aviation suppliers would be eligible to receive funds, potentially benefiting corporations such as Boeing Co., Delta Air Lines Inc., United Airlines Holdings Inc. and General Electric Co.

or to backstop any losses in lending facilities launched or expanded by the Federal Reserve.

President Trump approved on Friday a major disaster declaration for New York, unlocking federal funding and assistance for the strained state. He said Sunday that he approved the same declaration for California and Washington.

"Our goal is to get relief to Americans as quickly as possible," Mr. Trump said.

As lawmakers huddled on Capitol Hill, state leaders ordered residents to stay home as much as possible, sought medical supplies and moved to expand hospital capacity to prepare for an influx of patients.

New York state has emerged as the center of the crisis in the U.S., with 15,777 confirmed cases reported Sunday—about 4.000 infections more than a day earlier and thousands more than any other state.

The number of deaths worldwide from Covid-19 reached 14.641 as of Sunday, more than 400 of them in the U.S., according to data compiled by Johns Hopkins University.

New York Gov. Andrew Cuomo asked the federal government to nationalize the acquisition of ventilators and other medical supplies as states compete with each other for a scarcity of resources, leading to price gouging.

"This is just an impossible situation to manage," Mr. Cuomo said. "If we don't get the equipment, we can lose lives that we could've otherwise saved if we had the right equipment."

Mr. Cuomo said the state was moving to expand hospital capacity, ordering the U.S. Army Corps of Engineers to erect four temporary hospitals in facilities in Long Island, Westchester County and Manhattan.

Hospitals in New York City have felt the strain of the rising number of patients, with equipment shortages forcing doctors to wear the same masks for as long as weeks and emergencyroom physicians to reuse gowns.

—Paul Kiernan and Ted Mann contributed to this article.

## Coronavirus Daily Update

As of 9:43 p.m. EDT March 22

98,333

33,276 417
U.S. cases U.S. deaths

336,000

14,641

Source: Johns Hopkins Center for Systems Science and Engineering

# Companies Boost Their Lobbying

By Brody Mullins AND TED MANN

WASHINGTON-From Boeing Co. to Verizon Communications, scores of U.S. companies and industries are furiously lobbying Congress to add measures to the Trump administration's massive stimulus package to deal with the economic fallout of the coronavirus pandemic, some of which address issues that long predate the outbreak.

Lobbyists for restaurants are pressing Congress to include new caps on the transaction fees that stores must pay credit-card companies like Visa Inc. and Mastercard Inc. on consumer purchases.

The health-insurance lobby has asked lawmakers to add a proposal that would limit how much hospitals and doctors can charge patients for testing and treatment of coronavirus. And the fishing industry is pushing for changes in immigration laws to help ensure it can handle next season's salmon catch.

The coronavirus pandemic has led to thousands of deaths and hospitalizations around the globe and dealt a crushing blow to the U.S. economy.

Senators have been trying to hammer out a stimulus package that could top \$1.3 trillion.



For some lobbyists, the package provides an opportunity to score wins for corporate clients and breathe new life into stalled policy proposals unrelated to the crisis.

That lobbying approach has taken hold in Washington in recent years as Congress has approved fewer major pieces of legislation.

Each year, industry advocates try to add measures to unrelated bills that have momentum, such as must-pass annual bills to fund the federal government. Now lobbyists see the stimulus bill as an ideal piece of legislation on which to hitch a ride.

"At a time when Americans are looking for Congress to act swiftly and specifically on the coronavirus, it is absurd that special interests are using this crisis to get their unrelated pet projects included," said David Williams, the president of the Taxpayer Protection Alliance, a nonpartisan outfit that monitors federal spending.

To be sure, lobbyists for

many companies are pushing for measures aimed at corporate survival during a historic economic downturn: injections of government cash, tax credits and deregulations aimed at keeping their clients afloat through the pandemic.

The U.S. seafood industry has asked Congress for a temporary change in immigration rules to ensure they have enough workers to process salmon and other fish this summer in their Alaskan processing plants..

## THE CORONAVIRUS PANDEMIC

# Millions of Jobs at Risk In Downturn

By Josh Mitchell AND JOSH ZUMBRUN

The fallout from the coronavirus outbreak is expected to have a significant negative impact on U.S. economic prospects, with predictions emerging for losses of up to five million jobs this year and a drop in economic output of as much as \$1.5 trillion.

A recession is now all but certain, according to a Wall Street Journal survey of 34 economists that projects a downturn that would last months at least, and would in some ways rival—and possibly even surpass-the severity of the 2007-09 slump triggered by the housing collapse and subprime loan debacle.

"This shock is very big," said Bruce Kasman, head of economic research at JPMorgan, "You are going to see in the next two months the consequences of the actions taken in terms of economic activity. That set of trade-offs is not really clear in policy makers' minds right now."

Economic forecasts, which remained upbeat just two weeks ago, suddenly turned bleak as it became clear a pandemic, one that started in Asia and spread to Europe, would now affect American life far more than originally understood.

The extent of the expected downturn remains unclear to many economists, given uncertainty about the trajectory of the pandemic, extreme volatility in financial markets, restrictions on economic activity of unknown duration and a government response that is likely to continue to change in the weeks and months ahead.

Mr. Kasman expects U.S. gross domestic product will fall by 1.8% this year. Before the outbreak, he had projected output to grow 1.5%. That would translate into \$700 billion in lost output.

The economy, Mr. Kasman believes, will lose between 7 million and 8 million jobs this spring, though some of those will likely come back if, as he expects, the economy rebounds in the second half of the year.

Sung Won Sohn, a business economist at Loyola Marymount University, expects the coronavirus to cost \$592 billion in output, after inflation. and a loss of nearly 5.2 million jobs in 2020, compared with his pre-virus forecast.

Goldman Sachs projects U.S. output to fall 3.1% this year and unemployment to soar to 9% from the current 3.5%. Unemployment last peaked at 10% in October 2009, after the housing and financial collapse. Economists at Goldman estimate U.S. jobless claims—a proxy for layoffs—increased by roughly 2 million just this

"A public health emergency is morphing into an economic emergency," said David Shulman of the UCLA Anderson School of Management. "The basic outlines of the economy will be determined more by biology than by economics."

Some industries might actually be forced to hire workers as buying patterns shift. Amazon.com Inc., for example, plans to hire 100,000 more employees in the U.S. as



Shoppers wait outside a supermarket in Las Vegas that reserves the first hour of Mondays, Wednesdays and Fridays for senior citizens

it boosts online deliveries. Walmart Inc. said it would pay cash bonuses totaling \$550 million to its hourly workers and hire 150,000 temporary staffers.

And some believe an unprecedented government relief effort could still avoid some of the worst-case scenarios. In the median "optimistic" forecast, economists still see an extremely sharp contraction in the second quarter, but a recovery apparent by the third quarter of 2020, with 1.7% growth that quarter and 3.1% growth in the fourth quarter.

Under this scenario, job growth could recover to 15,000 in the third quarter and 175.000 in the fourth quarter. Unemployment, they said, could still be contained at

For most economists, their optimistic scenario isn't a "Vshaped recovery" with a sharp collapse followed by an extremely rapid rebound, but a scenario in which the contrac-

## Wide-Ranging Forecasts

Economists' median forecasts for optimistic, baseline and pessimistic scenarios as the coronavirus outbreak unfolds.

**Unemployment rate** Real GDP (annualized growth rate)

Source: Wall Street Journal survey of 34 economists March 18-19

"Things look so gloomy right now that perhaps we should be grateful if we can get out of this health crisis with a brief recession," said Bernard Baumohl of the Economic Outlook Group.

"You just cannot rule out the prospect of a longer, more destructive depression," said Mr. Baumohl. "What is clear is

that we are in a race against

The pessimistic scenario, according to the Journal survey, would be a sharp and long-lasting contraction. The median pessimistic forecast sees GDP decreasing by 10% in the second quarter, falling another 3.8% in the third quarter and dropping 0.5% in the fourth quarter. It projects the

-750 -500 -250 unemployment rate climbing

continuously, reaching about

Monthly change in nonfarm

payrolls, in thousands

Optimistic

Pessimistic

O Baseline

7.4% by the end of the year. Job losses, under this scenario, could approach 800,000 a month in the second quarter, followed by 300,000 a month in the third quarter and 40,000 a month in the fourth

-Anthony DeBarros contributed to this article.

# Frail Farm Economy Takes New Hit Big Firms The new coronavirus is dealing another blow to the struggling U.S. agricultural sector, driving down crop and A Cushion

livestock prices and threatening labor shortages for farms.

> By Jacob Bunge. Kirk Maltais and Jesse Newman

Even as consumers clear food staples from supermarket shelves, Midwestern farmers' prospects have dimmed. Agricultural futures on the Chicago Board of Trade have been on a slide since Feb. 24, when coronavirus concerns began to weigh on U.S. stock markets. Corn futures have shed nearly 10%, wheat futures have fallen nearly 2%, and soybean futures have dropped over 4%.

In U.S. Plains states, prices offered for ranchers' cattle have dropped over the past two weeks, reflecting selling by investment funds and fears that consumers will eat less beef as they avoid restaurants-and that meatpacking plants could suffer staffing shortages. Longer term, the declines reflect worries that after consumers' current rush to stock pantries, an economic downturn will limit spending and pressure prices.

Produce farms and orchards across the U.S. fear disruption after the Trump administration restricted immigration from Mexico, threatening a critical labor source. Dairy prices have fallen, with less milk flowing to school cafeterias and traffic expected to drop off for cheese-buying burger chains and pizzerias.

"The stress out there is really high-level for our farmers," said Zippy Duvall, president of the American Farm Bureau Federation.

Virus-driven disruptions could derail what economists had expected to be a more stable year for farmers, following years of sagging prices and trade disputes that cut into exports. The U.S. Department of Agriculture in February forecast that net U.S. farm income would rise 3.3% this year to \$96.7 billion, lifted by higher prices for livestock and dairy commodities. Even at those levels, U.S. net farm income would remain 30.5% below its 2013 peak.

The coronavirus' spread through the U.S. has upended



that view. Futures prices for lean hogs have fallen 12% in the past two weeks, while live cattle has dropped nearly 13%.

Near Minneapolis, Kan., feedlot manager Perry Owens watched cattle prices drop by \$250 to \$300 a head over the past few weeks. Offers for cattle this week were so low that some ranchers aren't bothering to take their cattle to market, and some livestock sales scheduled in Kansas, Texas and elsewhere were called off, he said.

#### The disruptions could derail what was to be a more stable year for farmers.

Falling prices are likely to push more ranchers out of the long-struggling cattle business, Mr. Owens said. "We were in a disaster before, now it's catastrophic."

Tyson Foods Inc., the largest U.S. meat processor by sales, said it plans to pay a premium on cattle slaughtered next week, to help feedlots through the price drop.

Dairy farmers face the prospect of milk prices collapsing by as much as 25% this year, falling to levels last seen during the 2008 financial crisis, said Tom Bailey, a senior analyst for agricultural lender Rabobank. School shutdowns will affect the approximately 7% of fluid milk consumed by school lunch programs, he said, and a drop-off in restaurant activity will cut into the 40% of cheese sold to food service outlets. More raw milk is made into cheese than any other dairy product in the U.S.

Land O'Lakes Inc. this month notified dairy farmers that the coronavirus could disrupt its processing plants and transport networks. If the Minnesota-based cooperative isn't able to market milk normally, Land O'Lakes said, it will begin enforcing policies that charge farmers for producing more milk than their allotted amount, to reduce potential oversupply. A spokeswoman said the message to farmers was a precautionary measure, and that the cooperative's plants are operating normally.

"We're doing a lot of fingercrossing," said Dan Siemers, a dairy farmer in Newton, Wis., who sells milk to Land O'Lakes. Generally high dairy supplies make it harder for farmers to market their milk, he said. "There are not a lot of other places to go with it if your buyer can't take it."

While many food companies have seen voracious demand for their products in recent days, agriculture executives say the surge may not represent a fundamental shift in consumers' overall food purchasing as many shy away from restaurants.

Coronavirus' spread, combined with last week's oil-market collapse, is ratcheting up pressure on U.S. ethanol producers, an industry that represents almost half of all U.S. corn consumption. At current prices, market participants fear that ethanol producers may be losing 25 to 45 cents a gallon of ethanol produced, raising the risk that plants slow pro-

duction or close altogether. Farmers face possible labor shortages after the administration said it would stop processing some visas for U.S. entry in offices across Mexico. The State Department says it will keep processing visas for seasonal workers, though the extent of the program remains unclear. The U.S. and Mexico on Friday also agreed to limit travel across their border, while allowing workers to continue crossing.

"We're in a terrible fix if they shut the Mexican border off," said Gregg Halverson, chairman of Black Gold Farms, one of the biggest U.S. potato producers with farms located around the country. Mr. Halverson said his sweet potatogrowing operations rely heavily on immigrants holding temporary H2A farm-work visas.

Continued from Page One small companies, which often operate with little margin for a crisis. Large companies typically have more means—diverse assets, cash, longtime relationships with investors and banks—to weather turmoil. They are also acting with an eve on the court of public opinion.

Just over half—54%—of employers said they would continue for some period of time to pay hourly staff whose workplaces shut down due to the virus, and 51% will pay people who stay home because of cold and flu symptoms, according to a survey of 805 large companies polled last week by consulting firm Willis Towers Watson. About onethird said they would pay employees who need to stay home because of their children's school closures.

Business leaders today are balancing their wish to be perceived as good corporate citizens and retain connections with employees for a time of economic rebound, and grim business projections from the virus. A misstep in either direction risks goodwill or survival.

The pandemic in some ways is shaping up to be a natural experiment in stakeholder capitalism, the vision laid out last August by the Business Roundtable. The association, which includes chief executives of some of the nation's largest companies, adopted a definition of corporate purpose that promotes "an economy that serves all Americans," jettisoning its prior focus on shareholders above all others.

The statement of purpose, signed by more than 180 CEOs, specifically mentions employees as stakeholders.

Joshua Bolten, the president and CEO of the Business Roundtable, said Sunday that in the long term, stakeholders' interests are congruent. If emplovees, customers, suppliers and communities can't be supported, "there will be no business for shareholders to own when we come out of this crisis." he said.

But even very large enterprises have limits, he said. "The decisions some of them are

currently making actually have to do with the survival of the enterprise.'

At **Waste Management** Inc., the big trash and recycling collector, chief executive Jim Fish told employees the company will continue to pay them for 40-hour workweeks regardless of whether their hours are cut or services are curtailed.

"What I did not want is to have any of our 45,000 teammates worry about how am I going to pay my rent or feed my family," he said in an interview. "We know it will be costly for the company but that doesn't matter.'

Mr. Fish said he made the decision a couple of weeks ago and ran it by his senior leadership team and board of directors. He said the policy will continue indefinitely. "I sure hope this thing doesn't go on for two years. But honestly if it did, I'd tell you that 40-hour guarantee becomes increasingly valuable the farther out you

Replacing people is expensive, running up to \$20,000 when a Waste Management

#### Large companies typically have more means to weather turmoil.

employee quits. "So purely from an economic standpoint, I'd still tell you it's the right thing to do," he said.

A few days ago, he also sent an email to 11 CEOs he knows, asking them to do something to help small businesses, an important customer base for large enterprises. He said several had already responded with agree-

Many companies extending pay or benefits are putting endpoints in place, raising questions of whether the measures will outlast the virus's impact. According to the Willis Towers Watson survey, the typical organization guaranteeing pay through the disruptions is capping compensation at 14 days.

At first, extending pay and sick leave was the right business strategy, "particularly because it bought you a bunch of goodwill," said Nicholas Bloom, an economist at Stanford University's Graduate School of Business. "As we go further into March, CEOs are facing a grimmer reality."

# Apparently Healthy Feed Spread

**A6** | Monday, March 23, 2020

Continued from Page One the sometimes-deadly virus and might be inadvertently helping it spread.

U.S. testing guidelines focus largely on people already sick. But without more widespread testing to include people who have no symptoms, it isn't possible to know how many infected people there really are in the U.S., experts said.

Such information could help decisions about where to deploy needed medical supplies and health-care workers, or which people to isolate-and could stem some of the economic and psychological fallout from the pandemic, infectiousdisease experts said.

Knowing who is carryingeven if they aren't showing symptoms-would allow governments to replace broad shelter-in-place policies with ones targeting those who have tested positive or have come in contact with someone who has, experts said.

"It's a more surgical or precise way to implement these isolation policies," said Mauricio Santillana, a Harvard Medical School assistant professor who specializes in disease modeling. "At this point, we don't know the size of the iceberg we're sitting on."

Because of limited capabili-



Rudy Gobert of the Utah Jazz, number 27 in blue, with the Boston Celtics' Marcus Smart on March 6. Both have tested positive for the virus.

ties, U.S. public-health officials have advised against testing people who don't show symptoms. NBA teams were heavily criticized last week for securing private tests.

So-called silent transmission isn't uncommon for respiratory viruses like the flu, scientists said. Recent data show this virus is no different.

Silent transmission can occur when the time it takes for someone to become infectious is shorter than the time it takes for someone to feel or look ill.

Researchers have posted to open-access site MedRxiv their own recent studies that suggest people can be infectious sometimes days before they show symptoms of Covid-19. Some reports suggest some carriers never experience any.

Officials observed a similar trend among people aboard the Diamond Princess cruise in February. Of the 634 passengers and crew members on the cruise who tested positive for the virus, slightly more than half didn't have symptoms, officials said at the time.

"That's what's really driving the spread of this virus, all this silent or stealth transmission," said Jeffrey Shaman, professor of environmental sciences at Columbia University's Mailman School of Public Health.

His group published on March 16 a peer-reviewed paper in the journal Science showing that early in China's outbreak, 86% of infections went undetected. The paper also noted that because they were so numerous, stealth infections were the source for about 80% of known ones.

Likewise, the number of cases in the U.S. is also likely to be higher than the official toll, said Dr. Shaman and other experts. How much higher won't be known unless public-health authorities expand testing, including to people who don't show any symptoms.

Without more testing data,

experts wouldn't be able to catch cases that might have

gone undetected, gain a more

complete picture of the spread

and take steps to control it.

'The people who are symptomatic are going to announce themselves," said Raphael Viscidi, pediatrics professor and virologist at the Johns Hopkins School of Medicine. If someone looks healthy and normal but isn't, he said, that is "much, much harder to avoid."

Symptoms in many Covid-19 cases are mild, so people carry on normal activities, experts said. That is a big problem because they can infect people who are likely to end up in the

hospital, they said. The proportion of people needing intense medical care is low, but because the virus is new and humans don't have a significant natural immunity, that small proportion translates into big numbers that are overwhelming the health-care system.

Public-health authorities leading the U.S. response have acknowledged the role of asymptomatic carriers, which they said underscores the need for social-distancing measures.

"Certainly there is some degree of asymptomatic transmissibility," Anthony Fauci, the director of the National Institute of Allergy and Infectious Diseases, said Friday. "It's still not quite clear exactly what that is. But when people focus on that, I think they take their eye off the real ball, which is the things you do will mitigate against getting infected."

Six weeks before Mr. Gobert's positive test shook the NBA, a 64-year-old woman in Nianjing, China, went to the hospital and tested positive for the novel coronavirus. Three days earlier, she had developed a fever and a cough, symptoms of Covid-19, according to a case study uploaded to MedRxiv.

The staff also tested her husband, son and daughter-in-law. Her son and daughter-in-law tested positive. They hadn't been in contact with any sick people, and neither had the 64-year-old, who ended up in intensive care with severe pneumonia.

Her husband had no visible symptoms, but he, too, tested positive. In January, he had traveled to Hubei province, where the pandemic originated.

## CEOs Face Giant Challenge

Continued from Page One their staff for the first time, are ramping up their communication with employees to address the confusion, anxiety and isolation setting in among the rank-and-file. They are sending daily companywide updates, hosting virtual town halls and sharing personal photos and stories from home.

Bosses like Cisco Systems Inc.'s Chuck Robbins aim to offer reassurance and replicate some of the human connection of the office water cooler. The networking-gear giant's CEO now leads a weekly all-company videoconference from his home office near San Francisco with Cisco's chief people officer. Medical professionals are invited to answer coronavirus-related questions.

In Thursday's session, employees asked how to handle racing "what if?" thoughts. Some wondered whether it was safe to go for a walk or swim.

## Always at work

Cisco employee Joie Healy, 46, said a challenge of working at home is that it can be tempting to work continuously. "I could sit in front of my computer the whole time," she said. Ms. Healy works in front of a window and can see joggers and others passing outside—a reminder to take breaks, something she says the company has encouraged. "The world is not going to come to an end if we take a couple of hours for ourselves."

CEOs including Arne Sorenson of Marriott International Inc. are turning to public messages or videos to discuss the damage to their companies. "I have never had a more difficult moment than this one," Mr. Sorenson said in a video in which he choked up as he announced layoffs.

"Our team was a bit concerned about using a video message today because of my new bald look," said Mr. Sorenson in the video; he was diagnosed with pancreatic cancer last year. The drop in hotel bookings caused by the virus has been worse than 9/11 and the 2008 financial crisis combined, he said. Mr. Sorenson said he would forfeit his salary and other executives would take a 50% pay cut as Marriott closes hotels and furloughs what it expects to be tens of thousands.

At Keurig Dr Pepper Inc., demand has surged as consumers stock up on its bottled water, soda, juice and single-serve coffee. That has increased the workload for its 25.000 employees, most of whom work in manufacturing and distribution, and has created a balancing act for their housebound leader.

CEO Bob Gamgort hasn't visited the company's Massachusetts or Texas headquarters in a week. He is leading the troops from home in suburban New Jersey, where he drove after his two adult sons decamped there from New York City. He is now trying to rally his workforce and minimize their risks.

"We need to keep up our supply" to meet the increased demand "by keeping our employees safe," Mr. Gamgort said. "We also need to make sure that they're feeling comfortable, that they're taken care of, they feel like we have their back, so that they're comfortable coming in to work.'

In an email last Monday, he and his senior leadership told staff that a distribution-center employee had tested positive for the coronavirus. Co-workers who had come in contact with the employee were in self-quarantine with full pay. The company is sanitizing its plants more frequently and has limited the number of workers who interact with one another by closing break rooms and mandating that shifts don't overlap.

## Severe effects

Some research suggests short-term effects of remote work can be severe. Brad Bell, a professor who runs the Cornell University's Center for Advanced Human Resource Studies, recently conducted research to figure out the effects, tracking 50 remote workers for two years. Three months after moving into a remote work arrangement, employees reported higher levels of work-family conflict than before.

The implication, Prof. Bell said: "If companies adopt work from home as a short-term. emergency action, it is likely that employees will not have the necessary time to adjust and will experience a number of challenges.'

Bayard Winthrop, CEO of American Giant Inc., a San Francisco seller of made-in-America apparel, now leads a daily all-company call so people can hear one another's voices and he can check in on how they are faring. He begins by updating people on the business, but many employees discuss personal situations and anxieties. "It was more personal than it was work, frankly, people saying: 'I'm nervous about this: I'm nervous about that," said Mr. Winthrop, 50. "That human part of it is super, super important."

A father of three young children, he has begun sneaking out to his Tacoma pickup truck for some calls: "In my previous call, my 3-year-old was yelling at me that she didn't have water for her watercolors.

At Textio Inc., a Seattle technology company that sent staff home about three weeks ago, CEO Kieran Snyder now often spends the first five minutes of meetings asking employees to describe their states of mind in one or two words. In a meeting





American Giant CEO Bayard Winthrop working in his vehicle with his dog, Dash, top. Above, Textio CEO Kieran Snyder managing at home. "I'm trying to check in on people," she says.

has three children home from school, tried to create a more open discussion by volunteering she was nervous.

"I'm running a company, but I'm also running an elementary school," she joked in an interview. "It's very likely this call will get interrupted to teach long division."

Earlier this week, Ms. Snyder called a senior engineeringteam member at 11 p.m. to see how she was doing. She knew the employee had three children under age 7 and a working spouse. They talked about managing a family with a demanding job. "I'm trying to check in on people," she said.

Working from home, CEO Michael Kirban of coconut-water maker Vita Coco on Thursday hosted the company's first virtual happy hour—something of an instant coronavirus-age fixture, in which colleagues pour their own drinks and log on to chat. "It's my job to keep it as light as possible," he said. "These are really tough times. People are scared."

Julie Morgenstern, a workplace consultant in New York who advises CEOs, said she is hearing from clients who find themselves and their employees overwhelmed. "There's

don't change their clothes, they barely brush their teeth, people are skipping meals."

Workers accustomed to commuting may have anticipated gaining several hours daily but find themselves fighting the distractions of developing news and heightened emotions, as well as triaging untested hometechnology setups and what she calls "Covid tasks."

"No matter what your job is, every conversation or meeting you have with people, the first 10 minutes are lost to how you're feeling. 'Are you safe, is it OK?" Ms. Morgenstern said. "There's a lot of actual time lost to that." She has recommended clients color-code blocks in their calendar they are devoting to coronavirus to get a clearer picture of how it is affecting productivity.

Fran Caradonna, CEO of the Saint Louis Brewery LLC, which makes Schlafly beer, said she has been sending companywide emails with the subject line "Be Well." The first announced the cancellation of the brewery's annual Stout & Oyster festival, which draws 10,000 to 15,000 people.

"There was a lot of grief around that one," said Ms. Caradonna, who was spending

Wednesday, Ms. Snyder, who structure," she said. "They some days at the office and some at home. She has had one-on-one conversations with employees who have approached her offering to take a pay cut or reduction in hours if a co-worker is in greater need. Ms. Caradonna, who has 250 employees, is planning fix-up projects so she can redeploy bartenders and food servers as painters and cleaners at the company's brewpubs, which are now limited to takeout.

Jeff Dachis, CEO of One Drop, which makes a bloodsugar monitoring system for diabetics, said he is trying to communicate more empathy to his staff in companywide Slack messages. The startup has 42 employees and offices in New York and Austin, Texas. All are now working from home.

"People with kids have an extraordinary challenge," he said by phone from his Brooklyn living room, where he has set up a folding table as his desk, "because they have to school their kids and...then get work done, which there's no letup in expectation for what we have to do."

Knowing many people are cooking more, Mr. Dachis, 53, created a #whatsfordinner channel on his company's Slack workspace and posted a photo

of a partially eaten plate of steamed halibut, sauteed kale and baked sweet potato.

Andy Pray, founder of public-relations firm Praytell, learned a new coping strategy from employees who found videoconferencing and messaging apps weren't a replacement for spontaneous conversations at the office.

The 150-person firm is providing weekly all-agency business updates and has set up companywide video chats where employees can talk about anything. Praytell account strategist Emily Gaus, 24, who began working from her Chicago home more than a week ago, said several employees live-streamed themselves cleaning out the Los Angeles office refrigerator to the rest of the company. Some colleagues, she said, have used it to demonstrate how to make creative

"I never knew we needed a cable-access equivalent until we had it," said Mr. Pray, "but man has it helped lift spirits and give a needed diversion."

## **Seeking camaraderie**

CEO Sarah Kauss of S'well, a maker of stainless-steel water bottles, said her team is realiz- $\frac{S}{2}$  ing how much they need office camaraderie. "We laugh a lot,' she said, "and that doesn't all come through on video."

The company, with fewer than 100 employees, has offices in New York and London, Working from her home in Jupiter, Fla., Ms. Kauss recently shared with staff a photo of her son Hudson, nearly 2 years old, wearing a S'well hat. She is considering social events like a virtual talent show in which colleagues could introduce children or pets or play the guitar.

Administrative assistant Sherry Schwenderlauf, 46, credited her company's leadership for making it easy to work at home and said she is grateful to have a job that she can do remotely. After nearly 16 years in a Portland, Ore., accountingfirm office, she began working from home Thursday.

"I never thought as an administrative assistant, I would ever have this happen," she said. So far, the transition has been largely smooth. She communicates via Microsoft Teams and says the work during the busy tax season is getting done.

She plans to go back into her office Sunday to borrow her rolling desk chair to use at her kitchen table. She also wants to grab her mouse and wrist pad along with two succulents and office flowers she has kept alive for six years: "It's the stuff I didn't think about when I left."

Ms. Schwenderlauf said she does miss some office camaraderie. During a lunch break this week, she stepped outside and called over to a neighbor. "I chatted with her," she said, "at a safe distance, of course,"

> -Kathryn Dill and Patrick Thomas contributed to this article.

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## A Crisis Guru Juggles a Flood Of Anxious Texts



As the new coronavirus changes in how we

work, The Wall Street Journal is looking at how different people are coping with the stresses and risks.

By Sarah Krouse

Fear of illness. Anxiety over potential financial strain or job loss. Concerns about closed schools and canceled events.

These are the issues Nancy Lublin is watching pour into Crisis Text Line, the nonprofit text-messaging organization she founded in 2013 and operates with funding from techindustry billionaires and others. The volume of messages has surged during the coronavirus pandemic.

The service connects individuals via text message with volunteers who have completed an online crisis-counselor training program.

"What we need right now is physical distance and social connection," she said.

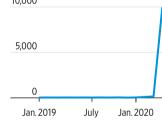
Ms. Lublin, 48, wakes before 7 a.m. to examine the number of messaging threads volunteers completed the day before. On Tuesday, for instance, about 1,200 counselors at the organization participated in 6,362 text conversations in the U.S. Roughly half of those messages included the word "virus."

"We are in a surge. The difference is I don't have surge pricing to incentivize my drivers," she said. "When it's surge time, there's more people in pain and that's when they come running.'

Crisis Text Line is used to high volumes, having handled 141.8 million text messages since it began. The extra load, however, has Ms. Lublin working to double texting capacity in the next three weeks. She is adding volunteer-training slots and recruiting more volunteer coaches

## Virus Anxiety

The number of text-message conversations conducted by crisis-counseling firm that mention the word "virus" 10,000



Note: Current month based on projections from data collected through March 19

Ms. Lublin had been participating in conversations with people in need each day, juggling four or more live threads at a time. Now her time is primarily spent communicating with her roughly 100-person staff on Slack, shared Google spaces and phone calls. The organization now offers a 15minute meditation session for its staff at noon each day.

To help people cope with virus-related stress, volunteers try to validate the pain and anxiety on the other end of the text. They ask questions like "What things can you do tomorrow to stay strong?" And they focus on short, immediate time frames.

"Shrink it into something that feels more manageable,' Ms. Lublin says. "It's not a script and it's not a robot; it's an empathetic human being."

Crisis Text Line's users are typically under 17 years old, but their age has started to skew older as the coronavirus outbreak spreads.

"The kids are all right. The teenagers are less worried or less panicked than the adults," Ms. Lublin said. Yet about 80% of the users who mention the word "virus" talk about feeling anxious, she said.

The virus-related anxiety in text-message conversations mirrors places where cases have swelled and where schools and workplaces are shut down, she said. The organization has also seen an increase in activity from Asian texters who say they are being bullied.

"If the first wave is anxiety, we are watching for a potential second wave that could possibly be child abuse, domestic violence, substance abuse. The side effects of being quarantined," Ms. Lublin

Ms. Lublin's life since the coronavirus prompted remote work, "is spent without socks and shoes and pants optional," she joked. "Although I am wearing lipstick and today I decided to wear hoops.



Nancy Lublin, the founder of **Crisis Text Line** 

A workman cleans the Capitol in Washington, D.C. Many janitors lack paid sick days, fanning their worries about falling ill as the work become riskier.

# Janitors Take Front Lines, Adding Danger for Same Pay

By Lauren Weber AND CHIP CUTTER

As fears of the new coronavirus's spread have grown, so has the burden placed on janitors and cleaners, some of the lowest paid workers in the U.S. Some say they are anxious

about exposure to the virus as they clean the toilets, kitchens and surfaces touched by dozens or hundreds of people a day in offices, stores and restaurants. Many lack paid sick days, according to workers and employers, fanning their worries about falling ill. They say their work is now harder and riskier than before, yet the pay often remains the same.

Yancy Betterly, a 45-yearold owner of a small janitorial firm based near Orlando, Fla., cleans office buildings, outpatient-care clinics and other facilities. He says the outbreak makes his crews' job more dif-

Many clients have called and asked him to step up cleaning beyond what is spelled out in his contracts, he says. Some want crews to wipe down hundreds of desks or phones nightly. Others ask if he's disinfected the copy machine. The extra work can add hours to each job, although Mr. Betterly said he is often not getting paid more, because he works under existing cleaning contracts.

He says he wants to give clients the service they expect and doesn't feel that he has the leverage to push back on the extra hours or potential

At the heart of Gen. Berger's

plan is the establishment of na-

val expeditionary units—what

the Marines call "littoral regi-

ments"-whose mission would

be to take on the Chinese navv.

the regiments would disperse

small teams of Marines, who

would rush in sleek landing

craft to the tiny islands that

dot the South and East China

Seas, according to Gen. Berger

and other senior Marine offi-

cers. Armed with sensor-laden

drones that operate in the air,

on the sea and underwater, the

Marines would target Chinese

If a confrontation loomed.

the Central Command.

exposure. "We are the bottom bacterial lotion. rung," said Mr. Betterly, who says he can't afford health insurance or paid sick time for himself or his workers. "We are an afterthought of an afterthought. Nobody really talks about the janitors."

Tom Buiocchi, chief executive of ServiceChannel, a software provider that helps large companies order cleaning and maintenance services, says that when companies ask for cleaning services above what is spelled out in contracts, they should also pay more. Cleaning companies work to maintain multiyear relationships with customers, so if those clients ask for additional cleaning, "you do it, and you do it for a price," Mr. Buiocchi said.

The median wage for the nation's 2.2 million janitors and cleaners was \$12.55 an hour in May 2018, according to the latest federal statistics. It was \$11.43 an hour for the nearly one million maids and housekeepers.

Elsa Romero, 56, is a janitor at the Miami Tower, among the tallest skyscrapers in Florida, where she works from 6 p.m. to 11 p.m. weekdays for \$9 an hour. She said she cleans bathrooms, offices and office kitchens, encountering dirty tissues and other materials with bodily fluids.

Since the scope of the virus's spread has become clearer, her employer, an outsourced cleaning company called SFM Services Inc., has reminded staff to wear gloves, wash their hands and use anti-

It hasn't extended paid sick days to employees, said Ms. Romero, who takes home about \$700 a month. If she feels ill, "I go to work anyway because for me to lose a day of work is very hard," she said through a Spanish translator. Ms. Romero, who is diabetic, has a health-insurance plan she purchases for \$100 a month that doesn't fully cover her insulin costs, leading her to ration.

SFM Services, based in Hialeah Gardens, Fla., declined to comment.

Before the coronavirus added new risk, Ms. Romero

Some are anxious about exposure to the virus as they clean surfaces.

had been trying to organize a union with her co-workers and assistance from the Service Employees International Union, hoping to win an increase in wages and better benefits, including sick leave.

"I'm very scared about catching the virus, but I am praying to God that nothing will happen," she said. "I live by myself. I pay all my bills. I don't want to be a burden to my daughters."

Work requests are soaring, said Mr. Buiocchi of ServiceChannel. From mid-February through early March, work

orders from health-care-related offices are up 66% compared with the same period in 2018 and 2019, he said. Requests from restaurants and grocery stores increased 53% and 18%, respectively.

Every business has a different set of concerns. "For restaurants, it's cooking equipment and eating surfaces. Shopping carts are a huge problem in grocery stores," Mr. Buiocchi said, adding that companies want more frequent cleaning with stronger chemicals.

More potent cleaning products can sometimes require workers with special training. Spaulding Decon, an environmental cleanup company in Tampa, Fla., has hired two new administrative assistants recently to handle an endless stream of calls for additional cleaning services, said CEO Laura Spaulding. Many cleaners are working

14- to 16-hour days, she said, and typically get paid \$14 to \$30 an hour, depending on their training. Her workers tend to be more highly paid because instead of doing regular housekeeping, they are responding to crime and accident scenes, such methamphetamine labs and the sites of suicides, she said. Crews already wear full protective gear and know how to handle tough jobs.

"They're looking at this like, 'This is nothing compared to what we normally do," she said, adding that the extra work—and pay—is a silver lining for them in this hard time.

## FROM PAGE ONE

## **Marines** Planning To Retool

Continued from Page One ning to spend billions of dollars on what the Pentagon projects will be intensified competition with China and Russia.

Nearly 20 years ago, U.S. troops found themselves battling militants in Iraq and Afghanistan who used suicide car bombs and roadside explosives but had no air force or heavy mechanized forces.

While the U.S. focused on the Middle East, however, China and Russia worked on systems to thwart the American ability to assemble forces near their regions and command them in battle. If war broke out, U.S. officials concluded, China could fire hundreds of missiles at U.S. and alair bases, ports and command centers throughout the Pacific, jam the U.S. military's GPS, attack satellite systems and use its air defenses to keep U.S. warplanes at bay.

A sobering assessment of how U.S. forces would match up against rivals was prepared by the Pentagon's Office of Net Assessment and the Rand Corp. and presented to then-Defense Secretary Jim Mattis in 2017.

The new strategy faces some

significant obstacles. One is that the defense budget is more likely to stay flat or contract over the next several years. Another question is whether Washington will be able to concentrate on the Chinese and Russian threats given persistent tensions with Iran. Some retired Marines cau-

tion that too heavy a focus on China may make the Corps less flexible in dealing with conflicts that might erupt in the Middle East. "I think it is a mistake to organize yourself in a way to go after a specific region," said Anthony Zinni, a retired fourstar Marine general who led

Marine Corns 10-year plan

Marine Corps 10-year plan	Current	2030
Unmanned aerial vehicle squadrons*	3	6
Missile/rocket batteries	7	21
C-130 aircraft squadrons	3 🛕	4
Fighter/attack aircraft squadrons†	18 =	18
Cannon batteries	21	5
Tank companies	7 🤻	0
Bridging companies	3	0
Infantry battalions‡	24	21
Tilt-rotor aircraft squadrons	17	14
Helicopter attack squadrons	7	5
Helicopter heavy lift squadrons	8	5

Note: Numbers are for active military and does not include reserves. \*Current squadrons are unarmed, and future squadrons will be armed and unarmed. †The number of F-35B warplanes in a Marine aircraft squadron is being reduced from 16 to 10. \*The size of Marine battalions, which currently number about 850 personnel, is being shrunk by 15%.

Source: U.S. Marine Corps

warships before they ventured into the wider Pacific.

The Marine teams would fire antiship missiles at the Chinese fleet. Targeting data also would be passed to Air Force or Navy units farther away, which would fire longer-range missiles.

To elude retaliatory blows, the Marines would hop from island to island every 48 or 72 hours, relying on amphibious ships that could be piloted remotely. Other Marine teams would operate from U.S. warships with decoy vessels nearby.

Gen. Berger said the wargames showed that the new Marine capabilities and tactics would create "a ton of problems" for the Chinese forces.

The Marines would deploy new missile batteries, drone units and amphibious ships. A major push is being made to ease the logistical burden, such as exploring the use of 3-D printing on the battlefield to make spare parts. The strategy requires deeper integration with the Navy, and Marine teams might perform other missions like refueling submarines or sub-hunting planes.

To fund the capabilities, the Marines will dispense with all tanks over the next few years, eliminate its bridge-laying companies and cut back on aviation and howitzers.

Gen. Berger said that adjusting over the next 10 to 20 years is part of the plan, and that the Marines are proceeding with "the cleared-eyed view that the threat is moving also."



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**A8** | Monday, March 23, 2020

# Italy Tightens Grip as Hundreds More Die

Most offices close and industrial production stops in a bid to stem deadliest outbreak yet

By Eric Sylvers

MILAN-Italy further tightened its nationwide quarantine, shutting down almost all industrial production and offices, as the country struggles to contain the world's deadliest coronavirus outbreak.

Only companies making what the government deems to be essential products can stay open, according to a decree published Sunday. The government is also forcing almost all private and public offices to close. Until now, some offices had stayed open and expected employees to come to work, but that will no longer be possible in most cases.

Since the outbreak started in late February, Italy has been introducing increasingly severe restrictions on everyday life. The measures are the most draconian by any Western democracy since World War II, and many European countries and parts of the U.S. have introduced similar ones as they deal with the severity of their own outbreaks.

By Sunday, Italy's total known coronavirus infections had reached 59,138 people, among whom 5,476 had died. On Sunday alone, 651 people died.



The Arch of Constantine and the Colosseum in Rome were free of visitors on Sunday, as the government intensified a nationwide quarantine.

"These are severe measures. I realize that," Prime Minister Giuseppe Conte said Saturday as he read a statement streamed live on Facebook announcing the imminent changes. "There is no alternative...This is the most difficult crisis that the country has faced since World War II."

Many large manufacturers had already closed, including Fiat Chrysler Automobiles NV,

but some smaller factories have stayed open, as previously allowed, as long as workers are a yard apart. Many union leaders had said all factories must be closed to guarantee the safety of workers

The government published the decree Sunday evening and the measures will be in place until April 3. Other measures include a ban on traveling beyond one's city limits, except for exceptional circumstances. Mr. Conte said the govern-

ment together with unions and other organizations came up with a list of products and services considered essential. The list of about 100 categories includes all parts of the food and agriculture supply chain, some types of fabrics, chemicals and cleaning products. People who can continue to work outside their homes include mechanics.

electricians and plumbers.

Supermarkets, pharmacies and newsstands will remain open, as before. Mr. Conte asked people not to buy excessively at food stores because they will stay open and continue to be stocked. Lines have formed outside supermarkets in the past week. Waiting times have varied in recent days, but jumped to more than 90 minutes at some big Milan super-

Italians were already facing severe restrictions, but Mr. Conte and other government officials have expressed increasing frustration at people's refusal to stay in their homes except for necessary outings.

Regional governments in the north, especially in Lombardy, the region most affected by the coronavirus outbreak with almost two-thirds of Italy's deaths, had been pushing Rome to tighten the restrictions.

Until now, people living in Lombardy could exercise outside as long as they remained near their home and maintained a distance from others. That will no longer be possible as all outdoor exercise has been banned in the region.

On Sunday in Milan, parks, streets, buses and trams were almost empty, a change from the previous weekend. Many of the few outside carried supermarket bags.

A normally busy avenue had almost no traffic and a police patrol stopped cars to see if people had a legitimate reason to be out.

Before the most recent restrictions, some 40% of people who were leaving their homes before the outbreak were still doing so regularly, according to officials in Lombardy who cited mobile-phone location data.

"We are doing all this because we love Italy," Mr. Conte said. "Together we can get through this."

# Merkel, Exposed to Infection, to Stay Home

By Bojan Pancevski

BERLIN-German Chancellor Angela Merkel went into self-isolation at home on Sunday after being exposed to a person infected by the new coronavirus

Ms. Merkel had received a vaccine against pneumonia on Friday by a physician who was later found to be infected with the virus, her spokesman said.

The chancellor will conduct her business from home until she receives a reliable test result, her spokesman Steffen ≸ Seibert said. On Monday, her government is set to adopt fiscal measures to help shield the economy from the fallout of the pandemic.

The health of Ms. Merkel, who is 65 years old, has been a subject of speculation in local media after she suffered several attacks of shaking in public last year, forcing her to remain seated during official appointments when the national anthem was played.

The news comes amid revelations that Germany, which has the world's fifth-highest number of Covid-19 cases, has so far experienced far fewer deaths from the disease than other countries-mainly, experts say, because the outbreak started among younger people who tend to experience milder

symptoms and rarely die. Epidemiologists cautioned that the virus was likely to spread more widely among older people in the weeks ahead and that the mortality rate would likely rise, especially if hospital intensive-care units are overwhelmed.

By Sunday, Germany had 23.921 confirmed cases and 92 deaths from the new pathogen, according to figures collected by Johns Hopkins University, putting the mortality rate from Covid-19 at nearly 0.4%, well below estimates elsewhere.

Some epidemiologists have suggested that the fact that



German Chancellor Angela Merkel prepared to address reporters about Germany's coronavirus outbreak.

#### **Germany Outlines Emergency Budget**

BERLIN-The German government is set to adopt fiscal measures of as much as €500 billion (\$534.9 billion) to help shield Europe's largest economy from the fallout of the pan-

Finance Minister Olaf Scholz, who serves as Germany's vice chancellor, will preside over the cabinet meeting on Monday that will draft an emergency budget, officials said, which could be approved by Parliament as early as Wednesday.

The new budget would al-

Germany conducts more testing

than most countries could also

contribute to the low mortality

rate, because the official num-

ber of infections is closer to the

month in the journal Nature

Medicine, estimated the death

A study published this

real figure than elsewhere.

low the government to raise borrowing to the tune of €150 billion this year and include several hundred billion euros more in loan guarantees to help businesses secure liquidity amid a coronavirus shutdown.

The package would cause the federal government to post a budget deficit for the first time since 2014, in a stark reversal of its longstanding policy of fiscal restraint.

The series of bills could even allow the German government to increase its liabilities beyond the €500 billion mark if the country's shutdown extends for longer or causes a sharper downturn than currently expected.

An estimate by Deutsche

Bank last week showed the country's gross domestic product could fall by as much as a guarter in the three months to the end of June.

The move comes after the German government last week ordered all nonessential businesses to close to help limit contagion, and large industrial companies such as the car makers Volkswagen AG and BMW AG closed their factories.

On Sunday, Chancellor Angela Merkel announced a tightening of these measures, including a ban of public gatherings of more than two people, with the exemption of families and people who live in

the same household. —Bojan Pancevski

infections likely go uncounted rate among Covid-19 patients with symptoms at 1.4% in Wuin official statistics, especially han, China, where the epiwhen people have mild or no demic originated, by late Febsymptoms. Roughly 80% of ruary. U.S. health officials have people who fall sick with the estimated an overall fatality new coronavirus are thought to be in that category. It is difficult to gauge mor-

So far, the median age of all people who have tested posimany is 47, according to the Robert Koch Institute, the country's main disease control and prevention agency. This compares with 63 for Italy, which has the highest official mortality rate in the world.

tive for coronavirus in Ger-

The initial outbreak in Germany was driven by people who visited traditional carnival parties in mid-February and others who became infected on skiing holidays in early hot spots of the disease in northern Italy and Austria, said Eva Grill, president of the German society of epidemiologists.

Several schools and kindergartens were also part of the initial outbreak, with many children contracting the disease during the winter holidays or on school trips to the affected regions, she added.

This may also explain why comparatively few Covid-19 patients have so far been admitted to hospitals, according to local authorities. In North-Rhine Westphalia, Germany's largest state and one of the worst affected, only 258 out of 4,479 infected were hospitalized by March 20, according to local authorities. Of those, 26 were in intensive-care units.

"In Germany, many old people have little social interaction, while the opposite is the case with young people, so it's therefore normal that they got infected earlier," said Karl Lauterbach, a physician and epidemiologist who is also a member of the German Parliament.

Another reason for Germany's low death level could be the large number of tests conducted in the country since the outbreak. The German doctors' association estimates that well over 200,000 coronavirus tests have been run in the past weeks.

scientists have Some pointed to the quality of health care in Germany as a possible explanation for the low mortality rates.

## WORLD WATCH

COLOMBIA

## **Prisoners Riot Over Health Conditions**

Inmates rioted across the country over what they said was the government's failure to address fears of the spread of the coronavirus in prison. Nearly two dozen inmates were killed and 83 injured in one of Colombia's most notorious jails, the Justice Ministry said.

Footage taken by inmates and posted on social media Saturday showed inmates roaming freely inside prisons and small blazes burning after prisoners set fire to mattresses. Gunfire was heard in the background.

Police responded to the outbreak at Bogota's La Modelo, where 23 people died, and in other prisons. Nine prison guards were injured, the Justice Ministry said via its Twitter account.

The uprisings took place as Colombia reported its first two deaths from the virus.

Prisoners and their advocates said inmates rose up because of what they deemed inadequate health care in the overcrowded prison system. There was also anger at measures prison authorities implemented earlier this month to safeguard inmates from the virus, including limiting visits from prisoners' relatives.

—Juan Forero

CROATIA

## Strong Earthquake **Injures 17 People**

A strong earthquake in Croatia caused panic, the evacuation of hospitals and widespread damage including to the capital's iconic cathedral—all amid a partial coronavirus lockdown. Authorities said 17 people were injured. The European seismological

agency said the earthquake measured 5.3 and struck a wide area north of the capital, Zagreb at 6:23 a.m. Sunday. Prime Minister Andrej Plenkovic said the earthquake was the biggest in Zagreb in 140 years.

Many buildings were damaged, incluidng Zagreb's cathedral, with the top of one of its two spires collapsing. The cathedral was rebuilt after it toppled in the 1880 earthquake.

-Associated Press

**GERMANY** 

## **Woman Honored for** Saving Jews Dies

Gertrud Steinl, the last surviving German honored for saving Jews during the Holocaust. has died. German news agency dpa on Sunday quoted the head of Nuremberg's Jewish community, Andre Freud, saying Ms. Steinl died Monday. She was 97.

Ms. Steinl, a Sudeten German, was recognized in 1979 as Righteous Among the Nations, Israel's highest honor to non-Jews who risked their lives to save Jews during the Holocaust.

–Associated Press

# U.S. Prosecutors Step Up Pressure on Maduro Regime

tality since large numbers of

rate of around 1%.

The U.S. quietly unsealed criminal cases against two former officials at Venezuela's state oil monopoly this month as part of what American offi-

By Christopher M. Matthews, Ian Talley and Aruna Viswanatha

cials say is a new round of charges and sanctions against a Maduro government they accuse of systemic corruption, narcotrafficking and stealing billions of dollars in state funds.

Prosecutors have charged a businessman associated with the subsidiary of the company, Petróleos de Venezuela, SA (PdVSA), for which the

officials worked. Some of the actions have

coronavirus pandemic. But senior U.S. officials say they are part of a Trump administration effort to double down on its pressure campaign against President Nicolás Maduro's government after failing to deliver on its primary goal of ousting the regime.

Federal prosecutors in Miami, New York and Washington, D.C., are targeting what they allege is vast corruption in the country's beleaguered petroleum sector and currency markets, state-aided narcotrafficking, and money-laundering through Venezuela's militaryrun emergency food program.

They have charged dozens of defendants—many of whom have pleaded guilty in U.S.

been delayed in part by the courts—and are continuing to probe alleged bribery and money laundering involving joint ventures with PdVSA, according to court documents and people familiar with the matter.

### The new charges are targeting vast corruption alleged in Venezuela.

On Friday, Miami prosecutors charged Leonardo Santilli, a Venezuelan citizen who controlled several companies working for the joint ventures, with money laundering in Miami and related offenses.

Mr. Santilli's companies allegedly received nearly \$150 million from the PdVSA subsidiaries between 2014-2017. according to court documents. More than \$100 million of that was allegedly transferred to accounts, trusts and shell companies controlled by him and other Venezuelan individuals, prosecutors allege.

Mr. Santilli allegedly used millions of the funds to bribe senior officials in the Venezuelan military and government on behalf of the joint ventures, according to the court documents, which also allege that employees at Mr. Santilli's companies tracked the payments in a spreadsheet, calling the transactions "comi-

Mr. Santilli couldn't be reached to comment. Venezuelan officials didn't respond to a request for comment. This month, federal judges

siones," or commissions.

in Miami also unsealed charges against two state-oil company executives at one the of subsidiaries Mr. Santilli allegedly received money from, Lennys Rangel and Edoardo Orsoni. Both worked at Petrocedeno, a joint venture between PdVSA and French oil giant Total SA and Norway's Equinor ASA. Representatives for Equinor and Total didn't respond to requests for comment.

An attorney for Ms. Rangel didn't respond to a request for comment. An attorney for Mr. Orsoni declined to comment.



# Strategic Intelligence

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# **Cuomo Wants Curbs on Park** Gatherings

Governor gives city 24 hours to address lack of social distancing as coronavirus cases climb

By Charles Passy AND KATIE HONAN

Gov. Andrew Cuomo on Sunday gave New York City a 24-hour deadline to come up with a plan to curb what he said was an alarming number of people ignoring social-distancing orders meant to stem the spread of the novel coro-

Some New York City residents, in particular younger ones, still were gathering in parks and public places, Mr. Cuomo said, even as he as directed all nonessential businesses in the state to close and urged residents to stay in their homes and avoid groups. Such gatherings could lead to the spread of the virus, he said.

New York City Mayor Bill de Blasio and City Council Speaker Corey Johnson have been directed to submit a plan to the state within 24 hours to "correct this situation," Mr. Cuomo said.

"It has to stop and it has to stop now," said Mr. Cuomo, a Democrat. "This is not a joke."

Mr. de Blasio said the city planned to keep parks and playgrounds open at least over the next week, but the New York Police Department would step up monitoring to enforce social distancing in those spaces.

He added that city officials would fully "codify our approach" over the next 24 hours and respond to the governor.

In general, Mr. de Blasio said New Yorkers have been observing the virus restrictions and recommendations. But he added that when people go out, they should be especially mindful about limiting their time.

Police officers will now be quick to remind them of that, Mr. de Blasio said. "If an officer sees you on a park bench, they're going to say, 'Hey, you need to get home.'

A spokeswoman for Mr. de Blasio said Sunday that the city already had banned team sports in parks and revoked all park permits for large gatherings.

The city is considering opening up streets and school yards to the public to provide more public space for pedestrians to distance themselves, she said.

Mr. Cuomo's call to halt social gatherings came as the number of confirmed coronavirus cases in the state climbed to 15,777. New York accounts for nearly half of the total number of cases in the Mr. Cuomo noted that he

visited parks in the city on Saturday and witnessed individuals in close proximity to each other. In particular, he pointed to young people playing basketball.

"There is no concept of social distancing while playing basketball," he said.

While the governor said it was up to city officials to devise the plan, he did mention that the city could open up other areas for people to walk, so they wouldn't be as likely to engage in group activities in the parks.

He mentioned the possibility of letting streets become pedestrian walkways since traffic will be on the decline during the pandemic.

"That's where people should be, in open-space areas," Mr. Cuomo said.





Domino Park in Williamsburg, Brooklyn, top, was crowded on Saturday, even though people have been urged to practice social distancing to prevent the spread of the coronavirus. In Riverside Park in Manhattan, above, a group of exercise buddies kept some space between them. Gov. Andrew Cuomo said he was concerned after seeing people congregating in city parks over the weekend.

# New Jersey Scrambles to Expand Hospital Capacity

By Joseph De Avila

racing to add beds and in- the state takes to decrease the for an expected surge in coronavirus patients in the coming weeks that threatens to overwhelm its health-care system.

State health officials are examining reopening closed hospitals and using college dorms, medical wards and nursing homes to expand capacity. Hospitals are clearing space in their existing facilities to add more beds and are canceling nonurgent medical procedures to free up rooms and to reduce workloads for staff. The U.S. Army Corps of Engineers is also studying building new wings on existing hospitals.

We expect a surge in cases that will stress the health-care system significantly," state Health Commissioner Judith Persichilli said at a news conference Friday.

The state is projected to reach its worst bed shortfall in mid-May, according to a report by Rutgers University-Camden, based on an analysis of what happened in China and Italy. At that time, it will

need between 122,700 and social-distancing policies to brations. All nonessential busi- identified spaces where they medical professionals to step 313,200 more beds than it has, New Jersey's hospitals are depending on the measures the report. The state has about 22,300 beds total, and about half that amount are typically occupied, according to the report.

The worst-case scenario in the Rutgers report assumes the state enacts minimal social-distancing policies. The projected shortage of 122,700 beds assumes New Jersey uses strong

pacity," said Sarah Allred, faculty director at the Senator Walter Rand Institute for Public Affairs at Rutgers University.

To reduce the need for beds, Gov. Phil Murphy, a Democrat, issued a stay-athome order Saturday for all New Jersey residents that prohibits all gatherings, including weddings and birthday cele-

slow the spread of the disease. nesses must close or have can add 1,000 beds over the services, visit family or engage in outdoor activities.

"We are almost certainly going to be in need of every single critical-care bed we can find in the state," Mr. Murphy said at a news conference Saturday. "We can no longer maintain a sense of business as usual during this emergency."

State health officials have

fall in two ways: by reducing home. People can leave home said Saturday. Another 400 the licensing and certification crease staff as the state girds virus's spread, according to the need and by increasing ca- to obtain essential goods and can be activated in four to five process for new medical proweeks. Hackensack Meridian Health, New Jersey's largest hospital system, has suspended all nonurgent surgeries and accelerated the release of pa-

tients when appropriate to free

up space at its hospitals, said Daniel Varga, chief physician

executive of the system. The hospitals are also erecting outdoor triage tents adjacent to their emergency departments. The hospital system is also looking to expand the number of intensive-care units by adding some to other parts of the hospitals, Dr. Varga said. Other

areas they could explore in-

clude using convention centers

and dorm rooms, he said. A surge in coronavirus cases will also stretch medical staff across the state, said Cathleen Bennett, chief executive of the New Jersey Hospital Association. Hospitals are preparing by refocusing existing staff to help respond to

the surge, she said. The state has asked inactive

up and help, Ms. Bennett said. "We can reduce this short- their employees work from next two weeks, Ms. Persichilli The state is also expediting fessionals and issuing waivers so that out-of-state healthcare workers can come work in New Jersey, she said.

> The nationwide shortage of personal protective equipment like gloves and masks is another major concern for health-care workers that needs to be addressed immediately, Ms. Bennett said.

> Brian Gragnolati, chief executive of Atlantic Health System, which operates seven hospitals in the state, warned that as hospitals across New Jersey hurry to respond to the coronavirus, they are increasingly facing a cash crunch. He said the federal government needs to heed the call for financial assistance from the American Medical Association, American Hospital Association and the American Nurses Association which together are asking for \$100 billion for hospitals.

"We need an infusion of funding to afford these steps we are taking to fight this battle," Mr. Gragnolati said.



An Atlantic Health System drive-though coronavirus testing facility in New Jersey.

STATE STREET | By Jimmy Vielkind

## Contagion Fears May Postpone State's Democratic Primary



New York officials are whether to move the

state's Democratic presidential primary from April 28 to a date in June as the number of coro-

navirus infections grows. State Sen. James Skoufis. a Democrat from Orange County, introduced a bill that would move the nominating contest to June 23, which is already the date of primary elections for members of Congress as well as the state

Assembly and Senate. State health officials project the outbreak will reach its peak in around 45 days. Mr. Skoufis said he was concerned about the possibility

of the virus spreading at polling places and said consolidating elections would save taxpayer money.

"Joe Biden is going to be the Democratic nominee, so there's no responsible reason why we should continue on with an April primary," said Mr. Skoufis, who had endorsed Pete Buttigieg's candidacy.

The April 28 elections were shaping up to be Vermont Sen. Bernie Sanders's last stand against the former vice president. Mr. Biden has amassed 1,181 delegates, compared with Mr. Sanders's 885.

Good-government advocacy groups including Citizens Union and Common Cause NY also support the postponement.

Republicans canceled their presidential primary after President Trump was the only candidate who submitted the required nominating signatures, Douglas Kellner, a Democratic commissioner of the State Board of Elections, said moving the presidential primary would be up to the state Legislature and Gov. Andrew Cuomo. Mr. Kellner supports the idea.

"I think that the date is arbitrary and the risks to the public outweigh the relative importance of keeping our democratic functions operational," he said.

Mr. Cuomo said Sunday that he was exploring ways to make it easier for people to vote by mail in the primary. New York City Mayor

Bill de Blasio last week postponed a March 24 special election for Queens borough president because of the outbreak. Spokesmen for Assembly Speaker Carl Heastie and Senate Majority Leader Andrea Stewart-Cousins, both Democrats, didn't respond to a request for com-

April 28 had become the so-called "Acela Primary" because voting was also scheduled in Pennsylvania, Connecticut, Delaware, Maryland and Rhode Island—all of which are serviced by Amtrak's express train. The governors of Marvland and Connecticut already delayed their contests until June 2, and officials in Pennsylvania and Rhode Island are also

considering changes. New York State Demo-

cratic Chairman Jay Jacobs said he believes it is premature to reschedule the primary. Mr. Jacobs said voting on June 28 would cause logistical problems: It will take officials around 10 days to certify the results, and the party's state committee must hold a meeting to name atlarge delegates before the Democratic National Convention in Milwaukee, which starts on July 13.

'At the moment, I choose to be optimistic and look at reports that show it might be abating by the date of our primary," Mr. Jacobs said of the coronavirus outbreak.

The Democratic National Committee has rules in place

that could reduce the number of convention delegates awarded to a state if it holds a primary after June 9. Mr. Jacobs said he was confident the DNC would reconsider its regulations in light of the outbreak; a DNC spokeswoman didn't respond to an email seeking comment.

There are also special elections on April 28 for a congressional seat in western New York, a state Senate seat around Syracuse and three Assembly seats. Political strategists said the virus has already prompted campaigns to focus their efforts online as door-to-door canvassing has been curtailed to prevent the spread of the virus.

jimmy.vielkind@wsj.com

**A10B** | Monday, March 23, 2020

## GREATER NEW YORK

## Stuck At Home, Kids Get Creative

By Amber Burton

Boaz Harlow Siegel, an eighth-grader at SAR Academy in New York City, started quarantine at home on Tuesday, March 3. By that Friday, he was bored. His mom suggested the budding musician, who had recently begun making YouTube videos, create a film about being in quarantine.

"If you made a video about coronavirus, it would literally be a viral video," Ilana Harlow said.

#### 'A lot of people were saying it cheered them up when they were sad and lonely.'

The family is Jewish and observes the Sabbath, so Boaz, 13 years old, couldn't film the video for the song he composed using his keyboard and fiddle until Saturday night. He stayed up until 5 a.m. on Sunday before pausing to sleep. He was hoping to post the video in time to share it before Purim, the Jewish holiday that started Monday, March 9.

What ensued was a full-fledged music video in his Manhattan apartment educating people on what it is like to be in quarantine. Over a week later, it has more than 8,000 views.

"A lot of people were saying it cheered them up when they were sad and lonely," said Boaz, whose formal quarantine is now over, though New York is telling residents to stay home generally. "That was the goal the whole time."

Boaz, who was quarantined after visiting a synagogue in New Rochelle at the heart of the outbreak in Westchester County, is one of thousands of children around New York who have found creative ways to pass the time while adjusting to life at home during the pandemic. Parents are joining in, too.

Jessica Schafroth, a lobbyist who lives in Slingerlands, N.Y., has taken to creating scavenger hunts each night for her 4-year-old son, Paidin, to do the following day while she works at home.

Each scavenger hunt gives her roughly 20 to 30 minutes to focus on work. While one hunt helps him identify shapes, colors and numbers, the next uses rhyming clues to help him learn sight words. He is often motivated by the promise of a chocolate reward at the end of his quest.

"I'm just trying to make sure he's learning," Ms. Schafroth said.

Adina Steinberg, an administrator at Boaz's school, also saw the opportunity to bring children together in a new way. Inspired by Boaz's video, she hosted a virtual talent show for the entire middle school via Zoom, a videoconferencing tool. She and another administrator served as MCs from their respective homes, matching their outfits from the waist up.

The show featured 16 video acts, all emailed in. One student played a song by the band Panic! at the Disco on the piano while her friend played accompanying violin via FaceTime. Another student painted a canvas. A boy solved a Rubik's Cube in under a minute. Another boy recited 579 digits of Pi while spinning a basketball on his finger. Ms. Steinberg had to edit down the seven-minute video to keep the show moving.

She said the virtual platform made students more confident to present their talents. Close to 300 students and fac-

ulty tuned into the live stream.

Steve Zeitlin, the founder and executive director of City Lore, a cultural center in Manhattan, saw Boaz's video. He said the current crisis reminds him of how people came together after Sept. 11, 2001, and the 2003 blackout—"times when the world stopped."

City Lore said it would begin collecting videos, poems and art created during this time, and encouraged children to submit their work as well.

"Our poetry and expression, jokes and the games that we play—there's tremendous meaning in that," said Mr. Zeitlin.

# Pandemic Prompts Some to Flee City

By Josh Barbanel

As coronavirus cases rise in New York, many residents can find themselves wondering: Should they leave to ride out the pandemic elsewhere?

Home rentals have surged in places New Yorkers typically turn to in the summer, from the Hamptons to Nantucket, Mass., as travel otherwise evaporated, according to AirDNA, a travel-booking analytics site.

Rental markets in areas outside other major, crowded cities as well from San Francisco to Chicago to Boston are seeing high demand.

Many families packed up and moved into summer homes that had been closed up for the winter in order to shelter in place. New Yorkers are ordered to stay home as much as possible and public schools are closed—raising the allure for families with small children and small apartments to find an escape, and a stroll on a beach.

The parking lot at Main Beach in East Hampton, N.Y., is as full as it is in July, said Glenn Vickers II, president of Discover the Hamptons, a notfor-profit that promotes tourism and economic development. People can be seen strolling along ocean beaches in hats and gloves, with children or pets in tow, maintaining a discrete distance between groups.

The new renters are choosing homes that have been

thoroughly cleaned and still they arrive with buckets of cleaning supplies and gloves and masks and clean all over again, said Eddie Shapiro, president of NestSeekers International, a brokerage specializing in the Hamptons and other luxury markets.

This influx has in turn triggered concerns that vacation getaways might not have enough resources to cope in the event that the number of people needing hospitalization soars in the weeks and months ahead.

"We are at summer population now," said Judi Desiderio, chief executive of Town & Country Real Estate, a brokerage based on the east end of Long Island. She said her firm handled 250 rentals so far this month, triple that of a normal March, with most set to start immediately and rented sight unseen. One person is paying \$250,000 in rent for April and May, normally a turgid period for rentals in the Hamptons.

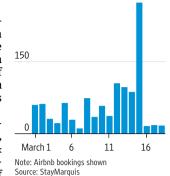
Local medical services aren't geared to meet the needs of the peak summer population in normal times, she said. The population at least triples in many places in the summer.

Stony Brook University Hospital, the nearest tertiary-care hospital, has said it is adding beds to cope with Covid-19 cases and it has suspended elective surgery and procedures. In East Hampton, the town supervisor, Peter Van Scoyoc, said Friday that the

Preseason bookings in the Hamptons soar as the coronavirus crisis worsens.

Bookings for March and April occupancy

300 bookings



town was working with state and county officials to identify "locations for satellite hospital services."

The move to the country by more affluent city residents, echoes the response to past contagions, such as the great plague in London in 1665-66 that saw most doctors, lawyers and merchants as well as the royal court flee, according to

many accounts of the plague. Some are ambivalent about the decision to leave the city.

Jill Laurie Goodman, a retired lawyer and photography student; her husband, Melvin Jules Bukiet, a novelist; and their cat, Tio, fled their home on Manhattan's Upper West Side last week for a weekend home they had been renovating in New Windsor, NY., next

to a state park and hiking trail, just over an hour's drive from the city.

They left after her daughter, Louisa, convinced her that at the age of 71, moving out of the city gave her the best chance of staying well, she said. "So I don't get sick, with the implications of that for spreading the virus and its effect on the health-care system."

"We are trying to do the best we can and make difficult decisions," she said.

Bookings for March as of last Thursday were up more than 400% in the Hamptons, in Nantucket and in Chatham on Cape Cod, compared with the same period in 2019, according to the AirDNA analysis of Airbnb bookings.

Bolstered by people leaving Chicago and San Francisco, rentals more than doubled in Michigan City, Ind., near Chicago, and in Pebble Beach and Napa, Calif., and bookings near Lake Tahoe were up 41%.

On the south shore of Lake Tahoe, tourism officials have urged visitors to stay away, warning that visitors could overwhelm existing resources and risk lives, due to the limited capacity of health facilities.

"This is something I thought I'd never have to say throughout my tourism career, but please stay home at this time," said Carol Chaplin, chief executive and president of the Lake Tahoe Visitors Authority in a press release.

In the Hamptons, the surge built up a week ago, especially around March 15, when Mayor Bill de Blasio announced that New York City public schools would close, said Bryan Fedner, a co-founder of vacation-rental company StayMarquis, with listings on Long Island and in the Hudson Valley, north of the city.

In the seven-day period ended March 18, his agency booked 87 rentals for March check-ins, compared with six during the same period in 2019. This included two bookings for more than \$90,000 for a month.

Mr. Fedner's research also found that on a single day, March 15, visitors made a total of 201 bookings for occupancy in March on Airbnb and HomeAway, compared with an average of 31 such bookings in the rest of the month.

"People were booking sight unseen, with no negotiations, which was very unusual," he said.

With museums and cultural institutions closed, most stores shut, and restaurants open only for delivery and drive-by pickups, there is little to do in the Hamptons beyond strolling and biking.

Lauren Spiegel, a Douglas Elliman broker, said that just being in the Hamptons was enough.

"If they are going to be shut down and locked down, at least they can be in the Hamptons," she said. "If they come out here, they can feel at peace even if the coronavirus is all around them."

## **New Yorkers Adjust to Life in the Time of Coronavirus**





DON'T STAND SO CLOSE TO ME: Customers spaced themselves in line outside Marlow & Daughters in Williamsburg, Brooklyn, this weekend, taking care to limit the number of people inside. At Coney Island, eating areas were deserted after restaurants were restricted to takeout and delivery orders and large gatherings were banned. Car and foot traffic on Eastern Parkway was light as a pedestrian pushing a stroller adjusted a face mask.



L

# How South Korea Made More Beds Trump

Strict patient triage, repurposed corporate facilities helped ease hospital overcrowding

By Dasl Yoon

DAEGU, South Korea—During the darkest days of its coronavirus outbreak, South Korea didn't have enough doctors and nurses to treat the sick, and patients were dying while waiting for hospital beds.

The country turned the situation around quickly, however, by devising a system to reserve hospital beds for those most in need and creating extra space with help from its biggest companies.

South Korea divided confirmed patients into four categories. Only the sickest and elderly went to hospitals. The young and asymptomatic went to dormitories, which were lent by Samsung Life Insurance Co., LG Display Co. and others.

The decision ensured that low-risk individuals remained quarantined under government watch. Thousands of South Korea's virus patients have ridden out the past several weeks living in buildings where companies typically put up workers for off-site, multiday training.

With Covid-19 cases skyrocketing, health officials around the globe fear their countries lack enough hospital beds, respirators, supplies and staffing. Few, if any, can. But South Korea, where new infections have tapered off, offers an example of how the intense pressure on hospital beds and equipment can be alleviated.

South Korea, despite around



Min Pok-kee, who heads South Korea's Covid-19 response team in Daegu, speaks to medical staff.

Saturday, has reported only 104 deaths. Just five died while waiting for a hospital bed, and everyone with severe symptoms is now hospitalized. Not a single South Korean doctor or nurse has died.

'We were fighting a war with very little time on our hands," said Min Pok-kee, who heads South Korea's Covid-19 response team in the city of Daegu, the center of the country's outbreak. "If we had not secured these other facilities, our death rate would have resembled other countries'.'

South Korea had a decided advantage over the U.S., with far more hospital beds per capita. The country has more than 12 hospital beds per 1,000 people, compared with the U.S., which has less than three per 1,000, according to the Organization for Economic Cooperation and Development.

A country of 52 million 8,900 confirmed patients as of people, South Korea also bene-

South Korea hospitalized Daegu patients in 70 hospitals countrywide and converted dormitories to handle the crush.

Patients hospitalized in Daegu, South Korea 4,000 3,000 2,000 Source: South Korea's Daegu City Hall

fited from having a single-

payer health-care system that ensured testing—and treatment-was free or low-cost. Wide screening detected the sick early on. The strategy

Patients waiting for a

hospital bed 3,000 2,000 1,000

prevented a riptide of contagions forming outside the Daegu area. The pace of new infections has slowed.

In late February, South Korea confronted an increasingly familiar problem as infections exploded across Daegu. The task: quickly secure 5,000 hospital beds, locate 1,000 more medical staff and keep supplies plentiful.

The most profound shift occurred on March 1, when the country's Centers for Disease and Prevention stopped admitting every confirmed patient into a hospital. Instead, it divided everyone into four groups based on criteria set by South Korea's largest physicians group: asymptomatic, mild, severe and critical. Only the latter two categories went to the hospital.

The approach bore some similarities to that in Wuhan, the city at the center of the pandemic in China, where officials also split up at-risk people into four categories.

The Seoul government's classification showed about 80% of the cases were mild, a similar ratio to that in Wuhan. But the grouping exercise also highlighted who should take priority: Just one of every 10 individuals needed medical treatment at a fully equipped hospital, said Son Young-rae, a senior South Korean health ministry official.

The shift required some relatively healthy people to be discharged. In early March, roughly 3,000 people were moved to more than a dozen repurposed company dormitories. The nonhospital venues dramatically reduced staffing shortages that looked bleak in the first week.

The bed shortage has dissipated. As recently as March 8, more than 2,200 confirmed patients-or roughly 40% of Daegu's total cases—awaited a hospital bed of any kind. By Saturday, that number dwindled to just 124, all of which are mild or asymptomatic cases.

## Writes to Kim Amid Outbreak

President Trump sent a letter to North Korean leader Kim Jong Un praising his efforts to combat the coronavirus and offering U.S. help, according to a statement by Mr. Kim's sister, published by North Korean state media on Sunday.

> By Dasl Yoon in Seoul and Andrew Restuccia in Washington

In Washington, the Trump administration confirmed Mr. Trump sent Mr. Kim a letter about the coronavirus, but declined to confirm that the U.S. president had offered North Korea help in fighting it.

A senior Trump administration official said the letter was "consistent with his efforts to engage global leaders during the ongoing pandemic."

The North Korean statement said Mr. Trump offered to cooperate with North Korea in "anti-epidemic work." The statement was published soon after Mr. Kim had observed the firing of tactical guided weapons over the weekend, consisting of two short range ballistic missiles, according to the South Korean military.

Kim Yo Jong, Mr. Kim's sister and one of the most senior officials of North Korea's ruling Workers' Party, called relations between the two countries' leaders "very excellent," in contrast to the more adversarial tone of the relationship between the two countries.

# One-Day Trial Shows Indians Are Open to Closures

By VIBHUTI AGARWAL

AND ERIC BELLMAN

NEW DELHI—India tried a one-day nationwide shutdown, hoping to slow the spread of the coronavirus and give citizens and policy makers a taste of how the massive, boisterous democracy would behave under unprecedented restrictions.

During Sunday's 7 a.m. to 9 p.m. lockdown—dubbed the "people's curfew" by Prime Minister Narendra Modi when he unveiled it-people were asked to stay in their homes and most businesses were shut.

The restrictions were voluntary, but each state was asked to do what it could to help citizens comply. The police in New Delhi said they were handing out flowers to drivers they found on the road and telling them to go home.

Initial reports suggested Indians were taking the exercise seriously. "The streets are empty," tweeted the prime minister Sunday. "But the resolve to fight COVID-19 is full."

India has seen a relatively small number of coronavirus cases. As of Sunday, it had confirmed five deaths and 324 infections. Some medical experts suspect that some infections aren't being recorded because India, a nation of 1.3 billion people, isn't testing sufficiently.

India could be due for a surge in cases which could quickly overwhelm its already overstretched health-care infra-



People assembled on Mumbai balconies Sunday to express appreciation for health-care workers, heeding Prime Minister Narendra Modi's call.

structure, said T. Jacob John, a retired professor of virology at the Christian Medical College in the southern city of Vellore.

"India is in the very early stage of the avalanche with a slow buildup to a massive outbreak," he said. "The effect of the 14-hour curfew should be closely watched."

Some airports struggled with

a surge in travelers trying to get back to India before it closed its borders to regular commercial international flights for a week beginning on Sunday.

India has the world's biggest international migrant population, with more than 17 million of its people living abroad. Travelers reported long waits at major Indian airports as many decided to rush home to be with their families.

India's internal migrants could be the hardest hit by shutting all or parts of the country. Millions have moved to big cities to work for daily wages in construction, cleaning and other odd jobs. With all types of businesses shut down, they have no money to feed themselves and want to flee the crowded slums and return

to their towns and villages. Most local and intercity trains as well as interstate road transportation were suspended as part of the trial curfew. Different states have added their own restrictions.

The western state of Maharashtra, which has reported

and is starting to restrict local travel, struggled with mobs trying to get on trains in the past week. Railway authorities added more trains and ratcheted up ticket prices to get the crowds under control. To try to inspire unity, hope

the most coronavirus cases

and restraint, Mr. Modi told people to make some noise across the country at 5 p.m. on Sunday. He said Indians need to show support for people risking their lives to provide essential services including transportation, delivery, health care, government and policing.

"Give them all a five-minute standing ovation," he said in a Thursday speech. "We clap our hands, beat our plates, ring our bells to boost their morale, salute their service."

Sirens went off in cities across the country at 5 p.m. to mark the beginning of the show of sound and solidarity, and the response surprised many.

Families stood in their porches, windows and doorways from Mumbai to Kolkata and New Delhi to Hyderabad to clap their hands, wave the Indian flag, sing, ring bells, bang on pans and play instruments. The noise and smiles continued beyond the allotted 10 minutes in a symbolic gesture designed to let people know that they weren't alone and that there were so many others nearby ready to try to do what must be done to get through the coming months.

## U.S. Pullout of China Staff Cripples Ties at a Key Moment

By Julie Wernau

BEIJING—A sweeping evacuation of American diplomats has hobbled the U.S. government's presence in China, further rupturing interactions between the two superpowers at a time of rising tensions and hampering efforts to fight the coronavirus pandemic.

U.S. diplomats and their family members started to return home en masse in early February as coronavirus infections exploded, kicking off what has become one of the largest peacetime evacuations of U.S. diplomatic personnel in history.

The consulate general in the city of Wuhan, where the pandemic began, closed in late January. Missions and consulates Shenyang, Shanghai, Chengdu and Guangzhou are at 20% to 30% of their staffing levels, according to people familiar with the matter. Most of those employees are local Chinese. Only those employees necessary to carry out vital functions and provide emergency services remain, these people said.

The emptying out of American diplomatic outposts came as relations between the U.S. and China descended to levels of rancor not seen in decades, fed by a two-year trade war and, more recently, fingerpointing over responsibility for the severity and origin of the coronavirus threat.

On Tuesday, China's government responded to new U.S. restrictions on Chinese staterun media by revoking the press credentials of more than a dozen American foreign correspondents at The Wall Street Journal, New York Times and Washington Post. in the latest severing of ties between the world's two largest economies.

China's assault on foreign media and the drawdown of the U.S. diplomatic corps have driven the U.S. and China toward a pivotal moment, according to Orville Schell, di-



The U.S. on Jan. 31 authorized the departure of nonemergency personnel from China, including the embassy in Beijing.

rector of the Asia Society's Center on U.S.-China Relations. "At a time when we should

be building greater collaborative mechanisms to deal with the pandemic—never mind the other big issues like climate change and trade—we're rupturing them across the board," said Mr. Schell, who questioned Washington's need to call back so many diplomats. U.S. missions to other coun-

tries experiencing outbreaks have also seen evacuations, but the evacuation in China is particularly disruptive because of how sour ties are between the two superpowers.

The U.S. government's for-

eign mission to China is among its largest in the world, according to the State Department, which doesn't release specific information about staffing levels overseas, citing security concerns. Current and former diplomats say at least 1,000 U.S. citizens typically work for the U.S. government in China, with roughly twice that number of local Chinese staff. The majority are based in Beijing.

The State Department on Jan. 31 ordered the departure of employees' family members under 21 years old and authorized the departure of nonemergency personnel from China.

"We have provided clear guidance to U.S. citizens to depart China and take appropriate precautions in other locations affected by this outbreak," the State Department said. The U.S. Embassy and consulates across China are "operational and continue to provide consular and emergency services for American citizens as resources allow," it said. The U.S.'s ability to respond

to infectious-disease outbreaks in China was already compromised by State Department budget cuts, current and former U.S. diplomats said. In 2018, the Centers for Dis-

ease Control and Prevention was forced to scale back or discontinue its work to prevent infectious-disease epidemics and other health threats in 39 foreign countries, including China. At its height, the CDC had more than a dozen programs in China, including an emerging-viruses program. Today, that presence is down to a handful of employees, most of them dedicated to influenza.

Plans for annual meetings between the CDC and China's Center for Disease Control and Prevention haven't been realized for three years, the current and former diplomats said.

The State Department said it had no comment on the budget cuts.

# LIFEESARTS

WHAT'S YOUR WORKOUT? | JEN MURPHY

# The Stuck-at-Home Workout

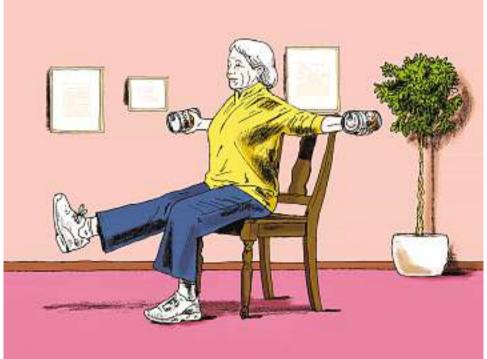
We asked experts to design workouts people can do while hunkering down during the coronavirus outbreak

ym closures and self-quarantine mandates are forcing people to make big changes to their workout routines. But exercise is especially important now, even when the logistics are challenging, because it

boosts us physically and mentally, says Craig Sawchuk, a clinical psychologist at the Mayo Clinic in Rochester, Minn.

"It's easy to be sedentary right now and fall into a habit of grazing and watching Netflix," he says. "Creating a daily routine that involves exercise can be therapeutic and bring a sense of normalcy to your day," he says. We're veering from our normal routine in this column by asking fitness experts to share specially tailored home workouts.





#### FOR THE TYPE-A OVERACHIEVER

hris Vlaun, a Miami-based personal trainer, created this workout for people with space and equipment.

## Jack squats

Standing with your feet close together and your hands clasped behind your head, push your hips back to get into a half-squat position. Jump your feet out to the sides, maintaining the squat position. Quickly jump your feet back to the starting position.

## The swimmer

Lie on your stomach. Hold a yoga block or shoe box between your hands, breathe deeply and lift your chest, arms and legs off of the floor and flutter kick your legs five times. Exhale and repeat.

#### Reverse prisoner lunge

Stand hip-width apart with your hands behind your head. Take a step backward with your right leg. Once your knee almost touches the floor, push back up and forward to your starting

## Resistance band 100's

Lie on the floor with your legs raised, knees bent at 90 degrees, shins parallel to the floor

and a resistance band under the arches of your feet. Hold the ends of the band and keep your arms along the torso. Exhale and lift the legs. Pulse your arms, moving from the shoulders. Repeat 10 times.

## Battle ropes jump slam

Hold one side of the rope in each hand, then lower the battle ropes down to your sides with your arms extended. Lower into a squat, then jump high, raising both hands overhead. As you land into a squat, slam the ropes onto the ground.

#### FOR AGING ATHLETES

As we age, our balance de-clines, says Dani Johnson, a physical therapist with the Mayo Clinic's Healthy Living Program in Rochester, Minn. Implementing balance exercises as simple as standing on one leg as you brush your teeth can help prevent falls. Getting a daily dose of cardio can boost the immune system.

This at-home circuit routine will get your heart rate up while also challenging strength and balance. Perform the circuit three times. Walk up and down steps or march in place for two to three minutes between sets

#### Chair squats Stand in front of a chair with

your feet shoulder-width apart. Bend your knees, lowering your hips back, keeping weight in your heels and your chest upright. Start by sitting into the chair and standing back up 10 to 12 times. If this is easy, hover above the chair then return to standing.

## Counter push-ups

Place your hands on the edge of a counter, just beyond shoulder width apart. Lower into a pushup then press back up. Repeat 10 to 12 times. For more of a challenge, walk your feet further

away from the counter.

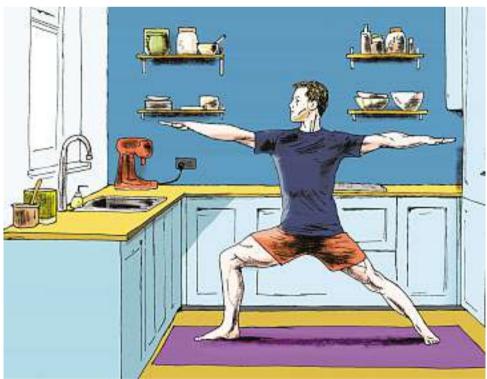
#### Chair triceps dips

Sit upright in a chair with your hands on the armrests, elbows bent at 90 degrees. Straighten your arms, lifting your body off the chair. Hold briefly. Then lower yourself down. Use your legs to balance. Repeat 10 to 12 times.

## Calf raises

Begin in a standing position. Rise up onto your toes, hold briefly, then lower back down. Repeat 10 to 12 times. Place one or both hands on a table or chair for more support.





## FOR THE OUTDOOR ENTHUSIAST

Studies suggest that even short daily amounts of nature improve our moods. If you can safely get outdoors and away from people, take a hike, jog, walk or bike ride. Or bring your workout to a park or your yard, Mr. Vlaun says. He cautions to keep distance from other people and to bring hand sanitizer and disinfectant wipes to clean any equipment that you touch be-

#### Warm-up Perform a series of arm rota-

tions forward and backward followed by high knee skips to get your blood flowing.

fore and after using it.

Set up a circuit where you can rotate between exercises for three rounds. Perform each exercise for 45 seconds. Rest one to three minutes between rounds. For added cardio, bring a jump rope and jump 45 seconds between exercises.

## Bulgarian split squat

Place the top of your left foot on an elevated bench or low wall. Squat until the front leg is at a 90 degree angle. Perform on each leg

## Inverted row

Find a parallel bar, tree branch or railing around waist height. Position yourself under the bar lying face up, grab the bar with an overhand grip, slightly wider than shoulder width and palms facing away from you. Keep your body in a straight line and pull yourself up until your chest touches the bar. Lower yourself back down with proper form.

Bench dip with kick

Sit down on a bench about knee height, hands next to your thighs. Walk your feet out so your knees are bent 90 degrees, lifting your bottom off the bench with extended arms. Hinging at the elbow, lower your body down until your arms form a 90-degree angle. When you come up, kick one leg straight. Repeat and alternate sides.

## **Pull-ups**

Find a set of monkey bars or a strong tree branch. With an overhand grip just beyond the shoulders, do as many pullups as possible in 45 seconds. If pull-ups are too challenging, do negatives where you hold the bar at chin level and slowly lower down, or just hold your chin at bar height and hold as long as

## FOR SMALL SPACES

You don't need fancy equipment or a large space to break a sweat, says Samantha Campbell, owner of Deep Relief Peak Performance Athletic Training Center in Maui. This high-intensity interval training workout delivers a boot camp burn with body weight and household items, like jars of peanut butter and jugs of water.

## Warm-up

Four-way lunges, 5 reps on each side

## Hand release push-ups,

10 reps This push-up variation prevents cheating because you must lower all the way to the ground and raise your hands off the floor before pushing back up.

## Warrior pose, 10 seconds

Workout Round 1: Repeat two times Plank pose, 1 minute

Glute bridge, 10 reps

Side plank, 30 seconds a side

Windmill toe touches, 5 reps per side

Single-leg deadlift, 5 reps

Round 2: Repeat three times

Burpees, 10 reps

Squat to overhead fly, 10 reps Sink into a squat position, pause, raise arms out to the sides and overhead to touch, palms facing up. Lower arms. Return to standing.

#### In-and-out squat jumps, 10 reps

Stand with feet together. Jump the legs outward and descend into a squat, then quickly jump the legs inward into a squat. Repeat.

#### Water bottle turtles, 20 reps

Lie on stomach holding a water bottle in one hand. Lift your legs and arms simultaneously off the ground and pass the water bottle behind your back, hand off, then pass to the front.

Lateral jumps, 20 reps Stand with feet together. Jump side to side, as fast and far as you can, keeping knees bent when you land.

Woodchops holding a jug of water, 10 reps

end" and "World War Z." However, as more users are forced to cocoon at home for an indefinite amount of time, the listmaking is skewing toward classic films and more recent comfort fare. "Our members are suckers for 'La La Land,' 'Lady Bird' and 'Call Me By Your Name.' Those

"There's such an abiding love for

meaning to watch. Many craved shows promising escape (73%), laughter (72%) and comfort (53%). With so many people cooped up for the same reason, the social

side of TV has taken on a new im-

Some are opting to use Netflix

Party, a Google Chrome extension

watch the same movie or show on

Netflix and allows for chatting at

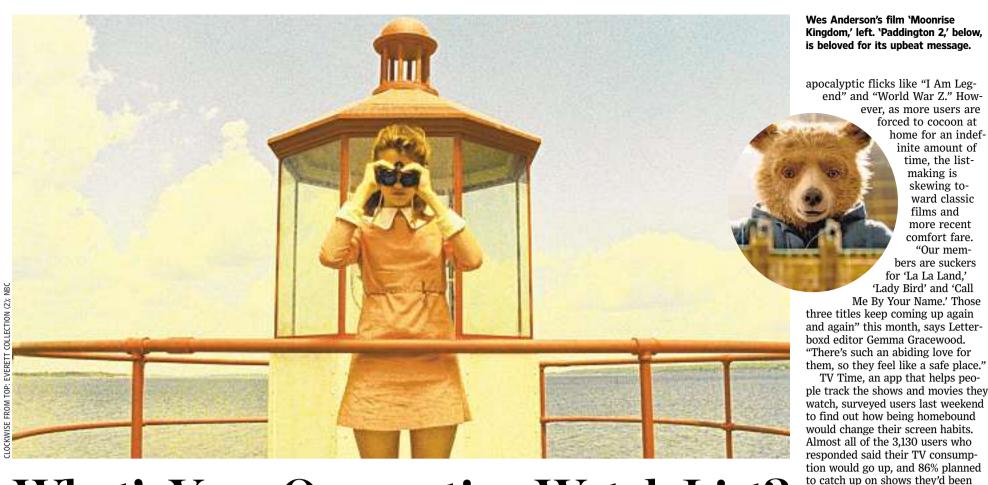
the same time. Seth Rogen live-

that allows people to remotely

portance too.

TV Time, an app that helps peo-

## LIFE **営 ARTS**



# What's Your Quarantine Watch List?

By John Jurgensen

**THERE'S SOMETHING** soothing about the work of filmmaker Wes Anderson. At least that's what Seattle psychotherapist Chad Perman is learning from his clients, many of them tech employees forced to work from home.

Mr. Perman has long used "cinema therapy" to get people talking about how they relate to themes and characters in movies. Lately he's been discussing movies more than ever at his practice near a nursing facility with at least 30 deaths linked to coronavirus. And Mr. Anderson's name keeps coming up.

The director of movies including "Rushmore," "The Grand Budapest Hotel" and "Moonrise Kingdom" is known for his meticulous composition of costumes, sets and color schemes. "There's something about going into these beautiful hermetically sealed films," says Mr. Perman, who is also founder and editor in chief of the online film magazine Bright Wall/Dark Room. "It makes you feel that you're in a controlled world, not the chaotic one you see when you turn on the news or look at your Twitter feed."

In the face of a spreading sickness, thousands of deaths, and economic damage around the globe, the question of what to put on TV while riding out the pandemic isn't as trivial as it may seem. Mr. Perman's clients for example, aren't just looking for something to pass the time-they're looking to quell feelings of isolation, anxiety and uncertainty. Now, as millions more people confront an indefinite stretch of social-distancing and school closures, they are assembling rosters of movies and TV shows to help cope—and finding new virtual ways to watch with family and friends. For some, such watch lists Tips and Inspiration for Home Viewers

■ Letterboxd: Users of the social movie site have been busy making lists such as the "Ultimate Quarantine Watchlist," loaded with some 260 titles, from "Adaptation" to "You Were Never Really Here." Filmmakers make recommendations there, too, including director Edgar Wright ("Shaun of the Dead") who recently pointed his online followers to a Letterboxd list of his 1,000 favorite movies.

■ Isolation Film Club: Brett Goldstein, a comedian, actor and host of a podcast called "Films To Be Buried With," created the club to unite home viewers. Different friends of his host each installment and tweet a running commentary about a movie of their choice. The roster has included "Long Shot," "Moonstruck" and "Thunder Road."

■ Quarantine Live Tweet Film Festival: A social-media audience is also gathering for the event, which takes place on the Twitter timeline of the film magazine Bright Wall/Dark Room. The communal viewing sessions started with the heartwarming "Paddington 2" and will continue with director Wong Kar-wai's "Chungking Express" and James L. Brooks's "Broadcast News."

**■ Countdown to Christmas:** The Hallmark Channel launched an emergency feel-good movie marathon of the network's seemingly endless supply of holiday movies, for those who want to fast-forward to a different reality.

"We're trying to use Disney+ as a carrot," said Alicia Curley, who lives outside Philadelphia with her husband and two children, ages 4 and 2. "We told them, if you behave well during the day, you can watch 'Frozen 2' at night." She and her husband, for their part, are watching more Netflix comedy specials to lighten the mood.

Last week, when L.T. Ward of Peoria, Ill., learned that school was closed for her four children, ages 5 through 16, she responded by turning on Bob Ross. The late TV host's "The Joy of Painting," which streams on Amazon Prime, played in the background for four hours that day. "His voice, the pacing of the show, seeing the art develop-it's a very simple way to reset when you're feeling stressed," says Ms. Ward, a writer, noting that even her teenagers agree.

On Letterboxd, a social-sharing site where movie lovers log their viewing history and share lists of recommendations, more than 4,800 movie lists have been created since March 1 that somehow reference the pandemic in their name or description. Many, such as "Coronavirus Quarantine Watchlist," are heavy on post-

tweeted "Cats." Mr. Perman's online magazine Bright Wall/Dark Room organized a Quarantine Live Tweet Movie Festival throughout March, encouraging its 21,000 Twitter followers to view the same movi e to-

gether on their separate home screens. To kick things off last Sunday, the journal-known for essays on film history and auteur directors—chose "Paddington 2." The 2018 sequel film based on the children's book character (and featuring a scene-stealing Hugh Grant as Paddington's nemesis) is a favorite of many movie buffs for its craftsmanship and verve, emphasizing the power of kindness, acceptance and marmalade.

"Every time I've watched it, I felt better," says Mr. Perman.

Meanwhile, many viewers are heading in the opposite direction. "Contagion," a 2011 film about a societal breakdown caused by pandemic, has been hovering on the chart of top movies in the iTunes store since late January. TiVo says there was a sixfold increase among its users for outbreak-related titles, including "12 Monkeys" and "Children of Men," between March 3 and March 14. On Netflix, 1995's "Outbreak," is ranked among the 10 most popular movies.

"There is this notion of homeopathic viewing--you get this small dose on the screen, and it might help you deal with it in real life," says Ms. Perks, the media-studies professor.

—Lillian Rizzo contributed to this article.



'The Good Place' is being recommended for its uplifting story lines.

seem as essential to the home stockpile as toilet paper and hand sanitizer.

"For me the research suggested that media-marathoning can be therapeutic. It offers something unique that other forms of coping don't," says Lisa Perks, a professor at Merrimack College in North Andover. Mass.

She researches media-engagement patterns and has published studies about people using bingeviewing as a way to deal with health struggles, including those laid up with injuries and isolated with flu. She's been recommending "The Good Place," about characters hashing out ethical problems in the afterlife, as a TV show whose comedy can, as she says, "restore faith in humanity."

Hollywood is scrambling to meet this new need even as most movie theaters have gone dark. Universal rushed its still-new theatrical releases, including "Emma" and "The Invisible Man," out to on-demand platforms this week. Disney did the same with Pixar's "Onward," and last week released "Frozen 2" on its streaming service three months early, offering sequestered families a new diversion.

# Houses of Worship Rush to 'Online Only'

By Ray A. Smith

LAST SUNDAY, Denise Nicholson-Metz, a regular attendee of Sunday services at Ebenezer Baptist Church in Atlanta, worshiped—but not as usual. She and her husband were in bed, watching on a Microsoft Surface laptop.

"I had bedside Baptist service that day," said Ms. Nicholson-Metz, 44, who lives in nearby Decatur and works as a business analysis manager for a telecommunications company.

On March 15, her church, where Martin Luther King Jr. and his father were once pastors, moved its 9 a.m. and 11 a.m. services online in an effort to keep visitors and its members safe from the novel coronavirus.

With local and state government officials restricting large public gatherings and President Trump urging Americans to limit their gatherings to fewer than 10 people, houses of worship all over the country are making the online move. Suddenly, a spiritual communion millions have depended on has moved from the presence of a religious leader and the reassuring solidity of a church, mosque or synagogue or similar building to a 15.6-inch screen.

The World Council of Churches and the Hartford Institute for Religion Research estimate there are



about 350,000 houses of worship and congregations in the U.S. Roughly 50% have 65 attendees or fewer, according to Scott Thumma, director of the Institute. Mr. Thumma said he has been conducting webinars on creating digital worship for church leaders.

Historically, people have turned to houses of worship during troubled times. Now, religious centers must figure out new ways of offering spiritual comfort—when some of their groups have themselves spread disease. A Jewish congregation was at the center of one of the big early U.S. outbreaks, in New Rochelle, N.Y., while in early March, South Korea's Centers for Disease Control and Prevention said most of all confirmed Covid-19 cases in the



A view, left, of the Ebenezer Baptist Church live stream seen on Denise A. Nicholson-Metz's laptop. Above, New York's St. Patrick's Cathedral.

nation were related to a secretive Christian sect, the Shincheonji Church of Jesus.

For some pastors, the move online is less disruptive because they have long used web platforms to reach their congregations. Joel Osteen, whose Lakewood Church services in Houston typically attract more than 50,000 people, has long reached out to a wider audience via live streams, satellite radio and TV. His worship services, which will now occur without congregants attending, will be viewable on such platforms as Facebook Live, YouTube, Roku and AppleTV. The church said it would continue to monitor the situation week by week with the hopes of resuming its services with live congregants in the near future.

Any online shift is intrinsically jarring. Suddenly many congregants accustomed to singing together, for example, can't do so. In New Jersey, the Islamic Center of Passaic County will live stream its Friday sermons, but the congregational prayers following the sermon can't be replicated online, so followers will have to pray on their own at the same time. "On a normal day, we would have up to a thousand people in one place praying," said board member Mohamed El Filali, adding, "Now we're physically distant but spiritually together."

Even a reduced service can ease "the sense of loneliness," said William Martin, a fellow in religion at Rice University's Baker Institute for Public Policy. Streaming "reduces the sense of 'this is a

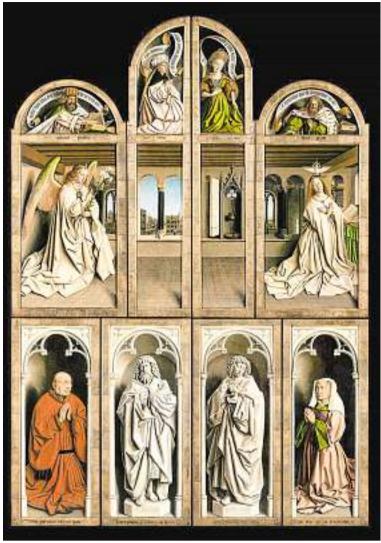
strange, strange time," by reassuring worshipers that "there are people still taking care of us. We're still part of a community."

But technology can threaten that fragile sense. In Portland, Maine, synagogue closing notices went out "on Facebook and through our website, and some of our people said 'Well, we don't use those things," said Gary Berenson, rabbi of Etz Chaim synagogue, where the average age of congregants is 70. He and other rabbis in Maine are discussing—on listserv email, of course—ways to continue offering

Many religious organizations have gotten behind the shutdowns. The Church of Jesus Christ of Latter-day Saints said recently that it was canceling services and other public gatherings, while five influential Islamic organizations, including the Islamic Society of North America, recently recommended the temporary suspension of daily congregational prayers and other gatherings. These shutdowns come as a number of religions approach big holy days worshipers usually celebrate en masse, including Easter (April 12), Passover (beginning April 8) and Ramadan (beginning April 23).

Pope Francis will celebrate Holy Week and Easter mass in Rome without a public, a first. Services will instead be broadcast online, and on TV and radio. In the archdiocese of New York, spokesman Joseph Zwilling said no final decision has been made about Palm Sunday, Holy Week or Easter Sunday. "It's something we're going to be looking very carefully at in the days and weeks ahead," he said.

## LIFE **営 ARTS**





**ART REVIEW** 

# 'An Optical **Revolution': Truer Than Life**

An exhibition reveals how the Flemish painter Jan van Eyck created illusions that seem more real than reality

By Judith H. Dobrzynski

Ghent, Belgium LITTLE IS KNOWN about the early years and training of Jan van Eyck (c. 1390-1441). Yet he emerged in early 15th-century Northern Europe as a colossus, defining artistic perfection with his luminous, incredibly detailed, naturalistic pictures. When his name first definitively appeared in a document, dated 1422, he ≨was identified as a "master"; today, he'd also be called a dis-grupter. Many art historians revere him as the greatest painter of all time.

Visitors to "Van Eyck: An Optical Revolution" at the Museum of Fine Arts Ghent will not need to 豊be persuaded of his genius. Even though it lacks Van Eyck's two greatest surviving works—the interior panels of the Ghent Altar-ੋਂ piece (1432) in nearby St. Bavo's Cathedral and "Portrait of Giovanni (?) Arnolfini and his Wife" (1434) at the National Gallery, London—the exhibition is sub-⊑lime. Not flawless, but awe-in- $\frac{1}{2}$  spiring nonetheless.

This unprecedented exhibit ≨ presents 10 panels from the altarpiece, hung in pairs, plus 13 of Van Eyck's other 22 recognized works. වූ They are accompanied by more than 100 other artworks from his workshop, by followers like Petrus 🖁 Christus and Quinten Metsys, and by contemporaries in Italy. Some ਤੋ are exquisite gems—for example,

Masaccio's "The Virgin and Child" (1426) and the Doria Pamphilj Diptych by Gerard David and Jan Gossart, "Madonna in a Church" and "Antonio Siciliano and St. Anthony" (c. 1510-15).

But Van Eyck's paintings are, quite plainly, "new" and different from them because—the curators assert—he was thrice-gifted: He possessed extraordinary powers of observation, exceptional handeye coordination, and deep understanding of the reflection and re-

#### He possessed extraordinary powers of observation, among many other gifts

fraction of light. Equally important, he "perfected" the use of oil paints: By adding a drying agent that made his mixtures more manageable, he could better manipulate and layer his paints and glazes. Consequently, Van Eyck portrayed a variety of surfaces, materials, textures and details more brilliantly and precisely than ever before.

Simply put, Van Eyck created illusions that seem more real than reality, that go beyond truth to verisimilitude.

Examples abound, perhaps none as crystal-clear as his grisaille "Annunciation Diptych: Archangel Gabriel and The Virgin" (c. 1435). The figures, painted in white against a glossy black background, appear as tangible, three-dimensional alabaster sculptures, with curly hair and deeply draped robes, set in stone niches that are inscribed with Scripture and framed in marble. Gabriel's right wing and Mary's book, especially, protrude toward viewers, while light from the right casts shadows that accentuate the figures' volume. Yet the dove of the Holy Spirit, far from being static, seems to be in flight above Marv.

Van Eyck accomplished similar effects in color in his most revered work, the Ghent altarpiece, which was commissioned in 1420, designed and begun by Hubert van Eyck, Jan's older brother, who died in 1426, and completed by Jan. Most of it, alas, remains in St. Bavo's in a dim, perpetually crowded chamber, protected by a see-through barrier that keeps visitors several feet away. The setting allows general appreciation of this masterpiece—made more stunning by an still unfinished project to remove extensive overpainting and varnish that muted its brilliant greens, blues, reds and whites-but makes the details imperceptible. The restoration of the main panel revealed, among other things, the original human-like facial features of the mystical Lamb of God, particularly his eyes, but you have to take that on faith or from images in news reports.

In contrast, visitors to "Van Eyck: An Optical Revolution" may stand within inches of the panels (which will return to St. Bavo's in May) and other works. They can see for themselves not just the individual hairs and raised veins of his monumental, fleshy Adam and Eve, for example, but also the ray of light refracted through a water flask in the background of the Mary panel.

In his portraits, Van Eyck also painted what he saw, not idealized versions of his subjects, as did his Italian contemporaries. He lays bare scars, blemishes, sagging skin and stubble, as well as the glint of the sun on the golden ring in "Por-

trait of Jan de Leeuw" (1436) and

Golden Fleece in "Portrait of Baud-

the insignia of the Order of the

ouin de Lannoy" (c. 1435). Even more remarkable displays of Van Eyck's mastery of minutiae and illusionistic realism are evident in "St. Francis of Assisi Receiving the Stigmata" (c. 1440). It shows Francis kneeling in a rocky landscape so accurate that geologists have discerned fossils and dated the rocks to the late Paleozoic era. Beyond them are a city, a lake, a winding river, a ship and then-miles away-a snowy mountain range. The painting measures 5 inches by 5 ¾ inches.

Among the most magical works on view is the tender, highly detailed "The Madonna at the Fountain" (1439). Van Eyck places his Mary, dressed in a beautifully draped deep-blue robe, in a rose garden. She stands against a red brocaded cloth held in place by angels with rainbow wings. To her right is a bronze fountain of life, glistening in the sun. This work, too, is tiny, just under 7 ½ inches by 5 inches.

This intimate painting inspired many copies, like the adjacent one attributed to Van Eyck and his workshop. But the copy lacks crispness, dazzle, the hand of a master throughout. It also alludes to the exhibition's one fault: It seems a bit padded with works that are not by Van Eyck, no doubt to disperse crowds privileged to visit its 13 galleries.

That doesn't mar the rarefied experience of seeing so many of Van Eyck's works in one place. The exhibition illustrates exactly why he was probably the first Flemish artist to sign his works. With such talent, who wouldn't take credit?

Van Eyck: An Optical Revolution Museum of Fine Arts Ghent, through April 30

Ms. Dobrzynski writes about art for the Journal and other publications.

Editors' Note: Though the exhibition is closed until April 5, zoomable images of most of the works discussed here can be found at closertovaneyck.kikirpa.be and on the

Van Eyck page of the Google Art



Clockwise from above: Jan van Eyck's 'The Madonna at the Fountain' (1439); 'Tapestry With Scenes From the Passion of Christ: Christ Carrying the Cross, the Crucifixion and the Resurrection' (c. 1445-55), by an anonymous artist; Jan and Hubert van Eyck's 'The Adoration of the Mystic Lamb' (1432); Jan van Eyck's 'Portrait of Baudouin de Lannoy' (c. 1435)



## **SPORTS**

# **IOC Considers Postponing Olympics**

Rising number of cases leads executive board to conclude it needs to 'take the next step in its scenario-planning'

The International Olympic Committee on Sunday said it is considering postponing the Tokyo 2020 Games, bowing to the reality of the worsening coronavirus pandemic and growing pressure from athletes, sports federations and public health leaders to delay its multibillion-dollar centerpiece event.

> By Rachel Bachman, Louise Radnofsky and Joshua Robinson

The statement brought a swift response from participating nations who made it clear that circumstances has already overtaken the IOC's deliberations. Later on Sunday, Canada's and Australia's Olympic Committees said they wouldn't send athletes to the Games if they were held this summer, with Australia telling athletes to prepare for a Tokyo Games in the northern summer of 2021.

The Australian Olympic Committee, for example, issued a statement saying its executive board had concluded "an Australian Team could not be assembled in the changing circumstances at home and abroad."

The IOC has been criticized for taking a full-steam-ahead approach to the Games' July 24 start date, failing to acknowledge the possibility of a delay despite a rising global death toll and the shutdown of many nations' athletic-training facilities.

It changed course on Sunday by saying it would assess the worldwide health situation and consult with the Tokyo 2020 Organizing Committee, Japanese authorities and the Tokyo Metropolitan Government. The IOC didn't detail possible postponement scenarios but said cancellation isn't being considered.

And it signaled that a decision isn't imminent, either, by saying it was confident it would complete the discussions within the next four weeks.

Whatever the outcome, moving the Games would be a complicated and disruptive event for a large number of constituencies. They include athletes whose training has been sidelined; broadcasters such as NBC, who pay huge sums for broadcasting rights; sponsors who make the Olympics a focal point of their marketing; and other sports organizations, who might find themselves competing with the IOC for new dates when the sports world one day moves toward playing games again.

The IOC's move came on the heels of USA Swimming, USA Track & Field and others calling for the U.S. Olympic & Paralympic Committee to use its influence with the IOC to postpone Tokyo

Japanese Prime Minister Shinzo



The International Olympic Committee has faced growing pressure from athletes, sports bodies and public health leaders to postpone the Tokyo Olympics.

Abe said he supported the IOC's decision. He said canceling the Games was "out of the question" and reiterated that he didn't want to scale back the event or hold it without

The Canadian Olympic Committee said late Sunday it would not send a team to the Tokyo Games, concluding it wouldn't be safe for the athletes and their families. It called for the Games to be delayed

Public health officials also have begun speaking forcefully on the matter. Lawrence Gostin, the director of the World Health Organization's center on global health law. said in an interview with The Wall Street Journal on Sunday that the Games couldn't go on in July and that he was making that argument strongly within the organization, which the IOC has said is its chief

"No one could say with any degree of confidence that the situation globally will be better." Gostin said. "Even if you're on the downturn in Asia and Japan, it would be on the upswing in many parts of the world.

source of expertise.

I could see the U.S. and Canada near peaking, and possibly in Mexico. I could see the curve of the pandemic on the way up in sub-Saharan Africa and the Middle East.

"Since this is a global event it would be the height of folly to consider going forward, and that's if the borders opened, travel restrictions

'It would be the height of folly to consider going forward; said WHO official Lawrence Gostin.

lifted and the airlines started flying." In its statement, the IOC said the "dramatic increase in cases and new outbreaks" led its executive board to conclude it needs to "take the next step in its scenario-planning."

World Athletics, the international governing body of track and field. said it welcomed discussions about postponement. Han Xiao, chair of the USOPC's Athletes' Advisory

Council, said the IOC's acknowledgment that postponement is an option and its timeline to shape scenarios is "a step in the right direction. We're looking forward to more information and continued transparency over the following four-week period."

In the event of postponement, the debate will shift to just how long the IOC should wait to hold the Games safely.

Public health experts have mixed perspectives on the best new date. While some said the fall of 2020 could work, others, such as Gostin, worry about the legacy of the 1918 influenza pandemic, in which the deadliest period came after restrictions were lifted because cases had

Carlos Del Rio, head of the global-health department at Emory University and the chair of a panel convened by the National Collegiate Athletic Association to guide its decision-making, agreed that the threat of reversing the gains made on coronavirus transmission by then might necessitate postponing the Games for a full year. "We are really

in uncharted territory," he said.

William Schaffner, a Vanderbilt University professor of preventive medicine who also served on that advisory panel, said that 2022, not 2021, would be preferable. By then, he said, there was a stronger likelihood that the Games could take place in a setting where a vaccine had been brought online and everyone attending had received it, he

Any postponement shorter than a year, meanwhile, could put the IOC squarely in a crush of rescheduled events this fall, plus the National Football League, playoff baseball, and European soccer—a scenario sure to be opposed by the Games' major broadcast-rights holders around the world.

Beyond scheduling concerns, any delay is certain to scramble the plan for Olympic sites after the Games. The main athletes' village is slated to be sold as private accommodation after the Games, and thousands of Olympic volunteers and staff who assumed their work would be done by August would have to be reassembled or re-recruited.

#### Weather AccuWeather DOWNLOAD THE FREE APP Shown are today's noon positions of weather systems and precipitation. Temperature bands are highs for the day 30s Edm <0 0s 30s Calgary 10s 50s-20s 30s 40s .40s August 50s Boston 50s 40s 30s 60s 30s 70s 60s Re 30s 40s 80s alt Lake City 30s De San Francisco 90s 50s 100 60s 50s 40s 60s Charlotte Warm San Diego Atlanta 70s Tucson 50s 80s Cold ballas 70s Jackson Austin Houston Snow 70s Showers 11111 40s **U.S. Forecasts** s...sunny: pc... partly cloudy: c...cloudy: sh...showers:

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Charlotte	57	48	sh	68	60	r	
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Detroit	49	31	pc	49	37	C	
Honolulu	79	70	pc	80	70	pc	
Houston	82	67	pc	86	63	C	
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Miami	85	72	pc	86	73	S	
Milwaukee	44	34	pc	44	36	C	
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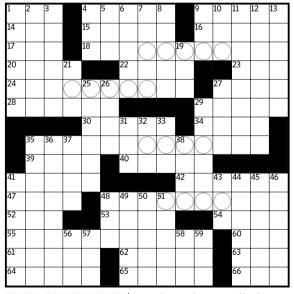
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## The WSJ Daily Crossword | Edited by Mike Shenk



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41 Game with 42 Rental agreements

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> Grapes" writer 62 Political influence 63 Pest at a picnic

64 Helen Mirren and Maggie Smith, for two 65 Reduced, as

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

#### 33 Atlanta-to-Tampa dir. 1 Bombastic talk

35 Sunbathing spot 2 Total mystery 36 Glass-half-full 3 Frankfurter

37 Dirt road hazards 4 "Then what?" \_ Alto, 5 Seven, on a California

electric autos

51 Some jazz

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57 Short albums,

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is MULTIMEDIA. As suggested by 61-Across, THIRD PLACE (clued as "Show"), the theme answers spells the contest answer

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## **Cracker Jack Economics**



INSIDE By Andy Kessler

politiwho want a prize in every package?

Last week when Joe Biden and Ber-Sanders nie clashed over

stimulus in a primary debate, Mr. Biden celebrated the 2009 Recovery Act, saying it "had \$900 billion in it and was the thing that kept us from going into a Great Depression." If you believe that, I've got a bridge to nowhere to sell you. The Obama administration touted "shovel ready" projects—they were shoveling something, all right. Then again, remember President George W. Bush's 2008 \$152 billion stimulus in the form of tax-rebate checks? The "booster shot" for the economy was a huge dud. Sadly, here we go again—a stimulus for all of us.

What actually saved the economy in 2009 was one word: backstop. Finance froze because toxic mortgagebacked securities littered the system and, as with mad-cow disease, no one knew which ones were bad. The Federal Reserve provided a backstop to the commercial-paper market, then money-market funds and eventually banks, by buying up many mortgages to relieve default risk. Once bank stress tests took Armageddon

What is it off the table, lending restarted even planes as collateral. The that applicants seek work. with Cracker and the crisis ended. Spending on roads and bailing out General Motors were mere porkbarrel waste.

The economy is now grinding to a halt. Forty million Californians must "shelter in place" until further notice. New Yorkers too. Everywhere bars are (gasp!) closed. Planes are empty. Cruise ships are mothballed. Marriott and other hotel chains are furloughing employees.

Politicians need to do something, right? Yes, but it should be short-term and temporary. President Trump has a "big bold plan." White House adviser Peter Navarro wants an \$800 billion payroll-tax cut. Senate Republicans want to send \$1,200 checks to a huge share of Americans. Treasury Secretary Steven Mnuchin is negotiating with congressional leaders a bailout of as much as \$2 trillion. Rep. Ro Khanna, Mr. Sanders's campaign co-chairman, ups the ante with checks of up to \$6,000 for those making less than \$65,000. Candy-coated popcorn, peanuts and a prize.

Mr. Mnuchin has smartly authorized the Fed, via Section 13(3) of the Federal Reserve Act, to lend directly to solvent companies, creating a trilliondollar backstop for the commercial-paper market and money-market funds. "lender of last resort" is needed. Airlines need capital, so lend to them at a unemployment insurance— Bagehotian penalty against future ticket sales or clude waiving the requirement

penalty rate is to make sure those that don't need it don't clog the system. The same program could shore up hotels and other still-solvent large businesses. And with support from the Fed, banks can do the same for small businesses. If the economy has a threemonth hole because of quarantines and lockdowns, the Fed can provide a bridge loan across that void.

A prize inside every package won't spur recovery from the coronavirus shock.

Those without jobs also need direct assistance, like debit cards for food handed out by local authorities. No one should go hungry as the economy evaporates for 90 days. Food aid could also be provided internationally maybe using those mothballed cruise ships.

But one big puzzle is deciding the best way to help workers, many of whom are out of jobs, or are running short on tips and trips if they're waiters or Uber drivers. We have a social safety net, and each immediately lower bureaucratic barriers to collecting rate, which obviously should in-

Temporary sick leave is critical, as is helping small businesses continue to pay wages.

Beyond that, Mr. Mnuchin talks of "business interruption payments": \$500 billion in direct payments to households those \$1,200 checks—which would work more quickly than a payroll-tax holiday. Voting begins this week. Politicians love sending checks with their names on them to voters. But structure them as a backstop: a loan against future earnings. Direct payments as stimulus have proved ineffective, so why double down?

Like clockwork, I can guarantee we'll soon start hearing about multipliers—you know, for every dollar of stimulus we'll supposedly see \$2 or \$3 or \$10 of economic activity. It's a great talking point, but it's bogus. Every dollar spent by the public sector is a dollar taken from the productive private sector.

How did the economy climb out of the Great Recession? Through the production and delivery of iPhones, Teslas and Lyfts (oh my) over the decade that followed. The best stimulus is the production of goods and services that the economy needs, at ever cheaper prices. By all means, let's get immediate money to those who need state must temporarily but it through unemployment assistance and backstop loans. But government giveaways as stimulus don't work. It's just Cracker Jack economics.

Write to kessler@wsi.com.

Yet more than crude, Ha-

**BOOKSHELF** | By Thomas A. Bass

# The Republic Of Samsung

Samsung Rising

By Geoffrey Cain (Currency, 391 pages, \$29)

SAMSUNG

RISING

eoffrey Cain's "Samsung Rising" reads like a dynastic thriller, rolling through three generations of family intrigue, embezzlement, bribery, corruption, prostitution and other bad behavior that seems to pass for standard operating procedure in the Korean business world. More than half of the country's 10 largest corporate groups, Mr. Cain tells us, are led by convicted criminals, although all of them have received presidential pardons, and several of them, including Samsung's current chairman, Lee Kun-hee, have been pardoned twice.

The Korean national spy agency works with Samsung, Samsung works with the government, and everyone makes out well in the virtuous circle of cross-shareholding known as the Republic of Samsung. In the meantime, South Korea's most valuable company, a \$300 billion behemoth that accounts for a fifth of the country's exports, keeps inventing

new products that we gobble up by the millions.

'Samsung is the most bizarro place I've ever seen," savs a former American executive at the company. Mr. Cain notes the irony that the most prominent company in South Korea is infused with the nationalism and militaristic structure of the North. The company is run by a revered leader whose messages are broadcast throughout its factories and reproduced in everything from comic books to a Samsungowned newspaper. During the company's

annual summer festival, Mr. Cain writes, drill teams line up to form a punching fist and raise placards spelling out the word "Victory"—just like their northern cousins do.

Like many stories about successful entrepreneurs, Samsung's begins with a young man dropping out of college. Lee Byung-chul, also known as B.C. Lee, founded Samsung in 1938. in what was then a Japanese colony. He failed at trading rice before moving into fresh vegetables and dried fish. As a university student in Tokyo, Lee had admired how the Japanese did business through zaibatsu-interconnected corporate cliques with strong ties to the military and state. Lee borrowed this structure to develop what became known in Korea as *chaebols*.

Lee drew on family resources to build a sugar refinery. He moved into trucking, wool spinning and insurance. He started a university and a newspaper. By the time he died in 1987. he was the richest man in South Korea and a "symbol of South Korean corruption," says Mr. Cain, for having bribed his way into obtaining a wide variety of state-controlled licenses and contracts.

In November 1983, Chairman Lee welcomed into one of his factories in Suwon, a grimy, industrial city south of Seoul, a 28-year-old American entrepreneur named Steve Jobs Dreaming about building a tablet computer, Jobs was looking for memory chips and displays. Samsung at the time was making cut-rate TVs and microwaves, but it was also getting started in making memory chips, and Jobs suspected they could build anything he wanted. He and Lee hit it off, and Samsung would eventually become the major supplier of computer chips, displays and other components used in Apple's iPads and smartphones.

South Korea's most valuable company produces a fifth of the country's exports and is intimately intertwined with the state.

Before his death, Lee handed the company to his third son, Lee Kun-hee, or K.H. Lee. Lee Kun-hee was a playboy better known for having a private race track for his Porsches until one day in 1993 when he had a kind of corporate epiphany. Gathering the company's top executives into the presidential suite at the Kempinski Hotel in Frankfurt, where he was living at the time. Lee delivered an eight-hour speech and urged them to "change everything except your wife and children"

and embrace Samsung's new philosophy of "perpetual crisis." Samsung's "quasi-religious corporate culture," as Mr. Cain calls it, began opening to the West. Samsung imported Madison Avenue advertising executives, California designers and Texas marketers. It launched Hollywood initiatives to improve the company's dismal image. The company began shifting from electronics to software and lifestyle. In this world of interchangeable technology, where one cellphone works pretty much like any other, design becomes the product itself.

Samsung went through a dark period in the late 1990s. Asian markets collapsed in 1997, Samsung Motors went bust and Lee Kun-hee was convicted of making \$32 million in "donations" to government officials. To bring in cash, Samsung began selling flip phones in bulk to Sprint and other carriers. This is when the sales and marketing people in Richardson, Texas, began attending corporate meetings that were "more like a Communist Party self-criticism session, as Mr. Cain puts it. The company was so driven by "fear of failure and loss of face" that good sales figures in the U.S. were thought to reflect badly on bosses back in Korea.

By 2010, the year before his death, Jobs was threatening "thermonuclear war" on Android, the operating system used by Samsung's phones. Furious that a major supplier was releasing its own competing products, Jobs launched one of the longest-running patent-infringement suits in corporate history, which ended seven years later in a legal draw, with Apple winning in the U.S. courts and Samsung winning in Korea, Japan and England.

By this point in the story, Mr. Cain's wonderfully informative book begins to fray into anecdotes about various product launches and celebrities pouting over promotional tie-ins. With Samsung shipping 85 million smartphones a quarter, it could buy endorsements from Jay-Z, Kanye, Ellen DeGeneres or anyone else.

Lee Kun-hee has not been seen in public since he suffered a heart attack in 2014. His son, Lee Jae-yong, is tapped to succeed his father, but the family is a minority shareholder in Samsung's 50 companies—or is it 60 or more, as some sources say?—and Lee Jae-yong may not be able to summon the alliances required to keep this sprawling enterprise in family hands. He and his sisters are also facing more than \$6 billion in estate taxes, not to mention his own five-year prison sentence for bribery and embezzlement, which is currently being appealed. Stay tuned for the next installment in this long-running drama.

Mr. Bass is the author of three books on Asian politics and culture, including "Vietnamerica" and "The Spy Who Loved Us."

## Repression in the Time of Coronavirus



**AMERICAS Bv Marv** Anastasia O'Grady

see them enjoying spring break in Varadero Beach last week.

credibility

that President

Vice President

Joe Biden lent

to Cuban pro-

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and

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The regime said Friday it will close its borders to foreigners starting March 24. But until now Havana has been trying to make lemonade out of the coronavirus by advertising Cuban holidays as an escape from the pandemic. week that regime tour companies were boasting about the island's state-of-the-art it's capable of taking on the contagious virus. This is known as being hard up for hard currency.

Cuba already has been denounced for treating its medical workers like chattel when it sends them abroad to earn money for the regime and indoctrinate populations. But now it's doubling down on the scheme, claiming that Havana is stepping up to help the world in a time of crisis.

It also maintains it makes magic in its pharmaceutical labs. Doctors around the world have long relied on interferon as an immune-system booster for treating viral infections and other illnesses. But now

the global influencers to promote for Venezuelan petroleum claims that its production of a type of the drug is the cutting-edge of science.

Italian tourists have experienced a different reality. A 61year-old from the Lombardy region of Italy died of the virus on Wednesday at Havana's Pedro Kuri Institute for Tropical Diseases, one of the island's best hospitals. Another Italian corona patient, confined in the same facility, complained bitterly on social media about no toilet paper, no spoons for soup, no news about her condition and no communication with doctors.

In a country where soap and water are luxuries, ramping up traffic from Europe The independent Cuban news was a precarious strategy. But outlet 14vmedio reported last desperate times spawn crackpot measures, and the Cuban economy is skating dangerously close to the edge. The health-care system, saying regime needs dollars to maintain the police state that has kent it in power for six decades. Its problem today, in a word, is oil.

Cuba hasn't done well on its own since Fidel Castro took power in 1959. It was a dependent of the Soviet Union until 1991. Havana was then forced to legalize the dollar and microenterprises and let foreign investors take minority stakes in regime companies. But the ruling elite didn't like it.

The Castros found a new sugar daddy in Venezuela's Hugo Chávez, who came to power in 1999. A symbiotic relationship blossomed: Cuba would exchange its compara-Cuba is using its army of tive advantage in repression

products. At the deal's peak, from 2010-12, Havana received some \$4 billion annually in oil subsidies from Venezuela.

But the party wasn't to last. Venezuela was pumping 3.4 million barrels a day before *chavismo*. Output is now around 750,000 barrels a day—and falling—thanks to poor well management, a

Venezuelan oil and Cuban tourism collapse. The despots scramble for dollars.

scarcity of skilled labor and a collapse of investment.

Caracas has been eating

big discounts because it's difficult for buyers to get around U.S. sanctions. Russia's Rosneft, formerly Venezuela's key customer, is said to be put off by all that effort. Other former buyers can get heavy crude more easily from Saudi Arabia. With the international oil-price swoon, tar-heavy Venezuelan crude has plummeted to between \$10 and \$15 a barrel.

Venezuelan storage capacity on land and at sea is full up, so it is sending the excess to Cuba. This has boosted daily shipments back to 100,000 barrels a day from lows of around 20,000 before fall 2019. The Castro regime has been filling its storage tanks and selling what it can on the black market.

vana needs gasoline, diesel and gas oil for electricity production, which Venezuela used to provide but no longer has the infrastructure to produce. Venezuela resorts to swaps when it can, but the terms are terrible. So despite the uptick in crude supplies, Cuba is still limping badly. Meanwhile the effects of

the coronavirus shutdown "are likely to be catastrophic Venezuela," Francisco Monaldi, an energy economist at Rice University, told me in a telephone interview last week. Running water and soap aren't readily available in hospitals or even in many homes. Gasoline shortages make getting imported food to cities outside the capital difficult. Venezuela is heavily dependent on some \$3 billion in annual remittances from citizens who fled, mostly to other South American countries, in recent years. If their jobs dry up in a deep regional recession, so will the flow of money. This will put more pressure on Venezuelan leadership to end subsidies to Cuba.

What's more, it may be necessary to cap wells, and that's unlikely to be temporary. Experts say it won't be easy to restart them when human and financial capital is in short supply.

All this explains Havana's efforts to use the pandemic to boost European tourism and to create the illusion that it specializes in advanced medical care. It's a sick joke.

Write to O'Grady@wsi.com.

## Celebrities Skype Away Coronavirus Blues

**By Peter Funt** 

he power of Skype and the peril of using it for live interviews from home were memorialized in March 2017 by political analyst Robert Kelly. Mr. Kelly appeared on BBC News from his home office to talk about South Korean politics. But during the interview his 4-yearold daughter and 9-month-old son sneaked up behind him, in full view of the camera. Mr. Kelly tried to push his daughter aside, turning pale as his wife finally yanked the kids out and then crawled back to close the office door. The video has been viewed more than 35 million times. Mr. Kelly is now known best as "BBC Dad."

Now, during the coronavirus pandemic, Skype, Zoom and other services are providing glimpses into the homes of celebrities and newsmakers.

So far nothing surpasses Mr. Kelly's experience, though for-Schwarzenegger drew atten-

feeding a donkey and miniature pony. He has a nifty collection of German beer steins on a shelf in the background.

John Legend sings and piano from home, streaming over Instagram. He's won 10 Grammy Awards, and

TV journalists report the latest news from their home offices.

in case you didn't know, they're prominently displayed on a shelf behind him. Another Grammy winner, Melissa Etheridge, has been livestreaming concerts over Facebook from her den, its walls decked with posters from her concerts and albums.

Some journalists Skyping in front of a bookcase slyly turn one book—their own—so the cover faces the camera, as Pemer California Gov. Arnold ter Baker of the New York Times did on MSNBC. Others tion with a recent video in want to convey basic literacy:

for books to make sure the bookshelf was full enough for a two-time World Series win-TV," CNN media reporter Brian Stelter tells me via email.

Mr. Stelter and his wife, Jamie, a host on local news station NY1, have converted a corner of a bedroom into a home studio, allowing their daughter, Sunny, to select a family photo that appears in the background. "My first live shot on CNN was a bit of a mess," Mr. Stelter notes, with Sunny heard crying as she pounded on the locked door.

Journalist and historian Walter Isaacson Skypes from what appears to be a front hall lit by a massive chandelier. Katie Couric calls from her living room, where we see at least three area rugs. CNN political reporter Gloria Borger positions herself in front of a painting of a barn in winter.

The communications director for President Trump's 2020 campaign, Tim Murtaugh, does Skype interviews from a dark nook in his house, surrounded by sports photographs. The

which he sits at his dining table "I surveyed the entire house one over his left shoulder is a beaut, showing his dad, Danny, ner as manager of the Pittsburgh Pirates.

Jimmy Fallon is getting millions of YouTube views with a "Home Edition" featuring a private wonderland complete with a full-size carnival popcorn machine and an indoor slide from the second floor to the first. Conan O'Brien plans to return to the airwaves March 30, via iPhone and Skype. "The quality of my work will not go down because technically that's not possible," he quipped.

Mr. Stelter's advice to Skyping newsmakers: "An adjustable-height desk is valuable for a home studio setup, because it allows you to get the camera at the right level."

To that I'd add: Even seated behind your adjustable desk, when Skyping on national TV it's probably best to keep your pants on.

Mr. Funt is a writer and host of "Candid Camera."

**A16** | Monday, March 23, 2020

#### REVIEW & OUTLOOK

## A Washington Liquidity Infusion

may help the economy

stave off a depression.

ederal and state governments have shut Treasury Secretary, at his discretion, to seek down much of the American economy, and now Washington is moving to lend The Senate virus bill

its balance sheet to compensate for some of the losses it is causing. The foremost goal should be to provide liquidity to prevent defaults and business failures that will cascade into mass layoffs and another depression.

By our deadline, the Senate had not reached a final deal. But the bipartisan draft bill and summaries we'd seen on Sunday afternoon were a major improvement on the state of play on Friday. The overall cost is murky, though it will be in the multi-trillions of dollars, and that includes hundreds of billions in subsidy payments to individuals to buy broad political support.

The version we examined is nonetheless worthy of Senate passage—not least to avoid House Speaker Nancy Pelosi making it worse. She and Senate Minority Leader Chuck Schumer were blocking a deal late Sunday with more demands from their non-virus-related policy wish list.

The window for providing liquidity to stressed businesses is closing faster than many realize. Markets face another tumultuous week. with many industries hard-pressed to find financing. Real-estate investment trusts, with investments in shopping malls that have few customers as people stay home, are one problem to watch. Non-bank financial institutions are another.

The most urgent need is for the Treasury to have more money to backstop the Federal Reserve as it stands up one or more facilities to provide liquidity. The Senate bill evolved for the better on this point over the weekend. The bill appropriates up to \$425 billion for the Treasury's Exchange Stabilization Fund that backs Fed facilities under Section 13(3) like the one launched last week for money-market funds. (There's another \$75 billion for airlines and firms deemed crucial to national security.) This can be leveraged up to well over \$1 trillion in lending power to calm markets.

As important, the Senate language shows the Treasury and Fed will be able to provide this money to all comers who don't qualify for the bill's small-business lending provision. One holdup is Democratic demands to attach more burdens on businesses that borrow from the Fed, such as dictating union board members or limiting executive pay.

There should be as few strings as possible because the point is to coax distressed companies to use the facility before they are on the verge of failure. The point is to prevent bankruptcy or default, not hope to salvage companies when they're about to fail. Strings-free loans will encourage still-healthy firms to participate and prevent further economic harm.

The bill does block companies that take direct loans from buying back stock for the duration of the loan. This is fair since if you need taxpayer cash to operate you shouldn't be ing your capital s tructure. Democrats which is purely punitive. The bill also allows the far deeper recession.

warrants, preferred shares or other equity from borrowers. We trust Secretary Steve Mnuchin

> will use this only in the most extreme circumstances, and he would not be able to exercise voting rights on common shares in the language we saw.

Senator Elizabeth Warren and other progressive Demo-

crats are calling these loans a "slush fund" and "bailout" (see nearby), as if these companies created the coronavirus. The government shouldn't be able to deny companies their customers and revenue—no matter how vital the public-health cause—and then demagogue and demand that government have a major say in running the companies. That's a ruin-and-rob strategy that President Trump and the GOP should not accept.

A second liquidity provision provides about \$350 billion for small businesses of fewer than 500 employees, and that too evolved for the better. Businesses will have access to loans of up to \$10 million for working capital like paying employees and keeping the lights on. The portion of the loan that finances employees will be forgiven if workers aren't laid off and don't see a major reduction in pay. This prevents businesses that operate on a narrow cash margin—which is most small businesses—from taking on debt that will swamp them once the virus crisis is past.

The main rub here will be bureaucratic, since the loans will be administered through the Small Business Administration's 7(a) program. The SBA has neither the systems nor the employees to do this quickly or efficiently. With that in mind, the bill attempts to streamline the bureaucratic traps so some 800 or so SBA-approved banks and other lenders can move the money fast.

The political price for getting this relief to private business is a huge expansion in welfare programs and jobless insurance for the states. We hope these payments won't induce too many essential workers to stay home during the crisis and beyond. We don't mean the front-line public-health workers who will continue to do heroic work despite the risks. The country also needs pharmacies, grocery stores, delivery companies and vital manufacturers to operate during the virus shutdown.

None of this government intervention is easy for a free-marketeer to swallow, and this bill is so large and complex that we will be discovering more about its details for weeks. The good news is that most of its provisions, including its business lending clauses, expire on Dec. 31 this year when the crisis should have eased.

This liquidity panic isn't the result of bad business decisions. It's the result of government orders to save lives. The loans are designed to keep employers alive during this forced shutdown so employees will still have jobs when it's over. The Trump Administration still needs a Phase Two strategy soon to move past the shutdown, and Democrats need to end their partisan want the buyback limits to continue forever, obstruction lest they send the economy into a

## Small Business, Individuals Confront Panic

LETTERS TO THE EDITOR

Regarding your editorials "Financing an Economic Shutdown" (March 17) and "The Fiscal Stimulus Panic" (March 18): You say the best way to keep companies and individuals solvent is to have the Fed create a new facility that could lend to companies hit by the economic shutdown, and that the borrowers would have to "present good collateral . . . and have been solvent before the viral panic took hold." I'd like to ask who will manage this process? Will the companies have to provide audited financial statements? What if the companies don't have audited financials (like most small companies)? Who will determine whether the collateral is sufficient and what defines solvency? The elephant in the

room is: "How long will this take?" I am on the board of a small manufacturing company which is reliant on the film industry. Our CEO figures he has eight weeks of leeway before the company runs out of money due to the drop in sales. I have a very hard time believing that any government agency will be able to pull a plan together in as little as eight weeks. How many companies must go out of business before a solution is in place?

NANCY DANDRIDGE, CPA, MSIS Long Beach, Calif.

I am 76 years old, retired and unemployed. On Dec. 31, 2019, I had a very nice annual capital gain. Today every dollar of that gain is gone. It likely will come back, but right now I am faced with selling shares at a loss to pay taxes on a gain that no longer exists. Selling shares to pay taxes assures me that I will not enjoy the eventual rally that will come in timemy shares will be gone. I doubt I am alone in this dilemma. A stimulus for me would be to reduce or forgo capital-gains taxes on 2019 returns for seniors and retirees. With that single

change in rules I would be able to hold on to my shares so the IRS can tax them later.

> TOM DENHAM Hendersonville, Tenn.

Your suggestion of a Fed lending facility to companies doesn't address the problem of consumer liquidity. With much of the retail sector closed, what will replace weekly paychecks? As you advised in "The Emergency 401(k) Button" (March 20), why not let individuals take tax- and penalty-free withdrawals from 401(k) and IRA accounts? This would provide easily accessible cash, and the cost to the U.S. Treasury would be future foregone tax revenue, which is cheaper than writing everyone a \$1.000 check. Cap the withdrawals at a percentage of the account value to prevent abuse. Not everyone has a 401(k) or IRA, but why not let those who do use this resource?

> Mark Johnson Berwyn, Pa.

This is an appropriate time to suspend required distributions from seniors' retirement accounts. The distribution amount is based on account balances as of the end of last year.

DENNIS L. SLIVINSKI Camarillo, Calif.

Free money won't replace a paycheck, and those who don't lose their jobs don't need the extra cash during this crisis. We are all going to be spending less anyway since everything is shuttering. It would be far better for the federal government to subsidize private-sector payrolls to keep people in their jobs and on benefits. Otherwise mass layoffs are coming. Since the government is throttling society, it is directly responsible for the collapsing economic climate.

DWAYNE KEITH Valrico, Fla.

## George Mason Will Keep Its Donor Agreement

History of Female Brain Studies Reveal a Lot

Regarding your March 14 editorial "Justice vs. Conformity at Scalia Law": You are misinformed about George Mason University and its commitment to protect donor anonymity. The university has been clear since the announcement of the renaming of the Antonin Scalia Law School that it will respect the donor's right to anonymity. The university has not shared the identity of the donor, nor does it intend to.

Donor support is essential to universities. Their gifts create opportunities for students, allow us to attract talented faculty and help us deliver on our mission of access to excellence. We have a responsibility to ensure that any gift provides protection against undue influence, that we up-

Lisa Mosconi's new book "The XX

Brain" provides a fresh take on the

study of sex differences in brains by

focusing on hormones ("Your Health:

Brain Works," Life & Arts, March 10).

women's health, the historical quest

to document sex differences in brains

New Wisdom on How the Female

While it is exciting to learn about

studies that promise to enhance

was founded on the premise that

rior to men's.

women's brains are inherently infe-

hold our commitment to academic freedom and that we remain as transparent as we can be while not compromising our donors' legal rights to privacy.

We accomplish this through policies that are clear, publicly available, reflect best practices, and serve as a model for other universities. These policies allow us to rely on donors for support, while protecting their rights to anonymity. Despite repeated requests by individuals, using Virginia's Freedom of Information Act, to reveal the identity of the donor, we are committed to preserving that anonymity, consistent with our legal obligations.

> Tom Davis Rector, George Mason University Fairfax, Va.

## Elizabeth Warren's Ranting Resumes

The fight against

the coronavirus is

'favoring' no one.

comity has descended with the coronavirus crisis, but given the low stan-

dards of our time, it could be worse. Americans everywhere have stepped away from politics the past week to help each other. Even the Senate seems to be working toward a decent legislative response (see nearby). Then there's Elizabeth Warren.

In a series of tweets Sunday, Sen. Warren ranted (there's no other word): "Millions may now lose their jobs. And Trump wants our response to be a half-trillion dollar slush fund to boost favored companies and corporate executives." She calls the Senate bill a "bailout" and gripes "it makes no long-term changes to make future bailouts less likely." What planet is she living on?

The virus's threat to life in the U.S. became apparent only weeks ago. Government leaders

 $\boldsymbol{7}$  e won't go so far as to say bipartisan  $\boldsymbol{7}$  from the White House to statehouses have ordered a virtual shutdown of the nation's economic life to reduce the virus's spread through

the population. Businesses large and small have been devastated by the government-ordered restrictions. No one is being "favored" by the crisis. There is no "slush fund."

Senator Warren's irresponsible rhetoric seems to have persuaded some of her fellow Democrats, who late Sunday blocked even a vote to proceed on a bill that had been negotiated by groups of Senators that included Democrats and Republicans. Even Joe Biden stooped to the "slush fund" talk Sunday.

There has been talk of a Biden-Warren presidential ticket. After this outburst, if Joe Biden lets Senator Warren near his ticket or Cabinet, we would say that is sufficient cause to vote against him.

## When the American Neurological Better Crisis Management

Would Beat Any Rate Cuts

In handling a major threat like the coronavirus outbreak, it helps to distinguish between prophylactic measures and treatments. A wellstaffed Centers for Disease Control and Prevention, a national plan for communicable diseases and a clear strategy for mitigating health and economic impact are all important before the fact and in the early stages of a crisis. Central-bank intervention is of limited value until later, when the likely course and magnitude of events are easier to predict ("Fed Slashes Rates as Slump Looms," Page One, March 16).

Making rate adjustments anticipatorily while fumbling management of the disease is foolhardy, especially so when, in the face of already-low rates and no remaining maneuvering room, adjustments can do little to shape the market's expectation of future interventions. It amounts to putting rehab ahead of preventive medicine. Add this misstep to the growing list of shortsighted and ineffective policies pursued by our current administration.

> Andreas Danckers Libertyville, Ill.

Letters intended for publication should be addressed to: The Editor, 1211 Avenue of the Americas, New York, NY 10036, or emailed to wsj.ltrs@wsj.com. Please include your city and state. All letters are subject to editing, and unpublished letters can be neither acknowledged nor Association was organized in 1875, two of its leading members—William Hammond and Edward Clarke-focused their research on documenting the "natural" inferiority of women. Hammond claimed that female brains were structurally different from male brains in 19 distinct ways, including weighing less. The brain-weight theory of intelligence was discredited in the early 1900s, but scientists continued to rely on the "greater male variability" hypothesis popularized by Charles Darwin (and more recently reiterated by former Harvard President Larry Summers).

Women's rights activists, together with female scientists, recognized that such biased studies jeopardized their efforts to attain equality. Helen Hamilton Gardener challenged Hammond in the pages of Popular Science Monthly and then went on to become "the most potent factor" in Congressional passage of the 19th Amendment. When she died in 1925, Gardener donated her brain to science to prove the intellectual equality of women. The New York Times headline declared: "Woman's Brain Not Inferior to Men's." As Gardener knew all too well, the quest to find sex differences in brains has political as well as scientific implications.

KIMBERLY HAMLIN, PH.D. Cincinnati

THE WALL STREET JOURNAL

## Pepper ... **And Salt**



my parking?"

returned.

## The Great Toilet Paper Scare

Those empty

supermarket shelves

should soon start

to disappear.

he President, the Governors, the Centers for Disease Control and Prevention and

news these last few weeks. But thanks to the magic of free enterprise, there is one fear we can alleviate: the idea that America is running out of toilet paper.

The scare is leading to some unusual behavior. And more than typical hoarding.

In Florida—where else?—police arrested a man after a security guard for an Orlando Marriott found him with 66 rolls of the hotel's toilet paper in his car. Nebraska's Department of Transportation said it would close down unattended rest stops along I-80 because drivers were pilfering rolls. In North Carolina deputies trailed a stolen 18-wheeler to a warehouse where they learned it was being used to transport 18,000 pounds of toilet paper and other bathroom paper products. Meanwhile in London, members of the Eltham Terrace Club played a game of power using rolls instead of cash because of the increasing value.

It's true that many local supermarkets still feature empty aisles that were until recently medical experts have given us little good filled with rolls of Scott and Charmin. Others

limit sales to one or two packs at a time. But industry experts say there is no shortage, that their supply lines continue to run, and that once people see they have what they need—and will be able to get more—the shelves will start to fill again. After all, it's not the use of toi-

let paper that's going up, and sooner or later people with a closet filled with a hundred rolls are going to realize they don't need more.

In an interview with BNN Bloomberg, the CEO of Kruger Products, Dino Bianco, says that though the surge in demand is "unprecedented" and he knows consumers are "frustrated," it's going to improve. He also says others in the business tell him all their manufacturing assets are running at full steam. There is, he says, "no absolute shortage" of toilet paper.

People should worry about the supply of ventilators, breathing masks and protective gear for health-care workers, but relax about TP.

P2JW083000-0-A01700-1-----XA

By Scott Gottlieb

irst, the bad news: America's coronavirus epidemic is only beginning, and the suffering will become more searing over the next two weeks. Hospitals in New York City may soon be overwhelmed. New Orleans, Chicago, San Francisco and Seattle may not be far behind.

It will soon be clear why Covid-19 can't be allowed to rage through the country untamed. The intense restrictions—telling Americans to stay inside in New York, California and other states—are necessary. But so is a path back to a more normal life. Here's what the priorities should be in the coming weeks, with a focus on preventing new sparks of the virus from turning into the fires of New York and Seattle.

Containment is no longer realistic in some areas of the U.S., but in other places it may still be possible. As public-health authorities learn more about infection rates in different parts of the country, governments can tailor strategies to the

Soon the U.S. will be able to do 75,000 tests a day. That will make changes in strategy possible.

facts on the ground. There is a tradeoff between mitigation strategies, which target large populations—such as sheltering in place and interventions that try to isolate those who are infected or might have been exposed.

The population tactics are blunt instruments, necessary for isolating hot spots like New York and Seattle. Other places may be able to rely more on individual interventions. which cause less disruption and economic damage. Yet every state



Doctors test for coronavirus at St. Barnabas Hospital, Bronx, N.Y., March 20.

should be taking steps such as encouraging social distancing and preparing to expand hospital capacity. Some states and cities that haven't seen as many cases vet—such as New Orleans—have been too slow to take the threat seriously.

For this to work, the U.S. will need widespread testing to know where and to what extent the virus is spreading. Testing capacity has increased significantly in the past few weeks thanks to relentless efforts from public, academic and private labs such as Quest and LabCorp. Producers of testing kits are also working overtime. A new test developed by Cepheid can be deployed in a doctor's office.

By the end of next week, the U.S. will have the capacity in place to screen more than 75,000 people a day. South Korea tested 1 in 160 of its people and deployed technology to identify people who were infected and trace contacts. The U.S. should do the same.

Another step: serological surveillance, which means blood tests to detect antibodies developed to fight the novel coronavirus. These antibodies confer immunity and can reveal

whether a person has been exposed. If a sizable portion of a local community has some protection, authorities can be more confident in relying on less invasive measures. Once deployed, serological tests are cheap, straightforward, and easy to scale.

Most important is developing a therapy to treat Covid-19 or perhaps prevent people from contracting it. America is home to a vast, dynamic life-science industry. This is its moment. This is why decades of drug investment and development matter so much.

One strategy would be to infuse convalescent plasma—antibodies from the blood of patients who have recovered from Covid-19. This could help boost the immune response in those recently infected. Arturo Casadevall of Johns Hopkins outlined such an approach in these pages last month. Another approach uses antiviral drugs to target the virus and block its replication. Pharmaceutical companies are pulling antiviral drugs off the shelf and testing them

Perhaps the most promising option for now is antibody drugs engineered by biotech companies that

target features on the virus's surface. This strategy was used with success against Ebola. These medications can be given as a prophylaxis to prevent infection for doctors or older populations at high risk of exposure, and can also be used on infected patients. Regeneron developed one such treatment against Ebola. The company has a product in the works to target Covid-19 that could be ready as soon as this summer.

Regulators need to innovate as well. The Food and Drug Administration should leverage "master protocols," which allow providers to test multiple promising therapies in the same large trial. Doctors caring for Covid-19 patients are about to be overwhelmed. They won't have time to deal with the administrative burdens of enrolling in a clinical trial. This was a problem in China. Regulators should create simple, standardized templates for enrollment and monitoring. Electronic data collection can ease the burden on hospitals.

For the most promising drugs, we should scale up manufacturing before we know for sure if they work. That means producing millions of doses while trials are under way. Sen. Steve Daines (R., Mont.) has suggested adding a provision to this effect to one of the relief bills in Congress. We have to be ready to distribute a drug on a massive scale as soon as it is proved safe and effective.

People will suffer and die in the coming weeks. For many others, the U.S. can still turn the coronavirus into a manageable threat. With the right mix of controlling transmission, expanding testing and deploying promising drugs, American ingenuity can beat back this pathogen.

Dr. Gottlieb is a resident fellow at the American Enterprise Institute and a board member of health-care companies. He was commissioner of the Food and Drug Administration,

## Loneliness Is a Health Hazard, Too

By David Kopp

never knew how much I enjoyed my commute L Covid-19 took it away.

As a CEO, my days are packed with meetings. My hourlong train ride to the office in San Francisco offers a good routine: biking to the station, time for uninterrupted thought and email while the wheels and rails clack in rhythm, and a brisk walk to the office.

Then, like millions of others, I started working from home last week. I asked our 340 employees world-wide to do the same. With today's technology, no big deal.

Or so I thought. I found myself heading straight to my home office after I woke up. I quickly fell behind on email because video meetings started earlier. Exercise didn't happen. I even forgot to eat lunch. Late at night, after some family time, I found myself back in front of the computer. I felt out of sorts, emotionally off balance.

Reach out to friends, family and neighbors, especially to the elderly and those who live alone.

Here's the other thing that ate at me more than I expected: the lack of casual contact with others. No nods to familiar faces on the train. No hallway conversations at the office. No spontaneous drop-ins to meetings. And this was only week

Social distancing is critical to flattening the curve of contagion so that our health-care system can keep up. Yet the social isolation that millions of people are facing is a serious Covid-19 side effect we will need to combat.

We should worry particularly about the elderly. Roughly 28% of older adults in the U.S.-14.3 million people—live alone, according to a 2018 report by the U.S. Department of Health and Human Services' Administration on Aging. Evidence shows that social isolation and loneliness can lead to health problems, including high blood pressure, heart disease, a weakened immune system, depression, cognitive decline and Alzheimer's dis-

Warding off these conditions requires people to socialize as much as possible. But that's exactly what public-health measures are taking away from older people.

I have a friend whose parents live near New Rochelle, N.Y., where the governor recently sent in the National Guard to create a containment zone. His mom is 88 and. though active, she already spends more time than she prefers at home because her husband is 92 and has Parkinson's disease. That neurological disorder has also inflicted intense anxiety, depression and feelings of isolation on both of them. Extended family can't visit often. One son lives in Boston, the other in San Francisco.

Now, her already small world has been shut off to her. The YMCA where she exercises has closed. Her caregiver support group has been canceled indefinitely with the group's leader self-quarantined because of coronavirus exposure.

My friend's father is determined to participate in life as much as possible. His biggest joy is his twice-weekly Dance for Parkinson's class. Even on days he's too weak to dance, the social interaction brings him to life. Last week, classes were suspended.

This is happening everywhere. Senior centers are closed. Places of worship have halted services. Social gatherings have been suspended.

"We can tolerate anything for a short amount of time," said Timothy Legg, a licensed psychologist and geriatric nurse practitioner in Binghamton, N.Y. "But social isolation can lead to major problems."

Technology can help. People can use computers to find groups of people with like-minded interests. Online games can connect people to others. And social media, which Mr. Legg is ordinarily no fan of, could "actually be people's salvation" now. In other words, to connect with others, he's encouraging the elderly to behave more like their grandchildren.

One of the best things we can do is reach out digitally or on the phone to friends, relatives and neighbors. If the elderly people in your life don't know how to video chat, now's the time to learn. More than ever, people living in isolation need us-no matter their age or how far away they are.

Mr. Kopp is CEO of Healthline

## These Drugs Are Helping Our Covid-19 Patients

By Jeff Colyer **And Daniel Hinthorn** 

flash of potential good news from the front lines of the coronavirus pandemic: A treatment is showing promise. Doctors in France, South Korea and the U.S. are using an antimalarial drug known as hydroxychloroquine with success. We are physicians treating patients with Covid-19, and the therapy appears to be making a difference. It isn't a silver bullet, but if deployed quickly and strategically the drug could potentially help bend the pandemic's "hockev stick" curve.

Hydroxychloroquine is a common generic drug used to treat lupus, arthritis and malaria. The medication, whose brand name is Plaquenil, is relatively safe, with the main side effect being stomach irritation, though it can cause echocardiogram and vision changes. In 2005, a Centers for Disease Control and Prevention study showed that chloroquine, an analogue, could block a virus from penetrating a cell if administered before exposure. If tissue had already been infected, the drug inhibited the

On March 9 a team of researchers in China published results showing hydroxychloroquine was effective against the 2019 coronavirus in a test tube. The authors suggested a five-day, 12-pill treatment for Covid-19: two 200-milligram tablets twice a day on the first day followed by one tablet twice a day for four more days.

A more recent French study used the drug in combination with azithromycin. Most Americans know azithromycin as the brand name Zithromax Z-Pak, prescribed for upper respiratory infections. The Z-Pak alone doesn't appear to help fight Covid-19, and the findings of combination treatment are preliminary.

But researchers in France treated a small number of patients with both hydroxychloroquine and a Z-Pak, and 100% of them were cured by day six

of treatment. Compare that with 57.1% of patients treated with hydroxychloroguine alone, and 12.5% of patients who received neither.

What's more, most patients cleared the virus in three to six days rather than the 20 days observed in China. That reduces the time a patient can spread the virus to others. One lesson that should inform the U.S. approach: Use this treatment cocktail early, and don't wait until a patient is on a ventilator in the intensive-care unit.

A couple of careful studies of hydroxychloroquine are in progress, but the results may take weeks or longer. Infectious-disease experts are already using hydroxychloroquine clinically with some success. With our colleague Dr. Joe Brewer in Kansas City, Mo., we are using hydroxychloroquine in two ways: to treat patients and as prophylaxis to protect

health-care workers from infection. We had been using the protocol outlined in the research from China. but we've switched to the combination prescribed in the French study. Our patients appear to be showing fewer symptoms.

Our experience suggests that hydroxychloroguine, with or without a Z-Pak, should be a first-line treatment. Unfortunately, there is already a shortage of hydroxychloroquine. The federal government should immediately contract with generic manufacturers to ramp up production. Any stockpiles should be re-

As a matter of clinical practice. hvdroxychloroquine should be given early to patients who test positive, and perhaps if Covid-19 is presumed-in the case of ill household contacts, for instance. It may be especially useful to treat mild cases and young patients, which would significantly decrease viral transmission and, as they say, "flatten the curve."

Emergency rooms run the risk of one patient exposing a dozen nurses and doctors. Instead of exposed health workers getting placed on 14day quarantine, they could receive hydroxychloroguine for five days. then test for the virus. That would allow health-care workers to return to work sooner if they test negative. President Trump touted hydroxy-

chloroquine in his Thursday press conference as a potential treatment,

## Evidence is preliminary, but the pandemic doesn't gives us the luxury of time.

which is a welcome move. And this isn't only about treatment. Rapid and strategic use of these drugs could help arrest the spread of the

We have decades of experience in treating infectious diseases and dealing with epidemics, and we believe

in safety and efficacy. We don't want to peddle false hope; we have seen promising drugs turn out to be duds.

But the public expects an answer, and we don't have the luxury of time. We have a drug with an excellent safety profile but limited clinical outcomes—and no better alternatives until long after this disaster peaks. We can use this treatment to help save lives and prevent others from becoming infected. Or we can wait several weeks and risk discovering we didn't do everything we could to end this pandemic as quickly as possible.

Dr. Colyer is a practicing physician and chairman of the National Advisory Commission on Rural Health. He served as governor of Kansas, 2018-19. Dr. Hinthorn is director of the Division of Infectious Disease at the University of Kansas Medical Center.

## **Worst Coronavirus Idea:** A Ban on Share Buybacks

By Donald L. Luskin **And Chris Hynes** 

emocrats insist that any government aid to businesses laid low by the Covid-19 crisis be conditioned on compliance with a laundry list of progressive demands. Sen. Elizabeth Warren would require, among other things, that to receive aid firms must institute a \$15 minimum wage, set aside board seats for workers, and obtain shareholder approval for any political expenditures. Of all her proposals, perhaps the most damaging economically in the long run is her insistence that companies receiving aid be permanently barred from executing share buybacks, even after the aid is repaid.

This is an opportunistic mutation of the left's longstanding claim that buybacks are a uniquely evil form of predatory capitalism. In reality, buybacks create benefits for shareholders large and small, and are a valuable source of cash for many of the people progressives claim to care about, especially retirees.

For some reason progressives don't object when companies pay money out to shareholders through dividends. Buybacks are superior because they give shareholders a choice. Shareholders must receive a dividend when it's declared and pay taxes on it. In a share buyback, investors who want cash can sell some shares and pay taxes. If they don't want cash, they can choose to hold on to their shares.

This is exactly why Warren Buffett's Berkshire Hathaway has never paid dividends but does buy back its stock. Progressives love to quote Mr. Buffett when he argues for higher tax rates. But they never mention his view on buybacks.

Some opponents of buybacks-including Sen. Marco Rubio, hardly a progressive—argue that they waste company cash that ought to be reinvested in plant and equipment. But not every company is in growth mode, and even those that are might have more cash than growth ideas. Within Mr. Buffett's portfolio of companies, if See's Candies is showing a huge profit, do we really need to insist that it build more stores? Maybe there are already enough.

## for ordinary investors. Ask Warren Buffett.

Paying money out to shareholders frees them to reinvest in new companies with big growth ideas. This is the best way to promote growth for the economy as a whole. At a time like this, when so many sacrifices are being made for the sake of the health of the overall community, surely we don't want to force companies to hoard their capital, any more than we want people to hoard toilet pa-

Democrats are trying to use the firms most in distress now to set a precedent for depriving ordinary investors—and the economy as a whole—of the benefits of share buybacks. We can have a debate about buybacks, and the \$15 minimum wage, and everything else on the progressive list of demands. But let's have debate, not blackmail, and let's have it after the crisis has passed.

Mr. Luskin is chief investment officer of Trend Macrolytics LLC. Mr. Hynes is CEO of Hynes Capital.

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They are a source of cash

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Monday, March 23, 2020 | **B1** 

Last Week: **S&P** 2304.92 ▼14.98% **S&P FIN** ▼17.98% **S&P IT** ▼15.25%

**DJTRANS V**13.88% **WSJ\$IDX** ▲ 4.21%

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# Investors Fear Worst Is Yet to Come

By Anna Hirtenstein AND AKANE OTANI

The most brutal stretch for global markets since the financial crisis likely isn't over yet, say investors and analysts who believe it is too early to assess the possible scale of economic damage from the coronavirus.

In just a few weeks, U.S. stocks have lost roughly a third of their value. In recent weeks, investors have even fled assets like U.S. government bonds and gold that typically do well during times of turmoil, underscoring the extent of the panic to global growth. The S&P 500 telling a U.S. recession even if a response that became so rouand the shock to once-robust investor sentiment delivered by the global health emergency.

But many analysts and portfolio managers warn that neither those declines nor recent extraordinary actions by the Federal Reserve are likely to signal the end of the market crunch. They note that by historical standards, stocks' declines look modest compared with some prior downturns, given the early indications of how much damage virus-related shutdowns are likely to do is down 32% from its February peak. In comparison, stocks tumbled 57% during the financial crisis and 49% after the dot-com bubble burst in 2000 before beginning to rebound.

What's more, some investors say, Wall Street is only now coming to grips with the dislocation being wrought by the virus. Analysts at Goldman Sachs Group Inc. said last week they expect U.S. economic output to tumble 24% in the second quarter, one of the worst readings on record and potentially fore-

Diamondback

growth picks back up in the second half.

With everyday life grinding to a halt, the world's biggest money managers and banks say they believe one of the most prominent market casualties from this episode could be long-term investors' ingrained inclination to step in to buy the dip. Before the coronavirus pandemic, investors' faith in the strength of the U.S. economy had led them to rush back into the market after pullbacks to scoop up discounted shares,

tine it came to be known by its own initials, BTD or, with more intensity, BTFD. Now, many believe it could be some time before that behavior returns.

"The ultimate impact of the virus on economies and markets is highly speculative at this time since there is so much we do not know about how the outbreak will actually evolve from here," said Rick Lacaille, global chief investment officer of State Street Global Advisors. "We need clarity on many

Please turn to page B6 Occidental Petroleum, like many U.S. oil-and-gas companies, has lost much of

Halliburtor

# Virus, Glut Bury Occidental's Big Wager on Shale

Petroleum Corp. Chief Executive Vicki Hollub sought to reassure investors that her bold bet on U.S. shale oil—a \$38

> By Rebecca Elliott, Christopher M. Matthews and Cara Lombardo

billion deal for rival Anadarko Petroleum Corp.—hadn't left the company on shaky footing.

An analyst asked on Feb. 28 if Occidental could weather the coronavirus outbreak and pay its beefy dividends as usual. "We're actually in a good scenario, I think, because we don't expect this situation to last," she said.

Soon after, oil prices crashed to around \$30 a barrel, the fallout from a price war erupting between Russia and Saudi Arabia that threatened to further flood the world with

Ms. Hollub was forced to slash the dividend by 86%, the company's first such cut in decades and, this weekend, cede major ground to Carl Icahn by ushering the activist investor into the embattled company's boardroom.

Mr. Icahn, a longstanding critic of the Anadarko deal. phoned Ms. Hollub March 12 to say he had increased his stake in the company to nearly 10%. After months of calling for Ms. Hollub and her board to be replaced, Mr. Icahn employed a

Just weeks ago, **Occidental** well-worn line, telling her she could have peace or war, said people familiar with the call.

"They promised to be prudent," Mr. Icahn said in an interview. "Yet they risked a great deal of the company's assets on an eximprudent tremely deal."

The following week, when oil plunged below \$30, Occidental was preparing to bring back its former chief executive Stephen Chazen as its new chairman, giving Mr. Icahn two seats on its board and approval of a third, independent director, The Wall Street Journal reported Sun-

The company declined to comment for this article.

The unfolding drama at Occidental is one example of the disastrous financial threat to U.S. oil and gas producers from demand and supply shocks upending the oil market.

Using horizontal drilling and hydraulic fracturing techniques to powerful effect, these shaleoil companies over the past decade turbocharged U.S. production to about 13 million barrels a day, the most in the world.

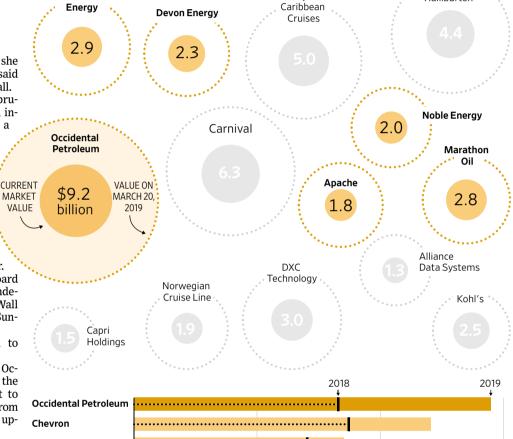
Now, heavy debt loads and poor returns, which have turned off lenders, leave them with limited wiggle room to manage an oil rout.

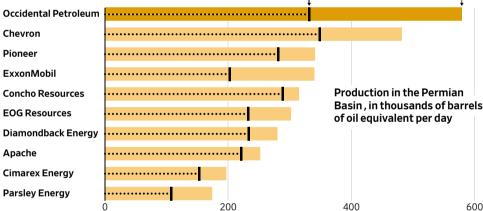
Occidental has slashed its planned spending by roughly a Please turn to page B2

its market value amid investor flight from the industry and a steep decline in crude prices.

Roval







\*Largest losses in percentage change terms Sources: FactSet (market value & performance); Rystad Energy (production)

## WeWork Officials Battle to Save Deal

By Liz Hoffman AND MAUREEN FARRELL

Some WeWork directors are gearing up to fight **SoftBank** Group Corp.'s move to back away from part of its bailout of the shared-office provider, presaging what could be a fierce internal battle just as the startup grapples with fallout from the coronavirus pandemic.

Independent WeWork board members have spent recent days weighing their options, including legal remedies, after SoftBank indicated it would back out of a deal to spend up to \$3 billion to buy shares from the company's investors and employees.

A spokeswoman for the board's committee of independent directors said they were "committed to taking all necessary actions to ensure that the tender offer which SoftBank has promised to our employees and shareholders is completed."

A spokeswoman for Soft-Bank, which controls half of WeWork's board, said it "continues to honor its obligations' in the deal. "In October, all parties agreed to specific closing conditions to protect SoftBank [that] must be satisfied before the tender offer can be completed," she said. "As of now, they are not."

The Wall Street Journal reported Wednesday that Soft-Bank notified WeWork shareholders that it believes regulatory probes into the startup's business, including from the Securities and Exchange Commission and U.S. Justice Department, allow it to cancel the tender offer. It also cited a lack of progress on a separate reorganization of We-Work's China operations.

A board clash is the last thing WeWork needs at a time when the spreading pandemic has emptied out its workspaces. WeWork is on the hook for long-term leases even if its tenants move out, which makes it acutely vulnerable to a recession

The tender offer was part of a rescue plan WeWork was forced to seek after its attempt to go public last year failed. SoftBank also agreed to accelerate a \$1.5 billion equity in-

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## **BUSINESS NEWS**

Nissan is expected to start retrenching after its bet on a global car boom went bad. B3



## **MARKETS**

Even before the virus, the loss of trader jobs was a trend long in the making. **B5** 

ON BUSINESS | By John D. Stoll

## **Boardrooms Could Use** A Few More Insiders



2008, with financial panic gripping the economy and automobile de

mand evaporating, General Motors Co.'s board met three times a week. The car company's health was failing as executives tweaked forecasts daily. The job of pressing executives for a realistic rescue plan fell to 12 independent di-

This type of boardroom triage was common during the

Great Recession, after the dot-com bubble burst and in the wake of the 9/11 terror at tacks. Plenty of vulnerable businesses went the way of GM, filing for chapter 11 or going belly up. The survivors gripped the wheel hard and steered sharp, capitalized on rivals' misfortunes or simply got lucky.

As the new coronavirus wreaks havoc on U.S. corporations, and entire industries teeter, it is fair to ask how

prepared today's boardrooms Please turn to page B4

# Hotels Furlough, Cut Thousands of Staff

By Craig Karmin AND ESTHER FUNG

Marriott International Inc., the world's largest hotel company, and a growing number of hotel owners are furloughing tens of thousands of workers or slashing staff to steer their companies through the coronavirus pandemic.

**Hilton Worldwide Holdings** Inc. and Hyatt Hotels Corp. are also furloughing many employees, the hotel companies said in statements on Sunday, as most travel plans world-wide grind to a halt.

A spokeswoman for Marriott confirmed that the company is furloughing about two-thirds of its 4,000 corporate employees at the company's Bethesda. Md., headquarters. Marriott is also furloughing about twothirds of its corporate staff abroad, though the spokeswoman said she couldn't immediately provide the number of Marriott corporate overseas

Those actions follow Marriott's decision to begin furloughing what the company expects to be tens of thousands of hotel staff—from managers to housekeepers—while it ramps up hotel closings across the globe.

The hospitality industry has been upended by the collapse in global travel as governments imposed travel restrictions in response to the pandemic. Companies have halted business trips, conference organizers have called off events and probably won't be coming back. vacationers have put plans on hold. Hotels are suffering the brunt of this sudden evaporation of travel, which is wiping out in a matter of weeks all the profits many companies had piled up in the past few years.

Some lodging companies are taking even more drastic steps than Marriott, furloughing or letting go more than 9 in 10 employees in some cases.

Ashford Inc., the Dallasbased firm that owns 130 hotels across the U.S., is laying off or furloughing 95% of 7,000 employees, Chief Executive Monty Bennett said. He expects about one-third of those employees

An immediate concern is Ashford's \$4 billion to \$5 billion in debt. Some payments are due next month, Mr. Bennett said, and he doesn't expect to be able to pay all of them. "Every single U.S. hotel will default on its debt in the next 30, maybe 60 days," he said. "It's a disaster that's snowballing."

Another hotel owner, Pebblebrook Hotel Trust, is furloughing about 90% to 95% of its 8,000 employees, CEO Jon Bortz said. He has closed about half the company's 54 hotels; occupancy levels at the ones that remain open have dwindled to the single digits.

"This is incredible hardship," Mr. Bortz said. "Any industry where human contact is involved has been decimated."

With so little business, it makes no sense to keep operating, executives say. Mr. Bortz expects most of his hotels that are still open to suspend operations over the next five days.

Lodging owners across the country are being forced to make similar calculations. With occupancy levels plunging by the day, it is a challenge for hoteliers to make payroll, let alone pay other expenses and meet debt obligations, they said. And as they opt to close Please turn to page B2



The actions follow Marriott's decision to furlough hotel staff. The company's Sheraton in Dubai.

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## Airlines Shift to Freight

By Jennifer Smith

Some airlines are putting planes to work as freight-only aircraft, a move that provides some revenue for carriers hurt by plunging demand and may ease freight bottlenecks caused by cancellations of passenger flights that carried goods.

**American Airlines Group** Inc. launched its first scheduled cargo flight since 1984 on Friday, with two round-trip flights over four days between Dallas-Fort Worth International Airport and Frankfurt on a widepassenger plane that can carry more than 100,000 pounds of freight. Delta Air Lines Inc., Korean Air Lines Co., and Oantas Airways Ltd. are running passenger aircraft on freightonly flights in certain lanes.

Deutsche Lufthansa AG, which cut 95% of its passenger flights but continues to operate its freight fleet, said it may use some passenger planes to move cargo. "We want to make our contribution wherever possible to maintain the delivery chains," Chief Executive Carsten Spohr said in a news conference last week.

## **BUSINESS & FINANCE**



Total's share price has halved since the start of the year, in line with other major oil companies.

# Oil Collapse Leads Total To Cut Returns, Spending

By Sarah McFarlane

French energy giant Total SA will immediately cut expenditures, trim returns to shareholders and freeze recruitment as the company combats the ravages of an oil-price rout and a demand-sapping coronavirus pandemic, Chief Executive Patrick Pouyanne told staffers last week in a video message seen by The Wall Street Journal.

The austerity measures at the fourth largest Western oil company will amount to about \$5 billion, Mr. Pouyanne said. Total also plans to borrow \$4 billion to make up for an expected \$9 billion shortfall created by lower oil prices.

The shortfall is roughly equivalent to the amount Total

spends on dividend payments cut spending and suspended its to shareholders, Mr. Pouyanne pointed out in the video.

The company declined to comment.

Oil companies are reeling after a double whammy from the coronavirus hitting global demand for crude while a Saudi-Russian price war creates excess supply. Oil prices have fallen by more than half since the beginning of the year to below \$30 a barrel.

Total's share price has halved since the start of the year, in line with other major oil companies.

Earlier this month, Houstonbased Occidental Petroleum Corp. slashed its spending by a third and cut its quarterly dividend, while Italy's ENI SpA also

share buyback program.

Speaking via a video broadcast to staff on Thursday, Mr. Pouyanne said the actions were necessary given that oil demand is likely to fall by 6 million barrels a day—or 6%—in April.

The company has set up a "crisis cell" headed by Denis Favier, senior vice president, security, and its executive committee have been communicating digitally, Paris-based Mr. Pouyanne said on the video.

Total's revised financial plan for 2020 is based on an oil price of \$35 a barrel, down from its previous assumption of \$60 a barrel, Mr. Pouyanne said. Benchmark Brent oil prices closed at \$27.21 a barrel on Friday.

## HotelsFurlough **Thousands**

Continued from page B1

more properties with no known reopen date, they feel they have little choice but to reduce staff and hope the company can remain afloat.

On Sunday, Rick Takach, CEO of Vesta Hospitality, owner and operator of 17 hotels, said he has concluded that cuts to his hotel-management company haven't been enough. "So, deeper cuts are needed," he said. "That means either much lower salaries and hours or the elimination of personnel. That is a decision I am trying to make today or tomorrow."

Hotel workers have been stunned at the suddenness with which they have been sent off. Shelby Halpin, who worked as a guest-services specialist and a guide in a ski resort in Big Sky, Mont., said she was told on Tuesday that she no longer had a job after the resort closed.

"The next day I put everything I owned into my jeep and left," said Ms. Halpin. "We were kicked out of the place. It was so surreal.'

Marriott Chief Executive Arne Sorenson said in a video message to his employees on Thursday that Marriott business is running about 75% below normal levels, making this period more devastating than any other in the history of the nearly century-old hotel company. He said that the financial impact was worse than the post-Sept. 11 2001, period and financial crisis combined.

Marriott told The Wall Street Journal that the corporate-staff furloughs would begin early next month and estimate that they will last 60 to 90 days. During that period, furloughed U.S. corporate employees will receive 20% of their salary toward health care and other costs, the spokeswoman said. Corporate employees who stay on are subject to 20% pay cuts and reduced workweeks, the spokeswoman

Marriott is the world's largest hotel company, with nearly 1.4 million rooms world-wide, 30 brands and about 7,300 properties, but rivals like Hilton and Hyatt have also resorted to staff reductions and cost cut-

Hilton has furloughed "tens of thousands" of employees, a spokesman said. "Our immediate focus is on doing what we can for our hotels and those team members."

A Hyatt spokeswoman said the company is "temporarily furloughing many hotel managers and reducing hours for most colleagues. U.S. colleagues' eligibility for health care and other benefits will not change, and colleagues may also file for unemployment benefits."

Hotel executives aren't going unscathed. Mr. Sorenson and Chairman Bill Marriott have stopped receiving a salary during this period, the CEO said in the video. His executive team will take a 50% cut in salary.

At Hersha Hospitality Trust. which owns nearly 50 hotels, the CEO and chief operating officer said they are reducing their salaries by 50%, and the board of trustees will take all payments in stock for the remainder of 2020.

Mr. Sorenson and other hospitality and travel executives met with President Trump in Washington on Tuesday, when they asked for \$250 billion in financial aid for the industries.

## body Boeing Co. 777-300 Virus, Glut Bury Shale

Continued from page B1 third and likely will limp along through low oil prices despite being highly leveraged.

Companies

Yet its market capitalization has plunged below \$10 billion from more than \$46 billion on the eve of its bid for Anadarko last April, a deal at a time when oil prices were more ≧ than twice current levels.

As of Friday, Occidental had lost roughly 82% of its market capitalization in a year, a greater share than all but eight companies in the S&P 500 index, according to Dow Jones Market Data.

Bankruptcy looms for others in the U.S. shale patch—those with smaller balance sheets and higher interest rates.

Scores of oil-and-gas companies, including Hess Corp. and Pioneer Natural Resources Co., approach survival mode, cutting spending and curtailing drilling.

On average, drillers have slashed budgets by about 30%, according to a Bernstein Research analysis of dozens of public producers that have disclosed revised spending plans.

## **Heavy lift**

Ms. Hollub, the first female chief executive of a major oil company, faces the biggest challenge of her career: steering Occidental through the chaos while seeking to placate Mr. Icahn.

When the venerable activist investor called Ms. Hollub on March 12, he let her know that a regulatory filing would soon reveal he had quadrupled his stake in Occidental, and that he was gunning to replace the company's board, people familiar with the matter said.

Mr. Icahn then offered a truce of sorts-his "peace or war" line—and concluded that peace was better. Mr. Icahn didn't say it, but the implication was clear: Ms. Hollub had a chance to save her job if she struck a deal.

The next day, Occidental said it had adopted a "poison provision to make it harder for Mr. Icahn or other activists to amass larger stakes in the company, a common takeover defense tactic.

About a week later, Occidental was nearing a settlement with Mr. Icahn.

Mr. Chazen agrees with Mr. Icahn that Occidental should be open to a sale if oil prices recover sufficiently, some of the people familiar with the matter said.



Occidental lost 82% of its market capitalization in a year, while bankruptcy looms for smaller drillers. Gas flares in a Texas field.

## **Low Prospects for High-Risk Drillers**

The impact of plummeting demand from the pandemic. coupled with the oil-price war, could linger into next year.

Larger investment-grade oil-and-gas companies should survive, said Todd Dittmann, head of energy at Angelo Gordon, which manages about \$33 billion across a range of alternative-asset strategies.

Riskier, high-yield companies, many of which managed to restructure and emerge from bankruptcy in the last downturn, face bloated expenses, steep debt and unprofitable wells, he said, putting their survival in question. These companies, primarily small- and medium-size shale

producers, make up about a

quarter of U.S. oil production. "Many may turn out to be less going concerns and more future liquidating trusts," Mr. Dittmann said.

The list of shale companies struggling with debt includes Whiting Petroleum Corp. and Chesapeake Energy Corp., a fracking pioneer co-founded by the late wildcatter Aubrey Mc-Clendon.

Before the coronavirus pandemic, many in the industry had hoped for a wave of consolidation to cut costs and combine the assets of companies that might not survive on their own.

Now, Regina Mayor, who leads KPMG's energy practice, said she didn't expect activists to descend and force mar-

-Christopher M. Matthews

Mr. Chazen won't campaign for the CEO position or accept it if offered to him, some of the people said. Mr. Chazen was only willing to come back if Mr. Icahn and Ms. Hollub blessed it, these people said. Still, there is no guarantee the alliance will work. People familiar with the matter say Mr. Chazen and Ms. Hollub haven't always seen eye-to-eye.

"The reason former CEOs exist is so the new ones can blame all the problems on them," Mr. Chazen said Satur-

He declined to comment on any settlement between the company and Mr. Icahn.

## Deep debt

Even before the crash in prices, some Occidental investors were heading for the exits over concerns about the company's post-Anadarko debt load.

Occidental's debt totaled about \$41 billion as of yearend, more than four times earnings, excluding interest, taxes and other accounting items, according to S&P Global Market Intelligence, up from about one times earnings a year earlier.

"There was a path to the acquisition of Anadarko being successful. But it was a very narrow needle hole to thread," Noah Barrett, an energy analyst for Janus Henderson Investors, said.

In hindsight, Mr. Barrett called the deal "a complete di-

Janus had about \$375 billion in assets under management as of year-end and was an Occidental investor, though the funds where Mr. Barrett has a say sold their positions in the company late last year.

## Shale kings

Occidental was once seen as an attractive midsize alternative to Exxon Mobil Corp. and Chevron Corp., with a healthy dividend and relatively low leverage.

It was long known for its smaller, conservative acquisitions. But it bulked up on shale just as investors were turning against the industry after years of poor returns.

The company's deal for Anadarko was largely to achieve economies of scale in America's top oil field, the Permian Basin that stretches through Texas and New Mexico. The acquisition made Occidental the largest producer in the region, Rystad Energy data

To seal the deal, Ms. Hollub outbid much larger rival Chevron, which had initially offered \$33 billion for Anadarko. Chevron pulled out of negotiations after Occidental's counteroffer.

As part of the merger, Occidental took on roughly \$12 billion of Anadarko's debt and issued roughly \$22 billion in new debt to finance the transaction, according to securities

Occidental also struck a deal with Warren Buffett's Berkshire Hathaway Inc., which agreed to spend \$10 billion in exchange for 100,000 Occidental preferred shares yielding 8%, or \$800 million annually, to help complete the

Mr. Buffett didn't respond to a request for comment.

Mr. Icahn has said Ms. Hollub pursued the deal to fend off takeover bids from larger competitors. Exxon has long been interested in acquiring Occidental, according to people familiar with the matter. Occidental declined to comment on whether the prospect of a takeover influenced its decision to acquire Anadarko.

While Mr. Icahn isn't arguing for a fire-sale of the company, he expects oil prices to rebound and continued consolidation in the Permian Ba-

Yet given the energy industry's lack of appetite for deals in the market tumult, Mr. Icahn and Ms. Hollub may be stuck with each other for a

"The world's changed, and I don't think people are going to be out there looking for bargains anytime soon," said Mark Stoeckle, chief executive of Adams Funds, which owns about 350,000 of Occidental's shares.

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## **BUSINESS NEWS**

# Interim CEO Set For MGM Resorts

By Katherine Sayre

MGM Resorts International has picked Bill Hornbuckle, the company's president and chief operating officer, to take over as acting chief executive as the global casino operator responds to widespread closures of its properties amid the coronavirus pandemic.

Outgoing Chief Executive Jim Murren, who announced his plans to leave last month, stepped down from his post Sunday. MGM Resorts also said board member Paul Salem, of Providence Equity Partners, will succeed Mr. Murren as chairman.

"It is clear that once the threat to the public health has subsided and we are ready to reopen our resorts and casinos, it will take an incredible effort to ramp back up," Mr. Salem said in a statement. "We believe continued steady, skilled leadership is needed in this time of great upheaval and uncertainty."

Mr. Murren had led the company since 2008, and his exit comes before his contract expires at the end of 2021. Mr. Hornbuckle previously served as MGM's chief marketing officer and in leadership roles at its Mandalay Bay and MGM Grand resorts, among other roles. MGM Resorts and other casino operators have closed down temporarily, including in the hubs of Las Vegas and Atlantic City, N.J., and implemented widespread layoffs.

MGM shares collapsed by 77% to \$7.70 on Thursday from \$33.66 on Feb. 12. Mr. Murren and more than a dozen other MGM executives and board members purchased shares in the company over the last week, and the share price ticked up to \$9.11 on Friday.

Last week, tourism industry leaders including Mr. Murren met with President Trump.

# Nissan Readies Its Revival Plan

Car maker bet on boom in car sales that didn't happen and now has to prepare for restructuring

By Sean McLain

TOKYO—Years ago, under Carlos Ghosn, **Nissan Motor** Co. bet on a future where global car sales would boom, driven by a bulging population in developing countries.

That future never came to pass, and now Nissan is gearing up for a restructuring plan due by May that is expected to involve closing plants, retrenching in major markets and cooperating more with its biggest shareholder, **Renault** SA of France.

"We wanted to grow much faster than the market, and the market didn't grow in line with our expectations," said Chief Operating Officer Ashwani Gupta, who is in charge of the restructuring plan, in an interview last week.

Even if times were normal, it would be hard enough to rescue Nissan. In the final quarter of 2019, before the world knew of the new coronavirus, the car maker posted its first quarterly loss since the global financial crisis in 2009. Its shares fell 27% in 2019 despite a global uptrend and have plunged with the rest of the market this year.

The coronavirus is taking the bottom out of the car market. Nissan's sales in China were down 80% in February from a year earlier, and they fell 13% in the U.S. in the same month, before car companies announced factory shutdowns. Those are its two biggest markets, and Nissan hopes to jump-start its U.S. sales with a new Rogue sport-utility vehicle and Frontier pickup.

"New product goes a long way, but because of this looming downturn you may invest all this money and not get a good return on it. The timing is terrible for them," said Christopher Richter, a Tokyo-based analyst with CLSA. "It's going to be like crossing a tightrope with a swamp full of alligators beneath you."

Global auto sales peaked at



A Nissan production line in England. Before the coronavirus hit, the company posted its first quarterly loss since the 2009 financial crisis.

95 million in 2017, according to forecasting firm LMC Automotive. This year, the number might be around 86 million, LMC says, the lowest figure since 2013.

Nissan has the factory space to build seven million cars annually—Mr. Ghosn's old sales goal—while it expects to sell only around five million for the year ending March 31, an estimate made before the pandemic spread widely in the U.S.

Mr. Gupta, the COO, sees Indonesia as an example of how Nissan's bets went wrong. A decade ago, Nissan thought the country's growing population and economic policies would lift the market size to two million cars annually from one million.

"Where are we today? One point one," said Mr. Gupta.

The factory that built those cars in Purwakarta, Indonesia—which Nissan spent around \$300 million in 2014 to expand—stopped producing Datsun vehicles early this year af-

## **Tighter Leash**

Nissan's debt due within a year is rising.

Short-term debtCash and equivalents

¥4 trillion

3
2

2014 '15 '16 '17 '1 Note: As of Dec. 31 of each year; ¥5 trillion = \$45.2 billion Source: the company

ter earlier shutting down production of Nissans. It is unlikely to restart, according to people briefed on the restructuring plan, although its final fate is still under study. Many of the workers were laid off.

For Southeast Asia, Nissan will turn to alliance partner Mitsubishi Motors Corp., in which it owns a one-third stake, and it may use Mitsubishi's plant in Indonesia.

Much hinges on Nissan's relationship with Renault, which has been in turmoil over the last 16 months since Mr. Ghosn, who led both companies, was arrested in Tokyo. He is living in exile in Lebanon after escaping Japan, where he faced trial on charges that he denied.

Nissan Chief Executive Makoto Uchida and Mr. Gupta, both of whom took over in December, are likely to stop production at Nissan's plant in Barcelona and lean on Renault in Europe, according to people familiar with the discussions.

One drawback of the alliance is slower speed, because key points of Mr. Gupta's remake must be brought to an alliance operating board headed by Renault Chairman Jean-Dominique Senard to ensure they align with similar plans under way at Renault and Mitsubishi

At a special Nissan shareholder meeting last month, investors accused Mr. Uchida of taking too long, saying Nissan couldn't wait until May for a plan. He apologized and asked for their patience.

Mr. Gupta, a 49-year-old native of India who is fluent in Japanese, worked at Renault and Mitsubishi before coming to Nissan. He said his remedy was simple: more revenue through new models and lower costs. "There's no rocket science," he said.

He grew animated describing how Nissan went nearly three years without introducing a new car in Japan. "Come on. We have not launched a single model in so many months in such a big market?" he said. "Cut cost and this and that, it's a one-day job. If we really want to sustain and grow, there is only dealer engagement and motivation, fueled by new products."

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PERSONAL TECHNOLOGY | By Nicole Nguyen

# How to Avoid the 'Infodemic' Set to Fight



The same coronavirus post kept popping up on my Facebook feed last week. Peo-

ple in my network had somehow obtained identical symptom and treatment guidance from Stanford University.

There were details about an at-home test involving breath holding, as well as something truly dubious about sipping water every 15 minutes. On March 12, the university said the text was "not from Stanford." Overnight, the post disappeared from the social network.

The regularity of forwarded falsehoods is revealing: Any absence of good information leaves room for a lot of terrible information. The World Health Organization recently described this moment as an "infodemic." We're getting virus news through a fire hose—push notifications, TV, social media, hearsay through our networks.

So, how do we wade through the onslaught? I called some experts for help.

◆ Focus on factual information from official channels. "I would strongly urge people to get their information from sources like the Centers for Disease Control and Prevention or highly respected news organizations. Everything else should be regarded as suspect," said Angie Drobnic Holan, editor in chief of the Poynter Institute's factchecking site PolitiFact.

Focus more on facts from official sources, and less on chasing down every shred that might be true, says Claire Wardle, a research fellow at Harvard's Berkman Klein Center and co-founder of First Draft, a nonprofit dedicated to studying misinformation.

The more people are exposed to a falsehood, the more likely they are to accept it as true—what Dr. Wardle

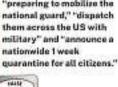
POLITIFACT

All Fact-checks for Coronavirus













PolitiFact's site on the coronavirus. Below, the World Health Organization's WhatsApp service.

refers to as the "familiarity

backfire effect.' The World Health Organization and U.S.-based CDC provide virus outbreak updates and guidance on how to stay healthy from public officials. The CDC mobile app serves this information right to your phone. Tip: Turn on the app's filter for "Coronavirus Disease 2019." The WHO launched a WhatsApp messaging service that provides situation reports in real time, as well as information on coronavirus myths. The CDC website includes links to accredited state and health departments across the U.S.

**♦** Misinformation is moving to private channels. Social networks are aggressively moderating virus content. On March 16, Facebook, Google, LinkedIn, Microsoft, Reddit, Twitter and YouTube sent a statement: "We are ... jointly combating fraud and misinformation about the virus [and] elevating authoritative content on our platforms."

The crackdown has unintended consequences. "People started moving into spaces where they can't be tracked," said Dr. Wardle.

Encrypted messaging services, like WhatsApp, have struggled to police misinforWelcome to the World Health

Get information and guidance from WHO regarding the current outbreak of coronavirus disease (CCVID-19)

What would you like to know about coronavirus?

Reply with a number (or emoji) at any time to get the latest information on the topic

1. Ladest numbers 🔝 Protect yourself 
 Your questions answered ? Mythbusters @ 5. Travel advice \*\*\* 6. News & Press 7. Share 🔛

mation sent through their systems. To mitigate misinformation, moderators must be able to see the message's contents. On Wednesday, Whats-App launched a coronavirus website, asking users to not forward a message if they

aren't sure it's true. **♦** Pause before you share. If people stopped sharing entirely and just relied on official sources, we'd likely be better off, Dr. Wardle said. "It's like washing our hands. We have to get into new habits about sharing only what we know," she said.

**♦** Look up which outlets covered the news.

Before sharing information, do a quick search to see if other outlets have reported the same thing, advised Jon Keegan, an adjunct assistant professor at the Columbia University School of Journalism and an investigative data journalist at The Markup.

Mr. Keegan suggested GroundNews, an app and website that shows you how many outlets have covered top stories at a glance. The more widely a story is covered, the more credible it likely is.

Most important, Mr. Keegan noted, look at the source named in those outlets' reporting. If multiple reports link to the same questionable story, instead of citing primary sources, be skeptical.

PolitiFact's virus hub is updated with the most-shared information on the web. Each fact-check is graded on its level of truthfulness and includes the sources PolitiFact's reporters used to determine its veracity.

◆ If you're stressed by the deluge, turn it off. If you want to stay connected with official updates, sign up for your city's Covid-19 text alerts where available.

# For Deal

Continued from page B1 vestment and lend \$5 billion to the company, which was running out of cash.

Adam Neumann, who was ousted as WeWork's chief executive, has the right to sell nearly \$1 billion in stock in the

The two directors who make up the special committee, venture capitalist Bruce Dunlevie and former Coach Inc. CEO Lew Frankfort, are working with investment bank Perella Weinberg Partners LP and law firm Wilson, Sonsini, Goodrich & Rosati. In a Thursday night phone call, they discussed ways they believe they can force SoftBank to follow through with the investment, according to people familiar with the matter.

SoftBank's "excuses for not trying to close are inappropriate and dishonest," the committee's spokeswoman said. "Reneging on the agreement would be completely unethical, especially given the current environment."

A representative for We-Work, whose parent is known as **We** Co., declined to comment.

The offer was to be completed April 1 and would also have been available to early employees and investors like Mr. Dunlevie's firm, Benchmark Capital. Current and former We-Work employees, excluding Mr. Neumann, would have been able to sell around \$550 million worth of shares, according to internal estimates.

A SoftBank spokeswoman said current employees would receive less than 10% of the proceeds. (Employees who joined more recently hold stock options priced below the value of SoftBank's offer, so they can't participate.)

Under the terms of the We-Work rescue, SoftBank can walk away from the offer if there is a "material adverse effect" on the company's prospects. The precise meaning of those words is a matter for a

judge, but the independent directors argue the investigations are unlikely to lead to fines or force changes to WeWork's

Courts are generally reluctant to let buyers with cold feet off the hook. But it does happen periodically, such as in an abandoned pipeline merger in 2016. Buyers can sometimes use the threat to cut a better deal, as Verizon Communications Inc. did after Yahoo disclosed a data breach while their merger was pending.

WeWork first received a subpoena from the SEC in November, according to people familiar with the matter. That investigation, and a parallel one by the Justice Department, center on a previous investment by Soft-Bank and whether WeWork was truthful in its disclosures, the people said.

#### SoftBank got cold feet over federal probes of the workspace startup.

That investment raised \$6 billion, but WeWork was still hemorrhaging cash. A planned IPO and related borrowing were scrapped in September after prospective investors balked at the company's large losses and Mr. Neumann's unorthodox behavior.

SoftBank and its CEO, Masayoshi Son, are grappling with falling stock prices that have lowered the value of its massive investment portfolio. It recently announced a \$4.8 billion share buyback to placate activist investor Elliott Management Corp. On Tuesday, S&P Global Inc. lowered Soft-Bank's credit outlook to negative, which could hurt its ability to borrow.

SoftBank's backtracking puts Marcelo Claure in a tough spot. A longtime SoftBank executive, he became WeWork's executive chairman as part of the rescue and has tried to reassure employees while making deep cuts and lavoffs and recruiting a new CEO, Sandeep Mathrani.

–Eliot Brown contributed to this article.

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## **Boards** Need More Insiders

Continued from page B1 are. I would argue that a movement that was designed to make boards better may instead leave some of them flat-footed as their companies face this crisis.

HE culling of the ultimate boardroom insider has taken place over the past couple decades without much fanfare, as investment advisers and governance experts made war on the "overboarded" director.

These are the directors who held a half-dozen or so public board seats at the same time. Some companies sought out such people to fill their directors' chairs, believing their broad perspective on a multitude of industries and companies made them experts on best and worst practices.

Detractors say these directors are overworked, and advance the old-boys' network at a time when diversity is top priority. If a director simply bounces from boardroom to boardroom, can they really focus on the specific needs of a troubled firm? And, if the same people keep getting tapped for new board openings, how will younger prospects with fresh ideas get a shot?

"The reason there are concerns about overboarding is exactly times like these," said Rusty O'Kelley, co-leader of Russell Reynolds Associates's Board & CEO advisory. "It may be easy to juggle multiple boards when times are going well, but what happens when too many board seats and other commitments get in the way?" Jerry Davis, a professor at

the University of Michigan's Ross School of Business, recently published a paper called "Who Killed the Inner Circle?" that reflects decades of research. He estimated there were at least 90 directors serving on five or more corporate boards of major U.S. companies in 1974. The num-



ber fell to 75 in 1994. By 2012, Shirley Jackson, then the president of Rensselaer Polytechnic Institute, was the lone ultra-insider at a major firm.

"The inner circle has vanished," Mr. Davis said. As a result, the amount of shared insights among corporations is shrinking with it. He notes JPMorgan Chase & Co. once was connected to 48 different companies via its directors' various affiliations; today that number is nine.

These affiliations have proved invaluable in past times of crisis. When GM was skidding toward bankruptcy, Ford Motor Co. relied on a longtime board member with deep connections and multiple board seats—ex-Goldman Sachs Group Inc. President John Thornton—to help it survive its own liquidity crisis. Mr. Thornton remains on Ford's board as its longestserving director.

"I think there is this simplistic notion out there saying that sitting on many boards is a bad thing," said Alexander Ljungqvist, a professor at the Stockholm School of Economics and a director at a Swedish pension fund. "This ignores the fact that there is a trade-off between a breadth of experiences and connections, and a limited attention."

Mr. Ljungqvist largely blames influential proxy advisers, such as Institutional Shareholder Services, and in-

vestment funds for adopting a "one-size-fits-all approach." ISS and other advisers recommend voting against independent directors with more than four seats. BlackRock and Vanguard, two of the world's largest institutional investors. draw the line at three.

ongtime turnaround expert Steve Miller, who has served on several boards, said he tapped his connections and expertise in the bankruptcy and restructuring fields, acquired from his 17-year tenure as a United Airlines board member, when he joined the board of American International Group Inc. He joined AIG in 2009 as it began a major overhaul after the financial crisis, and stayed on at United until 2010. Now he is the chairman of Purdue Pharma.

Mr. Miller signed on at Purdue, the maker of OxyContin, in 2018 as it grappled with mounting litigation over accusations that it helped fuel the opioid epidemic. In an opinion piece published by The Wall Street Journal, he said he "never encountered a situation as challenging or important to society than the one I now face."

Directors on multiple boards are necessary fixtures in these boardrooms. "They're parachuting in and can make a big difference," Mr. Miller said. "They don't just accept everything at face value."

P2JW083000-0-B00500-1-----NS

## **BUSINESS & FINANCE**

# **Loss of Trader Jobs Is** Trend Long in Making

By Justin Baer

Jim Maguire was on the floor of the New York Stock Exchange when the Dow Jones Industrial Average crashed in 1987, when it zoomed past 10000 in 1999 and when it tumbled in 2008.

But as Wall Street descended into its current crisis this month, Mr. Maguire watched the market's gyrations from an office building in Red Bank, N.J., across the street from an ice-cream parlor. Mr. Maguire, 58 years old, is still in the stock-trading business, though one that looks and sounds unlike the NYSE floor he left for good in 2011.

On Monday, the NYSE will temporarily close its iconic floor to prevent the spread of the coronavirus. The industry's trading floors have been emptying out. But traders have been disappearing from Wall Street for a long time.

Nearly all trades are exeelectronically now. cuted Money managers routed just 31% of their stock trades through traditional Wall Street sales desks in 2018, according to Tabb Group. That is down from 47% in 2006.

With the coronavirus pandemic confining many to their homes, the tools that have made it possible for many to do their jobs off the floor, from videoconferencing to internetprotocol telephony, will now be put to the test.

Every year, the industry built around the U.S. stock market loses more traders, salespeople and analysts as the electronification trading squeezes out tasks once performed by human hands. The 12 biggest global investment banks employed 26% fewer of those workers at the end of last year than they did in 2010, according to industry-data firm Coalition Ltd.

And many of those traders who remain, including Mr. Maguire, once a floor broker on the NYSE, no longer make their way to Wall Street before the morning's opening bell. "It's so quiet," said Mr. Maguire, a partner at Global Liquidity Partners LLC, which provides stock-trading algorithms to money managers.

Deepening concerns that the pandemic will damage the world's economies have sent stocks into a tailspin. A Monday morning selloff earlier this month triggered a circuit breaker that paused trading for 15 minutes—a first since 1997. Trading was halted twice more over the next few days. The major benchmarks, including the Dow, have dropped more than 25% from the record highs they touched in mid-February.

#### Nearly all trades are done electronically now, while investors pay less in fees.

The mass migration of traders from Manhattan offices to their homes and apartments has stirred a range of concerns, from firms' ability to monitor their employees' dealings with clients to their appetite to engage as intermediaries and take on risk, investment management executives said.

The Financial Industry Regulatory Authority said last week that financial firms would need to "establish and maintain a supervisory system that is reasonably designed to supervise the activities of each associated person while working from an alternative or remote location during the pandemic."

The security industry's transformation has been happening for years. The rise of computerdriven trading models and funds that track benchmark indexes has helped reshape the way stocks are bought and sold. A wave of electronic exchanges and trading platforms emerged after the Securities and Exchange Commission set new rules in 2005, which eliminated a key advantage floor traders at traditional venues had enjoyed: the right to match any price offered by a rival electronic exchange. As the competition intensified and trade orders scattered, investors' transaction costs fell substantially.

At the same time, as Wall Street firms were trying to cut costs, regulations imposed in the wake of the financial crisis forced many of the firms to hire workers with different skills.

With the addition of software engineers, compliance staff and other in-demand positions, the securities industry's total New York City workforce rose to 180,300 last year from 165,900 in 2003, according to the New York State Department of Labor. But the number of employees classified by the department as brokers—or those who serve as intermediaries between buyers and sellers—has dropped to 53,300 from 73,000 in the same period.

"Back in the day, you might have a broker and three people supporting him, including someone to pick up his laundry," said Michael Karp, chief executive of Options Group, a Wall Street recruitment firm. "But jobs have been eliminated and turned into tech. Today it's a very different business."

Citigroup Inc. slashed hundreds of trading jobs last summer, including some in equities, to account for the shrinking pool of business. Despite a successful initiative to grow the bank's stock-trading market share, Citi collected \$2.91 billion in equity-trading revenue last year, down from \$3.13 billion in 2015.

The shift by investors toward lower-cost funds tied to popular stock indexes meant even more of Citi's trades are



The New York Stock Exchange floor will shut today as a health measure. The iconic space on Friday.

Every year, Wall Street loses more traders.

Equity sales, trading and research jobs at top 12

global investment banks 25,000

20,000 10,000 5,000

Percentage of institutional stock-trading orders routed through traditional Wall Street sales desks

2018 **31%** Securities industry's New

York City workforce

150,000 100,000 BROKERS **OTHER** 50,000 2010

Bank of America Merrill Lynch, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan, Morgan Stanley, Société Generale and UBS Sources: Coalition (jobs); Tabb Group (orders); New York State Department of Labor (workforce)

sent directly through electronic platforms, which also meant lower commissions on those still executed through Wall Street sales desks.

Stock-trading volumes have surged this month as investors responded to both the deepening health crisis and a host of government policies intended to stabilize the economy. As that flurry subsides, many banks, brokers and asset managers may have to make deeper workforce cuts. The market's relentless digitization may accelerate.

"In a bear market, there's a spike in trading activity initially, but then you see activity slow down once firms and funds have repositioned their portfolios,"

said Brennan Hawken, a financial-services industry analyst with UBS Group AG.

"And then you have all the other pressures that come from an economic downturn," Mr. Hawken said. "All of these things will lead to a need to push down on expenses."

-David Benoit contributed to this article.



Lululemon is expected to post quarterly earnings of \$2.25 a share on Thursday.

THE TICKER | Market events coming this week

Monday

No major events scheduled

## Tuesday

#### Short-selling reports Ratio, days of trading volume of

NYSE 2.7 Nasdag

current position, at Feb. 28

## Earnings expected

Estimate/Year Ago(\$)

IHS Markit Nike Synnex

## Wednesday

Mort. bankers indexes Purch., previous down 1% Refinan., prev. down 10%

millions of barrels Crude-oil stocks up 2 Gasoline stocks down 6.2 Distillates down 2.9 Durable-goods orders Jan., previous down 0.2%

**0.64**/0.60 **0.60**/0.68 **3.08**/2.84 Paychex

## **EIA** status report

Previous change in stocks in Feb., expected down 0.9%

#### Earnings expected Estimate/Year Ago(\$)

Elbit Systems **2.03**/0.03 Micron Technology

## **0.37**/1.71

EIA report: natural gas billions of cubic feet

**Thursday** 

#### Gross domestic product Percentage change, annual rate

4th qtr. sec. est. up 2.1% 4th qtr., third est. up 2.1% **GDP Deflator** 4th qtr. sec. est. up 1.3%

4th qtr., third est. up 1.3%

## Initial jobless claims Previous

281,000 Expected 875,000

## Friday Personal spending

FactSet Research

Lululemon Athletica

Science Applications

International **1.34**/(0.20)

Systems

Jan., previous up 0.2% Feb., expected up 0.2% Personal income

Estimate/Year Ago(\$)

**2.49**/2.42

**2.25**/1.85

#### Jan., previous up 0.6% Feb., expected up 0.4%

U.Mich. consumer index Mar., prelim Mar., final

**0.96**/0.89 Earnings expected \* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLIT NOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

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The **S&P 500** continued to fall after fiscal stimulus programs

> Economic Growth and Tax Relief Reconciliation Act

> > 10

Most claims

since Sept. 2017

The number of Americans who

benefits jumped as companies

began laying off workers, data

released Thursday showed.

Initial jobless claims

applied for first-time unemployment

Economic Stimulus Act

in 2001 and 2008

2500

2000

1500

1000

500

2000

250,000

200,000

150,000

100,000

50,000

Jan. 2020

## **BUSINESS & FINANCE**

## Investors Fear Worst Is to Come

Continued from page B1 fronts."

Investors will get more of a sense of how badly the economy has been hit in the coming days when data on the manufacturing and services sectors and jobless claims are released.

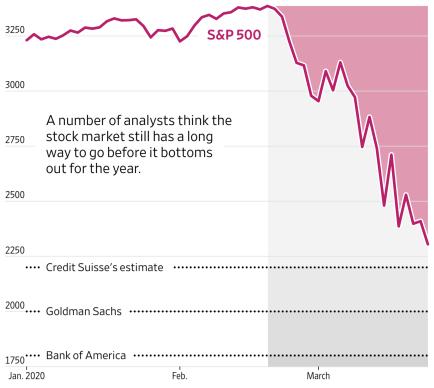
The latter data point has already spiked—leading Goldman to predict there could be an "unprecedented surge" in the number of Americans applying for unemployment benefits over the next week.

The firm forecasts the S&P 500 could be in for a 41% fall from peak to trough. Bank of America Corp. believes the selloff might not ease until the S&P 500 hits 1800—a 47% drop from its February record. And Credit Suisse Group AG, which notes stocks didn't hit their trough during the SARS pandemic in 2003 until a week after the number of new infections peaked, estimates the S&P 500 could be in for a 35% drop overall.

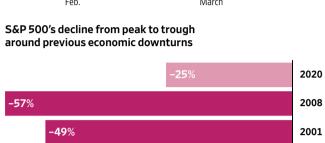
If economic output shrinks by double-digit percentages in the second quarter, it would be a devastating pullback even by historical standards: Adjusted for inflation and seasonality. GDP fell less than 5 percentage points from peak to trough during the 2007-09 recession, which was the longest downturn since World War II.

To put a floor on the current market rout, some of the world's biggest investors say they need three things: better information on the scale of the coronavirus pandemic, powerful support from governments and more forceful intervention in markets.

A key issue is the uncertainty surrounding what it will take to halt the fast-moving health crisis, and the economic fallout of such measures, investors say. Governments are using a range of strategies, from stringent lockdowns in Italy, France and Spain to looser recommendations of social dis-



The stock market hasn't yet fallen as much as it did during the financial crisis or the aftermath of the bursting of the dot-com bubble.



tancing in the U.K. and much of the crisis in 2008 is that policy the U.S. As the measures vary, so does the level of economic disruption.

Sources: FactSet (S&P 500); Banks' research notes

(estimates); Goldman Sachs (downturns); U.S. Employment

nd Training Administration via St. Louis Fed (Initial claims)

\*Data for 2020 is through midday Friday

Investors need "clarity on the ultimate scale of the problem and evidence that the infection's curves are bending globally," said Jean Boivin, head of BlackRock Investment Institute. Credible news on development of a vaccine and treatments would also help restore confidence, he said.

Central banks in some of the world's biggest economies have taken steps to cut interest rates to bolster economic growth and are acting together to boost the dollar's availability. Investors are looking for governments to also coordinate actions.

"One thing we've learned in

is a lot more than the sum of its parts if it's done as a global response," said Mr. Boivin.

So far, governments don't seem to have deployed enough fiscal stimulus-especially in Europe, said Didier Borowski, head of macroeconomic research at Amundi. The relief and stimulus measures should probably be equivalent to 2% to 3% of the eurozone's economic output, he said.

But others believe fiscal stimulus won't do much to arrest the market selloff.

Cornerstone Macro analyzed the stock market's response to bursts of fiscal stimulus during the 2001 and 2008 downturns and found the S&P 500 actually continued falling over a onevear period.

-20%

"Selloffs end when the problem that caused the selloff is under control," said Michael Kantrowitz, chief investment strategist at the firm.

1990

1981

Another area of concern for investors: Credit markets, encompassing both the safest sovereign bonds as well as more speculative corporate debt, have been in turmoil due to liquidity constraints, the pressure to unwind the riskiest trades and investors' demand for cash.

Investors would like to see "more aggressive steps by policy makers to provide some stability in fixed-income markets. said Evan Brown, head of multiasset strategy at UBS Asset Management. "This includes a Street's Mr. Lacaille.

Fed/Treasury partnership to provide lending against corporate bonds as collateral and the

ECB aggressively stepping up

purchases of Italian debt.'

The Fed said earlier this month that it would provide \$1.5 trillion through short-term lending and spend \$500 billion on Treasury securities to improve market functioning. On Wednesday, the U.S. Treasury department approved a new lending facility from the Fed to act as a backstop for moneymarket mutual funds. While this move is welcomed, investors say that the market is still weighing its effectiveness.

'Market participants need to feel they are backstopped without question,"

## **Rout Hurts** Lenders To Small Businesses

By WILLIAM LOUCH

Business-development companies, which raise money from investors and loan it to small, private businesses that need capital, have been among the hardest hit in the stock selloff.

The market losses seen by these lenders reflect broader concerns about whether the highly levered companies they serve can survive a downturn.

FS KKR Capital Corp. and Ares Capital Corp., two of the largest lenders, are down about 60% and 45%, respectively, over the past month. Lenders managed by Carlyle Group Inc., BlackRock Inc. and Investcorp have fallen 57%, 59% and 68%. The S&P 500 is down around 32% over the past four weeks by comparison.

KKR, Carlyle, Investcorp and BlackRock TCP Capital Corp. declined to comment, while Ares wasn't immediately available for comment.

Business-development companies have come to play an important role in the wider economy over the past decade, stepping in to fill the void left as banks cut lending to small and midsize companies in the wake of the financial crisis.

Now, the lenders face a reckoning as businesses they have lent money to shut down and brace for significant losses as the U.S. battles to contain the pandemic.

To be sure, other factors have contributed to the steep decline in the shares of the business-development companies. Individual investors typically own the bulk of these stocks and are usually more flighty in a downturn, an industry analyst said.

"They think anything that pays a high yield must be a high-risk junk bond, so there is a lot of selling in that direction," that analyst said.

Commercial paper (AA financial)

0.92850

1.20413

0.99425

0.93350

Libor

One month

Six month

Three month

**Euro Libor** 

One year

Treasury

MBS

One month **-0.476** 

Three month -0.353

Six month **-0.290** 

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## **Money Rates**

Federal funds

March 20, 2020

0.80013 2.50150 0.61163

0.84313 2.60988 0.74050

0.82138 2.68213 0.73538

0.82163 2.78700 0.74350

-0.527 -0.408 -0.621

-0.427 -0.335 -0.539

-0.380 -0.290 -0.491

-0.298 -0.173 -0.441 Value - 52-Week -

Traded High Low

**0.074** 29.300 6.007 0.074

**0.108** 98.500 6.699 0.108

Key annual interest rates paid to borrow or lend money in U.S. and international markets. Rates below are a guide to general levels but don't always represent actual transactions. -52-WEEK--52-WEEK-

				Latest ago High Low
F	Feb. index level	Chg Fron Jan. '20	n (%) Feb. ′19	Low <b>0.0500</b> 1.0000 2.4400 0.0500
				Bid <b>0.0500</b> 1.0500 2.4400 0.0500
U.S. consume	r price ind	ex		Offer <b>0.2500</b> 1.1000 2.5000 0.0800
All items Core	258.678 267.268	0.27 0.48	2.3 2.4	Treasury bill auction
Core	207.200	0.40	2.4	4 weeks <b>0.030</b> 0.395 2.470 0.030
Inter	national	rates		13 weeks <b>0.290</b> 0.390 2.410 0.260
	Wee		-Week —	26 weeks <b>0.300</b> 0.400 2.450 0.300
Lat	test ago	High	Low	Secondary market
Prime rates				Fannie Mae
U.S.	<b>3.25</b> 4.25	5.50	3.25	
Canada	<b>2.95</b> 3.4!	3.95	2.95	30-year mortgage yields
Japan 1.	<b>.475</b> 1.47	5 1.475	1.475	30 days <b>3.012</b> 2.991 3.857 2.328
Policy Rates				60 days <b>3.081</b> 3.035 3.884 2.353
-	<b>0.00</b> 0.00	0.00	0.00	Other short-term rates
Switzerland	<b>0.50</b> 0.50	0.50	0.50	
Britain	<b>0.75</b> 0.75	0.75	0.75	Week -52-Week-
Australia	<b>0.25</b> 0.50	1.50	0.25	Latest <sub>ago</sub> high low
Overnight rep	urchase			Call money
U.S.	<b>0.04</b> 1.18	3.40	0.04	<b>2.00</b> 3.00 4.25 2.00
U.S. go	vernmer	nt rates	;	<del></del>
Discount			<u> </u>	Notes on data: U.S. prime rate is the base rate on corporate loar

**0.5000** 1.1500 3.0000 0.5000

**0.25** 1.75 3.00 0.25

Effective rate **0.2800** 1.1200 2.4800 0.2700

U.S. prime rate is the base rate on corporate loans posted by at least 70% of the 10 largest U.S. banks, and is effective March 16, 2020. Other prime rates aren't directly comparable; lending practices vary widely by location; Discount rate is effective March 16, 2020. DTCC GCF Repo Index is Depository Trust & Clearing Corp's weighted average for overnight trades in applicable CUSIPs. Value traded is in billions of U.S. dollars. Federal-funds rates are Tullett Prebon rates as of 5:30 p.m. ET. Sources: Federal Reserve; Bureau of Labor Statistics; DTCC; FactSet; Tullett Prebon Information, Ltd.

## Cash Prices WSJ.com/commodities

Friday, March 20, 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.				
	Friday		Friday	
Energy		Palladium,Engelhard industrial Palladium,Engelhard fabricated	1675.0 n.a.	Wheat - Hard - KC (USDA) Wheat,No.1soft white,Po
Coal,C.Aplc.,12500Btu,1.2SO2-r,w Coal,PwdrRvrBsn,8800Btu,0.8SO2-r,w	58.000 11.500	Aluminum, LME, \$ per metric ton Copper,Comex spot	*1581.0 2.1905	Food
Metals		Iron Ore, 62% Fe CFR China-s	86.6	Beef,carcass equiv. index
Gold, per troy oz		Shredded Scrap, US Midwest-s,m Steel, HRC USA, FOB Midwest Mill-s	280 564	choice 1-3,600-900 lbs select 1-3,600-900 lbsu
Engelhard industrial	1496.00	Fibers and Textiles	;	Broilers, National comp wt
Engelhard fabricated Handy & Harman base Handy & Harman fabricated LBMA Gold Price AM LBMA Gold Price PM Krugerrand,wholesale-e	n.a. 1494.40 1658.78 *1480.70 *1474.25 1540.03 1554.84	Burlap,10-oz,40-inch NY yd-n,w Cotton,1 1/16 std lw-mdMphs-u Cotlook 'A' Index-t Hides,hvy native steers piece fob-u Wool,64s,staple,Terr del-u,w	0.5550 0.4993 *66.60 34.500 n.a.	Butter,AA Chicago Cheddar cheese,bbl,Chica Cheddar cheese,blk,Chica Milk,Nonfat dry,Chicago ll Coffee,Brazilian,Comp Coffee.Colombian, NY
Maple Leaf-e American Eagle-e	1554.84	Grains and Feeds		Eggs,large white,Chicago
Mexican peso-e Austria crown-e Austria phil-e	1793.40 1454.48 1554.84	Barley,top-quality Mnpls-u Bran,wheat middlings, KC-u Corn,No. 2 yellow,Cent IL-bp,u	n.a. 85 3.2950	Flour,hard winter KC Hams,17-20 lbs,Mid-US fo Hogs,Iowa-So. Minnesota Pork bellies,12-14 lb MidU
Silver, troy oz. Engelhard industrial Engelhard fabricated Handy & Harman base	12.6000 n.a. 12.5430	Corn gluten feed, Midwest-u, w Corn gluten meal, Midwest-u, w Cottonseed meal-u, w Hominy feed, Cent IL-u, w	107.9 462.2 245 98	Pork benies,12-14 ib MidUS- Pork loins,13-19 lb MidUS- Steers,TexOkla. Choice- Steers,feeder,Okla. City-u
Handy & Harman fabricated LBMA spot price	15.6790 *£10.4100	Meat-bonemeal,50% pro Mnpls-u,w	208	Fats and
(U.S.\$ equivalent) Coins,wholesale\$1,000 face-a Other metals	*12.0050 10984	Oats,No.2 milling,Mnpls-u Rice, Long Grain Milled, No. 2 AR-u,w Sorghum,(Milo) No.2 Gulf-u SoybeanMeal,Cent IL,rail,ton48%-u	3.2650 25.88 7.1038 326.70	Corn oil,crude wet/dry mill w Grease,choice white,Chica Lard,Chicago-u
LBMA Platinum Price PM Platinum,Engelhard industrial	*593.0 615.0	Soybeans,No.1 yllw IL-bp,u Wheat,Spring14%-pro Mnpls-u	8.5000 6.7350	Soybean oil,crude;Centl IL Tallow,bleach;Chicago-h

	Frida
Wheat-Hard-KC (USDA) \$ per bu-u	4.7400
Wheat,No.1soft white,Portld,OR-u	5.8750
Food	
Beef,carcass equiv. index	
choice 1-3,600-900 lbsu	203.32
select 1-3,600-900 lbsu	192.94
Broilers, National comp wtd. avgu,w	0.8751
Butter,AA Chicago	1.7550
Cheddar cheese,bbl,Chicago	143.00
Cheddar cheese,blk,Chicago	183.75
Milk,Nonfat dry,Chicago lb.	98.75
Coffee,Brazilian,Comp	1.1086
Coffee,Colombian, NY	1.5612
Eggs,large white,Chicago-u	1.4550
Flour,hard winter KC	15.30
Hams,17-20 lbs,Mid-US fob-u	0.61
Hogs,lowa-So. Minnesota-u	61.87
Pork bellies,12-14 lb MidUS-u	1.0110
Pork loins,13-19 lb MidUS-u	1.2256
Steers,TexOkla. Choice-u	n.a.
Steers,feeder,Okla. City-u,w	129.38
Fats and Oils	
Corn oil,crude wet/dry mill wtd. avgu,w	36.5000
Grease,choice white,Chicago-h	0.2550
Lard,Chicago-u	n.a.
Soybean oil,crude;Centl IL-u	0.2559

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=SNL Energy; S=Platts-TSI; T=Cotlook Limited; U=USDA; W=weekly, Z=not quoted. \*Data as of 3/19

Source: WSJ Market Data Group

0.2850

Ret

NA 15.6

NA -34.6

Prem12 Mo

NA

NA

THE WALL STREET JOURNAL.

Friday, March 20, 2020

			_	~ WK
		F	rem	Ttl
Fund (SYM)	VAV C	:lose/	Disc	Ret
<b>General Equity Funds</b>				
Adams Diversified Equity ADX	13.05	11.10	-14.9	-14.8
Boulder Growth & Income BIF	10.13	8.16	-19.4	-20.9
Central Secs CET	NA	22.20	NA	-19.1
CohenStrsCEOppFd FOF	8.63	7.34	-15.0	-35.1
EVTxAdvDivIncm <b>EVT</b>	14.94	13.32	-10.8	-34.7
GabelliDiv&IncTr GDV	14.61	11.91	-18.5	-39.9
Gabelli Equity Tr GAB	3.32	3.77	+13.6	-30.5
GeneralAmer GAM	29.80	24.75	-16.9	-20.0
JHancockTaxAdvDiv HTD	15.23	13.20	-13.3	-42.7
Librty AllStr Eq <b>USA</b>	4.58	4.02	-12.2	-26.5
Royce Micro-Cap Tr RMT	5.81	4.74	-18.4	-35.8
Royce Value Trust RVT	9.88	8.43	-14.7	-32.8
Source Capital SOR	33.52	27.11	-19.1	-22.4
Tri-Continental TY	21.91	18.53	-15.4	-23.1

Specialized Equity Funds Aberdeen Glb Prem Prop AWP 4.27 3.67 -14.1 -32.5 Adams Natural Resources **PEO** 8.89 7.53 -15.3 -51.4 GI NFJ DivInt&PremStr NFJ 10.09 8.26 -18.1 -25.5 ASA Gold & Prec Met Ltd ASA 10.55 9.10 -13.7 -12.7 12.60 11.21 -11.0 -23.9 BlackRock Energy & Res **BGR** 5.71 5.06 -11.4 -53.6 BlackRock Eq Enh Div **BDJ** 6.46 5.50 -14.9 -29.3 BlackRock Enh Glbl Div **BOE** 8.63 7.54 -12.6 -23.1 BlackRock Enh Intl Div BGY 4.74 4.12 -13.1 -18.7 BlackRock HIth Sciences BME 31.58 30.01 -5.0 -19.0 BlackRock Res & Comm **BCX** 5.14 3.90 -24.1 -47.0 BlackRock Sci&Tech Trll **BSTZ** 15.95 13.19 -17.3 NS BlackRock Sci&Tech Trust BST 25.89 24.58 -5.1 -17.0 BlackBock | Itl Inf & Dwr RIII 15 63 15 48 -1 0 -23 8 CBRE CIrnGlbRIEst IGR 5.11 4.24 -17.0 -37.2 CLEARBRIDGEENGY MDS OPP EMO 1.76 1.09 -38.1 -87.3 CLEARBRIDGEMLP&MDSTMTR CTR 1.99 1.36 -31.9 -84.4 ClearBridge MLP & Midstm **CEM 2.50 1.63 -34.8 -85.5** Cntr Cst Brkfld MLP&EI **CEN** 1.13 1.13 0.0 -82.5 ChnStrInfr UTF 16.71 14.01 -16.2 -37.1 Cohen&SteersQualInc RQI 8.41 7.43 -11.7 -36.7 CohenStrsREITPref RNP 15.57 13.34 -14.3 -30.2 Cohen&Steers TotRet RFI 9.31 8.46 -9.1 -31.0 Columbia Sel Prm Tech Gr STK 15.63 15.10 -3.4 -18.1 DNP Select Income DNP 6.86 8.95 +30.6 -16.7 Duff&PhUti&InfraIncFd DPG 8.79 7.94 -9.7 -40.6 EtnVncEqtyInc **EOI** 11.50 10.33 -10.2 -22.7 EtnVncEqtyIncoll **EOS** 13.00 12.06 -7.2 -22.3 EVRskMnDvsEqInc ETJ 8.54 7.42 -13.1 -9.9

Fund (SYM) NAV Close/Disc Ret EtnVncTxMqdBuvWrtOpp ETV 10.81 9.72 -10.1 -28.0 EvTxMnDvsEqInc ETY 8.97 8.10 -9.7 -21.5 EtnVncTxMqdGlbB ETW 7.52 6.20 -17.6 -30.5 EVTxMnGblDvEqInc **EXG** 6.18 5.40 -12.6 -26.9 First Trust Energy Inc G **FEN 10.23** 8.93 **-12.7 -53.7** First Tr Enhanced Eq **FFA 11.39 10.32 -9.4 -26.3** FirstTrEnergyInfra FIF 8.83 7.71 -12.7 -46.9 FirstTrMLPEner&Inc FEI 5.21 4.00 -23.3 -61.3 Gabelli Healthcare GRX 9.06 7.60 -16.1 -22.6 3.29 4.92 +49.5 -19.1 Gab Utility **GUT** GAMCOGIGold&NatRes **GGN** 2.74 2.41 -12.0 -34.5 J Han Finl Opptys **BTO** 16.43 17.48 +6.4 -38.9 Neuberger Brmn MLP & El NML 2.41 1.66 -31.1 -76.6 NubrgrRIEstSec NRO 2.90 2.66 -8.3 -41.0 Nuv Dow 30 Dyn Overwrite **DIAX 11.97 10.45 -12.7 -36.3** Nuveen Engy MLP Tot Rtn JMF 1.38 1.57 +13.8 -81.6 Nuveen Nasdaq 100 Dyn Ov QQQX 18.15 16.51 -9.0 -19.8 6.49 5.40 -16.8 -43.3 Nuv Real Est JRS Nuveen RI Asst Inc & Gro JRI 10.47 8.71 -16.8 -40.4 NuvS&P500DvnOvFd SPXX 11.21 10.15 -9.5 -28.4 NuvSP500BuyIncFd **BXMX 10.44 9.09 -12.9 -24.3** ReavesUtilityIncome UTG 23.22 22.28 -4.0 -28.3 RMRRealEstInc RIF 9.89 7.80 -21.1 -55.3 Tortoise Enrgy Infra Crp **TYG** 3.25 2.62 -19.4 -87.4 Income & Preferred Stock Funds

Tortoise Ess Asst Inc Tm TEAF 12.22 9.13 -25.3 NS Tortoise Midstream Enrgy NTG 1.33 1.14 -14.3 -90.7 CalamosStratTot CSO 8.75 7.73 -11.7 -32.0 CohenStrsLtdDurPref&Inc **LDP** 18.02 17.04 -5.4 -23.1 CohenStrsSelPref&Income **PSF 18.53 17.32 -6.5 -30.0** FirstTrIntDurPref&Inc FPF 16.52 15.12 -8.5 -25.5 JHanPrefinc HPI 12.50 13.30 +6.4 -35.6 JHPrefincil HPF 12.30 12.64 +2.8 -37.3 HnckJPfdInco III HPS 10.98 11.00 +0.2 -36.4 J Han Prm **PDT** 8.85 8.32 -6.0 -44.7 LMP CapInco **SCD** 8.31 6.94 -16.5 -41.9 Nuveen Pref & Inc Opp **JPC** 6.51 6.01 -7.7 -31.9 Nuveen Fd **JPS** 6.80 6.07 -10.7 -28.2 Nuveen Pref & Inc Term JPI 16.57 15.26 -7.9 -28.2 Nuveen TxAdvDivGr JTD 10.66 9.03 -15.3 -37.9 TCW Strat Income TSI NA 4.31 NA -16.1 Convertible Sec's. Funds AdvntCnvrtbl&IncFd AVK 11.33 10.26 -9.4 -21.2

GI Conv & Inc **NCV** 3.54 3.37 -4.8 -40.0 AGI Conv & Inc II **NCZ** 3.16 2.87 -9.2 -42.9 AGI Eqty & Conv Inc  $\,$  NIE  $\,$  18.76  $\,$  16.64  $\,$  -11.3  $\,$  -15.1  $\,$ CalamosConvHi **CHY** 8.12 7.66 -5.7 -22.6 CalmosConvOp **CHI** 7.70 7.10 -7.8 -22.6 World Equity Funds Aberdeen Emg Mkts Eg Inc AEF 5.65 4.85 -14.2 -31.0 Aberdeen Tot Dyn Div **AOD** 6.69 5.62 -16.0 -26.0 Calamos GloDynInc **CHW** 5.28 4.59 -13.1 -35.4 Cdn Genl Inv CGI 23.29 17.27 -25.8 -27.1

EV TxAdvGlbDivInc **ETG** 11.13 9.95 -10.6 -31.8 EtnVncTxAdvOpp **ETO** 15.08 14.94 -0.9 -32.1 FirstTr Dyn Euro EqInc **FDEU** 9.25 8.10 -12.4 -37.6 Gabelli Multimedia **GGT** 4.04 4.20 +4.0 -43.2 GDL Fund GDL 9.14 6.68 -26.9 -26.7

**IPO Scorecard** 

ETnVncTxMgdBuyWrtInc ETB 10.87 10.07 -7.4 -29.0

Performance of IP	OS, Mo	st-re	cent II	stea first			
		% Chg	From			% Chg	From
Company <b>SYMBOL</b> IPO date/Offer price	Friday's close (\$)	Offer price	1st-day close	Company <b>SYMBOL</b> IPO date/Offer price	Friday's close (\$)	Offer price	1st-day close
Imara IMRA March 12/\$16.00	16.00		6.7	Passage Bio PASG Feb. 28/\$18.00	9.79	-45.6	-55.9
DFP Healthcare Acquisitions DFPHU March 9/\$10.00		-1.5	-3.4	Zhongchao <b>ZCMD</b> Feb. 24/\$4.00	2.09	-47.8	-47.8
Flying Eagle Acquisition FEAC.U March 6/\$10.00		-2.2	-6.0	dMY Technology Grp <b>DMYT.UT</b> Feb. 21/\$10.00	9.42	-5.8	-8.9
LifeSci Acquisition LSACU March 6/\$10.00	9.32	<b>-6.</b> 8	-9.1	East Stone Acquisition <b>ESSCU</b> Feb. 20/\$10.00	9.50	-5.0	-5.1
GFL Environmental GFL March 2/\$19.00	15.69	-17.4	-6.6	Churchill Capital III CCXX.UT Feb. 14/\$10.00	9.65	-3.5	-8.2
				Sources: Dow Jone	s Market	Data: F	actSet

Prem NAV Close/Disc Fund (SYM) Ret Highland Global Alloc HGLB 8.26 5.04 -39.0 -56.2 15.58 12.80 -17.8 -30.7 Japan Smaller Cap JOF 7.38 6.08 -17.6 -23.7 MS ChinaShrFd **CAF** 20.87 16.20 -22.4 -26.0 MS India IIF 15.75 12.41 -21.2 -39.5 New Germany **GF** 12.20 9.62 -21.2 -27.5 Templeton Dragon **TDF** 18.44 15.00 -18.7 -14.4 Templeton Em Mkt **EMF** 11.95 10.31 -13.7 -25.1 Wells Fargo GI Div Oppty **EOD** 3.76 3.28 -12.8 -29.8

Prem12 Mo NAV Close /Disc Yld Fund (SYM) U.S. Mortgage Bond Funds

BlckRk Income **BKT** 6.12 5.61 -8.3 Invesco HI 2023 Tgt Term IHIT 8.67 7.90 -8.9 Nuveen Mortgage and Inc JLS 18.48 17.00 -8.0 6.2 Investment Grade Bond Funds BIRck Core Bond BHK 13 58 11 99 -11 7

BR Credit Alloc Inc BTZ 11.39 9.85 -13.5 13.22 11.84 -10.4 J Han Income **JHS** MFS Intmdt MIN 3.80 3.38 -11.1 Western Asset Inf-Lk Inc WIA 11.45 9.58 -16.3 Western Asset Inf-Lk O&I **WIW 10.96 9.31 -15.1** 3.7 Loan Participation Funds Apollo Senior Floating **AFT 12.59 10.43 -17.1** 8.1

BR Debt Strategy **DSU** 8.82 6.99 -20.7 BR F/R Inc Str **FRA** 10.60 8.59 -19.0 BlackRock Floatng Rt Inc **BGT** 10.28 8.37 -18.6 7.0 Blackstone/GSO Strat **BGB 11.68 9.76 -16.4** 9.8 Blackstone/GSO Sr Flt Rt BSL 12.84 11.44 -10.9 8.5 Eagle Point Credit ECC NA 6.25 NA 17.8 EtnVncFltRteInc EFT 10.81 8.95 -17.2 7.9 EV SenFIRtTr **EFR** 10.55 8.40 -20.4 7.8 5.01 4.06 -19.0 EVSnrIncm **EVF** 7.4 4.0 FT/Sr Fltg Rte Inc 2 FCT 10.02 7.96 -20.6 FT/Sr Fltg Rte 2022 TgTr **FIV 7.08 6.22 -12.1** Highland Income **HFRO 12.63 9.01 -28.7** InvDYCrOpp **VTA** 9.28 7.21 -22.3 7.5 InvSnrIncTr **VVR** 3.56 2.82 -20.8 Nuveen Credit Strat Inc JQC 5.71 4.71 -17.5 17.5 NuvFloatRateIncEd JFR 7.52 6.07 -19.3 7.9 NuvFloatRteIncOppty JRO 7.49 6.26 -16.4 Nuveen Senior Income **NSL** 4.45 3.76 -15.5 PionrFltRate Tr **PHD** 8.85 7.21 -18.5 6.5

**High Yield Bond Funds** 

AllianceBernGlHilncm AWF 10.19 8.87 -13.0 Barings Glb SD HY Rd BGH 12.03 10.10 -16.0 10.8 BR Corporate HY **HYT** 8.56 7.40 -13.6 BlackRock Ltd Dur Inc **BLW 12.71 10.67 -16.1** RNY Mellon Hi Yield Str DHF 2.39 1.99 -16.7 9.0 Brookfield Real Asst Inc RA 15.93 13.65 -14.3 11.8 CrSuisHighYld **DHY** 1.93 1.61 -16.8 9.5 DoubleLine Inc Sol **DSL** 13.45 12.92 -3.9 9.8 First Tr Hi Inc Lng/Shrt **FSD 12.76 10.55 -17.3** IVYHIGH INCOME OPP IVH 10.78 8.64 -19.9 9.4 NeubHgYldStrt NHS 8.51 7.54 -11.4 8.8 NexPointStratOppty **NHF 17.29 7.98 -53.8 14.9** Nuveen Crdt Opps 2022 TT JCO 7.09 6.66 -6.1 5.7 7.8 Nuveen Global High Inc **JGH 12.18 10.55 -13.4** Nuveen HI Nov 2021 Tgt JHB 8.61 7.95 PGIM Global High Yield GHY 12.23 9.71 -20.6 PGIM High Yield Bond ISD 12.45 10.27 -17.5 8.5 PioneerHilncmTr **PHT** 6.98 5.75 -17.6 Wells Fargo Income Oppty **EAD** 6.77 5.45 -19.5 9.1 WstAstHIF II HIX 5.26 4.19 -20.3 8.7 Western Asset Hi Inc Opp HIO 4.36 3.48 -20.2 Western Asset Hi Yld D O HYI 12.73 10.98 -13.7 6.8 Other Domestic Taxable Bond Funds

Ares Dynamic Crdt Alloc ARDC NA 10.25 NA Barings Corporate Inv MCI NA 10.25 NA 7.2 9.2 BlackRock Mlt-Sctr Inc BIT 12.21 10.99 -10.0 BlackRock Tax Muni Bd BBN 23.87 20.48 -14.2 5.5 7.0 DoubleLine:Oppor Crdt Fd DBL 18.47 17.10 -7.4 Duff&Ph Util Cor **DUC** 8.56 8.31 EVLmtDurlncm **EVV** 11.07 8.80 -20.5 Franklin Ltd Dur Income FTF 8.13 6.99 -14.0 11.6 J Han Investors **JHI** 12.42 10.57 -14.9

KKR Income Opportunities KIO NA 10.26 NA 10.4

No. of shrs in Price range (\$) \$ Value

Prem12 Mo NAV Close / Disc Yld Fund (SYM) MFS Charter **MCR** 7.55 6.27 -17.0 Nuveen Taxable Muni Inc NBB 18.75 18.11 PIMCO Corp & Inc Oppty PTY 10 84 11 94 +10 1 PIMCO Corp & Inc Strat **PCN 11.27 11.17 -0.9** PIMCOHilnco **PHK** 4.60 4.36 -5.2 11.4 PIMCO IncmStrFd PFL 8.17 7.76 -5.0 9.7 PIMCO IncmStrFd II PFN 7.41 7.07 Putnam Mas Int **PIM** 4.03 3.64 -9.7 Putnam Prem Inc **PPT** 4.46 4.06 -9.0 8.3 Wells Fargo Multi-Sector **ERC 10.08 8.72 -13.5 10.1** World Income Funds

Abrdn AP IncFd **FAX** BrndywnGLB Glb Inc Oppts BWG 11.73 9.75 -16.9 EtnVncStDivInc **EVG** 11.99 10.25 -14.5 MS EmMktDomDebt EDD 6.13 4.81 -21.5 PIMCO Dyn Crd & Mrt Inc **PCI 16.31 15.84 -2.9** PIMCO Dynamic Income PDI 19.97 19.62 -1.8 10.3 PIMCO Income Opportunity **PKO** 18.69 17.65 -5.6 PIMCO Stratg Inc **RCS** 5.37 5.65 +5.2 Templeton Em Inc TEI 8.78 7.04 -19.8 Templtn Glbl Inc **GIM** 6.30 5.05 -19.8 WstAstEmergDebt EMD 11.85 9.81 -17.2

Western Asset GICr D Op GDO 13.99 13.00 -7.1 National Muni Bond Funds AllBerNatlMuninc AFB 12.85 11.91 -7.3 BlckRk Inv Q Mun **BKN 13.41 12.90** BlackRock Muni 2030 Tgt BTT 22.40 20.40 BlackRock Muni BFK 11.87 11.17 -5.9 4.7 BlackRock Muni II BLE 12.41 11.75 BlckRk Muni Inc Qly **BYM 12.95 11.61 -10.3** BR Muni Assets Fd MUA 12.34 11.28 -8.6 4.0 BR MuniEnhanced MEN 9.99 9.11 BR MuniHoldings Qly MFL 12.27 11.36 -7.4 BR MH Oly 2 MUE 11.83 10.66 -9.9 BR MuniHoldngs MHD 13.86 13.45 BR MuniVest Ed MVF 7.97 7.50 -5.9 BR MuniVest 2 MVT 12.50 11.89 BR MuniYield Fd MYD 12.28 11.28 BR MuniYield Olty MQY 13.46 12.32 -8.5 BR MuniYld Qlty2 MQT 11.82 10.63 -10.1 BR MuniYld Qly 3 **MYI 12.41 11.34** BNY Mellon Muni Bd Infra **DMB 12.06 11.02 -8.6** BNY Mellon Str Muni Bond DSM 6.94 6.40 BNY Mellon Strat Muni **LEO 7.12 6.90 -3.1** 10.91 9.56 -12.4 DWS Muni Inc KTF EVMuniBd **EIM** 12.01 10.79 -10.2 11 74 10 86 -7 5 EVMunilncm EVN EVNatMuniOpp **EOT** 18.90 17.37 -8.1 InvAdvMuIncTrII VKI 10.27 9.08 -11.6 Invesco MuniOp OIA 6.48 5.89 -9.1 4.8 InvescoMuOppTr **VMO** 11.53 10.36 -10.1 11.50 10.44 -9.2 InvescoMuTr VKQ InvescoQual Inc IQI 11.63 10.60 -8.9 InvTrInvGrMu **VGM** 11.90 10.55 -11.3 InvescoValMunInc **IIM** 14.06 12.48 -11.2 MAINSTAYMKDEFTRMUNOP **MMD** 17.94 19.07 +6.3 NeubrgrBrm **NBH** Nuveen AMT-Fr Mu Val **NUW** 14.82 13.66 -7.8 Nuveen AMT-Fr Qlty Muni **NEA** 13.29 12.17 -8.4 Nuveen AMT-Fr Mu CI **NVG 14.19 12.90** Nuveen Enh Muni Val NEV 12.83 11.99 Nuveen Int Dur Mun Term NID 12.19 11.94 Nuv Muni Credit Income NZF 13.67 12.52 NuvMuniHilncOpp NMZ 11.33 10.99 -3.0 Nuveen Muni Val NUV 9.53 9.14 Nuveen Quality Muni Inc NAD 13.49 12.21 -9.5 4.3 Nuveen Sel TF NXP 14.49 13.97 -3.6 Nuveen Sel TF 2 **NXQ** 13.86 13.76

Putnam Mgd Inc **PMM 6.82 6.41 -6.0** Putnam Muni Opp **PMO 11.67 11.00** -5.7 4.8 RiverNorth Mgd Dur Mun I RMM 15.06 14.64 -2.8 Western Asset Mgd Muni MMU 11.58 10.70 -7.6 Westn Asst Mu Def Opp Tr MTT 18.45 18.03 -2.3 4.0 Single State Muni Bond BlackRock CA Mun **BFZ** 12.63 11.04 -12.6 BR MH CA Qly Fd Inc **MUC** 13.31 12.16 -8.6 3.7

BR MH NJ Qly **MUJ** 13.40 11.90 -11.2

BR MH NY Qly MHN 12.97 11.86 -8.6

PIMCO Munilnc **PMF** 10.67 10.85 +1.7

PIMCOMunilncll **PML** 10.16 10.99 +8.2

PioneerHilncAdv MAV 10.56 9.20 -12.9

PioneerMunHilcmT MHI 11.31 9.86 -12.8

4.1

Pimco Muni III **PMX** 

Fund (SYM) NAV Close/Disc Yld BR MuniYld CA **MYC** 13.14 12.10 -7.9 BR MuniYld CA Qly MCA 13.34 12.15 BR MuniYld MI Qly MIY 13.67 11.91 -12.9 BR MuniYld NJ MYJ 13.46 12.06 -10.4 BR MuniYld NY Qly **MYN 12.43 10.93 -12.1** EVCAMuniBd **EVM** 10.98 9.76 -11.1 Eaton Vance NY MuniBd **ENX** 11.65 10.34 -11.2 InvCaValMuIncTr VCV 11.62 10.35 -10.9 InvPAValMuIncTr **VPV** 12.29 10.51 -14.5 InvTrInvGrNYMu VTN 12.36 10.62 -14.1 Nuveen CA AMT-F Qual MI NKX 13.74 12.50 -9.0 Nuveen CA Val NCA NuveenCAQtyMuInc NAC 13.55 12.42 -8.3 Nuveen MD Qual Muni Inc NMY 12.95 11.75 -9.3 Nuveen MI Qual Muni Inc NUM 14.01 12.17 -13.1 NuvNJ Qual Muni Inc **NXJ 14.01 12.09 -13.7** Nuveen NY AMT/Fr Qual MI NRK 12.71 11.54 -9.2 Nuveen NY Qual Muni Inc NAN 13.26 11.42 -13.9 Nuveen OH Qual Muni Inc **NUO 14.89 13.46 -9.6** Nuveen PA Qual Muni Inc NQP 13.49 11.87 -12.0 4.1 Nuveen VA Qlty Mun Inc **NPV 12.84 12.08 -5.9** 3.6 11.76 13.97 +18.8 PIMCOCAMunill **PCK** 7.24 7.21 -0.4 4.1

52 wk n Ttl Fund (SYM) NAV Close/Disc Ret NA

Specialized Equity Funds Bluerock Total Inc+ RE:A 30.25 Bluerock Total Inc+ RE:C 28.94 5.4 6.5 Bluerock Total Inc+ RE:I 30.77 NA NA Bluerock Total Inc+ RE:L 30.04 NA Broadstone RI Est Acc:I -9.7 NA NA NA -9.95 Broadstone RI Est Acc:W 8.80 CC Real Estate Income;A NA -16.8 CC Real Estate Income:Ad 7.08 NA NA -21.4 CC Real Estate Income;C NA -20.7 7.39 7.17 NA -16.8 NA -18.2 CC Real Estate Income:I NA NA CC Real Estate Income;T NA NA NA Clarion Partners REID 9.94 NA NS NS Clarion Partners REII Clarion Partners REIS 9.92 NA NA NS NS Clarion Partners REI T NA -51.5 NA -51.3 FS Energy Total Return A 5.24 NA FS Energy Total Return I -3.8 -4.5 Griffin Inst Access RE:A 25.10 NA NA NA NA Griffin Inst Access RE:C 24.26 Griffin Inst Access RE:I 25.40 NexPointHCOpp;A 12.53 NA NA -3.5 NA NA -18.2 NexPointRIEstStrat;A 13.56 NA NA NA -18.8 NA -27.2 NexPointRIEstStrat;C 13.67 NA NA NA -27.6 NexPointRIEstStrat; Z 13.69 NA -26.7 4.2 4.2 PREDEX;I NA PREDEX;T 26.15 NA NA NA NA NA PREDEX;W Principal Dvs Sel RA A 18.73 NA NS NS Principal Dvs Sel RA Ins 18.74 Principal Dvs Sel RA Y 18.77 NA NS Resource RE Div Inc:A NA NA -7.4 -6.5 Resource RE Div Inc:C 9.00 NA Resource RE Div Inc:I Resource RE Div Inc:L 9.00 NA NA -6.9 Resource RE Div Inc:W -6.8 SharesPost 100;A SharesPost 100:I NA NA 3.1 3.4 30.38 NA NA 30.55 SharesPost 100:L 30.23 2.9 NE Versus Cap MMgr RE Inc:l 26.68 Versus Capital Real Asst 24.00 NA NA -1.4 Wildermuth Endwmnt: A 13.31 3.8 NA NA 3.0 4.2 Wildermuth Endwmnt: C 12.91 Wildermuth Endowment: 13.44 NA Income & Preferred Stock Funds NA 10.30 NA NS A3 Alternative Cr

Calamos L/S Eqty and DI CPZ 13.62 10.91 -19.9 Destra Multi-Altrntv; A 11.58 NA NA -10.1 Destra Multi-Altrntv;C 11.13 Destra Multi-Altrntv: 11.79 NA -9.9 Destra Multi-Altrntv;L 11.28 Flat Rock Opportunity 16.31 NA NA -6.2 The Relative Value:CIA 23.12 NA Variant Altrnty Inc:Inst 26.98 NA NA 11.6 Variant Altrntv Inc:Inv 26.99 NA NA 11.3 Convertible Sec's. Funds Calmos Dyn Conv and Inc **CCD** 14.41 13.45 -6.7 -20.1

**World Equity Funds** 

Fund (SYM) NAV Close/Disc ACAP Strategic:A 18.69 ACAP Strategic:W 4.1 BMO LGM Front ME:I 5.95 CalamosGlbTotRet CGO 7.55 7.29 -3.4 -28.1 Fund (SYM) NAV Close/Disc Loan Participation Funds 4.3 1WS Credit Income 4.4 3.9 4.2 3.8 4.3 3.9

AlphCntrc Prime Merid In 10.25 NS 6.6 3.5 6.4 6.7 6.2 NS NS 3.4 NS NS 7.4 4.1 6.9 NS NS NS Angel Oak Str Crdt:Inst 20.90 Axonic Alternative Inc 20.88 Blackstone/GSO FR EID 18.35 Blackstone/GSOFREII 18.33 Blackstone/GSO FR EIT 18.29 Blackstone/GSO FR EIT-I 18.69 Blackstone/GSO FR EI U 19.10 BISTN Commnty Dev NA
BNYM Alcntr Glb MS Cr Fd 72.72 CLIFFWATER CL FD;I CNR Strategic Credit 8,48 FS Global Crdt Opptys D Garrison Capital Inc GARS NA Schrdrs Opp Inc;A 22.01 NA NA NA NA Schrdrs Opp Inc;A2 22.00 Schrdrs Opp Inc;I Schrdrs Opp Inc;SDR 22.01 NA NA NS NS 4.8 4.1 NA 22.02 Invesco Sr Loan A 5.12 Invesco Sr Loan C 5.1 4.9 5.1 nvesco Sr Loan IB Invesco Sr Loan IC 5.10 NA Invesco Sr Loan Y Sierra Total Return:T 18.80 NA NA High Yield Bond Funds Griffin Inst Access Cd:A 20.15

Griffin Inst Access Cd:C 20.15 Griffin Inst Access Cd:F 20.16 Griffin Inst Access Cd:l 20.15 Griffin Inst Access Cd:L 20.15
PIMCO Flexible Cr I;A-2 7.67 PIMCO Flexible Cr I; A-4 7.67 PIMCO Flexible Cr I;Inst 7.67 PionrILSBridge WA Middle Mkt Dbt 531.77 Other Domestic Taxable Bond Fu

Am Beacon Apollo TR:T Am Beacon Apollo TR:Y 8.56 NΑ Am Beacon SP Enh Inc:T 8.04 Am Beacon SP Enh Inc:Y 8.05 BR Credit Strat;Inst 8.01 BlackRock Mlt-Sctr Oppty 69.11 BlackRock Mlt-Sec Opp II 71.09 7.6 NS 7.8 8.4 8.1 NS 8.2 5.4 5.4 5.4 0.0 NE NS 7.6 5.8 7.7 6.9 7.4 7.7 Carlyle Tact Pvt Cred:A Carlyle Tact Pvt Cred: Carlyle Tact Pvt Cred:L Carlyle Tact Pvt Cred:N NA Carlyle Tact Pvt Cred:Y CION Ares Dysfd Crdt:A CION Ares Dvsfd Crdt;C CION Ares Dvsfd Crdt;I NA NA CION Ares Dvsfd Crdt;L CION Ares Dvsfd Crdt;U CION Ares Dvsfd Crdt;W NA CNR Select Strategies 10.90 1.10 GL Beyond Income KKR CREDIT OPPTY;I Lord Abbett Cred Opps Fd 8.07 Lord Abbett Cred Opps Fd 8.07 Palmer Square Opp Inc 14.92 Resource Credit Inc:A Resource Credit Inc:C 8.98 NΑ NA Resource Credit Inc:I Resource Credit Inc:L 8.87 Resource Credit Inc:W Thrivent Church Ln&Inc:S 10.46 NA NA **World Income Funds** 5.0 5.2

Destra Int&Evt-Dvn Crd:A 21.13 Destra Int&Evt-Dvn Crd:I 21.15 NA Destra Int&Evt-Dvn Crd:L 21.12 Destra Int&Evt-Dvn Crd:T 21.11 National Muni Bond Funds PIMCO Flex Mun Inc;A-3 9.37 PIMCO Flex Mun Inc;Inst 9.37 NA NA NA NΑ

Tortoise Tax-Adv Soc Inf 9.11

NS NS

## Insider-Trading Spotlight

Trading by 'insiders' of a corporation, such as a company's CEO, vice president or director, potentially conveys new information about the prospects of a company. Insiders are required to report large trades to the SEC within two business days. Here's a look at the biggest individual trades by insiders, based on data received by

Thomson Financial on March 20, and year-to-date stock performance of the company KEY: B: beneficial owner of more than 10% of a security class CB: chairman CEO: chief executive officer CFO: chief financial officer CO: chief operating officer D: director DO: director and beneficial owner GC: general counsel H: officer, director and beneficial owner l. indirect transaction filed through a trust, insider spouse, minor child or other 0: officer 0D: officer and director P: president UT:unknown **VP**: vice president Excludes pure options transactions

## Biggest weekly individual trades

Based on reports filed with regulators this past week

Date(s)	Company	Symbol	Insider	Title	trans (000s)	) in transaction	(000s)	Close (\$)	Ytd (%)
Buyers	5								
Mar. 10-12	Hertz Global Holdings	HTZ	C. Icahn	ВІ	11,416	6.99-8.06	84,833	5.14	-67.4
Mar. 12	TransDigm Group	TDG	R. Small	DI	157	391.42-422.66	63,668	302.51	-46.0
Mar. 16	Prospect Capital	PSEC	J. Barry	CEO	4,610	4.77	22,007	4.80	-25.5
Mar. 17			J. Barry	CEO	4,265	4.97-5.00	21,190		
Mar. 12			J. Barry	CEO	4,562	4.31-4.73	20,813		
Mar. 13			J. Barry	CEO	3,253	4.92	16,008		
Mar. 11			J. Barry	CEO	698	4.79	3,346		
Mar. 13-16	AXIS Capital Holdings	AXS	C. Davis	DI	501	38.77-42.24	20,013	38.16	-35.8
Mar. 18-19	Delek US Holdings	DK	C. Icahn	ВІ	1,109	10.42-11.39	11,822	15.08	-55.0
Mar. 18	Simon Property Group	SPG	H. Simon	DI	189	52.67-52.68	9,933	48.14	-67.7
Mar. 17			D. Simon	CEO	150	60.83	9,124		
Mar. 16	Cardlytics	CDLX	C. Sosin	ВІ	191	42.40	8,093	30.39	-51.7
Mar. 13			C. Sosin	ВІ	80	47.36	3,782		
Mar. 12	Encompass Health	EHC	A. Anthony	0	125	54.50-60.76	7,337	50.54	-27.0
Mar. 16	Cloudera	CLDR	P. Fenton	D	719	6.95	4,999	6.95	-40.2
Mar. 13	Hubspot	HUBS	D. Shah	СТ	40	124.23-124.97	4,977	117.79	-25.7
Mar. 12	Energy Transfer	ET	R. Davis	D	802	6.21	4,976	5.25	-59.1
Mar. 13	Wells Fargo	WFC	C. Scharf	CEO	173	28.69	4,963	26.50	-50.7

## Sellers

Mar. 16	lululemon athletica	LULU	D. Wilson	DI	174	137.87-150.88	24,998	165.01	-28.8
Mar. 11-12	Forty Seven	FTSV	I. Weissman	DI	250	92.19-94.72	23,591	91.84	133.3
Mar. 16	Snap	SNAP	R. Murphy	СТІ	2,500	9.31	23,275	10.09	-38.2
Mar. 19	Slack Technologies	WORK	J. O Farrell	DI	850	20.54-21.01	17,461	22.23	-1.1
Mar. 12	Digital Realty Trust	DLR	D. Ruberg	0	125	126.62	15,828	121.20	1.2
Mar. 16-17 Mar. 10	Zoom Video Communications	ZM	E. Yuan S. Subotovsky	CEO DI	140 73	102.28-118.96 108.58-109.35	15,533 7,949	130.55	91.9
Mar. 11	Intercontinental Exchange	ICE	J. Sprecher	CEOI	175	85.52-89.12	15,263	72.99	-21.1
Mar. 16	Broadcom	AVGO	H. Tan	CEO	74	181.64-217.98	14,595	192.22	-39.2
Mar. 16	Adobe	ADBE	M. Thompson	OI	38	298.16	11,256	295.34	-10.5
Mar. 16-17	Q2 Holdings	QTWO	R. Seale	DI	200	55.12-57.02	11,118	55.31	-31.8
Mar.13	SBA Communications	SBAC	J. Stoops	CEO	38	280.04	10,553	229.33	-4.8
Mar. 16	Workday	WDAY	D. Duffield	DOI	79	116.62-130.09	9,628	125.00	-24.0
Mar. 11	BlackLine	BL	M. Spanicciati	ODI	150	61.18	9,176	46.44	-9.9
Mar. 16	Activision Blizzard	ATVI	C. Walther	OI	159	55.00	8,770	52.05	-12.4
Mar. 13	Knight-Swift Transportation Holdings	KNX	J. Moyes	ВІ	290	29.76	8,630	30.36	-15.3
Mar. 16	Comcast	CMCSA	D. Watson	0	203	36.69-37.30	7,512	33.37	-25.8
Mar. 13-16	Nexpoint Residential Trust	NXRT	J. Dondero	PI	209	33.13-36.96	7,137	27.00	-40.0

\* Half the transactions were indirect \*\*Two day transaction

## Buying and selling by sector

Based on actual transaction dates in reports received this past week

Sector	Buying	Selling	Sector	Buying	Selling
Basic Industries	3,453,927	3,827,011	Finance	60,350,693	43,147,204
Business services	2,123,823	7,724,904	Health care	9,076,935	28,997,246
Capital goods	0	0	Industrial	3,531,470	3,061,784
Consumer durables	1,826,868	1,718,302	Media	8,402,830	14,574,874
Consumer nondurables	5,552,671	30,937,408	Technology	13,504,967	57,156,639
Consumer services	8,488,876	44,849,701	Transportation	1,404,396	232,309
Energy	21,683,815	7,202,831	Utilities	3,745,348	4,286,089

Sources: Thomson Financial; WSJ Market Data Group

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## MARKETS DIGEST

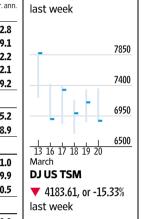
#### S&P 500 Index **Dow Jones Industrial Average** Last Year ago **19173.98 V**4011.64, or 17.3% last week Trailing P/E ratio 14.91 17.65 **2304.92** ▼406.10, or 14.98% last week Trailing P/E ratio \* P/E estimate \* 13.27 15.84 High, low, open and close for each of P/E estimate \* High, low, open and close for each of Dividend yield 3.40 Dividend yield \* the past 52 weeks the past 52 weeks All-time high 29551.42, 02/12/20 All-time high 3386.15, 02/19/20 Current divisor 0.14744568353097 28500 27000 25500 200-day moving average 24000 Week's high **DOWN** 22500 Monday's open ▶ Friday's close ▶ Monday's open 21000 200-day moving average 65-day moving average Week's low 19500 Bars measure the point change from Monday's open 18000 F M S 0 Primary market Composite NYSE weekly volume, in billions of shares **Financial Flashback** 36 The Wall Street Journal, March 23, 2009 24 12 The Treasury Department rolled out its plan to purge bank are limiting lending and prolonging the recession.

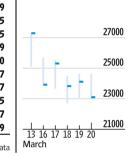
balance sheets of as much as \$1 trillion in sour assets that

#### Major U.S. Stock-Market Indexes

			- Latest We	eek ——		52-Week				— % chg —		
D I	High	Low	Close	Net chg	% chg	Low		Close (●)	High	% chg		3-yr. ann.
Dow Jones							_					
Industrial Average			19173.98		-17.30	19173.98			29551.42		-32.8	<b>-2.</b> 8
Transportation Avg	7617.70	6481.20	6837.72	-1101.68	-13.88	6837.72			11304.97		-37.3	-9.1
Utility Average	773.49	640.76	646.13	-116.47	-15.27	646.13			960.89	-17.6	-26.5	-2.2
Total Stock Market	25705.58	22691.97	23105.30	-4183.03	-15.33	23104.72			34631.28	-19.8	-30.1	-2.1
Barron's 400	513.48	467.85	468.93	-85.92	-15.49	468.81	•		746.64	-30.1	-36.0	-9.2
Nasdaq Stock Market												
Nasdaq Composite	7422.20	6686.36	6879.52	-995.36	-12.64	6879.52	•		9817.18	-10.0	-23.3	5.2
Nasdaq 100	7563.45	6837.53	6994.29	-1000.97	-12.52	6978.02	•		9718.73	-4.5	-19.9	8.9
S&P												
500 Index	2562.98	2280.52	2304.92	-406.10	-14.98	2304.92	•		3386.15	-17.7	-28.7	-1.0
MidCap 400	1500.46	1214.57	1258.73	-288.02	-18.62	1257.86			2106.12	-32.2	-39.0	-9.9
SmallCap 600	704.65	582.41	604.59	-121.39	-16.72	600.82	•		1041.03	-34.1	-40.8	-10.5
Other Indexes												
Russell 2000	1209.46	966.22	1013.89	-196.25	-16.22	991.16	•		1705.22	-32.7	-39.2	-9.9
NYSE Composite	10413.70	8953.60	9133.16	-1718.82	-15.84	9133.16	•		14183.2	-27.2	-34.4	-7.5
Value Line	372.76	293.60	313.68	-68.95	-18.02	306.90			562.05	-40.1	-43.2	-15.5
NYSE Arca Biotech	4262.88	3757.70	3972.01	-373.64	-8.60	3855.67	•		5313.05	-19.8	-21.6	2.9
NYSE Arca Pharma	571.01	513.37	515.17	-67.97	-11.66	515.17	•		670.32	-13.5	-21.2	0.0
KBW Bank	72.85	57.10	60.56	-13.99	-18.77	60.56			114.12	-34.0	-46.6	-13.7
PHLX§ Gold/Silver	86.55	62.72	70.12	-0.14	-0.20	66.14	•		111.51	-9.4	-34.4	-5.7
PHLX§ Oil Service	26.52	20.78	22.88	-4.212	-15.55	21.47	•		102.39	-75.6	-70.8	-48.5
PHLX <sup>§</sup> Semiconducto	r 1446.80	1233.97	1298.54	-245.72	-15.91	1286.84	•		1979.5	-7.3	-29.8	8.7
CBOE Volatility	85.47	57.42	66.04	8.21	14.20	11.54		•	82.69	300.7	379.2	79.9
§ <sub>Nasdaq PHLX</sub>									Sources: Fact	:Set; Dow	Jones Ma	rket Data

#### **Nasdaq Composite 995.36, or -12.64**%





Last Week

Close Net chg %Chg % chg

**466.17** -41.56 **-8.19** -27.42

## International Stock Indexes

			Latest Week ————		— 52-Week Range		YTD
Region/Country	/ Index	Close	% chg	Low	Close	High	% chg
World	The Global Dow	2204.75	-10.76	2204.75	•	3300.22	-32.2
	DJ Global Index	301.93	-12.16	301.93	•	444.78	-30.4
	DJ Global ex U.S.	180.87	-8.14	177.94	•	267.54	-31.4
Americas	DJ Americas	528.87	-15.47	528.87	•	796.10	-30.5
Brazil	Sao Paulo Bovespa	67069.36	-18.88	66894.95	•	119527.63	-42.0
Canada	S&P/TSX Comp	11851.81	-13.59	11721.42	•	17944.06	-30.5
Mexico	S&P/BMV IPC	34269.51	-10.02	34269.51	•	45902.68	-21.29
Chile	Santiago IPSA	2191.06	-18.28	2047.83	•	3865.98	-34.3
EMEA	Stoxx Europe 600	293.04	-2.04	279.66	•	433.90	-29.5
	Stoxx Europe 50	2500.07	0.18	2383.14	•	3539.12	-26.5
Eurozone	Euro Stoxx	278.85	-1.80	261.53	•	421.34	-31.0
	Euro Stoxx 50	2548.50	-1.45	2385.82	•	3865.18	-32.0
Austria	ATX	1889.19	-5.58	1630.84	•	3301.38	-40.7
Belgium	Bel-20	2771.49	1.42	2528.77	•	4198.31	-29.9
France	CAC 40	4048.80	-1.69	3754.84	•	6111.24	-32.3
Germany	DAX	8928.95	-3.28	8441.71	•	13789.00	-32.6
Greece	Athex Composite	555.13	0.57	484.40	•	948.64	-39.4
Israel	Tel Aviv	1230.31	-1.70	1181.97	•	1751.79	-26.9
Italy	FTSE MIB	15731.85	-1.39	14894	•	25478	-33.1
Netherlands	AEX	431.98	-0.20	404.10	•	629.23	
Portugal	PSI 20	3670.00	-4.36	3596.08	•	5435.85	-29.6
Russia	RTS Index	924.22	-6.80	832.26	•	1646.60	-40.3
South Africa	FTSE/JSE All-Share	40272.00	-8.84	37963.01	•	59544.80	-29.5
Spain	IBEX 35	6443.31	-2.81	6107.2	•	10083.6	
Sweden	OMX Stockholm	505.08	-3.11	489.07	•	732.67	
Switzerland		8623.86	3.06	8227.08	•	11263.01	
U.K.	FTSE 100	5190.78	-3.27	5080.58	•	7686.61	-31.2
Asia-Pacific							
Australia	S&P/ASX 200	4816.60	-13.05	4782.9	•	7162.5	-27.9
China	Shanghai Composite	2745.62	-4.91	2702.13	•	3270.80	-10.0
Hong Kong	Hang Seng	22805.07	-5.11	21709.13	•	30157.49	
India	S&P BSE Sensex	29915.96	-12.28	28288.23	•	41952.63	
Japan	Nikkei Stock Avg	16552.83	-5.04	16552.83	•	24083.51	
Malaysia	FTSE Bursa Malaysia KLCI		-3.08	1219.72	•	1691.00	-18.0
Singapore	Straits Times	2410.74	-8.48	2311.00	•	3407.02	
South Korea	•	1566.15	-11.59	1457.64	•	2267.25	
Taiwan	TAIEX	9234.09	-8.83	8681.34		12179.81	-23.0

#### **Commodities and** Currencies

**DJ Commodity** 

TR/CC CRB Index	123.88	-16.95	-12.04	-33.32
Crude oil, \$ per barrel	22.43	-9.30	-29.31	-63.27
Natural gas, \$/MMBtu	1.604	-0.265	-14.18	-26.72
Gold, \$ per troy oz.	1484.00	-31.70	-2.09	-2.34
U.S. Dollar Index	101.95	3.20	3.24	5.77
WSJ Dollar Index	96.80	3.91	4.21	8.08
Euro, per dollar	0.9349	0.0343	3.80	4.84
Yen, per dollar	110.82	2.85	2.64	2.01
<b>U.K. pound,</b> in dollars	1.16	-0.0645	-5.25	-12.22
			eek —	
	Low	Close(•)	High	% Chg
<b>DJ Commodity</b>	451.81	•	647.86	-25.23
TR/CC CRB Index	120.34	•	189.66	-32.73
Crude oil, \$ per barrel	20.37	•	66.30	-62.01
Natural gas, \$/MMBtu	1.604		2 042	-41.74
rvacurar gas, $\phi$ / iviivible	1.00	•	2.002	-41./4
Gold, \$ per troy oz.	1269.30		2.002	13.14
Gold, \$ per troy oz.	1269.30	•	1674.50	13.14
Gold, \$ per troy oz.  U.S. Dollar Index	94.90	•	1674.50 102.76	13.14 5.48
Gold, \$ per troy oz.  U.S. Dollar Index WSJ Dollar Index	94.90 89.47	•	102.76 96.99	13.14 5.48 7.97
Gold, \$ per troy oz.  U.S. Dollar Index WSJ Dollar Index Euro, per dollar	94.90 89.47 0.8742		102.76 96.99 0.9352 112.20	5.48 7.97 5.68



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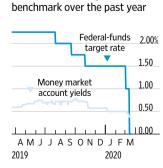
Plus, get deeper money-flows data and email delivery of key stock-market

All are available free at WSJMarkets.com

## Consumer Rates and Returns to Investor

## **U.S.** consumer rates A consumer rate against its

Source: FactSet; Dow Jones Market Data



banks.† Excludes closing costs.

**Selected rates** Money market accounts

Bankrate.com avg†:	0.37%
ableBanking, a division of Northeast Bank	1.70%
Lewiston, ME	877-505-1933
American Express National Bank	1.70%
New York, NY	866-215-8754
Citizens Access	1.70%
Westwood, MA	888-201-6505
Goldman Sachs Bank USA	1.70%
New York, NY	855-730-7283
TAB Bank	1.70%
Ogden, UT	800-355-3063

AMJJASUNDJEI	IVI		217 070					
2019 2020		800-3	800-355-3063					
Interestrate		ate (%) <del>-</del> ) Week ago		52-Week Range (%) Low 0 2 4 6 8 High				
Federal-funds rate target	0.00-0.25	1.00-1.25	1.00		2.25	-0.75		
Prime rate*	3.25	4.25	3.25	•	5.50	-0.75		
Libor, 3-month	1.20	0.84	0.74	•	2.61	0.05		
Money market, annual yield	0.37	0.44	0.37	•	0.78	0.03		
Five-year CD, annual yield	1.05	1.15	1.05	•	2.03	-0.22		
30-year mortgage, fixed <sup>†</sup>	4.01	3.99	3.52	•	4.34	-0.21		
15-year mortgage, fixed†	3.40	3.16	2.95	•	3.73			
Jumbo mortgages, \$510,400-plus	4.09	4.14	3.54	•	4.71	-0.70		
Five-year adj mortgage (ARM)	3.57	3.67	3.32	•	4.78	0.07		
New-car loan, 48-month	4.42	4.45	4.41	•	4.81	1.09		
Bankrate.com rates based on survey of ov	/er 4,800 on	line banks.	Base rate	posted by 70%	of the natior	's largest		

Sources: FactSet; Dow Jones Market Data; Bankrate.com

## **Benchmark Yields and Rates**

Treasury yield curve Yen, euro vs. dollar; dollar vs. Yield to maturity of current bills, major U.S. trading partners notes and bonds



## Sources: Tradeweb ICE U.S. Treasury Close; Tullett Prebon; Dow Jones Market Data Corporate Borrowing Rates and Yields

	Yiel	d(%)	in basis pts	, 52-wk F	Range	Total Return		
Bond total return index	Last	Wkago	Last	Low	High	52-wk	3-yr	
U.S. Treasury, Barclays	0.810	0.920				12.24	5.37	
<b>U.S. Treasury Long</b> , Barclays	1.570	1.530				30.06	12.14	
Aggregate, Barclays	2.280	1.910	n.a.	39	122	6.51	3.92	
Fixed-Rate MBS, Barclays	2.690	2.290	n.a.	32	132	5.53	3.55	
High Yield 100, ICE BofA	9.994	7.527	928	271	928	-14.15	-2.01	
Muni Master, ICE BofA	3.441	1.865	-12	-12	19	-3.26	1.32	
EMBI Global, J.P. Morgan	7.149	5.914	618	277	634	-9.19	-0.89	

Sources: J.P. Morgan; S&P Dow Jones Indices; Bloomberg Barclays; ICE Data Services Sources: Tullett Prebon, Dow Jones Market Data

#### **New to the Market**

#### **Public Offerings of Stock**

#### IPOs in the U.S. Market

None expected this week

Last Year ago

18.42 21.54

16.98

1.96

3180

3000

2820

2640

2460

2280

14.62

2.51

#### **Lockup Expirations**

Below, companies whose officers and other insiders will become eligible to sell shares in their newly public companies for the first time. Such sales can move the stock's price.

Lоскир			Orrer	Offer ami	Inrougn	Lockup
expiration Issue date	Issuer	Symbol	price(\$)	(\$ mil.)	Friday (%)	provision
March 23 Sept. 25, '19	Peloton Interactive Inc	PTON	29.00	1100.0	-32.7	180 days
Sept. 25, '19	Oportun Financial	OPRT	15.00	100.0	-28.1	180 days
			Sources: [	Dealogic; V	VSJ Market	Data Group

#### **Other Stock Offerings**

Secondaries and follow-ons expected this week in the U.S. market None expected this week

#### Off the Shelf

"Shelf registrations" allow a company to prepare a stock or bond for sale, without selling the whole issue at once. Corporations sell as conditions become favorable. Here are the shelf sales, or takedowns, over the last week:

Issuer/Industry	Registration date	(\$ mil.)	Bookrunner(s)
Safehold Inc	March 18	\$70.1	BofA Securities, GS, JPM, Barclays,
Real Estate/Property	July 2,'18		${\it Mizuho, Sun Trust, Robinson  Humphrey}$
Village Farms International Inc	March 19	\$6.9	Beacon Securities Ltd
Agribusiness	June 14,′19		

Talendarum data / Dagleralum

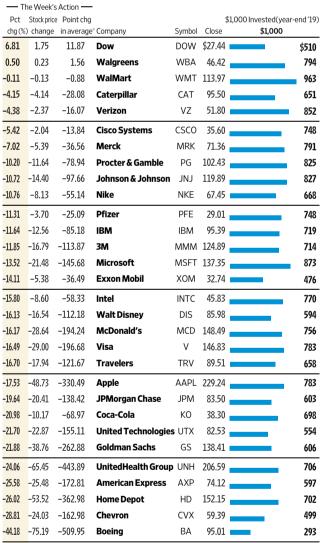
## **Public and Private Borrowing**

#### **Treasurys**

Monday, March 23	Tuesday, March 24
Auction of 13 week bill; announced on March 19; settles on March 26	Auction of 52 week bill; announced on March 19; settles on March 26
Auction of 26 week bill;	Auction of 2 year note;
announced on March 19; settles on March 26	announced on March 19; settles on March 31
Wednesday, March 25	Thursday, March 26
Auction of 2 year FRN; announced on March 19; settles on March 27	Auction of 4 and 8 week bills; announced on March 24; settles on March 31
Auction of 5 year note;	Auction of 7 year note;
announced on March 19; settles on March 31	
almounced offivial ciris, settles offivial cirisi	announced on March 19; settles on March 31

### A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA lost 4,011.64 points, or 17.30%, on the week. A \$1 change in the price of any DJIA stock = 6.78-point change in the average. To date, a \$1,000 investment on Dec. 31 in each current DJIA stock component would have returned \$20,761, or a loss of 30.80%, on the \$30,000 investment, including reinvested dividends.



Based on Composite price. DJIA is calculated on primary-market price. Source: Dow Jones Market Data; FactSet

## **Currencies**

U.S.-dollar foreign-exchange rates in late New York trading

	Fri YTD chg				- Fri - YTDd		
Country/currency	in US\$	per US\$	(%)	Country/currency	in US\$	per US\$	(5
Americas				<b>Vietnam</b> dong	.00004263	23460	1.
<b>Argentina</b> peso	.0157	63.7998	6.5	Europe			
<b>Brazil</b> real	.1975	5.0643	26.0	Czech Rep. koruna	.03924	25.485	12.
Canada dollar	.6966	1.4355	10.5	<b>Denmark</b> krone	.1432	6.9830	4.
Chile peso	.001158	863.30	16.8	Euro area euro	1.0697	.9349	4.
Colombiapeso	.000243	4120.50	25.6	<b>Hungary</b> forint	.003050	327.92	11
<b>Ecuador</b> US dollar	1	1	unch	Iceland krona	.007109	140.67	16
<b>Mexico</b> peso	.0409	24.4252	29.0	Norway krone	.0848	11.7859	34
<b>Uruguay</b> peso	.02180	45.8700	23.5	Poland zloty	.2359	4.2393	11
Asia-Pacific				Russia ruble	.01250	79.978	28
Australian dollar	.5784	1.7289	21 2	Sweden krona	.0963	10.3858	10
China vuan	.1409	7.0958	1.9	Switzerland franc	1.0146	.9856	1
Hong Kong dollar	.1289	7.7570		Turkey lira	.1526	6.5525	10
ndia rupee	.01326	75.399	5.7	<b>Ukraine</b> hryvnia	.0359	27.8252	17
Indonesia rupiah	.0000628	15925		<b>UK</b> pound	1.1639	.8592	13
<b>Japan</b> yen	.009023	110.82	2.0	Middle East/Afri	ca		
Kazakhstan tenge	.009023			Bahrain dinar	2.6476	.3777	0
<b>Macau</b> pataca		7.9742		Egypt pound		15.7487	-
<b>Viacau</b> pataca <b>Vialaysia</b> ringgit	.2276	4.3945	7.4	Israel shekel		3.6076	-4
<b>Vlaidysia</b> ringgit <b>Vew Zealand</b> dollar		1.7516		Kuwait dinar	3.2199		2
Pakistan rupee		158.600	2.3	Oman sul rial	2.5959		0
Philippines peso		51.230	1.0	Qatar rial	.2746		
Singapore dollar		1.4489	7.6	Saudi Arabia riyal		3.7581	-0
South Korea won	.0007968		8.6	South Africa rand		17.5891	-
Sri Lanka rupee	.0007968		2.9	Journ Allica rand	.0509	17.2091	23
Taiwan dollar	.03303	30.280	1.2		Close Net C	ha %Cha`	VTD%
Thailand baht	.03059	32.690	9.8	WSJ Dollar Index			8.0

# Bet on Stock Swings Backfires in Slump

By Julia-Ambra Verlaine

The global market rout has dealt a particular blow to a trade that intertwines Silicon Valley stock-market favorites with cautious Asian savers and European asset managers.

Designed to boost returns during the bull market, Wall Street's hunt for yield hatched a multibillion-dollar business betting on volatility. The idea functioned well, until the pandemic blindsided investors and sent markets swinging at levels unseen since the financial crisis.

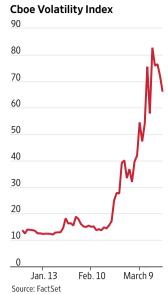
The Cboe Volatility Index, or VIX—Wall Street's fear gauge surged above 80 from 13 over the past month, the S&P 500 and other major indexes plunged and even the Treasury market, usually a stalwart in market turmoil, faced disruptions so severe, the Federal Reserve intervened to prevent further chaos.

As the declines force banks and money managers to sell assets to raise cash, hedge funds such as La Française Investment Solutions and LMR Partners are pulling back from one particular once-hot trade, with losses estimated in the hundreds of millions across Wall Street. La Française and LMR didn't respond to requests for comment.

Salespeople at banks familiar with pricing say it can cost such funds millions at a time to exit. Unwinding one bespoke deal alone could run over \$5 million. There is little public data available because trades are executed bilaterally between hedge funds and dealers rather than through an exchange. Many also expect the pain to hit savers as far away as Japan.

"It will take approximately four to six weeks for [retail] investors to begin to realize what's happened to their investments," said Andrew Stoltman, a Chicago-based securities and lawver. "When we see extreme volatility, these things typically do not react the way Wall Street anticipates."

Known by the name "risk recycling," the practice was the latest concoction of financial engineers at banks including Bank of America Corp., Citigroup Inc.



and Société Generale SA.

Here is how it works: Dealers transform bets on global stockmarket indexes and tech darlings such as Apple Inc. and Amazon.com Inc. into fixed-income notes paying low but steady interest. They market them to individual investors in Asia through outlets including Japan Post Bank Co. Sales of these structured notes amounted to more than \$10 billion in Japan alone last year.

Along the way, banks dispose of the risks accumulated by bundling stocks and options into a security by selling volatilitylinked derivatives to investors, mostly hedge funds. Banks say risk recycling enables them to satiate ordinary investors' demand for structured notes. which are popular with savers seeking to capture elevated stock-market gains in a low-interest-rate environment.

While the strategy has been around for some time, the riskrecycling market grew in size and complexity over the past few years as the bull market extended its run and price movements varied little.

Demand soared for the retail product-structured dubbed "autocallables," which deliver capped stock-market returns to purchasers while giving the issuing bank the right to "call" or retire the note when



the underlying shares hit certain levels. International banks sold over \$10 billion of notes linked to equity markets in Japan last year. That is up from approximately \$2 billion a decade ago, according to data from MTNi.

Issuance in South Korea totaled \$57 billion in 2019, a massive jump from \$3.4 billion in 2009, according to data from Structured Retail Products, a division of Euromonev Global Ltd. To keep printing, banks needed to sell more derivatives to hedge

Unwinding one bespoke deal alone could cost a hedge fund over \$5 million.

Some traders warned that the latest generation of products bear striking similarities to other derivatives strategies spawned by banks during previous good times, many of which suffered significant losses when markets soured.

Among the potential flashpoints: the extent to which the strategy's profitability is dependent on markets remaining placid, and undermined by factors including imperfect hedging

and sharply higher levels of vol-

"Little of what is recycled to hedge funds exactly matches the profile of what is being sold on the retail side," said Bram Kaplan, a senior equity derivatives strategist at J.P. Morgan. "The vast majority are proxy hedges designed to roughly mirror the aggregated risk profiles of the products and many of these structures use complex underlying instruments."

Popular trades on the back of risk recycling are called "corridor variance swaps" and "dispersion baskets." Dubbed exotic in the world of finance, traders need to manage mathematical relationships that arise from movements in the underlying stocks or indexes.

To some extent, risk recycling was simply Wall Street's latest response to the scourge of low interest rates and the postcrisis rulebook. Over the last decade. central banks slashed rates in response to tepid economic growth, quelling price swings and helping markets generally rise in orderly fashion. For institutional investors and hedge funds, this translates into lower returns on safe assets and a growing thirst for new ways to take risk.

Meanwhile, increased bank fundamentally regulation changed global lenders' business model, pushing them toward

fee-generating businesses.

When banks sell autocallable notes to individual customers. they embed options that give them the right to buy or sell stock indexes or baskets of global stocks at stated levels. Holding these options triggers risk limits that are the product of the financial overhaul following the 2008 crisis. Where the banks once held these risks in obscure corners of their balance sheet, now they must slice and dice them into complex volatility products that pay above-market returns to hedge funds.

Before the financial crisis, banks could issue these products and maintain the risk," said James Masserio, co-head of Americas equities trading at Société Générale. "Now banks are less in the storage business and more in the processing business."

Before Lehman failed, proprietary traders at banks made gargantuan bets on stocks, bonds, commodities and currencies in a bid to fatten profits. Now giant firms such as Goldman, Morgan Stanley and JPMorgan Chase & Co. have disbanded those units, and the traders have mostly shifted their risk-taking to hedge

Hedge funds with experience trading correlation and volatility say the right trades can generate above-market returns. But they warn that structured vola-

tility products aren't as liquid as other financial instruments and are susceptible during periods of severe market dislocationespecially when all assets move in sync.

Investors say that banks have become more sophisticated in terms of isolating precise risk, packaging and selling it to hedge funds over the past few years in response to heavy market demand and an increase in funds that systematically allocate capital to risk recycling trades. But even experienced banks enacting these trades can miss the mark. Some lost money on the hedges in 2019 because certain strategies involved managing price movements in 50 single-name stocks.

Meanwhile, hedging can have the effect of creating distortions in the market. Dealing structured notes makes banks natural sellers of long-date volatility in stock indexes up until an inflection point called "peak vega." Once it has hit, they scramble to buy volatility, squeezing it higher.

The S&P 500 has fallen more than 25% year-to-date, even as the Federal Reserve and European Central Bank introduced fresh measures to protect the global economy. Investors are rushing for cash to meet margin calls and redemptions—and that means selling investments, particularly the complicated ones.

A person familiar with the trades says hedge funds are closing out deals done two years ago that involved betting against volatility on the S&P 500 while wagering on swings in the Nikkei Stock Average using variance swaps. Some of these trades cost as much \$7 million to unwind, the person said.

Analysts say January saw the largest hedge-fund buying of certain risk-recycle trades, only a month before markets turned. In addition to hedge funds dedicated to trading volatility, large asset managers such as Capula and Lombard Asset Management often have a trader involved in the strategy.

Asset managers say the strategy can still be profitable and that current unwinding is creating new opportunities for when volatility subsides.



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# HEARD ON STREET

FINANCIAL ANALYSIS & COMMENTARY

## Virus Remakes Economic Policy

Crisis creates consensus favoring bold fiscal moves

The coronavirus crisis has turned into the biggest threat to the global economy at least since 2008. The big difference this time around is that a surprising consensus has emerged about what to do about it.

Indeed, the specific characteristics of the Covid-19 outbreak give it the power to change economic policy forever.

Last week, even the previously cautious European Central Bank Uturned, launching a €750 billion (\$809 billion) stimulus program that includes the bold possibility of backstopping the eurozone's weakest governments. Meanwhile, the Federal Reserve has deployed all the tools developed during the liquidity crunch 12 years ago—including facilities to support banks and companies and currency swaps with other central banks.

Crucially, this comes amid a wave of spending pledges by governments—the biggest shift in economic policy since the 1970s, when fiscal stimulus was abandoned as a primary tool to stabilize employment. According to UBS economist Arend Kapteyn, fiscal expansion globally will amount to about 2% of gross domestic product this year, versus 1.7% in 2009.

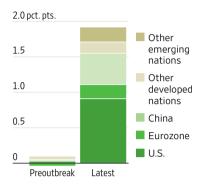
The plans include ideas considered fringe not long ago: The Trump administration wants to mail \$250 billion in checks to Americans. Economists are even putting forward heterodox proposals like having central banks print such checks—so-called helicopter money—and giving everyone a basic income.

Arguably, the coronavirus cash



Take-out orders are the only business allowed in restaurants in Racine, Wis.

Change in the cyclically adjusted primary fiscal balance as a percentage of global GDP



Note: 2020 figures are estimates based on policy announcements

crunch isn't nearly as strong a challenge to officials' understanding of economics as 2008 was. Yet the global financial crisis only truly shifted the reach of what central banks could do, not governments. With the International Monetary Fund still embracing theories of "expansionary austerity," the Obama administration's stimulus package met with fierce opposition.

Now, almost all officials and economists seem united in pushing for a new mind-set. What has changed?

Part of it has been brewing for a decade, in which neither inflation nor huge public debts have proved to be the problem that fiscal hawks feared—dispelling the idea that currency-printing Western govern-

ments can ever go bust. Even before the virus hit, President Trump in the U.S. and Prime Minister Boris Johnson in the U.K. had put the lid on austerity policies.

But the change also has to do with what Polish economist Michal Kalecki wrote in his famous 1943 essay "Political Aspects of Full Employment:" A reason why subsidizing consumers is resisted by businesses against their own selfinterest is because it goes against the moral principle of "you shall earn your bread in sweat." The coronavirus crisis is special, though, in that it is an external, amoral force that has hit the "real" economy first. Damage to financial markets and indebted consumers-two groups often seen as suspect by business leaders-has been a consequence of the crisis, not its cause as in 2008.

To be sure, the announced fiscal stimulus may still not be enough, especially in Europe. There is a risk of replicating the sluggish 2008 posterisis period if businesses and officials don't back a second round of government support to fight unemployment once the immediate impact on companies is left behind.

On the record of the last two weeks, though, policy makers are suddenly eager to act. Post-1970s economics was already suffering from pre-existing conditions; Covid-19 could be what sends the old orthodoxy to the grave.

—Jon Sindreu

## Tobacco's Resilience Is a Temptation

It is a dark irony that a respiratory pandemic could pull tobacco stocks out of their three-year funk.

British American Tobacco reiterated its 2020 outlook last week even as many other global companies slashed theirs. The maker of Lucky Strike cigarettes has been largely untouched by the Covid-19 outbreak so far, other than a hit to airports sales.

Cigarette companies have been resilient in previous economic downturns. One study of the 2008 financial crisis by international cancer institute IRCCS found no significant change in U.S. smoking prevalence between 2005 and 2010.

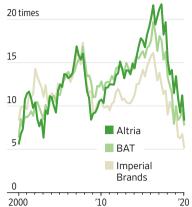
Cigarette stocks were a good place to shelter during the financial crisis. The S&P 500 index dropped 47% from October 2007 through January 2009, roughly double the declines at BAT and **Altria**.

But investors don't seem to believe that tobacco companies will be as defensive this time. Since the stock market selloff began in the third week of February, global cigarette makers BAT, **Imperial Brands**, **Philip Morris International** and Altria have, on average, seen their shares fall roughly in line with the S&P 500.

That may be because sentiment toward cigarette stocks has been exceptionally weak since mid-2017, when U.S. authorities toughened regulations. Or perhaps investors may believe that smokers have a greater incentive than ever to quit given the crisis.

Early signs are that demand for tobacco is stable. In the U.S., the number of cigarettes sold in the four weeks through Feb. 22 fell 3.5% year-over-year, according to data from MSAi, an improvement on steeper declines throughout 2019. True, the latest data predates the rapid escalation in cases in the U.S. of Covid-19, the disease caused by the new coronavirus. But BAT has also seen no slowdown in purchases in Italy or France, where tobacco-

Forward price/ earnings multiples



Source: FactSet

Source: FactSet

nists are among the only stores that remain open, alongside supermarkets and pharmacies.

If that trend holds, tobacco's temptations will grow for investors. Valuations are low: Altria and BAT fetch earnings multiples last seen in the early 2000s, when investors worried the tobacco industry would be bankrupted by litigation. Imperial Brands is even cheaper. Average dividend yields are 10%, and high cash generation suggests payouts are safe, except at Imperial where a new chief executive is taking over.

Tobacco names won't be immune to short-term manufacturing and staffing disruptions due to the epidemic. On Thursday, Altria said its chief executive had contracted Covid-19 and is taking medical leave. The company has also closed its Richmond factory after an employee tested positive, but says it has two months of inventory stockpiled.

By far the biggest challenge for business during the pandemic is turning out to be the drop off in sales due to social distancing. With their antisocial products, cigarette companies may be among the few to escape relatively unscathed.

—Carol Ryan



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