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# THE WALL STREET JOURNAL.

DOW JONES	News Corp	*****	MONDAY, DECEMBER 14, 2020 ~ VOL. CCLXXVI NO. 140	WSJ.com	★★★★ \$4.00
Last week: DJIA 30046.37 ▼ 171.89 0.6%	NASDAQ 12377.87 ▼ 0.7%	STOXX 600 390.12 ▼ 1.0%	10-YR. TREASURY ▲ 23/32, yield 0.892%	OIL \$46.57 ▲ \$0.31	EURO \$1.2112 YEN 104.02

## What's News

### Business & Finance

**V**aluations of recent IPOs are at their highest levels since the dot-com bubble, relative to the companies' revenue, sparking concerns among investors about the level of froth. **A1**

◆ **AstraZeneca** agreed to buy Boston-based Alexion for \$39 billion, a move that would bolster the British drug giant's footprint in rare diseases. **B1**

◆ **A small** but prominent roster of tech firms and investors is leaving the San Francisco Bay area as the hub has strained to absorb the torrid growth of the tech sector. **B1**

◆ **Elliott** has built a significant stake in Public Storage and privately nominated six directors to the self-storage giant's board. **B3**

◆ **Indian workers** broke windows and overturned cars at the office of a factory that makes iPhones. Labor leaders said the workers were upset about wages and hours. **A20**

◆ **TV networks** feeling the strains of disappointing NFL ratings are being forced to restructure deals with advertisers to make up for smaller audiences. **B2**

### World-Wide

◆ **Pfizer** began shipping vials of Covid-19 vaccine, part of one of the largest mass mobilizations since American factories were repurposed to help fight World War II. **A1, A10-A11**

◆ **Health authorities** and researchers face the daunting task of persuading millions of people skeptical of vaccines to take the shots. **A1**

◆ **Multiple** U.S. government agencies have had some of their computer systems breached as part of a cyber espionage campaign believed to be the work of the Russian government. **A1**

◆ **The U.K.'s Johnson** and top EU officials decided not to pull the plug on Brexit negotiations, with officials signaling progress on some issues that have bedeviled the talks. **A1**

◆ **A group of lawmakers** made a last-minute push to craft a bipartisan coronavirus aid proposal, as leadership in both parties indicated they might drop the most contentious issues and pass a narrower bill. **A3**

◆ **Iran's execution** of a dissident journalist has strained Tehran's relationship with Europe just when expectations were being raised of a diplomatic opening between Iran and the West. **A12**

◆ **Died: John le Carré**, 89, master spy writer. **A14**

## JOURNAL REPORT

### C-Suite Strategies: 2020's Best-Managed Companies. R1-18

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Shipments of Pfizer's Covid-19 vaccine were loaded onto a UPS plane Sunday, top, in Lansing, Mich. Bottom, boxes of the vaccine were prepared for transport at the Pfizer manufacturing plant in Portage, Mich. The vaccine is packed in specially designed containers equipped with sensors to monitor location, temperature, light exposure and unusual jolting.

## Pfizer Begins Mass Shipping Of Vaccines

Trucks filled with Covid-19 vaccine vials pulled out of Pfizer Inc.'s Kalamazoo, Mich., production plant on Sunday morning, part of one of the largest mass mobilizations since the country's factories were repurposed to help fight World War II.

By Sarah Krouse, Jared S. Hopkins and Anna Wilde Mathews

The effort to vaccinate the nation relies on chemists, factory workers, truck drivers, pilots, data scientists, bureaucrats, pharmacists and health-care workers. It requires ultracold freezers, dry ice, needles, masks and swabs converging simultaneously at thousands of locations across

the country. To work, every one of the many and complicated links of the chain has to hold. In the trucks that headed to airports and distribution hubs, specially designed containers equipped with sensors monitored location, temperature, light exposure and unusual jolting. Inside, dry ice sandwiched thousands of doses of BNT162b2, the scientific name of the Covid-19 vaccine. "The biggest concern that I have is not that we don't know what to do. We have contingency plans in place for just about everything," said Shawn Seamans, a senior executive in charge of the Covid vaccine distribution program at McKesson Corp., which is

Please turn to page A10

## One Hurdle on Shot: Convincing Skeptics

By JARED S. HOPKINS AND ARIAN CAMPO-FLORES

Now that the first Covid-19 vaccine in the U.S. has been cleared by federal regulators, health authorities and researchers face the daunting task of persuading millions of people such as Kathy Wood to take the shots. Ms. Wood, a 72-year-old resident of Ogallala, Neb., is uneasy about getting the vaccine produced by Pfizer Inc. and Germany's BioNTech SE, in part because of claims she said she read online that vaccines could alter a person's DNA—a contention scientists say isn't true. Although her husband is willing to take the shot, she is anxious about its rapid development and swift authorization by reg-

ulators. "They sure pushed it hard and fast," said Ms. Wood, who wouldn't rule out eventually getting the shot. "I'm hoping for the best for those who take it." The Food and Drug Administration granted an emergency authorization on Friday, allowing the companies to begin distributing the vaccine. Initial doses will mostly go to the nation's health-care workers and residents of long-term-care facilities—roughly 24 million people. Please turn to page A11

- ◆ Bipartisan group makes new push for aid package..... A3
- ◆ States face vaccine demands on limited resources..... A8
- ◆ Caution chills Europe's Christmas spirit..... A12

## U.S. Agencies Hacked, Russia Blamed U.K., EU Indicate Progress On Talks

By DUSTIN VOLZ

WASHINGTON—Multiple federal government agencies, including the Treasury and Commerce departments, have had some of their computer systems breached as part of a global cyber espionage campaign believed to be the work of the Russian government, according to officials and people familiar with the matter. Russia's foreign intelligence

service is suspected of being behind the hacks of the U.S. government networks—in which some internal communications are believed to have been stolen—and the operation is related to a breach disclosed last week of U.S.-based cybersecurity firm FireEye, one of the people familiar with the matter said. The hacking operation exposed as many as hundreds of thousands of government and

corporate networks to potential risk and alarmed national-security officials in the Trump administration as well as executives at FireEye, some of whom view it as far more significant than a routine case of foreign cyber espionage, people familiar with the matter said. While those familiar with the hack couldn't specify its scope or the resulting damage, several described it as among

the most potentially worrisome cyberattacks in years, as it may have allowed Russia to access sensitive information from government agencies, defense contractors and other industries. One person familiar with the matter said the campaign was a "10" on a scale of one to 10, in terms of its likely severity and national-security implications. The Commerce Department

Please turn to page A6

### Tight Christmas Tree Supply Means 8-Footer Can Fetch \$2,000

\* \* \*

### Global shortage drives up prices from U.S. to Hong Kong; 'Charlie Brown tree'

By LUCY CRAYMER

This year, people are going all out for Christmas. There's just one problem: finding a Christmas tree. On the streets of Hong Kong, 8-foot Noble Firs are selling for as much as \$2,167 apiece, while in California and New York shoppers are paying more for what they say are inferior trees. And in the U.K., retailers are scrambling for more trees. The pandemic means millions are

unable to travel over the holiday season, and are celebrating at home instead. That's produced a spike in demand for trees. Carla St. Germain, a 55-year-old business owner in Fargo, N.D., doesn't normally buy her tree until mid-December, but this year unseasonably warm weather made her go a week earlier. It was a good thing she did. "When I pulled in on the side street on the side where I normally get my tree, it was completely empty," Please turn to page A6



Green gold

## Stunning IPO Boom Spurs Some to Pause

By ELIOT BROWN AND MAUREEN FARRELL

A frenzy in the market for newly listed tech stocks hit an unexpected speed bump over the weekend. After DoorDash Inc.'s stock shot up 86% in its trading debut Wednesday and Airbnb Inc.'s shares more than doubled a day later, two companies that were set to join them in the public markets this month pressed pause on their offerings. Videogame company Roblox Corp. postponed its initial public offering until early next year as it tries to make sense of the market, while financial-technology company

Affirm Holdings Inc. moved its listing to January at the earliest, The Wall Street Journal reported. What seems to be vexing IPO market participants is the eye-popping recent first-day trading gains of DoorDash, Airbnb and others. While such moves are great news for existing investors and those lucky enough to get IPO allocations, they also mean the companies in question have left big money on the table. Roblox and Affirm are studying potential moves that would lessen any initial pop in their shares, including selling more stock and changing the mix of shares to be sold by

Please turn to page A4

BRUSSELS—U.K. Prime Minister Boris Johnson and top European Union officials decided not to pull the plug on Brexit negotiations, with officials signaling last-minute progress on some of the issues that have bedeviled the talks. Officials on both sides on Sunday said they were narrowing differences over the question that lies at the center of their dispute: How much will the U.K. be tied in the future to EU norms as the price for a tariff-free trade deal with its largest trading partner? On that question hangs trade worth close to \$900 billion a year. The EU is seeking to make sure it doesn't have a major competitor on its doorstep that can slash regulation and have special access to its market. With time running short—a deal has to be in place by Jan. 1 to prevent huge disruption to trade and security cooperation—officials said negotiators appeared to be finding some common ground, though they cautioned much work needed

Please turn to page A12



# U.S. NEWS

THE OUTLOOK | By Nick Timiraos

## Fed Has New Reason for Optimism

 Federal Reserve officials have something new to talk about at their policy meeting this week: good news.

This might sound a little absurd. Covid-19 infections, hospitalizations and deaths are hitting records. States and localities are imposing new restrictions on dining and other activities. Claims for unemployment benefits are rising, and the jobless rate fell in November for the wrong reasons—more workers stopped seeking jobs.

But last week's emergency authorization by the U.S. Food and Drug Administration of a coronavirus vaccine developed by **Pfizer Inc.** and **BioNTech SE**, plus a second candidate from **Moderna Inc.** also under review, is a potential economic game-changer because it could reduce uncertainty for households, businesses and policy makers.

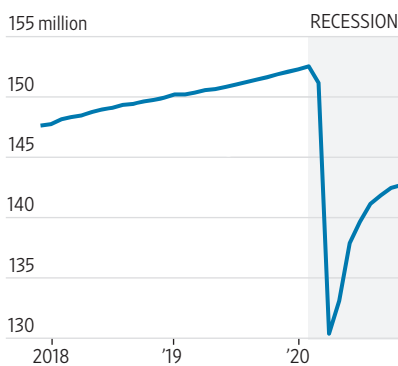
"There is a bridge to somewhere now. You're no longer just putting fingers in a dike that's about to burst," said Diane Swonk, chief economist at accounting firm Grant Thornton. "We still have a lot of wounds to dress. But now you can see an end date, and it's likely to happen in 2021."

Fed officials face an economic outlook with little precedent. Economic growth is at risk of slowing further in the next few months and then revving up. How to navigate these developments will be the focus of the central bankers' two-day meeting that concludes Wednesday.

Central-bank policy decisions are guided not just by a baseline forecast but also by

Employment rebounded strongly this summer, but gains have slowed recently. The widespread delivery of an effective coronavirus vaccine by the third quarter of 2021 could return U.S. gross domestic product to its pre-pandemic level by the end of next year, according to one forecast.

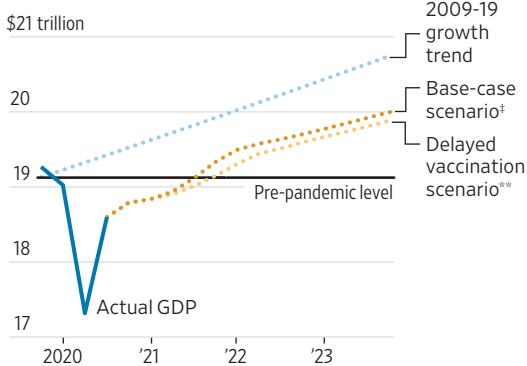
Total nonfarm payrolls\*



\*Seasonally adjusted †GDP figures are seasonally adjusted annual rates adjusted for inflation. ‡Base case assumes herd immunity achieved in Q3 2021. \*\*Delayed scenario assumes immunity achieved in Q4 2021.

Source: Labor Department via St. Louis Fed (payrolls); Diane Swonk, Grant Thornton LLP (GDP)

U.S. gross domestic product†



cials' November meeting.

"The economy should come bouncing back pretty powerfully in the second half of next year. The Fed should be fairly confident about that. That's different," said William Dudley, former president of the New York Fed.

"The risk characterization has improved," said Chicago

**Vaccines increase the likelihood that worst-case scenarios may be avoided.**

Fed President Charles Evans on Dec. 4. "It is possible that things are going to change in a meaningful way earlier next year than I was previously expecting."

The current downturn has been like no other. Forecasters at the Fed and on Wall Street have been surprised by the strength of the rebound in the face of deteriorating

public-health conditions.

Elevated personal saving rates, an aggressive response from fiscal and monetary policy, and the noneconomic forces that drove the current downturn suggest there is a "tightly coiled spring of pent-up demand" that could yield "a sharp rebound as broad vaccine distribution is achieved," said Kristina Hooper, chief global market strategist at Invesco.

"I would expect this recovery to be far more robust and less anemic than what we saw in the global financial crisis," said Ms. Hooper.

The Fed's economists already made important changes to their outlook at last month's meeting. They judged the savings cushion many households had amassed would be enough to maintain overall spending even though political gridlock prompted them to erase previously anticipated federal-aid spending from their forecast.

The Fed slashed its short-term benchmark interest rate

to near zero in March and in September officials provided more assurance they will be in no hurry to raise rates. Since June, the Fed also has been buying \$120 billion a month in Treasury and mortgage debt to hold down long-term yields.

Some analysts think Fed officials will take a step this week to provide more stimulus by increasing the share of long-term Treasury securities they purchase.

No Fed officials have publicly advocated doing so at this meeting. Instead, in recent remarks, they have focused on the issue of clarifying how long their bond purchases could continue, just as they provided guidance on their rate plans in September. "We need to have an approach that can adapt or change to the economic environment," said New York Fed President John Williams in a Nov. 24 interview.

Several officials have said they don't think they need to change the asset-buying program now to deliver more economic stimulus. Vaccines could be an important reason why.

Serious hardship still looms for millions of households, and vaccine delivery is fraught with logistical burdens. Fed officials still have their eyes firmly on dangers of long-term scarring to the economy from extended jobless spells and business failures.

But increased confidence that there is light at the end of the tunnel—and that it isn't an oncoming train—could improve how hiring and purchasing managers and bank credit officers look ahead to 2021.

For the Fed, that counts as good news.

### ECONOMIC CALENDAR

**TUESDAY:** China's growth momentum likely remained strong in November, with economists expecting gauges of domestic consumption and investment to gain steam. **Retail sales, fixed-asset investment and industrial output** figures will all shed more light on the pace of the country's rebound.

**U.S. industrial production** is expected to increase in November on the back of strong demand for autos. **Overall output**, however, will likely remain below pre-pandemic levels, underscoring the economy's incomplete rebound from this spring's downturn.

**WEDNESDAY:** Surveys of **purchasing managers** are expected to indicate the eurozone's economy contracted in the early weeks of December as high rates of coronavirus infection curtailed activity in the services sectors, while pointing to a continued expansion in the U.S., albeit at a slower pace than in recent months.

**U.S. retail sales** could rise for the seventh consecutive month in November. Demand for goods has been strong through the pandemic but new Covid-19 restrictions might hold back restaurant sales, the lone measure of service-sector activity in the monthly report.

The **Federal Reserve** releases a policy statement and economic projections, and Chairman Jerome Powell holds a press conference. Economists aren't looking for major policy moves, but Fed officials are likely to unveil new guidance about how long they expect to continue their current asset-purchase program.

**THURSDAY: Jobless claims**, a proxy for layoffs, are expected to ease slightly in the week ended Dec. 12.

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### U.S. WATCH

#### NAVY

##### Search Ends for Sailor Who Fell Overboard

The Navy called off search and rescue efforts for a 20-year-old sailor who reportedly fell overboard last week from the USS Theodore Roosevelt.

The Navy said it ended the effort at sunset Saturday after it searched more than 607 square nautical miles for more than 55 hours off the coast of Southern California. The Navy has declared the man deceased.

The search started Thursday morning after a lookout spotted what appeared to be a person in the water, a statement from the San Diego-based Third Fleet said. Three helicopters and a

boat were launched in response, and one sailor was unaccounted for during a command-wide muster, the statement said.

—Associated Press

#### TEXAS

##### Former El Paso Mayor Wins the Office Again

El Paso residents have elected a new mayor, handing a defeat to incumbent Mayor Dee Margo in favor of his predecessor, Oscar Leeser, in a runoff race.

Mr. Leeser, who was mayor of the West Texas city on the Mexican border from 2013 through 2017, won with 82% of the vote, according to El Paso County's unofficial tally. He finished first among six mayoral

candidates in November, but with less than 50%, forcing Saturday's runoff.

Mr. Leeser pledged Saturday night to bring together the city that has been battered in recent years by overcrowded migrants at the border, a mass shooting at a Walmart and the economic and health crises brought on by the coronavirus.

Mayoral races in El Paso are nonpartisan, but Mr. Margo, a businessman and former state legislator, identifies as a Republican. Mr. Leeser, president of a car dealership, is a Democrat.

Mr. Margo said in a concession speech that he believes no mayor has had to deal with the array of calamity he has faced in the past two years.

—Associated Press

#### MASSACHUSETTS

##### Dedicated Bus Lane Set for Tobin Bridge

The Tobin Bridge is getting a dedicated bus lane to see if it helps ease crowding and speed up commutes, state transportation officials say.

The 11-mile southbound bus lane on the bridge is expected to open for use on Monday, according to a statement from the Massachusetts Bay Transportation Authority and the state Transportation Department.

The pilot project will last a year, with the bus lane's performance analyzed for travel time, operations, crowding, ridership and overall traffic safety.

—Associated Press

### CORRECTIONS & AMPLIFICATIONS

The first name of Jon Hall, a principal at design firm GGLO, was incorrectly given as John in a Future of Everything article on Friday about future home designs.

#### Notice to readers

Wall Street Journal staff members are working remotely during the pandemic. For the foreseeable future, please send reader comments only by email or phone, using the contacts below, not via U.S. Mail.

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



COLLECTION

## Women



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U.S. NEWS

# Bipartisan Group Makes New Push on Aid

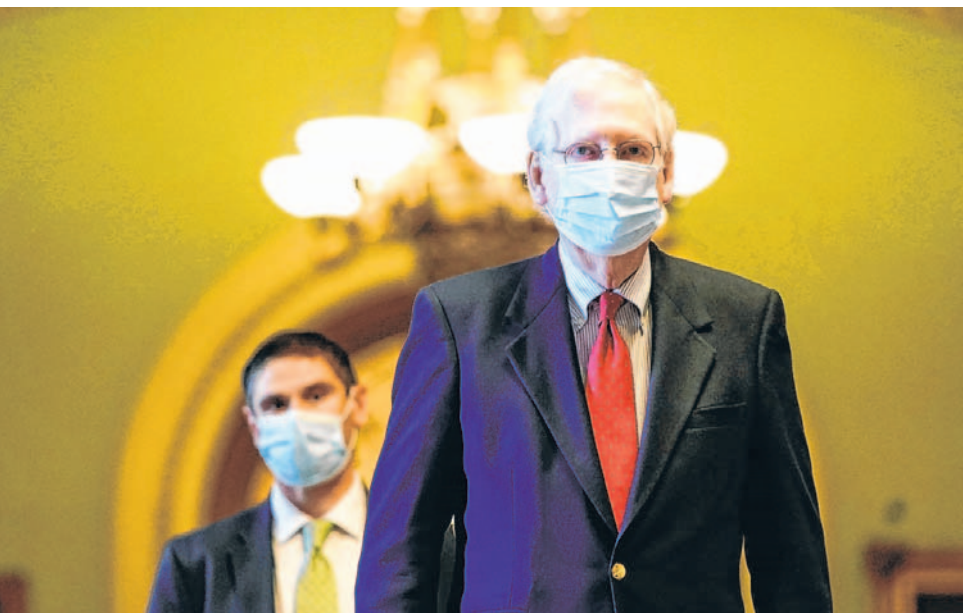
Lawmakers reach for a deal that splits off contentious issues into a separate bill

By Andrew Duehren and Harriet Torrey

WASHINGTON—A group of rank-and-file lawmakers made a last-minute push to assemble a bipartisan coronavirus aid proposal, as leadership in both parties indicated they might drop the most contentious issues in the talks and pass a narrower bill.

The bipartisan set of lawmakers has in recent days struggled to finish putting together a \$908 billion aid package, tripping up over disagreements on creating liability protections for businesses and other entities to help them guard against coronavirus-related suits. Senate Majority Leader Mitch McConnell (R., Ky.) last week proposed dropping the protections if Democrats agreed to forgo state and local aid that has drawn Republican objections.

House Majority Leader Steny Hoyer (D., Md.) indicated Sunday that Democrats may be open to a bill without state and local aid, which they have long insisted on in talks with



Senate Majority Leader Mitch McConnell has tied liability protections to state and local aid.

Republicans.

“We need to act,” Mr. Hoyer said on CNN. “If acting means we’re not going to get everything we want, we think state and local is important, and if we can get that, we want to get it. But we want to get aid out to the people who are really, really struggling and are at great risk.”

House Speaker Nancy Pelosi (D., Calif.) and Treasury Secretary Steven Mnuchin held a 30-minute phone call Sunday af-

ternoon, a spokesman for Mrs. Pelosi said. Mrs. Pelosi believes in the necessity of state and local aid and told Mr. Mnuchin during the call that the two parties should find a compromise on liability protections, the spokesman said. The pair will speak again Monday.

The bipartisan group of lawmakers is preparing to split their proposal into two parts, according to people familiar with the talks, segmenting \$160 billion in state and local

aid and liability protections into their own legislation. The other \$748 billion in aid—covering \$300 a week to state unemployment benefits for four months, \$300 billion in aid to small businesses, and \$35 billion for health-care providers, among other measures—would be the second bill.

The proposed \$300 billion in small-business aid would be part of a restart of the Paycheck Protection Program, which closed in August. The

plan would limit loans to businesses that have 300 or fewer employees and can demonstrate that they sustained a 30% revenue loss in any quarter of 2020.

The bipartisan group’s proposal on liability protections will call for requiring plaintiffs in coronavirus-related lawsuits to prove a defendant acted with gross negligence to expose people to the virus, according to a person familiar with the plan. Mr. McConnell’s original proposal on liability protections would have created a gross negligence standard, a step Democrats had been hesitant to accept earlier in the talks.

Congress faces a series of deadlines to pass a new aid package. Current government funding lasts through Dec. 18, and lawmakers have aimed to approve more coronavirus aid in conjunction with a broader spending package. A number of coronavirus relief provisions approved in the spring will expire at the end of the year, further prodding lawmakers to agree soon to more aid.

President Trump has called for the next coronavirus aid package to include a new round of direct payments to Americans. “I want to see checks going for more money than they’re talking about going to people,” he said in an

interview with Fox News that aired Sunday.

Sen. Joe Manchin (D., W.Va.), a member of the informal group of Republicans and Democrats working on the joint aid proposal, said Sunday on Fox News that he expects “we’ll have a bill produced for the American people tomorrow—\$908 billion.”

Mr. McConnell indicated earlier this past week that the liability measures at the center of the bipartisan talks were likely to be insufficient to earn GOP support.

Sen. Bill Cassidy (R., La.) said Sunday that he didn’t know if Mr. McConnell would allow the full bipartisan measure to come up for a vote. “We’ve got to do something for the American people,” he said on CNN. “What Leader McConnell decides to do, I don’t have control over. I only can do what I can do.”

Mr. Cassidy said he wished the Senate could approve both state and local aid and liability protections. But he said talks between congressional leaders over such an agreement had stalled. “It would be great if we could pass that. It doesn’t seem that we can,” he said.

—Amara Omeokwe, Nick Timiraos and Kristina Peterson contributed to this article.

## Many Will Face Eviction Unless Ban Extended

By Will Parker

Millions of U.S. renters face the prospect of eviction in January, unless federal officials extend protections put in place during the Covid-19 pandemic.

That month is when the Centers for Disease Control and Prevention’s ban on evictions is set to expire. The moratorium protects tenants who have missed monthly rent payments from being thrown out of their homes if they declare financial hardship. The CDC ordered the halt on evictions under the Public Health Service Act, which allows the federal government to enact regulations that help stop the spread of infectious diseases.

Between 2.4 million and 5 million American households are at risk of eviction in January alone, and millions more will be vulnerable in the months after, according to estimates from the investment bank and financial-advisory firm Stout Risius Ross.

While several states and cities have their own eviction bans with varying rules and expiration dates, the CDC order is the only one that covers the entire country.

Housing-industry executives said they expect the CDC eviction ban to be extended. Many landlords said they believe they are more likely to recover some rent by working with tenants, rather than by evicting them.

While many states have enacted eviction moratoriums, the CDC order is the only protection for renters in some cities. Attorneys and judges said they expect courts to be overwhelmed once moratoriums end, creating a monthslong backlog of cases.

In many cities and towns, the legal process is under way. While the CDC order helps keep renters in their homes, it doesn’t prevent landlords from beginning the eviction process

in court. Since the CDC eviction moratorium went into effect in September, building owners in places like Plano, Texas, and Milwaukee have taken tenants to court through videoconferencing.

Landlords have already filed more than 150,000 eviction petitions during the pandemic in the 27 cities tracked by Princeton University’s Eviction Lab. Many of those tenants have lost their cases, and are now on the hook for all their back rent.

Some failed to qualify for the moratorium because they didn’t sign a declaration of their inability to pay, or because their landlord challenged their claim to financial hardship. Some renters have then had to leave their homes despite the ban being in place.

Evicted renters are still liable for months of unpaid rent. Moody’s Analytics said it estimates U.S. tenants owing as much as \$70 billion in back rent by year-end.

John Pollock, staff attorney at the Public Justice Center, a legal advocacy nonprofit, said that if the moratorium isn’t renewed, January is expected to be the worst month for evictions in American history. “I don’t see how it’s possible that we’re not going to see more evictions on Jan. 1 than we’ve ever seen in a month,” he said.

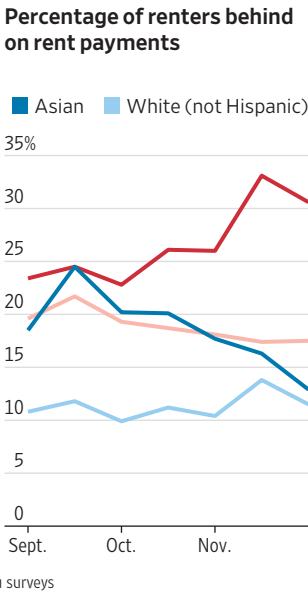
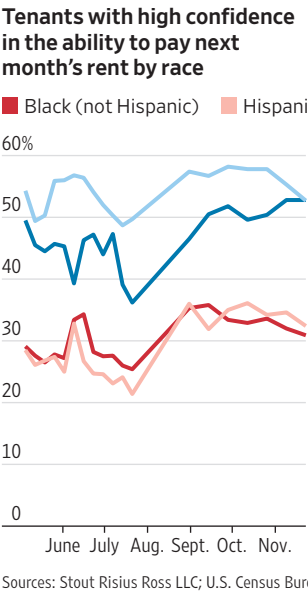
Evictions stress cities where the pandemic has already weakened social-safety nets, housing advocates say. Studies show they also worsen the health crisis.

New research led by an epidemiologist at the University of California, Los Angeles found that the expiration of local eviction moratoria was associated with more than 10,000 excess deaths from Covid-19, potentially due to increased disease transmission from displacement or homelessness.

Some landlords say they have offered installment plans or taken other steps to accom-



Housing-industry executives said they expect the Centers for Disease Control and Prevention’s eviction moratorium, now set to expire in January, to be extended. U.S. tenants will owe as much as \$70 billion in back rent by the end of 2020, Moody’s Analytics estimated.



modate struggling tenants, but now have gone months without collecting rent. They are blocked from taking control of their property by what they consider overly restrictive local and federal laws.

Korvall Li in Seattle said he hasn’t seen a rent check since January from a townhouse tenant who makes a six-figure

salary. That is a deficit of about \$30,000. Mr. Li said he has continued his mortgage payments and is suing the state and city over eviction protections that exceed the federal moratorium.

“I already decided that I’m not going to be a landlord in the future,” Mr. Li said. “It’s really turned me off the whole

### Court Cases Reflect Tumultuous Times

The dollar amounts of unpaid rent in eviction cases astonish even some veteran judges.

Justice of the Peace Michael Missildine of Collin County, Texas, said he was issuing judgments against tenants owing more than \$10,000 in rent payments. In the past, a typical ruling would be a fraction of that sum.

“It’s not normal,” Judge Missildine said during a video hearing.

Some tenants are struggling with videoconferencing applications, attorneys say. Missing a court hearing often means an automatic victory for the landlord.

real-estate thing.”

Those behind on their rent during the pandemic are disproportionately minorities, according to recent survey data from the Census Bureau.

In St. Louis, a legal-aid intern said he had observed several hearings where judges granted landlords evictions because they believed the tenants had failed to log into the videoconference. In fact, they had been placed on silent mode, according to his sworn affidavit in October. Those judgments were overturned, the affidavit said.

Julie Watts, a Dallas wholesale worker who has been out of a job since the spring, has missed her \$1,003 rent bill many times but kept her apartment because of the eviction ban. She is due to enter the hospital this month for an ailing kidney.

“I’m afraid to leave my apartment because I don’t want to come home from the hospital and find out my stuff is in the parking lot,” she said.

Nearly a third of Black renters and 18% of Hispanic renters said they were behind on rent last month. About 12% of white renters said they weren’t caught up on rent.

## Cleveland’s Baseball Team Will Drop Its Indians Nickname

By Jared Diamond

The Cleveland Indians will drop the team’s longtime nickname, abandoning a moniker that has been the subject of protest by fans and Native American groups who criticized it as racist, a person familiar with the matter said Sunday.

The decision comes months after the Washington Football Team of the NFL dropped a name that had been seen as a racial slur. The changes come in the wake of a broad reckoning over racial and social in-

justice in the U.S. that was sparked by the killing of George Floyd, an unarmed Black man, while in Minneapolis police custody.

It is unclear at this point what the Cleveland team will call itself or when it will fully retire the Indians name. An official announcement will likely come this week, but the team isn’t expected to unveil a new name at that time. During the 2019 season, Cleveland eliminated Chief Wahoo—a grinning, red-faced caricature of a Native American that served as the team’s logo—from its

uniforms, caps and signs at its park, Progressive Field.

Cleveland’s American League baseball franchise has been known as the Indians since 1915, when local journalists proposed the name as a replacement for the previous one: the Naps, after Hall of Fame star Nap Lajoie. The Indians name was supposedly a way to honor Louis Sockalexis, a member of the Penobscot tribe who played outfield for another professional baseball club in the city in the late 19th century.

The Cleveland baseball club

didn’t immediately respond to a request for a comment. The decision to make the change was earlier reported by the New York Times.

In July, hours after the Washington Football Team announced that it would conduct a “thorough review” of its previous name, Cleveland’s baseball team revealed that it would re-examine its name as well. Though the club played the 2020 season as the Indians, it seemed only a matter of time before it would move on from the name.

“The recent social unrest in

our community and our country has only underscored the need for us to keep improving as an organization on issues of social justice,” the Indians said in July.

The Washington Football Team has shown this year that fully replacing a nickname takes time and requires many logistical considerations. Dan Snyder, Washington’s owner, told The Wall Street Journal earlier this fall that the process is “truly a massive undertaking,” involving the manufacturing of uniforms, merchandise, stadium signs and more.

Cleveland has played nearly 17,000 games as the Indians over more than 100 years. Their last championship came in 1948, giving them the longest active drought of any team in the major leagues.

Native American nicknames in sports have been the subject of controversy for decades. Other franchises, including baseball’s Atlanta Braves, the National Football League’s Kansas City Chiefs and the National Hockey League’s Chicago Blackhawks, have said recently that they have no plans to change their names.



U.S. NEWS

# It's a Big Job, Low Profile For Electors

President Trump's refusal to concede shines a spotlight on state representatives

By JOHN MCCORMICK

A few famous names are among the 538 Americans about to cast the votes that matter most when electing U.S. presidents. But many are people like Mary Arnold, a retired social worker and a first-time member of the Electoral College.

Ms. Arnold, a Democrat from Columbus, Wis., will cast one of her state's 10 electoral votes for President-elect Joe Biden on Monday, when electors nationwide meet in their states.

"I was blown away to be asked," she said. "It never occurred to me that I might be an elector."

Ms. Arnold, who is 72 years old and leads her county's party organization, said she received a phone call in September from the state Democratic chairman asking if she would like to be an elector. She was told she was selected because she had been a good local leader.

She said the occasion will be the first time she gets dressed up since the coronavirus pandemic hit, and she figures she will stop for takeout food to celebrate during her 30-minute drive home from Madison. "I am going to put on makeup for probably the first time in nine months," she said.

The nation's founders created the Electoral College as a compromise between those who favored a direct popular vote and those who wanted lawmakers to pick presidents.

Mr. Biden won the national popular vote by more than seven million ballots, the Associated Press reported. But the number that counts is his electoral-vote total, 306, to President Trump's 232.

Mr. Trump has refused to accept the election outcome and pushed dozens of legal challenges, with losses at all levels including the U.S. Supreme Court. His unwillingness to concede has put a spotlight on the mechanics of choosing the president.

The Constitution doesn't specify how electors are to be picked, and each state has its own process. Many are elected at state party conventions. In some cases, they are essentially handpicked by party leaders and then confirmed at a special state meeting.

Electors are legally bound in some states to vote for the

person who won their state, a requirement the Supreme Court said this year is permissible. In others, so-called faithless electors can break ranks, though that is rare.

The 59th Electoral College that will assemble on Monday will be different because of the pandemic. In some states, limits are being placed on the number of guests electors can bring. Others are moving the meetings to larger spaces to accommodate social distancing.

In Vermont, electors will convene at 10 a.m., while those in Hawaii won't assemble until nine hours later.

In each state, electors will review the election results and sign six certificates. The certificates contain two lists, one that includes the electoral votes for the president and the other the electoral votes for the vice president.

They will then pair those certificates with paperwork from their state's governor and send the material through registered mail to a variety of places, according to the Congressional Research Service. Single certificates will be sent to Vice President Mike Pence and to the U.S. district court for the area where the electors met. Two certificates will be sent to both the secretary of state, or an equivalent official, and the archivist of the U.S.

The electoral vote won't be official until Jan. 6, when Mr. Pence is expected to open cor-

**In each state, electors will review the results and sign six certificates.**

respondence from each state during a joint session of Congress and have the totals read aloud. Once a candidate reaches 270 electoral votes, he or she will be declared the winner.

Some well-known people are electors. Hillary Clinton will be among New York Democrats, as will her husband, former President Bill Clinton. Stacey Abrams, the former Georgia House minority leader who narrowly lost a 2018 bid for governor, is also an elector.

South Dakota Gov. Kristi Noem is a Republican elector, along with Ken Blackwell, a former Ohio secretary of state and treasurer.

Some Democrats have pushed to abolish the Electoral College, and some of this



Rachel Paule, above, president of the Young Democrats organization in Georgia, said the process could be improved, while Texas college student Tamon Hamlett, a Republican, wants to be a model to fellow students. Alaskan Judy Eledge, bottom, says the system works.

year's participants said the system could use updating.

"I'm not sure it should be abolished, but the way it is now it doesn't uphold the spirit of democracy in America," said elector Rachel Paule, a suburban Atlanta resident who is president of the Young Democrats organization in Georgia. "It's an honor to be part of this process, but I don't think it's a perfect process," she said.

Ms. Paule, who is 27 years old, was asked in February by her state party's chairwoman to be an elector. She said she would prefer to see a system that avoids the winner-take-all rules used by all but two states. "We are the United States of America," she said. "One person, one vote not applying to the president is sort of silly to me."

Alaska elector Judy Eledge, a 73-year-old retired elementary-school principal who leads the Anchorage Republican Women's Club, said she doesn't think the system should be changed. "If you don't have the Electoral College, you just have the big cities elect everything," she said. "Our founders were very smart in designing it this way."

Ms. Eledge, who was picked as an elector in early April at her party's state convention, will take a nearly two-hour flight to cast her ballot for Mr. Trump.

More than 3,000 miles to the southeast, Tamon Hamlett, 19, hopes his 2006 Nissan holds up for the three-hour drive from Houston to Austin.

Mr. Hamlett, a political-science student at the University of Houston, said he was elected during a July virtual state GOP convention.

"I've heard about it my entire life, but now I'm part of it," he said. "I want to be a model for my fellow students."



## Stunning IPO Boom Spurs Pause

Continued from Page One the companies themselves, their employees and shareholders, people familiar with the matter said.

Whatever the outcome, it's clear the IPO market is in uncharted territory.

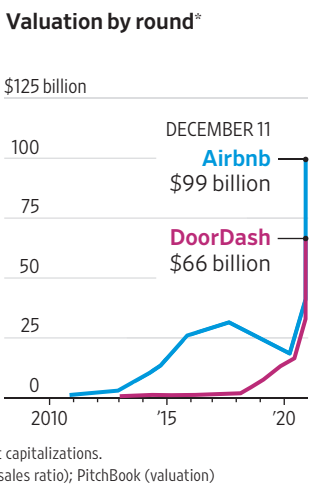
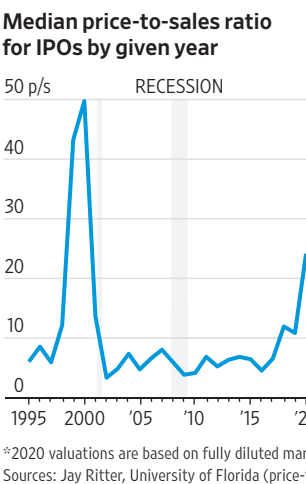
This year has been the busiest ever as measured by dollars raised in the U.S., with a wave of traditional listings as well as deals by shell companies known as special-purpose acquisition companies.

Valuations of recent IPOs are at their highest levels since the dot-com bubble relative to the companies' revenue, sparking concerns among investors about the level of froth.

Multiple investors said they were puzzled by the extraordinary enthusiasm in the market. Airbnb Chief Executive Brian Chesky was at a loss for words in a Bloomberg TV appearance when he was told of the company's opening share price.

The market capitalizations of many money-losing upstarts have become larger than giant, highly profitable stalwarts of corporate America.

DoorDash is valued at \$56 billion, just shy of General Motors Co. Airbnb is worth



over \$83 billion, more than FedEx Corp. Cloud-software company Snowflake Inc. is worth over \$100 billion, more than Goldman Sachs Group Inc.

Investors this year have valued newly public tech companies at a median of 23.9 times the revenue they reported in the 12 months before going public, according to University of Florida business professor Jay Ritter, who tracks initial public offerings. That measure is by far the highest of the past two decades.

For most of the 2010s, the median multiple for a tech company after its first day of trading hovered around six times its revenue in the prior 12 months.

The same measurement for stocks on the Nasdaq Composite Index is 4.3, according to FactSet.

"I have a great deal of diffi-

culty understanding the valuations of some of these companies," Mr. Ritter said. The difference in enthusiasm for the unprofitable young companies and older corporate giants with consistent profits is "night and day," he said.

The valuations imply investors are counting on years of continued rapid growth by these companies, hoping some will dominate their industries and churn out large profits, Mr. Ritter said.

Tech enthusiasts and some observers say there are concrete reasons for the enthusiasm, as businesses across the country spend more on software and cloud-computing services, while more consumers are comfortable with ordering food or rooms on apps.

"Without doubt, there's a major transformation," said Jeffrey Sonnenfeld, a professor at Yale University's School

### Private Valuations Cede Advantage

The tech IPO bonanza marks a change in fortunes between the private and public markets.

For much of the 2010s, the stock market was a check on the frothy valuations of startups heavy on losses that were funded by venture capitalists. As the roster of multibillion-dollar startups grew and grew, valuations in the private mar-

kets were considered to be significantly higher than those in the public markets.

Uber Technologies Inc., once the country's most valuable startup, had a disappointing public debut in 2019. WeWork Cos. ended up pulling its planned IPO after potential investors were repelled by details about the company's finances and corporate governance that were revealed in the lead-up to its expected listing. Its private valuation fell by \$39 billion, to \$8 billion.

of Management.

But the ballooning valuations are driven even more, experts say, by surging demand from investors for stocks that show growth and have buzz. Retail stock trading has surged in popularity during the pandemic, tech giants' growing profits have cast a halo on upstarts, and falling interest rates have led more investors to chase returns in stocks.

"The valuations are better in the public markets than private markets, which was not the case in '19 or '18," Rajeev Misra, who runs Rajeek Group Corp.'s \$100 billion Vision Fund, said in a conversation with an analyst at New Street Research LLP last month. "The public markets are very buoyant."

SoftBank was by far the largest investor in startups during the past few years, flooding companies including

WeWork, Uber and DoorDash with cash.

The enthusiasm extends further than buzzy companies known well to consumers. Business-software companies have been in particularly high demand.

Software company Snowflake, which went public in September, is worth more than 200 times the \$489 million in revenue that it brought in during the 12 months that ended in October. Data-analysis firm Palantir Technologies Inc., which went public in September at a roughly \$21 billion valuation, is now worth \$50 billion, or 50 times its revenue.

At least three electric-vehicle companies valued at more than \$2 billion have gone public this year with no revenue, while numerous other tiny companies with large private valuations in the electric-vehicle sector are planning public

listings.

Meeting the high expectations of stock-market investors could prove difficult. While a few standouts like Amazon.com Inc. and Alphabet Inc.'s Google have shown an ability to keep expanding quickly at large scale, most companies are unable to maintain the soaring growth rates of their early years as they mature and get bigger.

Airbnb's annual revenue growth slowed from 80% during 2016 to 31% during 2019. Bookings of shared homes tanked early in the pandemic as travel ground to a halt, and revenue in the first nine months of 2020 was down 32% from the year-earlier period.

Still, business has been robust since the lows of the spring, and the company expects to return to growth after the pandemic.

Whatever the challenges, if the market's appetite for such tech companies continues, venture capitalists see a surge of additional IPOs, even if some pause briefly to retool.

"A lot of entrepreneurs now realize it's a very receptive and attractive public market," said Rich Wong, a partner at venture-capital firm Accel, which was an early investor in Slack Technologies Inc. and Facebook Inc.

If the rally stays apace, 2021 "will definitely be the most active IPO market in the last 20 years," he said.

—Cara Lombardo contributed to this article.



Special Advertising Feature



Discover a younger generation’s approach to human-centered solutions for tomorrow’s society

*"It was mind-blowing, incredible, world-opening. I felt like I could do anything."*

That’s how Benjamin Spiegel felt when he and his teammates from Brooklyn Technical High School won the 2016 Samsung Solve for Tomorrow contest, which asks public school students from grades 6 to 12 to solve urgent problems in their community using STEM—science, technology, engineering and math.

Mr. Spiegel was invited to join his school’s effort by his English teacher, who was coordinating the team. He and his classmates had recently experienced a devastating loss of a friend due to a vehicle collision, and the students were determined to use STEM application to create a safer environment for themselves and others to ensure this type of accident would never reoccur. “I was brought in as the technical lead,” he says. Together with his classmates, they developed a pedestrian safety app to help hearing- and vision-impaired people navigate the busy streets of New York City. It won his team the contest’s Grand Prize Winner title.

Today, Mr. Spiegel is going into his fourth year, studying artificial intelligence at Brown University, where he’s created his own custom major: a Bachelor of Science in Computers and Minds. “I’ve been interested in AI since I was a kid. I grew up reading lots of science fiction, and I think we’re now almost at the point where a lot of it becomes reality,” he says. “I don’t think most people realize how impactful AI will be on humankind, but it’s going to become abundantly clear in the coming decades that we have to start paying serious attention to what AI is capable of.”

He is particularly passionate about the opportunities AI presents for education, given that everyone learns differently, which makes a one-size-fits-all approach to education hard to successfully achieve. “AI could make it possible for every student to have a better educational experience by tailoring the education to the individual,” he says.

That’s one of the reasons he designed his own program of study, which he describes as being focused as much on the social implications of AI as its technical side. “So alongside studying the math and computer science that underpins modern artificial intelligence, I’m also studying its implications on society,” says Mr. Spiegel. “We need more people

thinking about AI from a comprehensive and socially responsible perspective.”

It’s an approach that goes back to his experience in the Samsung Solve for Tomorrow contest. The competition is part of Samsung’s larger CSR vision, *Together for Tomorrow! Enabling People*, which aims to provide the technology to students and other young talents to tackle real-world problems. Along with the contest, some of Samsung’s other projects include two-year web development training for marginalized youth in France, smart school programs that help connect isolated schools with the rest of the world, and educational

A new generation of students are now following in Mr. Spiegel’s footsteps. This year’s Samsung Solve for Tomorrow winners are a lesson in forward-thinking design. For instance, in Florida, a group of middle school students from Downtown Doral Charter Upper School created a device that warns against flash flooding by monitoring sediment build-up in nearby waterways. At the North Carolina School of Science and Math in Durham, students tackled the problem of cross-contamination between recycling and waste by designing an app that uses image processing and machine learning algorithms to sort recyclables from trash. And high school students from Omro, Wisconsin built a sensor that helps gauge ice thickness with real-time data sent to an app—a project that seeks to address nearly 8,000 needless deaths that occur nationwide each year from people falling through thin ice.

If Mr. Spiegel is any indication, those students are set to make a meaningful contribution to the world. And he is doing his best to help students follow in his footsteps. In 2019 he mentored a team of students from Deep Creek Middle School in Chesapeake, Virginia, helping them refine their presentation at the Samsung Solve for Tomorrow pitch event in New York. “I think it’s absolutely critical to get them into STEM as soon as possible,” he says. “After an introduction to STEM, you start to think different and see the world differently. Our society is becoming increasingly technical in nature, so it’s really important that younger students get into it.”

To his surprise, the middle schoolers didn’t need much help with the technical aspects of their presentation. “What they really needed was preparation for presenting their ideas,” says Mr. Spiegel. “This, I think, is just as crucial as the actual technology.” The Deep Creek Middle School students went on to become one of the Grand Prize Winners.

With one year of study left in his degree, Mr. Spiegel is now beginning to consider his next move. “I’m still deciding between a masters, a PhD or going right into industry,” he says. Whatever he decides, his story will serve as inspiration for a new generation of young and idealistic social entrepreneurs, who through Samsung’s Solve for Tomorrow program are discovering human-centred tech solutions to global issues.

*The Wall Street Journal news organization was not involved in the creation of this content. This content was commissioned by Samsung.*



support for children battling serious medical conditions in hospitals.

It’s a vision based on the human side of technology. That’s something Mr. Spiegel learned when he took part in Solve for Tomorrow. “The technical component of bringing the project idea to reality was difficult, but that wasn’t really where the competition ended,” he recalls. “Even after we had the proof-of-concept working, we still had to figure out how to present it and explain why our project was important to the world. It helped me to realize that in the real world, having the technical ability is equally as critical as having the ability to explain your ideas and justify their importance to others.”



U.S. NEWS

# Feuds Tear at Arizona GOP

Party leaders trade personal insults, fueling worries over the next elections

By ELIZA COLLINS

PHOENIX—The Arizona Republican Party has been racked by infighting as elected officials argue over President Trump's efforts to overturn the election results and as the GOP governor grapples with a worsening Covid-19 pandemic. The public spats have some worried about the party's chances going into the next round of elections.

The chief disputes are between the party's establishment and its right wing over whether to keep contesting President-elect Joe Biden's win in the state, despite no evidence of widespread fraud, and how far to go on restrictions related to the pandemic.

After Republican Gov. Doug Ducey defended Arizona's election system in November, the state GOP chairwoman, Kelli Ward, tweeted that he should #STHU, shorthand for "shut the hell up." (She later said in a radio interview she meant "shut the heck up.") Mr. Ducey told reporters: "The feeling's mutual to her."

On Wednesday, the Arizona GOP Twitter account accused Mr. Ducey of trying to replace Ms. Ward as state party chairwoman. Ms. Ward said in an interview she hasn't decided what she will do next, adding that Mr. Trump told her he would support her remaining the state GOP party's leader or running for another position. "The world is my oyster," she said.

Both the White House and the governor's office declined to comment for this article.

Separately, U.S. Rep. Andy Biggs, an Arizona Republican who has pushed for less intervention on the virus, tweeted on Dec. 4 that he worried the governor would force vaccinations and the Republican legislature would allow it, to which Mr. Ducey's chief of staff responded that Mr. Biggs should



State GOP Chairwoman Kelli Ward, Reps. Debbie Lesko, Andy Biggs and Paul Gosar, and then-Sen. Martha McSally greeted President Trump as he arrived in Arizona on Aug. 18. Below, Gov. Doug Ducey on Nov. 30 handed over documents to certify election results.

"enjoy your time as a permanent resident of Crazytown."

Unlike some other governors, Mr. Ducey hasn't issued a stay-at-home order, curfew or face-mask mandate, but cities and counties can impose their own mask mandates. Mr. Ducey has put in place some limited restrictions on businesses.

Some Republicans say the party division is here to stay and will play out in primaries for competitive races in 2022. That concerns center-right Republicans who believe establishment candidates will have the best shot at winning in a competitive state. Arizona, once seen as a Republican stronghold, narrowly voted for Mr. Biden for president this year. It also elected its second consecutive Democrat to the U.S. Senate.

In 2022, Mr. Ducey will be term-limited out of his position, opening up what is expected to be a competitive race for his seat. Sen. Mark Kelly, a Democrat who was sworn in on Dec. 2 to fill the remainder of the late Sen. John McCain's term, will be up for re-election that year.

"I'm not naive enough to think it's just going to go away. I do think that on the Republi-



can side anyway, the statewide offices, the Senate seat that will be up in two years, there will be primary fights," said Arizona state Rep. T.J. Shope Jr.

Mr. Shope said he supported the president, but added that Republicans should start looking ahead and try to capitalize on a midterm election with a Democratic president, which generally favors the party not in power. He is concerned far-right candidates will pull establishment candidates to the right during a midterm election and then turn off moderate votes in a general election.

U.S. Rep. Paul Gosar, a Republican, said that ultraconser-

vative candidates can win statewide and that people who believed differently were "full of crap."

Mr. Gosar, who has been calling for a forensic audit of the state's election results, said Republicans who want to move on from this year's election and accept the results will hurt themselves with the party faithful.

"You let something lie like this, your base is not going to follow you. They have questions and they want answers," Mr. Gosar said. He said he plans to sign a recall petition to attempt to remove Mr. Ducey from office.

## Federal Agencies Hacked

Continued from Page One

confirmed that one of its bureaus had been breached and that it was working with federal partners, including the Federal Bureau of Investigation, to probe the matter. The hack of Commerce systems includes the National Telecommunications and Information Administration, a unit that works on technology policy issues, the person familiar with the matter said.

Treasury and the FBI didn't respond to requests for comment. The Russian Embassy in Washington denied responsibility and said the allegations were "unfounded attempts of the U.S. media to blame Russia."

The hackers were able to infiltrate the systems of government agencies as well as FireEye through a malicious software update introduced in a product from SolarWinds Inc., a U.S. network management company, according to the companies and people familiar with the matter.

The apparent use of a flaw in SolarWinds technology could be problematic, as the company says it has over 300,000 customers worldwide, including over 400 of the U.S. Fortune 500 companies.

Based in Austin, Texas, SolarWinds Worldwide LLC employs more than 3,200 people and counts the National Security Agency, Secret Service, Defense Department, the Federal Reserve, Booz Allen Hamilton, Lockheed Martin Corp. and PricewaterhouseCoopers LLP among its customers, according to the SolarWinds website.

A SolarWinds spokesman said that the company was aware of a potential vulnerability related to updates of its Orion technology management software released between March and June. "We believe that this vulnerability is the result of a highly sophisticated, targeted and manual

supply chain attack by a nation state," the spokesman said.

In a blog post late Sunday, FireEye said it had identified a "global campaign" using the SolarWinds attack vector that appeared to have compromised multiple customers dating to the spring.

FireEye didn't identify Russia as the suspect, but said the hackers were highly sophisticated, patiently conducted reconnaissance on their victims and used difficult-to-attribute tools. The company said that each attempted intrusion required "meticulous planning and manual interaction."

FireEye has so far seen customers compromised around the globe, a person familiar with the company investigation said.

Sophisticated hackers increasingly have sought to rely on supply chain attacks where they can harness a vulnerability in a common product or service used widely across the internet to rapidly hack scores of victims before the compromises are detected.

## Some internal communications are believed to have been stolen.

Reuters reported earlier Sunday that the Treasury and Commerce agencies had been hacked by a group supported by a foreign government.

"The United States government is aware of these reports and we are taking all necessary steps to identify and remedy any possible issues related to this situation," National Security Council spokesman John Ulliyot said.

FireEye said last week that it was hacked in what it said was a highly sophisticated foreign-government attack that compromised its software tools used to test the defenses of its thousands of customers.

Russia's foreign intelligence service was seen as the leading suspect in the FireEye breach.

—Robert McMillan contributed to this article.

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## Yule Tree Supply Is Pinched

Continued from Page One

she said. There were still some 8-foot and taller trees left and "some super tiny short ones that you'd put in the corner of the apartment." Mrs. St. Germain said she ended up persuading the seller to shorten a larger tree for her.

"My husband said it's the most unusual Christmas tree I've ever bought," Mrs. St. Germain said. There is no central trunk to place a tree topper and the branches are all reaching for the ceiling like they're performing the Village People song "YMCA," she said.

The tree shortage has its roots in the global recession of more than a decade ago. During those years, a glut of Christmas trees caused prices to tumble, and some farmers planted fewer or switched to other kinds of crops. Other farms just closed. Wildfires on the West Coast also wiped out a number of Christmas tree farms.

Casey Grogan, owner of Silver Bells Tree Farm, a 700-acre Christmas tree farm in Silverton, Ore., said his trees typically take between eight and 12 years to grow. He estimates the smaller supply has pushed up prices by about 30% over the last four years.

The National Christmas Tree Association says that there is not so much a shortage—if people want a tree they can find one—but that supply has tightened.

Mikaela O'Brien and her family spent half a day scouring their favorite Christmas Tree farm looking for an 11- or 12-foot Fir this year near their home in Maple Valley, Wash. They ended up buying something a few feet shorter.

"The taller trees—there just aren't any," she said. "We ended up finding one in the very back corner. It's still a beautiful tree, it's just skinnier and smaller and shorter than normal," she said. "It's our Charlie Brown tree. It's a



Carla St. Germain persuaded her tree seller to shorten a larger tree to make it fit.

big room and it's a small tree."

In Europe retailers, cautious about what lockdowns would mean to sales, reduced their Christmas tree orders, and now harvesters are rushing to cut more trees to meet demand, said Claus Jerum Christensen, managing director of the Danish Christmas Tree Association. The U.K. is having to rely on trees from Europe after many of its own farms ran low on trees when sales jumped early.

This year, fewer trees have been shipped abroad from growers in the U.S. because the pandemic has boosted domestic sales.

Swedish furniture giant IKEA, a popular destination for buying Christmas trees in Hong Kong and Singapore, has run out of them in those cities.

That has shoppers lining up for hours to buy trees from nurseries, or turning to online sellers ordering look-alikes from China. In the flower market in Wanchai, Hong Kong, 6-foot trees are going for about \$1,500, about seven or eight times what they sold for a year ago. Knee-high bundles of branches shaped like trees are going for \$100.

Mihir Melwani, a 22-year-old college student in Hong Kong, said his friends' struggles to find trees spurred him to do something about the

situation. Using the contacts of his father, who works in the logistics business, Mr. Melwani said he arranged for more than 25 trees to be trucked into the city from Northern China.

After mentioning his upcoming sale of trees for \$175 each on Facebook, he was contacted by dozens of interested buyers.

"The demand has been crazy—I've been getting a message every five minutes," Mr. Melwani said.

Marie Bernal and her family have been in Hong Kong five years. After a year without travel and a move to a new residence, she decided it was time to trade in her plastic tree for one like she had in the Christmases of her childhood in Mexico City.

"I promised the children we are going to get a beautiful tree this year, and we'll go and we'll pick it out together," she said. "It's going to smell wonderful and amazing."

It didn't turn out quite like that. Ms. Bernal visited some garden centers two weeks before Thanksgiving, only to find that most of the trees were already sold. In a panic, she purchased the last tree at one venue, a roughly 6-foot tree imported from the U.S., with a \$320 price tag.

"Do I think I'll do it again? Probably not," she said. Her 11-year-old daughter didn't notice the tree in their living room until days after it arrived, and her 5-year-old son was nonchalant about it, she said. "The joy was in my head."

Sean Man, whose family owns Wah King Garden Arts, in Sai Kung, Hong Kong, imports around 700 Noble Firs each year from Oregon that normally sell out around mid-December. This year, they were all sold before the end of November.

Mr. Man said that recently around 40 customers arrived as early as 6 a.m. at the garden center in the hopes of getting hold of the last trees when it opened at 8:30 a.m.

"I was expecting a brawl," he said, but the buyers were well-behaved and lined up in single file. Not wanting to leave anyone empty handed, Mr. Man is offering to fly in Nordmann Firs from Holland.



U.S. NEWS

Pressure Grows for Ouster of VA Chief

By BEN KESLING

House Speaker Nancy Pelosi and all of the nation's top veterans advocacy groups called for the dismissal of Veterans Affairs Secretary Robert Wilkie after the department's inspector general found he mishandled an investigation into sexual-assault allegations by a female veteran.

On Saturday, Mrs. Pelosi (D, Calif.), the American Legion and Vietnam Veterans of America joined a number of those calling on Mr. Wilkie to resign.

An inspector general report released Thursday said the secretary disparaged a veteran who said she had been assaulted at a VA hospital last year. Mr. Wilkie and top aides refused to fully cooperate with the probe and a top aide unsuccessfully tried to plant a story with a major newspaper discrediting the woman, investigators said in the report.

Investigators said they didn't find that Mr. Wilkie actively tried to seek negative information about the woman. But they said they couldn't resolve a number of discrepancies because of his and other VA officials' lack of cooperation.

A spokeswoman for Mr. Wilkie said Saturday he would continue to lead the department. He said Thursday that he denied wrongdoing and the investigation was unfounded.

"After nearly a year of investigation, interviews with 65

A spokeswoman for Robert Wilkie said he would continue to lead the department.

people and analysis of nearly 1.5 million documents, VA's inspector general cannot substantiate that I sought to investigate or asked others to investigate the veteran," Mr. Wilkie said. "That's because these allegations are false."

On Friday four of the nation's most-established veterans advocacy groups and the Democratic chairman of the House Committee on Veterans' Affairs said they had lost confidence in Mr. Wilkie as secretary and called on him to resign or be removed from his post.

"The accountability, professionalism and respect that our veterans have earned, and quite frankly deserve, is completely lost in this current VA leadership team," said B.J. Lawrence, executive director of the Veterans of Foreign Wars. "Secretary Wilkie must resign now."

The American Legion, Veterans of Foreign Wars, Paralyzed Veterans of America, Disabled American Veterans, AMVETS and Vietnam Veterans of America are known as the Big Six—the half-dozen advocacy groups traditionally considered the key voices that speak on behalf of veterans.

John Rowan, president of the Vietnam Veterans of America, said Saturday that his group would join in the call for dismissal, completing the Big Six's solidarity.

Other influential veterans groups, including Iraq and Afghanistan Veterans of America and Modern Military Association of America, which represents LGBTQ troops and veterans, also called for the secretary's dismissal.

The White House didn't respond to requests for comment.

Veterans organizations and Mr. Wilkie have had disagreements throughout his tenure as secretary, according to former officials in the department and current officials at veterans organizations. And many veterans groups, which the department typically consults on policy, have been left out of decisions and discussions throughout Mr. Wilkie's tenure, those people said.

President-elect Joe Biden on Thursday named Denis McDonough, a former White House chief of staff, to be his VA secretary. Mr. McDonough has contacted top stakeholders, including veterans groups, to build relationships, according to a person familiar with the matter.

DNC Faulted for Issues in Iowa Caucus

By JOHN MCCORMICK

The Iowa Democratic Party released a report that said late technology demands from the Democratic National Committee contributed to a caucus results-reporting debacle that marred the start of the presidential-nomination process.

Technical glitches and tabulation problems from Iowa's Feb. 3 Democratic caucuses meant results were delayed for days and confusion dominated the formal start of the nomination race. An app the state party developed to allow volunteers from roughly 1,700 neighborhood caucus sites to report vote totals crashed, and

there were problems with a backup-telephone system.

The drama prompted some Democrats to call for an end to Iowa's first-in-the-nation status, which the state has protected even as others have moved their nominating contests earlier. The caucuses generate millions of dollars of revenue and massive political attention.

The document released on Saturday said the DNC demanded late changes to the reporting system Iowa Democrats planned to use and that those alterations resulted in failure. "Attempting to graft an entirely new software element onto the back-end reporting system at the prover-

bial eleventh hour is likely always going to be problematic, and it was ultimately the cause of a major problem on caucus night," the report said.

The report also blamed the Iowa Democratic Party for not being better prepared. "The IDP—not the DNC—is ultimately responsible to ensure that its caucus tools and infrastructure are in place prior to the caucuses," it said.

The DNC said it didn't participate in interviews for the Iowa report, whose lead authors are a former Iowa attorney general and a former U.S. attorney in Iowa.

"Evaluating the nominating process always happens fol-

lowing the election so that DNC staff can remain focused on winning the general election," said David Bergstein, a DNC spokesman. "Every four years, the DNC looks back at what worked and what didn't work and the DNC's Rules and Bylaws Committee will continue to evaluate all areas of our nominating process and make recommendations for any changes."

Iowa and Nevada, two of the first four states on the 2020 nominating calendar, have clung to their caucus traditions as other states have shifted to primaries, which tend to have higher voter participation. Iowa's use of cau-

cuses has allowed it to keep peace with New Hampshire, which fiercely protects its first-in-the-nation primary.

The in-person caucuses tend to reward candidates who have organizing muscle and passionate followings, but they are much more complicated to administer.

President-elect Joe Biden finished fourth in the first nominating contest of 2020. Former South Bend, Ind., Mayor Pete Buttigieg narrowly won the caucuses, but the reporting delay drew some attention away from his victory.

In recent years, the DNC has sought to bring more transparency to caucuses.

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U.S. NEWS

# U.S. Nears 300,000 Covid-19 Fatalities

It might not be until late March before the shot starts to flatten the curve, expert says

By DAN FROSCH

The U.S. neared 300,000 total deaths on Sunday since the start of the pandemic, as the death rate has accelerated in recent months despite shutdowns, stay-at-home measures and other restrictions.

According to data from Johns

Hopkins University, 298,465 people had died from the virus as of Sunday afternoon and more fatalities were expected to be recorded by day's end.

Last spring, President Trump predicted the coronavirus would take the lives of between about 55,000 and 100,000 people in the U.S. Public-health experts long feared the death toll would be much higher, particularly if Americans refused to wear masks and businesses were permitted to remain open even as cases soared.

While shutdowns, stay-at-

home orders and other factors have at times temporarily blunted increases in cases and deaths counts, fatalities have actually accelerated in recent months, data show.

According to a Wall Street Journal analysis of Johns Hopkins data, it took the U.S. roughly four months to reach 200,000 deaths on Sept. 21 from 100,000 fatalities, but it took just two and half months to reach 300,000 deaths.

Even as hospitals made final preparations to administer the first shipment of Covid-19

vaccines—as early as Monday—public-health experts warned the death toll would continue to climb exponentially over the next several months until the bulk of Americans could be immunized.

“I thought we could get here, but I didn’t believe in my heart of hearts we would,” Thomas Russo, head of infectious disease at Jacobs School of Medicine and Biomedical Sciences at the University of Buffalo, said of the 300,000 fatality figure. “I thought we would circle the wagons and

take this seriously and do everything we can to minimize infections and do better. It has been disappointing.”

Dr. Russo said the ubiquity of the virus right now—in comparison with earlier in the pandemic when different parts of the U.S. experienced surges—contributed to a faster rise in deaths in recent months. More people are simply infected with it, he pointed out. He also noted that it is too early to assess the full impact of the Thanksgiving holiday. Deaths typically are the

final indicator of a surge in infections, following rising cases and hospitalizations.

He said he feared deaths would continue to increase, noting that at this point, people aren’t likely to dramatically change their behavior if they haven’t done so already.

Dr. Russo estimated it might not be until the end of March before the vaccine really starts to flatten the curve of new cases and deaths. “We’re going to be hitting more milestones,” he said. “It’s a numbers game.”

## States Face New Demands On Limited Resources

By STEPHANIE ARMOUR AND SCOTT CALVERT

State leaders say they are short billions of dollars in funding needed to successfully provide Covid-19 vaccinations to all Americans who want to be inoculated by health officials’ June goal.

The federal government is providing the vaccine, along with syringes, needles, face masks and shields. But state leaders say they must hire medical workers, provide community outreach and education, set up vaccination clinics and ensure storage capacity for vaccines. Some states are also concerned about having enough supplies, such as gloves and gowns, to protect health-care workers as well as people getting vaccinated.

Officials in several states said they would spend whatever is needed to get residents vaccinated. Some said that might force spending cuts in areas like education, unless Congress provides additional funding or the federal government reimburses a large chunk of their rollout costs.

Congressional lawmakers have been wrestling with a po-

tential \$908 billion coronavirus relief package, and aid to state and local governments has been a sticking point.

The Centers for Disease Control and Prevention has sent more than \$300 million to states to support flu and Covid-19 vaccine planning, according to a spokeswoman for the Department of Health and Human Services.

“Every dose is already paid for,” a White House senior administration official said during a Dec. 7 press call. “The syringes and needles and swabs necessary to vaccinate will be merged with the vaccines going out, and those are already paid for. We’re providing the dry ice with the vaccines for the cold storage.”

Dr. Rachel Levine, Pennsylvania’s health secretary and president of the Association of State and Territorial Health Officers, told a Senate hearing Thursday that states need \$8.4 billion for the vaccination program.

“This will not be a short-term operation,” she said, adding that states also would face a challenge “in almost competing with each other for resources,” as they did in the search for protective equip-

ment in the spring. “It would be helpful if the federal government coordinated that and we didn’t have to bid against our sister states,” she said.

The financial demands are striking at a time state tax revenues have dwindled because of the pandemic, leaving some with looming budget deficits.

The Trump administration has been working on Operation Warp Speed to produce and deliver 300 million doses of vaccines, with the initial doses available by January. The vaccines are distributed to states, which decide where they go.

About one-third of states said they were “greatly” or “completely” concerned about having sufficient supplies to administer Covid-19 vaccines, according to a November report by the Government Accountability Office.

The shortfalls and funding woes could slow the rapid pace of inoculations that health officials have said would be needed to reopen businesses and jump-start the economy.

New York state estimates its vaccination distribution effort could cost as much as \$1 billion, said Robert Mujica, the state’s budget director. About



Boxes containing the Pfizer-BioNTech Covid-19 vaccine are prepared Sunday in Portage, Mich.

75% of the projected costs are personnel-related, including the hiring and training of vaccinators, doctors and support staff, he said.

Other expenses will involve logistics like refrigeration for the vaccines that must maintain a certain temperature, warehouse storage and security, as well as public campaigns to encourage people to get the shots.

Finding the money won’t be easy. “It’s a big concern,” he said.

Virginia officials said they expect vaccine distribution to

cost as much as \$120 million.

“I think it should be part of the federal government’s responsibility, but make no mistake, we’re going to do it,” said Aubrey Layne, the state’s finance secretary. “We have to put the welfare and health of our citizens first.”

Virginia has fared better economically during the pandemic than many states, partly because of its large defense-industry sector, he said. Even so, state tax revenues are significantly below pre-pandemic levels, and covering vaccine distribution costs will come at

the expense of other areas that rely on the \$22.5 billion general fund, Mr. Layne said.

State budget officials face a difficult challenge crafting spending plans for the coming fiscal year even without having to pay for vaccine distribution, said Brian Sigratz, director of state fiscal studies at the National Association of State Budget Officers.

With revenues running sharply lower because of the pandemic, states will have less money for areas such as education, health care, transportation and corrections, he said.

I didn't talk  
for a  
very long time

Jacob Sanchez  
Diagnosed with autism

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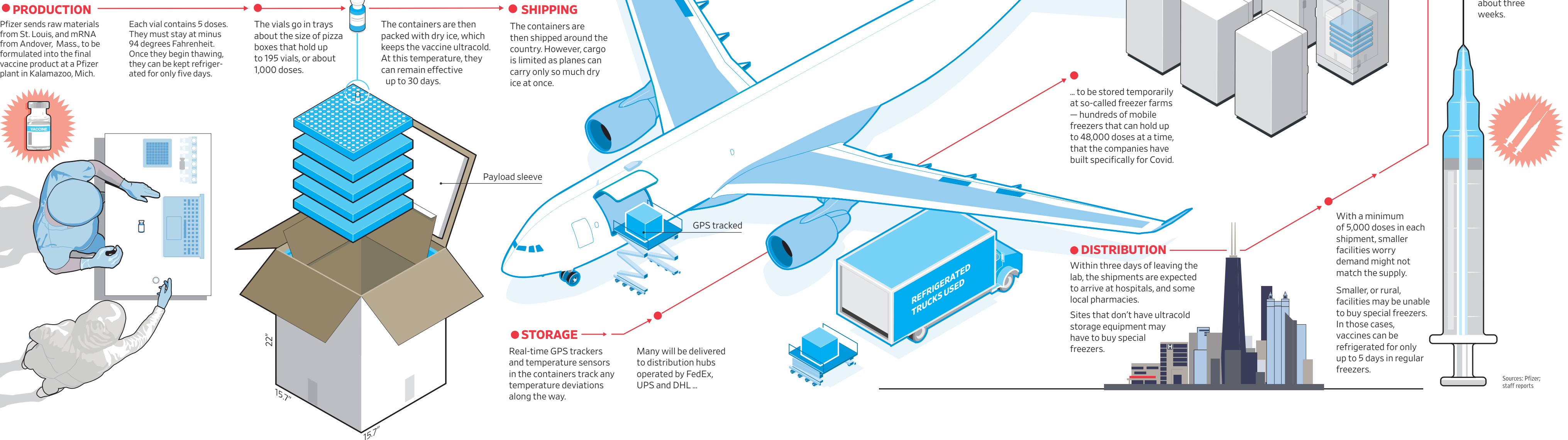
U.S. NEWS

# How Pfizer’s Covid-19 Vaccine Will Be Delivered to Millions, From Factory to Front Line

By Jared S. Hopkins, Peter Loftus, Tonia Cowan, Juanje Gomez and Taylor Umlauf

After some 200 companies world-wide set out earlier this year to produce a Covid-19 vaccine, the U.S. Food and Drug Administration authorized Pfizer Inc. to distribute its doses on an emergency basis in the U.S.—the first vaccine to be rolled out in the country.

Pfizer has said it would distribute 25 million doses to high-priority groups before year’s end, with the two-shot vaccine serving about 12.5 million people. The challenge is how to get the doses, which must stay at the ultracold temperature of minus 94 degrees Fahrenheit, around the country before they go bad.



## Vaccines Start Shipping

*Continued from Page One*

dispatching syringes and other supplies for administering Pfizer's vaccine. "You don't know if it's going to work until you get there."

Pfizer is leading the distribution of the vaccine, developed with BioNTech SE of Germany. That differs from vaccines developed by other drug companies, which will be distributed by McKesson as the federal government-appointed partner. Among the most difficult aspects of delivering the first vaccine to gain emergency approval: the need to keep it at minus 94 degrees Fahrenheit as it travels and awaits use at vaccination sites.

Despite dry runs and contingency planning, a lot can go wrong. Refrigeration problems could ruin doses, and logistical snafus could delay shipments. If hospitals botch the challenge of scheduling a continuous stream of people to get the shots, defrosting doses might go bad. And the pandemic itself could sideline some of the armies of workers involved in the effort.

"Everything has to come together—the packaging, the dry ice, the vials, the material itself. It all has to come together to the same place and have enough of it and exactly the right people there ready to take it," said Yossi Sheffi, director of the MIT Center for Transportation & Logistics. "Right now, there's no conductor to the symphony," just

many parts that each need to work.

### The vaccine

The journey starts in a factory just outside St. Louis, where Pfizer scientists make the raw materials that are the backbone of the vaccine. Those materials move on to Andover, Mass., where researchers turn them into mRNA—molecular couriers that deliver genetic instructions to the body.

The mRNA is dispatched to Michigan, where machines the size of single-car garages envelop them with lipid nanoparticles, microscopic vessels used to deliver genetic material into the body. Making doses takes about a week, and batches sit for about two weeks before being shipped.

The vaccine is transported in glass vials strong enough to withstand transit and the subarctic temperatures in which the liquid must be stored. Trays carrying 195 vials are packed with dry ice in suitcase-like boxes weighing 80 pounds. Those vaccines eventually are diluted with enough saline solution to make 975 doses.

Because Pfizer needs dry ice to keep its vaccine cold, it bought its own dry-ice-making equipment. Now it is making dry ice at both the Kalamazoo plant, where 650 employees worked on distribution efforts, and a storage facility in Pleasant Prairie, Wis., where it has freezer farms to store the vaccines.

Pfizer bought three tanks to hold the carbon dioxide used to make dry ice, each the size of a three-story grain silo. Assembly lines end with machines that shoot out the dry-ice pellets used to blanket the vials inside containers, each

holding about 1,000 vials.

Inside each box, a device about the size of a cellphone measures temperatures, records GPS and can detect if a box is opened. Pfizer can track the boxes until they arrive at their destinations.

"We actually know every moment in the journey, and the temperature, and there were no deviations," said Mike McDermott, the Pfizer global supply president overseeing the manufacturing and distribution.

Pfizer has been testing the boxes for months, shipping them empty to places like Dubai and Africa, then conducting runs with airlines, logistics companies and certain states.

Supply chain experts said problems could develop given the newness of Pfizer's operation. Raw materials or batches might need to be discarded, filled vials could break in transit and the containers could be mishandled by recipients. Pfizer has even instituted safety measures to prevent the theft of doses.

Vaccinating the nation also requires the simultaneous mass distribution of face masks, needles, syringes and alcohol wipes needed to administer shots, along with saline solution to dilute vials and create doses.

For weeks, workers in McKesson facilities across the U.S. have been filling boxes with those supplies, and on Wednesday, the company began shipping the containers, each weighing up to 50 pounds and holding enough supplies for 1,000 doses.

After stopping at a storage and distribution hub in Louisville, Ky., the boxes were ferried by United Parcel Service Inc. planes and trucks to hundreds of nursing homes, hos-



Boxes containing Covid-19 vaccines were prepared to be shipped across the nation Sunday inside Pfizer's manufacturing plant in Michigan.

pitals and pharmacy hubs nationwide.

Ensuring the packages arrive at the right locations is a challenge. During mock vaccine distribution exercises, some supply kits arrived two days after vaccine doses, Dr. Rachel Levine, a Pennsylvania state health official, told Congress earlier this week. A McKesson spokeswoman said that during its initial test with empty boxes, a data transmission issue was identified and resolved before actual kits were shipped.

"Having syringes without vaccines isn't very helpful," said Bruce Gellin, president of global immunization at Sabin Vaccine Institute, a nonprofit that promotes vaccine adoption and trains immunization professionals. "It all has to go right."

### On the move

Pfizer is shipping vaccines from many locations, and some doses are made abroad. During Thanksgiving week, about 750,000 doses made in Europe arrived at Chicago O'Hare International Airport on chartered cargo flights from Brussels International Airport. More flights followed.

After landing in the U.S., the vaccine is trucked to FedEx Corp. and UPS air hubs

in Memphis, Louisville and elsewhere.

FedEx affixes a tracking device to every package it transports, allowing the carrier to monitor each shipment's location. UPS has a similar scanning technology. Vaccines arriving in Memphis and other hubs get the fast-lane treatment meant for priority packages, with an early delivery commitment the next day.

Delivery networks have been stretched thin by a pandemic-fueled surge in online shopping, leaving little margin for error. Executives say holiday gifts will take a back seat to vaccines, and they have reserved enough space in their networks to handle the expected shipments.

"We've planned for the capacity," said Richard Smith, president of the Americas for FedEx Express. "This is something we are confident will not overwhelm the system."

Shipments of anything by road or air can be delayed by such vagaries as winter weather or mechanical problems.

Truck fleets that work with pharmaceutical companies undergo quality audits and certifications to ensure they adhere to global standards for the transport of medicine.

"You can't haul chicken nuggets and then transport

oncology drugs," said Andrew Boyle, co-president of Boyle Transportation, a Billerica, Mass.-based trucking company that specializes in secure, temperature-controlled transport and is involved in Covid-19 vaccine distribution efforts.

U.S. airports have been gearing up for months, including upgrading freezer storage facilities and training staff. They are operating on a compressed timetable.

Deutsche Lufthansa AG, one of the world's biggest air transporters of vaccines, including measles treatments, usually is notified months ahead of time about pallets of vaccines coming its way. It expects five-day notice or less for imports or exports of the Covid-19 vaccines, said Bernhard Kindelbacher, the airline's vice president of cargo for the U.S. and Canada. "It's the uncertainty," he said. "What routes, what volumes, what temperatures?"

After doses land at airports close to vaccination sites, they again are loaded onto trucks.

The process will become more complex as distribution moves from large urban and suburban areas to more remote locations with smaller populations, said Susan Beardslee, principal analyst for freight transportation and lo-

gistics at technology-market advisory firm ABI Research. "In a remote area, where are you going to find those drivers that are available and used to handling [temperature-sensitive] pharmaceutical products?" she asked.

States, big cities and U.S. territories are among the 64 federally designated places that will receive the vaccines and decide when and where they will be administered. Government officials said Saturday they expect the initial doses to arrive at 145 sites on Monday. It will be up to the states not to mismanage the complex task of making sure the right number of doses get to the right places at the right times.

When Minnesota gets the 46,800 initial doses it expects in the coming week, they will be split between health-care workers and residents and employees of long-term care facilities. At first, they will go to 25 hospitals or large pharmacies capable of handling ultracold storage. Those places will use some and distribute the rest to 118 other locations.

New Mexico will send some of its initial 17,550 doses to five major hospitals that can handle ultracold storage, for distribution to health-care workers. A state health-department warehouse in Albu-

querque will get the rest of the doses, break them up into truck shipments and send them to 32 other sites, where they must be administered within five days.

Kentucky has said it would distribute most of its 38,000 initial doses to long-term care facilities through CVS Health Corp. and Walgreens Boots Alliance Inc., which have federal contracts for that job. The other 12,000 doses will go to health-care workers.

### Final destination

Once hospitals get their doses, they need to make sure the vaccines don't spoil before they go into people's arms, and that none go to waste.

Before the U.S. Food and Drug Administration authorized the vaccine on Friday, hospitals performed vaccination dry runs, checked backup power and temperature settings for freezers and rushed to decide who would get shots first.

To choreograph the vaccine's arrival, hospitals have put employees on notice about the deliveries. Some staffers have hunted down photos of packaging to minimize the risk that boxes could be left unattended on loading docks, said Jessica Daley, a pharmacist and executive with Premier Inc., which contracts with pharmaceutical and other medical-supply manufacturers on behalf of hospitals.

"Everyone is very focused on ensuring that receipt of these products goes perfectly according to plan," she said.

At Mass General Brigham, a pharmacist likely will be notified by courier of the vaccine's arrival, said Paul Biddinger, the Boston-based hospital system's medical director for emergency preparedness. Mass General Brigham will store its allotment in a central location before distributing it to a dozen sites, using bar codes to track deliveries.

There are exacting procedures for retrieving the vials for vaccinations. Pfizer's containers can be opened only twice a day, and can't stay open for more than three minutes at a time, Dr. Daley said. Smaller boxes with trays of vials can be opened for no more than three minutes, and they can't be outside ultracold temperatures more than once every two hours.

People getting vaccinated must be moved through the line at a steady clip so the

doses don't go bad. Hospitals must stagger appointments to avoid crowding, and keep those waiting socially distanced. A missed appointment could leave hospitals with unused doses that must be thrown out, said Dr. Biddinger. "We really don't want to waste any single dose," he said.

Long-term care facilities are expected to get most of their vaccines through CVS and Walgreens, though some also will use smaller pharmacies. Each chain said it expects to receive supplies via FedEx or UPS in around 1,000 hubs, nearly all at pharmacies.

From those hubs, teams of pharmacists and other staffers will fan out to long-term care facilities, with some taking doses in small refrigerated totes. Walgreens said it is supplying about 30,000 facilities, and CVS is working with more than 40,000, so far.

"We just press 'go' and start running," said Rina Shah, Walgreens vice president for pharmacy operations and services.

Pharmacies also are preparing for Covid-19 vaccines besides Pfizer's, including one from Moderna Inc. that is under consideration for emergency authorization and could be cleared by the FDA this month.

Brad Phillips, director of operations for long-term care at Thrifty White Pharmacy, a regional chain based in Plymouth, Minn., that is supplying the vaccine to 240 facilities in North Dakota and Minnesota, said he expects to arrive at the company's headquarters pharmacy around 6 a.m. on Dec. 28, the designated start of the long-term-care rollout in Minnesota.

If it is authorized, he and about a half-dozen colleagues will head to a nursing home in the Minneapolis area in a company van with coolers of the Moderna vaccine. There, he said, he will don a gown, mask and gloves and enter the rooms of residents to inject them.

After weeks of planning, Mr. Phillips said, he is excited to start. "As we look at the impact on people and the health-care system," he said, "it is the biggest and most important thing I've been involved with."

—Melanie Evans, Paul Ziobro, Joe Barrett, Doug Cameron, Jennifer Smith and Alison Slider contributed to this article.

## Convincing Skeptics Is A Hurdle

*Continued from Page One*

ple combined. Much of the general public won't receive shots until spring or summer 2021.

For months, surveys have shown large percentages of people in the U.S. are reluctant, skeptical or even opposed to taking a Covid-19 vaccine, with concerns ranging from safety to mistrust of drugmakers and the government. Some prefer waiting to see if there are major problems or side effects.

Winning over these people will be crucial to stopping the spread of the virus. A vaccine's effectiveness depends not only on how well it works in an individual but also on how widely it is adopted.

William Arch, a 41-year-old cook at a nursing home in Pittsburgh, said he is wary and wants to wait for long-term safety data. He even started looking for another job out of concern his employer will make the shot mandatory.

"I don't want to be the first one to take it," he said. "I'm scared of it."

Overall, 63% of Americans would be willing to receive an FDA-approved Covid-19 vaccine, according to a Gallup poll released this month that surveyed about 3,000 people after Pfizer announced its vaccine-efficacy results in November. That is up from 50% in September, but slightly below findings in a poll from July.

"The idea that everyone is just going to take it is naive, and so is the idea that we can come up with a messaging campaign and everyone will go along with it," said Emily Brunson, a medical anthropologist at Texas State University who studies vaccine hesitancy. "It's really going to be a lot of work and a lot of effort for the next 12 months to be able to get people vaccinated."

Those skeptical about receiving a shot include small but vocal numbers of people who oppose all vaccines, which they say are unsafe despite research proving otherwise. Another obstacle is a deep-rooted mistrust among minority groups of health-care authorities after a tainted history of unethical medical experimentation on minorities.

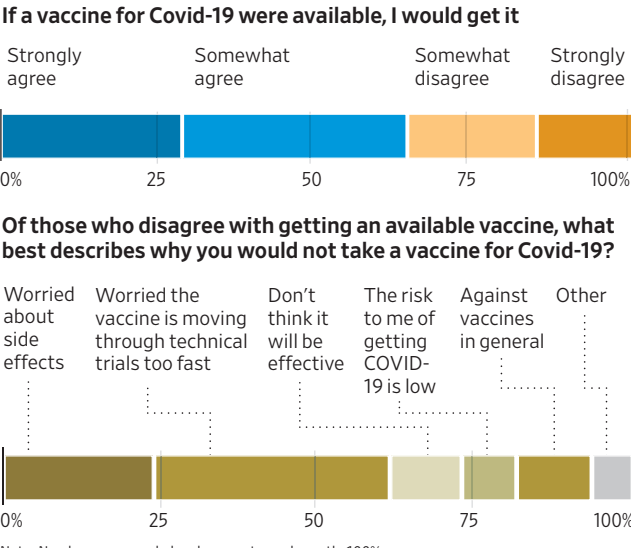
Researchers, community

groups and religious leaders have worked for months to educate people about the benefits of vaccines to counter misinformation. Many believe the initially vaccinated group, which includes doctors and nurses, will be key to the overall vaccine rollout given how influential they are in their patients' health decisions.

"If you're not part of the health-care system and you see health-care workers taking it, you think, 'Well, maybe they know something,'" said Bruce Gellin, president of global immunization at Sabin Vaccine Institute, which promotes vaccine adoption and trains immunization professionals. "Health-care workers are often sought,

### Worth a Shot?

Survey respondents who said they wouldn't get a Covid-19 vaccine cited several different reasons.



whether they're doctors, nurses, pharmacists, people in the system, for their advice about health."

Vineet Arora, a 47-year-old hospitalist at University of Chicago Medicine who has treated Covid-19 patients, said she is looking forward to taking the vaccine. "I'll do it for the safety of my family and colleagues and patients," she said.

Dr. Arora initially was concerned because she has an 8-month-old baby, whom she is still breast-feeding. With pregnant women excluded from Pfizer's trial, there is little known about the vaccine's impact on nursing.

But even health-care workers, who are often required by employers to get flu shots, aren't fully on board. An October survey of about 13,000 people by the American Nurses Foundation found that 36% of

nurses in the U.S. wouldn't voluntarily take a Covid-19 vaccine, 34% said they would and 31% said they were unsure.

The government has said the shots will be free, but it hasn't begun a national messaging campaign about vaccine benefits, having scrapped plans for one that would pair celebrities and physicians. A spokeswoman for the U.S. Department of Health and Human Services said a new one is planned but declined to say when it would start.

The Ad Council, a public-service organization that has produced messages on such issues as fighting AIDS, plans to launch a \$50 million communications campaign before the

end of the year. Aimed at informing people about Covid-19 vaccines and overcoming any hesitancy, it will include TV ads, social media and outreach through community groups.

"It is the most significant public education effort that we've ever undertaken," said Chief Executive Lisa Sherman.

Researchers say prominent people receiving the vaccine, and urging others to get it, could help overcome skepticism. Former Presidents Barack Obama, George W. Bush and Bill Clinton have pledged to be vaccinated.

But some say hesitancy could persist if the public perceives that shots aren't distributed equally across communities. During the H1N1 pandemic, for example, the vaccine was given early on to Wall Street firms, creating the impression of inequity.



WORLD NEWS

Iran Dissident’s Execution Strains EU Ties

Disagreement is second significant setback to diplomacy in less than two weeks

Iran’s execution on Saturday of a dissident journalist has strained Tehran’s relationship with Europe at a time when the presidential transition in the U.S. has raised expectations of a diplomatic opening between Iran and the West.

By Sune Engel Rasmussen in London and Aresu Egbali in Tehran

The Iranian Foreign Ministry on Sunday summoned the German and French ambassadors after the European Union condemned the execution of journalist Ruhollah Zam, who was sentenced to death for inciting antigovernment protests in 2017.

The foreign ministry criticized the European statements

as an unacceptable interference in domestic Iranian affairs, the IRNA state news agency reported.

The rift is the second serious setback in less than two weeks to diplomacy between Iran and Europe ahead of an expected rethink of U.S. sanctions policy against Tehran by the incoming administration of President-elect Joe Biden.

In early December, hard-line Iranian lawmakers pushed through a law that orders the country to ramp up nuclear enrichment—in what would be its most serious breach of the 2015 nuclear deal—and limit access to United Nations nuclear inspectors if sanctions aren’t lifted by February.

If put into action, the law would jeopardize efforts between the EU and Iranian President Hassan Rouhani’s government, which opposed the bill, to salvage the 2015 agreement, which was designed to limit and monitor Iran’s nuclear activity in return for sanctions relief.

The accord has been on life-



Ruhollah Zam, seized by Iranian agents in Iraq in 2019, was returned to Tehran and sentenced to death for inciting 2017 protests.

support since President Trump withdrew from it in 2018 and reimposed strict sanctions on Tehran.

Amid the fallout over Mr. Zam’s execution, the Europe-Iran Business Forum canceled a three-day virtual conference scheduled to start on Monday,

which was funded by the EU and convened by the International Trade Center and the Trade Promotion Organization for Iran.

The French and German ambassadors who were summoned by the Iranian Foreign Ministry were both slated to

speak at the conference.

The execution of Mr. Zam showed the willingness of Iranian authorities to defy international opposition in its suppression of the country’s media and opposition activists, and demonstrated the reach of its intelligence services beyond the country’s borders.

Mr. Zam, who had been living in France since 2011, ran a popular news channel called Amad News on the Telegram messaging platform which he used to share news and logistics involving antigovernment unrest in Iran in 2017, amid efforts by government security forces to suppress it.

Mr. Zam was lured in 2019 to Iraq, where he was captured by the Revolutionary Guard, Iran’s prime security force tasked with defending the state against foreign enemies as well as domestic opposition.

The son of a prominent pro-establishment cleric, Mr. Zam had his first serious run-in with Iranian authorities during the Green Movement protests in 2009 when he was arrested.

After his release, he fled the country and later settled in France.

Mr. Zam was tried this year in Tehran’s Revolutionary Court, accused of “corruption on earth,” a charge often slapped on opposition activists allegedly working to overthrow the system.

The court sentenced him to death in June and confirmed his sentence in December, judiciary spokesman Gholamhossein Esmaili said on Tuesday.

France on Saturday condemned the execution of Mr. Zam as a “barbaric and unacceptable act.” Germany said it was horrified by the execution and by the way Mr. Zam had been abducted in Iraq.

Responding to the criticism, Iran’s Revolutionary Court on Sunday said Mr. Zam had confessed his crime.

Mohammad Ali Zam, the executed journalist’s father, said on Instagram that his son had been led to believe that he would be released in a prisoner exchange and that his confessions were false.

Coronavirus Caution Chills Europe Christmas Spirit

By RUTH BENDER

Every year for Christmas, members of Mariachiara Montera’s family converge from all corners of Italy on her birthplace in the south, where they share stories and regional favorites from spaghetti with clams to fried fish and the classic dessert panettone.

This year, Ms. Montera will spend the holiday alone. Her mother, aunts, uncles and cousins will stay put, too.

“My mother gets nostalgic, but she knows it’s safer for everyone,” said the 40-year-old freelance consultant, who lives in Turin.

Christmas marks the high point of the festive calendar for many Christians around the world. But this year, families face a dilemma: whether to reunite despite the risk posed by the Covid-19 pandemic or play it safe and scale things down, at the expense of tradition. Many try to land somewhere in between, planning smaller festivities and lowering risks.

In the U.S., restrictions on gatherings vary from state to state. In Europe, many governments have tightened restrictions on travel and socializing to combat an autumn surge in infections, ruling out large Christmas gatherings. Most Alpine countries have shut ski resorts and Italy banned travel between regions from Dec. 21 to Jan. 6.

But some countries such as France, the U.K., Spain and Germany are planning to relax some of these restrictions just for the holiday. Some scientists



Germany is planning to relax some coronavirus restrictions for Christmas, which could boost sales of trees at a farm on Frankfurt’s outskirts.

worry that such relaxations, by deferring to people on how much Christmas should be allowed this year, will pave the way for a new surge in infections.

“The problem won’t be the people who will think about how to protect their families but those who don’t care about all this,” said Alexander Kekulé, a German virologist who thinks the government should have tightened restrictions weeks ago to help push down infections before Christmas.

Germany on Sunday said it would close nonessential shops, schools and daycares from Wednesday until mid January, moving to a much stricter lockdown as infection numbers creep up.

Mr. Kekulé and his relatives meeting for Christmas will isolate for a week before the holiday and he will test all on Christmas Eve before they meet, he said, a privilege not available to all in Germany, where rapid tests aren’t yet widely distributed.

A survey from the University of the German Armed Forces in Munich published on Tuesday found that while more than two-thirds of Germans agree with the country’s current restrictions to curb the spread of the virus, 42% said they might break the rules for Christmas.

The recent steps toward distributing vaccines in many countries for now isn’t changing many family decisions over Christmas. Some people, like Ms. Martin, say there are still too many uncertainties over

when vaccines will be available to all to make decisions based on them.

While planning the holiday might evoke joyful anticipation, balancing safety and clashing expectations in the midst of a pandemic can do the opposite, piling emotional stress on already strained households, said Christina Jochim, a psychotherapist in Berlin.

“In the Western world, Christmas is traditionally associated with closeness, togetherness, family and friends and in

those times of restrictions we realize even more so how we miss that,” Ms. Jochim said.

Étienne Balmadier, 85, won’t be able to join the traditional French Christmas dinner with seafood and foie gras his daughter usually hosts at her house in the suburbs of Bordeaux, in southwestern France. He isn’t allowed to leave his retirement home and visits are tightly regulated.

Anne-Joëlle Balmadier hopes she will at least be able to bring her father oysters, a chilled bottle of white wine and a gift for her mother, who lives in the same facility and suffers from Alzheimer’s disease.

“It’s hard not even being allowed to hug them,” said Ms. Balmadier, who will celebrate with her two sons this year.

In a year where more people will face loneliness on Christmas than in normal times, Sebastian Fuhrmann, pastor at a Protestant church in Berlin, wanted to give as many people as possible an opportunity to attend the church service in a safe way.

Like in many countries, churches in Germany are limited in the number of people allowed inside. Father Fuhrmann will be preaching on the field of an amateur soccer stadium that can fit up to 500 people with plenty of space between them. Trombonists will be performing at least 20 feet apart from each other.

“To cancel Christmas is a big sacrifice for many people,” said Mr. Fuhrmann. “I want to offer people at least a piece of normality.”

Discussions Inch Ahead On Brexit

Continued from Page One

to be done. The two sides had set Sunday as the day to decide whether it was worth keeping the negotiations going. Following a midday phone call between Mr. Johnson and Ursula von der Leyen, the president of the European Commission, the two leaders said they would try to seal a post-Brexit economic and security deal by Dec. 31.

“Despite the exhaustion after almost a year of negotiations, despite the fact that deadlines have been missed over and over we think it is responsible at this point to go the extra mile,” they said. “We have accordingly mandated our negotiators to continue the talks and to see whether an

agreement can even at this late stage be reached.”

Failure to compete and ratify an agreement by Dec. 31 would mean that at the start of the year, the U.K. would apply tariffs for the first time in almost a half-century on some trade with the EU, to which it sends 43% of its exports.

Mr. Johnson’s government won an election a year ago promising to use Brexit to free the U.K. from EU rules, standards and oversight, restoring full sovereignty to U.K. decision makers.

The EU on its side offered a zero-tariff, zero-quota trade agreement, but made it contingent on what European officials describe as fair competition, ensuring the U.K. doesn’t undercut the bloc on social, environmental and labor conditions and doesn’t use government subsidies to generate unfair advantages for its firms.

Some EU member states, including France and the Netherlands, have ratcheted up pressure on the bloc’s negotiating team in recent days to ensure its red lines on this “level playing field” are respected.

While the two sides have fixed most of an agreement, officials say, they continue to spar over how far the U.K. must stay broadly in line with EU standards and, separately, over the question of how much future access EU fishing fleets will have to British waters.

Last week, the two sides acknowledged wide gaps on the remaining critical issues, and the mood turned grim, with threats of British navy ships

being sent to challenge French fishing vessels in British waters after Jan 1.

Yet with talks on the brink of failing, people involved in the negotiations say there has been movement on both sides, which at least opens the possibility of a deal. Mr. Johnson told British media on Sunday he still thinks a deal is less likely than no agreement.

On the level playing field, the U.K. has bowed to EU pressure to agree to an independent domestic regulator to oversee the British govern-

The U.K. and EU face a year-end deadline to reach a broad agreement.

ment’s decisions on government support for private companies, mirroring the EU’s competition authorities in Brussels, officials on both sides said. There are important disagreements over the powers the body would have and how it would enforce its rulings, but if those issues are settled, it would be a significant step toward a deal.

Meanwhile, EU officials have stressed that on other level-playing-field issues, it is flexible on the mechanism for maintaining broadly equivalent standards, including ensuring fair arbitration if the U.K. wants to challenge EU decisions on the issue. On the British side, officials have said

they could live with an agreement that allowed the EU to take punitive action, like imposing some tariffs, if U.K. standards fell far below EU ones so long as these were narrowly targeted.

On fish, the two sides remain at loggerheads. The EU is demanding a 10-year transition period to shift to new rules that would give British fishermen a far higher quota of stocks caught in U.K. waters. The U.K. has rejected that but said it is open to a short transition.

French President Emmanuel Macron has insisted his country’s 7,000 fishermen won’t be made to pay the cost of Britain’s position to exit from the bloc, and officials say Paris could veto a deal that leaves its fishing sector worse off. However, many EU countries, including Germany, have pointed to the tiny economic stakes at play over the fishing industry, which accounts for a small proportion of economic activity for both sides.

“There is definitely a way out, it’s just whether there is the political will on the EU side to accept that we will not be treated differently from any self-respecting independent economy in the world,” U.K. Foreign Secretary Dominic Raab told Sky News.

Spain’s foreign minister, Arancha González, on Sunday said she couldn’t see why a deal to manage interdependence couldn’t be settled, saying failure to reach a deal during the pandemic would create a “double whammy” for both sides, with the U.K. hit the hardest.

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## GREATER NEW YORK

# Police Fatally Shoot Gunman at Cathedral

The suspect shouted 'kill me' and fired outside St. John the Divine in Manhattan

By BEN CHAPMAN  
AND KATIE HONAN

New York Police Department officers fatally shot a man firing a gun on the steps of the Cathedral Church of St. John the Divine in Manhattan after a holiday event Sunday afternoon, police officials said.

The suspect shouted “kill me” and fired the gun multiple times before three officers directed 15 shots at him, striking him at least once in the head, NYPD Commissioner Dermot Shea said at a news briefing.

The gunman, whose identity wasn’t immediately provided, was taken to a nearby hospital in critical condition, where he later died, said police officials.

No bystanders were injured in the incident, authorities said. Several officers were being evaluated for tinnitus, according to the officials.

Officers recovered two semi-automatic guns belonging to the suspect, as well as a bag containing a full can of gasoline, rope, knives and a bible, Mr. Shea said.

“It is by the grace of God



NYPD officers arrive after a man opened fire outside the Cathedral Church of St. John the Divine in the Manhattan on Sunday.

today that we don’t have anyone struck,” by the shots fired by the suspect, Mr. Shea said.

In a statement posted to the St. John the Divine web-

site, church officials said the gunman opened fire on the cathedral’s front steps following a caroling event.

The officers responded to

the historic church in the neighborhood of Morningside Heights at about 3:45 p.m., after several residents made 911 calls reporting an active

shooter, the officials said.

Manhattan Borough President Gale Brewer and her chief of staff, Jessica Mates, said they were at the holiday

concert when the incident occurred.

In an interview, Ms. Mates said she heard the first shots as she and other visitors entered the church’s gift shop following the event.

Other visitors rushed inside the church after the shots began, she said, as St. John the Divine staff tried to keep everyone calm.

She said some of the people at the church said they saw the gunman firing shots into the air and heard him say, “Just kill me.”

“After the conclusion of our Carols for the Community event this afternoon, the gathering was interrupted by an armed individual, who set off a round of gunfire into the air from our front steps. Thankfully, none of the attendees were hit,” Cathedral spokeswoman Isadora Wilkenfeld said. “It is horrible that our choir’s gift to New York City, a much-needed afternoon of song and unity, was cut short by this shocking act of violence.”

More than 125 years old, the landmark cathedral is one of the largest churches in the world, according to its website. It is the cathedral church of the Episcopal Diocese of New York.

The church underwent repairs and cleanings after a fire in 2001 and one in 2019.

## Ex-Aide To Cuomo Calls Him Harasser

By JIMMY VIELKIND

A former economic-development aide to New York Gov. Andrew Cuomo who is now a candidate for Manhattan borough president accused the Democratic governor Sunday of sexually harassing her while she worked for the state.

Lindsey Boylan, 36 years old, said in posts on Twitter that Mr. Cuomo “harassed me for years. Many saw it, and watched. I could never anticipate what to expect: would I be grilled on my work (which was very good) or harassed about my looks. Or would it be both in the same conversation?”

Ms. Boylan didn’t return messages asking her to elaborate. She later tweeted that she wouldn’t be talking to reporters about the matter.

Caitlin Girouard, a spokeswoman for the governor, denied the allegations. “There is simply no truth to these claims,” she said.

A state official said Ms. Boylan didn’t file any formal complaints against the governor while she was a state employee.

Ms. Boylan worked at the state’s economic-development authority, Empire State Development, from 2015 to 2018, according to her LinkedIn profile. She then moved into the Executive Chamber—Mr. Cuomo’s dedicated staff—and served from March to October 2018.

Mr. Cuomo’s national profile has increased based on his management of the coronavirus pandemic in New York. He is being considered for appointment as U.S. attorney general by President-elect Joe Biden, people familiar with the matter have said.

In the midst of the #MeToo movement, Mr. Cuomo signed legislation in 2018 that, among other things, extended state workplace harassment protections to contractors, banned mandatory arbitration for harassment victims and required private employers to develop antiharassment policies.

In a Democratic primary challenge that year, Cynthia Nixon accused Mr. Cuomo of being slow to act on complaints of sexual harassment against allies.

Mr. Cuomo’s campaign responded to Ms. Nixon at the time by pointing to his legislative record.

After leaving state employment, Ms. Boylan mounted an unsuccessful Democratic primary challenge to U.S. Rep. Jerrold Nadler. She declared her candidacy for borough president in November.

# NYPD Aims to Curb Soaring Gun Violence

By BEN CHAPMAN

New York Police Department detectives will target gang leaders in a fresh campaign against gun violence as New York City grapples with a rise in shootings that is more intense than any seen in the previous 20 years, police officials said.

Gun violence in New York has surged in 2020 to heights unseen in a decade, according to NYPD data. The city has recorded 1,412 shooting incidents in the first 11 months of 2020, a nearly 96% rise from 721 in the same period last year. The number of shooting victims in the city was 1,730 in the first 11 months of this year, more than double than in the same period a year earlier.

Police officials believe that roughly half of this year’s shootings were linked to gang activity. Many of the conflicts that led to those shootings were fueled by personal disputes or clashes over the illegal-drug trade or control of gang turf, the officials said.

To stem the rise in shootings, NYPD Chief of Detectives Rodney Harrison said in an interview that police would focus their efforts for the coming year on leadership of local crews, with a law-enforcement strategy known as precision policing.

Chief Harrison also said officers would redouble their efforts to strengthen relation-



NeQuan McLean outside the Bedford-Stuyvesant bodega where his 22-year-old nephew was killed.

ships in communities with high numbers of shootings. He said some residents have been less likely to participate in police investigations amid a rise in antipolice sentiment following the May 25 killing of George Floyd, a Black man, in Minneapolis police custody.

The chief said both efforts would be key to halting the city’s deadly increase in shootings that for months has been described as an escalating crisis by members of law enforcement, elected officials, residents and community leaders.

“The NYPD, we can’t do this by ourselves,” Chief Harrison

said. “In order for us to have success, we have to work with the community. We have to do this hand-in-hand, and there’s got to be a synergy.”

Police statistics show that shootings have increased in a particularly dramatic fashion in some neighborhoods in Brooklyn, the Bronx and Queens that have long struggled with gun violence.

Chief Harrison said the current wave of shootings also has spread to other parts of the city such as Carnarsie, Brooklyn, where years of steady efforts by police and residents had previously low-

ered incidents of gunfire.

Residents said the pronounced increase in shootings has left hard-hit neighborhoods in a state of fear.

“Our children don’t want guns. Our children don’t want to be in gangs,” said NeQuan McLean, a business owner and leader of a local school board who lives in the Bedford-Stuyvesant section of Brooklyn. “But what other resources are we putting out there?”

Mr. McLean’s 22-year-old nephew, Shyhiem McLean, was fatally shot on Oct. 22 in a bodega on the block where they both lived. Officers have ar-

rested one suspect and an investigation is continuing, police officials said.

The number of shootings has more than doubled this year in the 81st Precinct, where Mr. McLean’s nephew was killed, rising to 42 such incidents from Jan. 1 through Dec. 6, up from 20 incidents in the same period last year.

Members of law enforcement, criminologists and elected officials have debated the reasons for the surge of shootings in neighborhoods such as Bedford-Stuyvesant.

NYPD Commissioner Dermot Shea has cited reforms to bail laws as one reason for the rise, while other city officials have pointed to a drop in arrests and an influx of guns coming to the city.

Eric Cumberbatch, deputy director of New York City’s Office of Neighborhood Safety, said the circumstances surrounding shootings are most often the result of altercations or personal disputes.

“The truth is that, if we’re waiting for people to be in gang leadership positions before we address what compels someone to pick up a gun and use it, then we’ve already lost,” Mr. Cumberbatch said.

Officers in New York City have struggled to keep pace with the rise in crimes involving guns amid the coronavirus pandemic, but since August NYPD detectives have made more arrests in shootings.

STATE STREET | Jimmy Vielkind

## Democrats Tighten Their Grip on Senate in Albany



Incoming Democratic state senators representing upstate New York areas say their victories will bring a new set of issues to the table when state lawmakers reconvene in January.

Five Democrats won elections last month to represent parts of Buffalo, Rochester, Syracuse and the Hudson Valley in seats that were previously occupied by Republicans. The GOP incumbents in each district declined to seek re-election.

The results helped swell the Democratic conference to 43 members, which is enough votes to override a gubernatorial veto. It also means there will be eight senators representing areas north and west of Albany—roughly tied together by the old Erie Canal and New York State Thruway—in a conference whose leaders have long been dominated by people from New York City. For the past two years, there have been only three senators from those areas.

“I think there’s going to

be a regional economic interest that will definitely become apparent. It’s good to have many people talking about the same issues, and that’s always helpful. All the people from outside of New York City—we’re all dealing with very, very similar economic problems,” said Sen.-elect Sean Ryan, a Democrat from Buffalo who now serves in the state Assembly.

Cities not named New York are still grappling with the loss of most of their industrial bases over the past 50 years, Mr. Ryan said. He said he would focus on investing in state-funded colleges, studying high-speed rail and keeping remote workers—some of whom are doing jobs based in New York City from upstate areas where the cost of living is lower—in his district long-term.

Democratic Sen.-elect Michelle Hinchey, whose district stretches from Kingston on the Hudson River to Mohawk Valley communities, said her constituents’ lives revolved around a “Main Street economy” rather than a more globalized “Wall Street economy” that drives

thinking downstate.

Both Mr. Ryan and Ms. Hinchey said state-sponsored economic development programs are important in their areas. Other downstate Democrats, including Deputy Leader Mike Gianaris of Queens, have said those programs are “broken” and should be reined in.

The sheer size of the conference should help Majority Leader Andrea Stewart-Cousins, a Yonkers Democrat, iron out any differences. Democrats have controlled the state Senate since 2019; when the party previously controlled the Senate in 2010, it did so with a bare 32-seat majority in a chamber that then had 62 senators. As a result, every Democratic vote was needed to pass the state budget and other controversial legislation.

The results helped swell the Democratic conference to 43.

Next year there will be 43 Democrats in the 63-seat chamber, so Ms. Stewart-Cousins would still have the votes to pass a bill, even if 11 senators in her conference voted against it.

And despite their different perspectives on economic development, the new Democratic senators said they supported Ms. Stewart-Cousins’ position of raising taxes on the wealthy as the state grapples with a budget deficit. Sen.-elect John Mannion, from the outskirts of Syracuse, said such a tax increase “could impact potentially zero” constituents but help avoid layoffs for teachers and nurses in his district.

Republicans have sought to link upstate Democrats to policies that were advanced by their downstate colleagues—even if they didn’t support them—with mixed results.

“These Democrats share the same perspective as New York City Democrats and support radical pro-criminal policies, the elimination of private health care and higher taxes,” Candice Giove, a spokeswoman for Senate

Republicans, said.

Ms. Stewart-Cousins said at a pre-Thanksgiving press conference that she was excited by the new additions, and every senator would have a seat at the table.

“I think the secret of our sauce is making sure the voices are heard, and our conference will only be enhanced by the additional voices and regions that will be represented in it,” she said.

**ELECTORAL COLLEGE, IN-PERSON:** While members of the state Legislature moved much of their discussion and voting to a virtual format this year, the 29 members of the Electoral College from New York will convene in-person on Monday to cast their lots for President-elect Joe Biden.

State law specifies that New York’s electors must convene in person, at the Capitol in Albany. Gov. Andrew Cuomo has used emergency powers to suspend other state laws as a result of the pandemic, but said he didn’t want to give Republicans an opportunity to challenge New York’s electors.



GREATER NEW YORK

Students Get Boost Saving for College

By Katie Honan

Rahimuzzaman Sumon was out of work this spring as an Uber driver because of the pandemic and relied on unemployment to support his wife and two children. But he still put money into his daughter’s college-savings account.

Rukiya Zaman, 6 years old, dreams of being a NASA scientist. And with every \$10 and \$25 deposit, Mr. Sumon said his daughter is one step closer to that dream.

“When I came to this country, I had \$700 in my hand and one luggage of clothes and I had to start a whole new life,” said Mr. Sumon, who moved to Queens from Bangladesh 11 years ago. “I don’t care how much hard work I have to do, I want to make sure she has that chance.”

Rukiya already has an advantage. She is a part of NYC Kids RISE, a nonprofit that since 2017 has helped more than 10,000 students in schools in western Queens save for college.

Students in the area—which includes a large immigrant population and many low-income households—are automatically enrolled in the program when they start kindergarten, receiving \$100 in a program-operated college-savings account, known as a 529, along with opportunities for additional money. Families also can receive help in opening separate accounts that provide tax-free savings and withdrawals for higher education. The two savings accounts can be used together.

NYC Kids RISE officials project students will have an average of \$3,000 in their accounts by the time they are 18, with additional funds redirected based on need. A 529 account also has other benefits, including tax-free earnings on the account.

NYC Kids RISE operates the program in partnership with the city’s Education Department. The city said it hopes to expand the program citywide.

“Our goal for every New York City student is that they get on the path to a postsecondary education,” said an Education Department spokesman.



Nadia Landry says she wants to save \$10,000 for her daughter Zhyla by the time the third-grader heads to college. Right, Rahimuzzaman Sumon’s 6-year-old daughter Rukiya Zaman dreams of being a NASA scientist. They are part of the NYC Kids RISE saving program.

FROM LEFT: NADIA LANDRY; RAHIMUZZAMAN SUMON

Studies have shown that lower-income families opened up specific college-savings accounts at much lower rates than those with higher incomes. These types of accounts also don’t count against a student when applying for most financial aid and for other scholarships, officials said.

Debra-Ellen Glickstein, founding director of NYC Kids RISE, said the core of the savings program’s success comes from community support.

A \$10 million donation from the Gray Foundation helped launch the program in 2017.

“Our goal is to show this works and get others to help us expand to new communities for children across the entire city,” said Jonathan Gray, who started the foundation with his wife, Mindy. Mr. Gray is also the president and chief operating officer

of Blackstone Group Inc.

It took NYC Kids RISE a few years to build out the infrastructure for the program, figuring out how to set up college-savings accounts, while maintaining privacy for families. In meetings with parent-teacher associations and tenant groups, the nonprofit learned of other challenges.

For example, New York state’s 529 plans initially required minimum balances and deposits, which could be restrictive for some families. The rules have since been changed. Also, paperwork for the plans used to be only available in English. Now the documents are also published in Spanish.

And in schools with large Muslim populations, the organization realized parts of Sharia law observed by some families prohibit participating in banking that accrues interest. NYC



Kids RISE said it worked with Amalgamated Bank to introduce a specific account in the future that doesn’t have interest.

Residents in the district have rallied behind the children, hosting fundraisers such as concerts and through online platforms, Ms. Glickstein said. Hundreds of thousands of dollars have been raised for the program beyond the initial philanthropic investment. Some families also received financial support during the height of the pandemic in the spring, when their neighborhoods were hit by outbreaks.

“It’s really just getting started, it’s a generational project,” Ms. Glickstein said.

Parents like Rosa Mar, the parent-teacher association president at P.S. 92 in the Queens neighborhood of Corona, have raised money for the program for students at different

schools. Her daughter Isabella Zambrano wants to go to veterinary school and keeps a piggy bank at home where she socks away money for her education.

“She wants to save every animal she can,” said Ms. Mar, who works as a restaurant manager. “She knows that every dollar she saves is going to that goal.”

On Thursday, the tenants association at the Astoria Houses, a public-housing development in Queens, reached its goal of raising \$134,000 for children who live there and have accounts.

Zhyla Landy, a third-grader at P.S. 234, will be one of the recipients. Her mother, Nadia Landy, said she wants to save \$10,000 for her daughter by the time she goes to college. Zhyla, 8, wants to be an artist, a rapper or a YouTube star. Ms. Landy said the program “taught me to be able to open my kids to possibilities.”

GREATER NEW YORK WATCH

NEW YORK CITY

Max Rose Explores Joining Mayoral Race

U.S. Rep. Max Rose, a first-term Democrat who lost his re-election bid last month, said Sunday he is exploring a run for mayor of New York City.

“The five boroughs are where dreams are made, underdogs triumph, and anyone can build a better future,” Mr. Rose said in an email to supporters. “Yet that New York is slipping away...With so much at stake, we can’t sit on the sidelines.”

Mr. Rose, 34 years old, is a centrist Democrat and Army combat veteran who lost a 2020 race to Republican Nicole Malliotakis, a state Assembly member.

If he joins the 2021 race to succeed Mayor Bill de Blasio, who is term-limited, Mr. Rose will have to compete with a field that includes City Comptroller Scott Stringer, Brooklyn Borough President Eric Adams, former U.S. Housing Secretary Shaun Donovan and former de Blasio counsel Maya Wiley.

—Associated Press

NEW JERSEY

Health-Care Workers To Get Shots Tuesday

Gov. Phil Murphy says health-care workers in New Jersey will begin receiving vaccinations for the coronavirus this week at a Newark hospital.

He told ABC’s “This Week” program that he will be at University Hospital in Newark on Tuesday for the first Covid-19 vaccinations. He said the bulk of the 76,000 doses constituting the first batch of the Pfizer vaccine will go to health-care workers, with some going to residents and staff at long-term care homes.

The governor said he believes that by April or May, everyone in the state will have access to one of the vaccines. He is urging people not to relax efforts to stem the spread of the virus, especially limiting holiday celebrations to immediate family.

—Associated Press



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WORK & LIFE  
RACHEL  
FEINTZEIG

We worked from our kitchen tables, or donned masks to do our jobs. Our vocabulary changed: We learned what PPE was, and that some roles were essential. Protests, the racial justice movement and a historic election shook the country. We felt stressed, lonely; we lost our jobs or had to leave them.

It's been a wild year that's transformed work. To try to capture the breadth of what's changed, and understand where we might be heading, I turned to the numbers: surveys, economic data and research papers.

They tell the story of women dropping out of the workforce in droves, companies catalyzed—at least on the surface—by the death of George Floyd, and a country where a quarter of households have had someone laid off. They point to a future where those who don't have to don't go into an office, at least not every day. Here's our year at work, by the numbers.

#### Productive...at a cost

We're getting our work done, but we feel pretty miserable. In a September survey of 330 human resources leaders by the Conference Board, 47% of respondents reported an increase in productivity at their companies, while only 13% reported a drop. But 60% said their employees are working more hours and 63% said their employees are spending more time in meetings. Four out of 10 reported more mental health problems among workers.

Part of it is surely the work itself—we're exhausted from back-to-back video calls, without even a commute as buffer between work and life. We're scared of losing our livelihoods. And then there's the health crisis: 78% of participants in an American Psychological Association survey of 3,409 adults said the pandemic was a significant source of stress, so it's no surprise that's bleeding into our work lives.

Some employers say they're planning to discount mental health services next year. And some employees say it's time for a change. A November survey by public rela-



865,000

Some 865,000 women left the labor force in September alone, about four times as many as the number of men who dropped out.

8x

Americans have spent eight times as many working days at home because of the pandemic.

40%

A survey of companies found that 40% reported their employees have been suffering from more mental health problems.

families have landed on: Mom quits her job. Some 865,000 women dropped out of the labor force in September, the start of the academic year, according to an analysis of Bureau of Labor Statistics data by the National Women's Law Center. That's compared with 216,000 men.

Despite nearly half a million women rejoining the workforce in October, women held 5.5 million fewer jobs that month than they did in February, according to an analysis by the Institute for Women's Policy Research. The unemployment rate is especially high for Black and Hispanic women.

Employers seem reluctant to provide much substantive support for working parents. Many report allowing things like flexible hours but are far less generous with benefits like paid leave. In a U.S. Chamber of Commerce Foundation survey, 4% of 790 organizations surveyed said they'd offered financial assistance for child care, and most were unwilling or equivocal about increasing their company's investment in child care.

#### Remote work forever

For years, it existed as an afterthought, or even a secret in many corporate jobs. Remote work was the hushed arrangement for a new parent returning from leave, the one-off negotiation for a longtime colleague moving to California.

Now, it's gone mainstream. The number of working days Americans spend at home has increased eightfold with the pandemic, according to an analysis by Nicholas Bloom, an economist at Stanford University's Graduate School of Business. Nearly 34% of Americans were working from home in November, according to a Stanford survey of 2,500 people.

Once the threat of the coronavirus has subsided, we may not be going back—at least not to the way things were. The average employee wants to work from home twice a week after the pandemic, according to a continuing Stanford survey. Workers and employers have invested in the new way of working, from buying furniture to learning to use videoconferencing software.

The stigma once associated with remote work is fading. We all see it's not just watching Netflix while occasionally shooting off an email. Forced to try something new, we've realized some change isn't so bad.

## Working in 2020 Meant Often Painful Change

tions firm Weber Shandwick finds that 66% of people polled were planning to make a shift like switching jobs, moving out of town or cutting their hours to part-time as the pandemic wears on.

#### Realizing diversity needs

The Black Lives Matter movement certainly got corporate executives talking more about race and inequality. The share of organizations where leaders and employees say diversity and inclusion is a value or priority rose to 72% in 2020 from 65% in 2019, according to a continuing PricewaterhouseCoopers survey. At the same time, a third of respondents agree that diversity is a bar-

rier to progression at their organizations, up from 28% in 2019.

Companies have taken steps like designating Juneteenth a paid holiday in 2021 (10% of those surveyed by XpertHR, an online provider of compliance guidance) and creating formal mentoring programs for underrepresented employee groups (42% of those surveyed by human resources organization WorldatWork.) But this statistic really stood out to me: More than half of people surveyed by Weber Shandwick reported that their company "says all the right things about diversity, equity and inclusion, but does not do what they say."

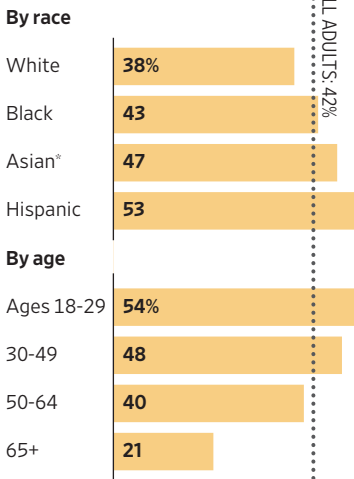
Employees seem hungry for real action. Three-quarters of those participating in the Weber Shandwick survey said they want their employer to commit to fight racism, discrimination and unconscious bias, and 82% want a commitment to fair pay.

#### Job news, most of it bad

The economic crisis continues affecting our paychecks. Almost a third of the companies surveyed by the Conference Board had deferred pay increases or bonuses to workers, and another 8% planned to do so before the end of the year. A similar number of firms had conducted permanent layoffs. A quarter had furloughed workers and a fifth had frozen all hiring.

The unemployment rate jumped more in three months—from 3.8% in February to 13% in May—than it did in two years of the last recession, according to an analysis of government data by Pew Research

Percentage of survey respondents saying they or someone in their household has been laid off, lost a job or had to take a cut in pay because of Covid.



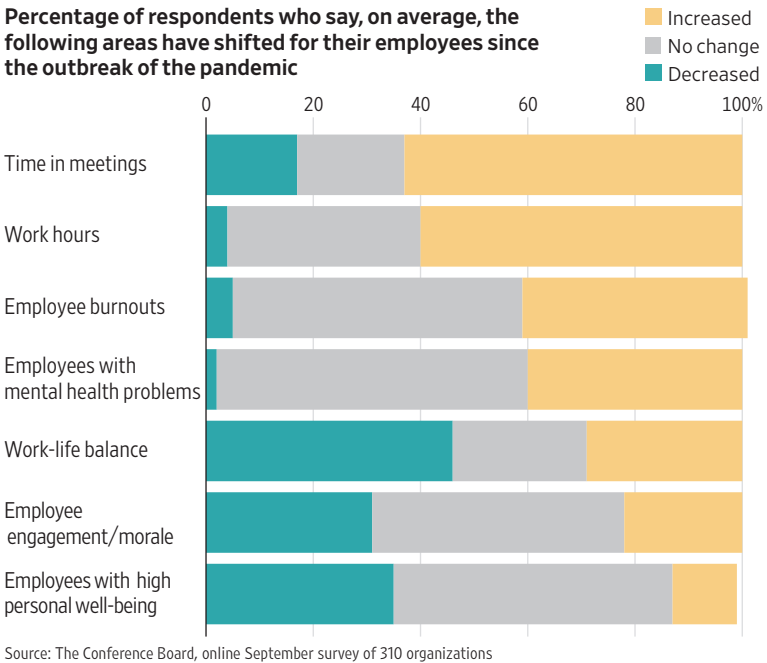
\*Asian adults were interviewed in English only  
Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race.  
Source: Pew Research survey of U.S. adults conducted Aug. 3-16, 2020

Center. It stands at 6.7%.

Another survey from Pew, of 13,200 Americans in August, found that one in four had either been laid off or had someone in their household lose their job. And yet the Conference Board survey suggests that finding workers is tough, especially in industries like construction and transportation.

#### Trials for working parents

Remote school and day-care closures have left parents with a heavy burden. The solution many



Source: The Conference Board, online September survey of 310 organizations

## ASK PERSONAL JOURNAL

### PROTECTING YOUR FSA

I have a dependent-care flexible spending account, but since most after-school programs and summer camps didn't take place this year, I have a big balance left in my account for 2020. What are my options?

#### The bottom line

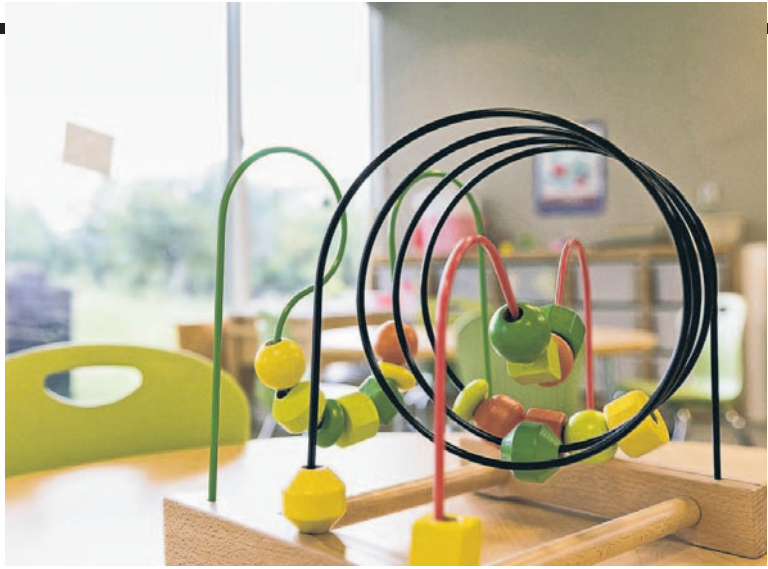
Flexible spending accounts (FSAs) put aside pretax dollars for certain expenses—in this case qualified child-care and elder-care costs. These accounts are use-it-or-lose-it, so unless you find expenses to claim, you'll forfeit the balance to your employer. However, there may be some relief in sight regarding your 2020 dollars: Employers can choose to offer a grace period, allowing employees to claim expenses incurred in early 2021. And the House and Senate Covid-19 stimulus bills currently stalled in Congress have provisions allowing workers to roll all or most of their 2020 balances into 2021.

#### The details

The Internal Revenue Service recognized in May that the pandemic would change expectations for child-care and elder-care costs, and the agency published guidance allowing employers to let workers make mid-year changes to their FSA elections. Some workers stopped or reduced their FSA contributions, but they may still have remaining balances. And some people didn't have that opportunity or simply missed it.

Your best option is to find expenses to claim, tax attorneys say. There are strict limits on what expenses the IRS considers eligible, and employers and plan administrators don't have flexibility to alter the rules, said Michael Chittenden, a tax attorney with Covington & Burling LLP in Washington. Most important, you must have incurred the expenses in order to allow you time to work. And if you're married, your spouse must be working as well or otherwise unable to care for your dependents while you work.

A few expenses you might consider, said Mr. Chittenden: If you paid a person or bus service to bring your child from school to their after-school program before school closures, the expense is eligible. So are costs incurred if you brought an elderly parent home to live with you



because of the pandemic and paid an aide to care for them while you work.

During the pandemic, many people relied on family members to provide care. You can claim those payments if a relative watched your child and was not one of your dependents (such as an older child). Also, the relative should report the payments they received from you as income on their taxes, Mr. Chittenden said.

If you can't find enough reimbursable expenses, there's still hope. Employers have the option of extending the reimbursable period to

March 15, 2021. While no one knows what the next few months hold in terms of the virus's impact, having more time to spend FSA balances might help, said Andy Anderson, a partner at Morgan Lewis & Bockius LLP in Chicago. "If we're all getting vaccines in the next half year and people stop working at home, then you have a chance of using it," he said. "It's not the be-all and end-all, but it is a tool employers can adopt."

If your employer hasn't announced its intentions about this grace period by now, be sure to

ask. These plan changes can mean extra administrative costs for employers and the loss of money that would otherwise be forfeited to them, so they may be more likely to act if employees advocate for the grace period.

The ideal relief would be for the Internal Revenue Service to extend the grace period through all of 2021, said Mr. Anderson. That option is included in House Democrats' Heroes Act. Senate Republicans' proposed bill, the Heals Act, allows balances up to \$2,750 to be rolled over into 2021. (Account maximums are \$5,000 for 2020.) It's unclear if any of the compromise legislation currently under discussion will include FSA relief. The Treasury Department, which oversees the IRS, could also act on its own, according to Mr. Anderson.

"My hope is that the IRS will recognize the unprecedented nature of Covid-19 and the hand the government has had in preventing people from spending this money. If your governor closed day camp last summer, you didn't have a choice to send your child to camp," Mr. Anderson said. Ultimately, "it's a political rather than legal question as to whether the IRS gives employers and employees that [rollover] flexibility."



PERSONAL JOURNAL.

# His Books Defined Cold War Spy Thriller

By BRENDA CRONIN

John le Carré, the British spy-turned-writer whose novels brought the Cold War to life for readers around the world, died Saturday, in a hospital in Cornwall, England. He was 89 years old and had pneumonia, according to a statement from his family.

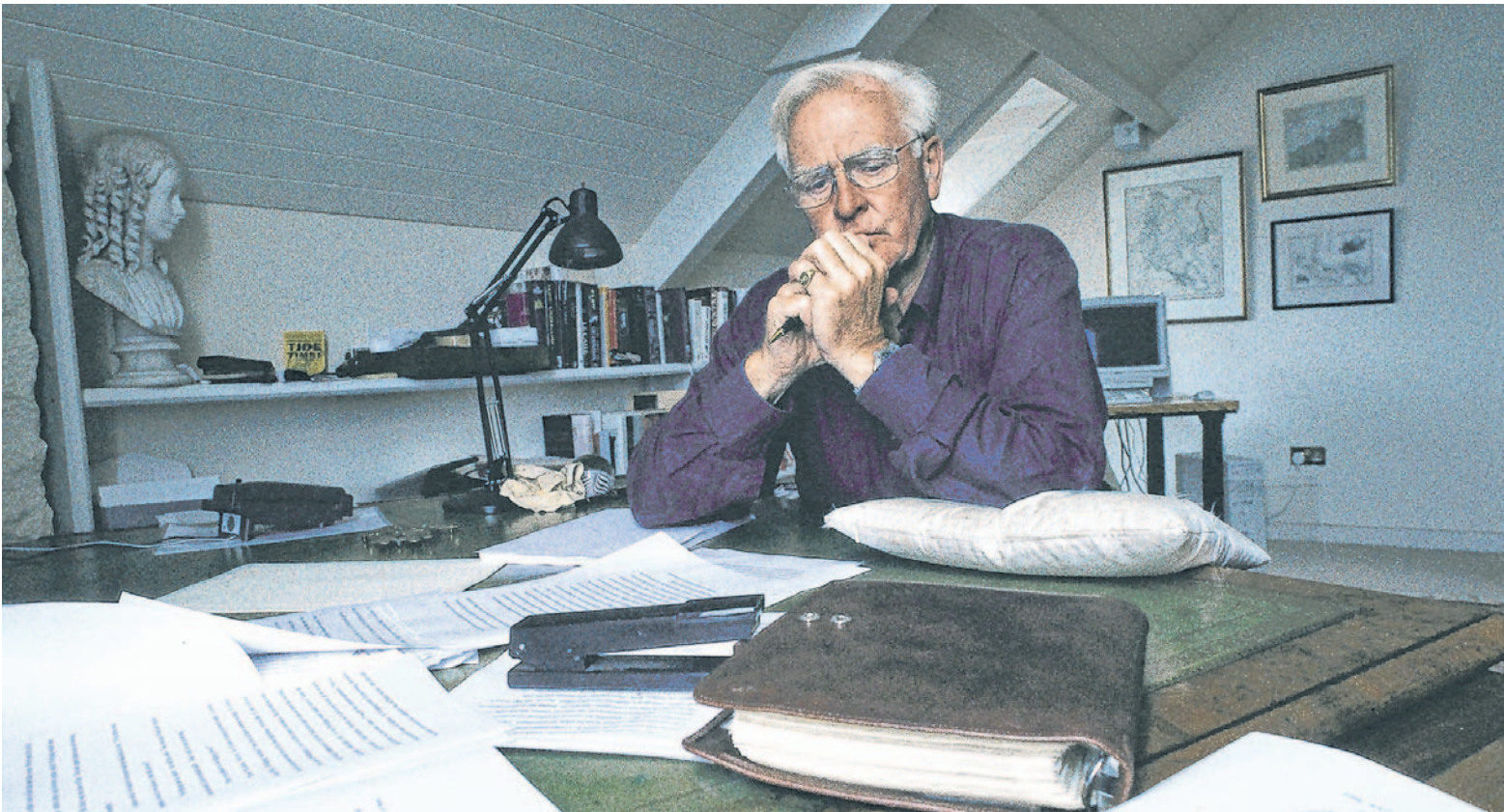
His bestselling books, including “The Spy Who Came In from the Cold” portrayed shadowy worlds of double agents and Cold War tradecraft, brought to life by

**OBITUARY**  
**JOHN**  
**LE CARRÉ**  
**1931-2020**

Mr. le Carré’s sharply etched characters and his fluid, empathetic prose. A number were adapted for the screen. The British Broadcasting Corp. series based on his novels, “Tinker Tailor Soldier Spy” and “Smiley’s People,” starring Alec Guinness in the title role of the dour spymaster George Smiley, left an indelible image with viewers of the grim and risky business of espionage.

John le Carré was the pen name of David John Moore Cornwell, a veteran of the British intelligence services, whose spy work required that he publish under a pseudonym. Born in Poole, Dorset, Mr. le Carré attributed some of his gifts in spycraft to his unsettled family life as a boy. His mother left when he was 5 years old and Mr. le Carré, in his 2016 memoir, described his father as a con man and “occasional jailbird.” In an effort to find his equilibrium through school, he later wrote in a memoir, he adopted the mannerisms and habits of friends from more stable homes.

“From an early age, I was pretending to be who I wasn’t,” Mr. le Carré told The Wall Street Journal last year. “I was pretending to be a normal kid like all the other kids in the boarding school, pretending



to go back to a settled household and pretending to have a mother.”

Mr. le Carré’s observant eye and facility with languages destined him for intelligence work. After studying languages at the University of Bern in Switzerland, he joined the Intelligence Corps of the British Army, according to a statement from his publisher, Viking Penguin, part of Penguin Random House.

In the interview last year with the Journal, Mr. le Carré said, spying gives you “an extraordinary insight into people. I don’t think we ever know very much about one another, but it gives you the habit of considering the possibilities of people. Is she this or that? And if

you’re acquisitive as an intelligence officer, how would I use her? You think of all these wayward possibilities. It’s a kind of inside-out thinking that never leaves you.”

Mr. le Carré turned to fiction while at MI5, writing his first novel, “Call for the Dead,” in 1961. His childhood and professional life gave him a wealth of material. He had something of a mentor and inspiration in the spymaster, Lord Clannmorris, who also was a novelist. According to Mr. le Carré’s publisher, the author said he based one of his most famous characters—George Smiley—in part on Lord Clannmorris.

In 1963, Mr. le Carré published

what would be his breakthrough novel, “The Spy Who Came in from the Cold.” The book allowed him to focus full time on fiction and launched his nearly six decades as a perennial on bestseller lists.

According to Viking Penguin, Mr. le Carré wrote in a postscript to the 50th anniversary edition of his career-making work: “I wrote ‘The Spy who Came in from the Cold’ at the age of thirty under intense, unshared, personal stress, and in extreme privacy. From the day my novel was published, I realised that now and for ever more I was to be branded as the spy turned writer, rather than as a writer who, like scores of his kind, had done a stint in the secret

world, and written about it. The novel’s merit, then—or its offence, depending on where you stood—was not that it was authentic, but that it was credible.”

Mr. le Carré continued to take on new subjects in his plots long after the Cold War concluded. He published “Agent Running in the Field” last year and in 2016 published a memoir, “The Pigeon Tunnel.” Other than the BBC miniseries his novels were transformed into big-screen adaptations starring Sean Connery in “The Russia House,” Ralph Fiennes and Rachel Weisz in “The Constant Gardener” and Gary Oldman as George Smiley in a movie of “Tinker Tailor Soldier Spy.”

## Virtual College Career Fairs Are Tricky, Fruitful

By KATHRYN DILL

Jeanavic Malaiba had her routine for campus career fairs down cold. As she approached each recruiter, she would offer a firm handshake and pull a copy of her resume from an embossed leather portfolio she had saved up for, in order to appear more professional at interviews.

Then she’d take a deep breath and launch into a tight pitch about the engineering classes she was taking at California State University, Long Beach and her hopes to develop a career in the aerospace industry.

But this fall, Ms. Malaiba began attending career fairs virtually and tweaked her strategy: She’d break the ice with recruiters joking about how both she and they were struggling with the event’s software, then quickly provide her full contact information in case they were disconnected.

Along with college classes, commencements and club meetings, the pandemic has pushed campus career fairs online this year. Instead of walking table to table, charming recruiters and elbowing classmates out of the way, job- and internship-hunting college students now log into virtual events where they may struggle to make an impression.

A poll of more than 500 schools conducted earlier this fall by the National Association of Colleges



The Fall Career Expo at Marshall University in Huntington, W.Va.—back when it was in person, in October 2017.

and Employers found that 85% had not conducted a virtual career fair in previous years but 80% planned one for this autumn. The same poll surveyed attendance in fairs that occurred earlier this season and found that 72% of the schools said

fewer employers had participated compared with in-person events, while 81% of the schools reported fewer students as well.

Many students say they can wait hours to exchange chat messages with a recruiter, after dressing in business conservative on the chance the interaction might move to a video conference. At a virtual career fair put on by her university, Ms. Malaiba says digital queues for some recruiters stretched on for four or five hours,

longer than the fair itself. Students hoping to connect with specific employers could only wait it out. “It was kind of confusing,” said Ms. Malaiba, who is 21. “In years past, you’d stand in line, you could see where you were in line, if you were next. We were kind of left in the dark, virtually.” Ms. Malaiba ultimately only spoke with one company. A representative of her school confirmed the career fair but declined to elaborate.

Other students say the events are less intimidating and more efficient than those held in-person. Ricardo Yolas, a senior at Stony Brook University on New York’s Long Island, said the virtual recruiter meetings he had at fairs this fall offered an opportunity similar to a job interview, with lower stakes. “It wasn’t official, so it took away that nervousness,” he said.

Recruiters are finding virtual

fairs a challenge. Beth Hendler-Grunt, president of Next Great Step, a Livingston, N.J., firm that coaches college students and graduates on their careers, said these recruiters are relying almost solely on a student’s résumé to determine whether they want to engage. Reaching out and introducing oneself in advance to recruiters who will be attending virtual events can boost a student’s chances of a conversation the day of the fair. “The more you can insert yourself into the interaction ahead of time, that’s a great thing,” said Ms. Hendler-Grunt.

Schools have tried various approaches to make the virtual career fairs work. This fall, more than 700 schools turned to college career site Handshake to arrange over 2,300 fairs. Nearly 18,000 employers and more than 260,000 students attended events via the platform, which lets them request

in advance 10-minute appointments with recruiters at the fair.

Looking ahead, many in the industry expect the post-pandemic world to include more virtual recruiting events, so the current crop of online fairs lets younger students practice key skills they’re just starting to hone. After a professor told Howard University freshman Corine Houngrinou that it was important to get the attention of recruiters at a virtual career fair held in September, she pushed herself to pose a question before a screen stacked with faces in Zoom squares.

“I realized the biggest things [were] not being afraid to unmute myself and ask questions, and making sure that I look professional,” the 18-year-old computer information-systems major said. Still, “it was pretty nerve-wracking.” In November Ms. Houngrinou learned that, through a virtual fair, she had secured a summer internship with software company HubSpot.

Despite the glitches, the virtual events are leading to real salaries for many students. The format suited students like Anthony Bagamian, a 21-year-old senior and computer-science major at Rice University in Houston, just fine.

“You didn’t have to walk around and be sweaty or worry about how you look as much,” said Mr. Bagamian, who nevertheless wore the top half of his interview suit to Rice’s virtual career fair in September, where he met a recruiter from CapitalOne. He’ll start a business-analyst position with the company in August of next year.

As for Ms. Malaiba, she fared better than before at a two-day event held virtually in October by the Society of Asian Scientists and Engineers. There, she met a recruiter from Raytheon, which eventually offered her a mechanical engineering job she’ll start after she graduates later this month.



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# ARTS IN REVIEW



ART REVIEW

## A Black Community Too Long Forgotten

By RICHARD B. WOODWARD

*New York*

Visitors to “Working Together: The Photographers of the Kamoinge Workshop” at the Whitney Museum of American Art are likely to have two immediate reactions. The first will be to wonder why this group of African-American photographers is not better known. What took so long for major museums to take note of their contributions?

A second reaction should then override the first. Walking through the galleries on the eighth floor, which feature some 140 black-and-white photographs and relevant ephemera by 14 artists, people may begin to forget that most of the names are unfamiliar and instead bask in the sheer luminosity of the prints. This was a group of men (and one woman) that cared deeply about exploring the nuances and depths possible with monochrome film and paper. (If you can’t see the show in person, the Whitney has a digital feature on its website where visitors can see nearly all of the photos in the show and learn more about each artist.)

“Kamoinge” is a word borrowed from the Kikuyu language of Kenya and translates as “a group of people acting and working together.” The photographer and teacher Louis Draper (1935-2002) chose the name in 1963 when he founded the collective in New York. He had studied with the leading photojournalist of

the day, W. Eugene Smith, and wanted to portray Black communities with the same emotional scope found in the work of Smith, Gordon Parks and Roy DeCarava brought to their subjects.

Sarah L. Eckhardt, associate curator of modern and contemporary art at the Virginia Museum of Fine Arts in Richmond, organized the show there earlier this year and also edited the substantial catalog. (The VMFA selection has been lightly trimmed for its trip to the Whitney.) She concentrates on Kamoinge’s first 20 years, a period that encompasses the Civil Rights and Black Arts movements.

One common theme uniting the group was a determination to counter media depictions of African-American life as consumed by drugs, crime and violence. An instructive vitrine in the first room describes the frustrations of DeCarava, who tried in vain to prevent his editors at Newsweek from captioning his 1964 cover photograph of three Black men in Harlem with the words: “Hatred in the Streets.”

Other vitrines—containing self-published annuals and portfolios, group photographs of reunions, announcements of exhibitions and workshops—indicate the necessity for members to go outside the normal artistic channels to make names for themselves. Their camaraderie in the face of indifference is inspiring.

A number of celebrities are on the walls: Malcolm X, James Baldwin, Amiri Baraka, Mahalia Jackson, Miles Davis, John Coltrane. The highlight in this regard may



be Draper’s 1971 portrait of the Mississippi activist Fannie Lou Hamer, her wide face glowing like a silvery moon in the frame. Elsewhere, though, in keeping with the ethos of street documentary, most of the people are unnamed.

There are so many marvelous photographs here evincing a tender regard for human transience and struggle that it seems unfair to single out only a few. Nonetheless, Herbert Randall’s snapshot of two men scrambling through the door of a truck on the Lower East Side of New York (c. 1970s) is perfect. Fraught with mystery, it captures an unpredictable action as only the camera can. Shawn Walker’s “Harlem, 117th Street” (c. 1960) is a dual portrait: of a shredded produce bas-



Anthony Barboza’s ‘Kamoinge Members’ (1973), left; Louis Draper’s ‘Untitled (Santos)’ (1968), above; Draper’s ‘Fannie Lou Hamer, Mississippi’ (c. 1960), top left

ket that serves as a basketball hoop, and of a boy who watches from behind a barred window in the shadows.

W. Eugene Smith’s sumptuous printing—described by member Ray Francis as “black blacks, black on black”—dominated the group’s style through Draper’s teaching. Adger Cowans’s overhead view of a Malcolm X rally (c. 1960-65) exemplifies how the group pushed black-and-white toward pure abstraction.

The Kamoinge photographers were not totally ignored by New York. They exhibited at the Studio Museum in 1972 and at the International Center for Photography in 1975. Anthony Barboza had steady success. This year Draper and Ming Smith have had shows in New York galleries; Herb Robinson, Beuford Smith, Mr. Cowans and Mr. Walker are likewise deserving.

Lack of recognition in the 1960s and ’70s can’t entirely be attributed to racism, as one catalog essay suggests. The New York art world at that time was embracing the sarcasm of Pop art and the cool, repetitive practices of Minimalism. Earnest humanism was out of step with the political disengagement of Lee Friedlander and Diane Arbus. Fine printing wasn’t a concern to Conceptual serialists like Edward Ruscha. Younger photographers were then documenting their own performances, going back to large-format cameras, dipping their toes into color.

Every picture here is black-and-white and none are shocking. That the art world largely excluded the Kamoinge artists—and is at last redressing the neglect—does not negate the fact that, unlike the jazz musicians in their pictures, they were more stylistically conventional than avant-garde.

Art historical questions aside, these were—and are—serious artists who have earned their renown, however belated. It will be a shame if Covid-19 shortens the show’s stay at the Whitney, as it did at the VMFA. In which case, try to catch it at the J. Paul Getty Museum next summer, or the Cincinnati Art Museum in 2022.

**Working Together: The Photographers of the Kamoinge Workshop**  
Whitney Museum of American Art, through March 28, 2021

*Mr. Woodward is an arts critic in New York.*

### MUSIC REVIEW

## Concerts For a Covid Christmas

By BARBARA JEPSON

Although many Christmas concerts have been canceled this year due to the resurgence of Covid-19, filmed performances here and abroad offer the opportunity to watch an array of impressive, holiday-themed music-making online. Many of the best programs come from England, with its centuries-old tradition of fine choral singing nurtured in its cathedrals and colleges.

Among the more notable, on Dec. 15, is the first global broadcast of the annual Christmas concert from historic Westminster Abbey by its eponymous choir. And beginning Dec. 25, the Gabrieli Consort & Players led by Paul McCreesh will perform Bach’s Christmas Oratorio, one cantata per program. Both events are part of the multinational “Live From London—Christmas” series presented by the VOCES8 Foundation, a music-education charity whose artist-teachers include the choral ensemble VOCES8. (Purchased events air at 2 p.m. EST and remain available for viewing on the VOCES8 website through Jan. 15, 2021.)

Not surprisingly, VOCES8 (pronounced Vah-chez 8) figured prominently in the two opening programs, filmed by candlelight at its Centre in the lovely St. Anne and St. Agnes Church. The first, on Dec. 1, featured Baroque violinist



Westminster Abbey Choir singing ‘The Sussex Carol’

original music in “He Is,” rendered with stylish aplomb and sincerity.

Although it was interesting to meet some of the choir members via video clips between numbers, other prerecorded statements proved intrusive. That was especially true of the one that followed the Aeolians’ glowing performance of the bluesy gospel song “Mary Had a Baby,” with Tiffany Richter as the rousing guest soloist.

Also on the Dec. 5 program, VOCES8 presented six world premieres, each distinguished by vivid texts and compositional polish. In “Solstice” by Taylor Scott Davis, dreamy vocal lines overlap and intensify to stunning effect midway through the piece. VOCES8 conveyed the sense of longing that erupts in the text that follows—“oh, that we had a ladder”—and sang everything with pinpoint accuracy. Opera singer Roderick Williams lent his burnished, lyric baritone to works by Paul Smith and Ken Burton. His own piece, “Now Winter Nights,” wrapped words by Renaissance poet Thomas Campion in silken harmonies.

While many American orchestras

Rachel Podger as guest artist in an intelligently chosen program that spanned Medieval chant to recent works. She was a sensitive accompanist when called for, and displayed nimble fingers in her virtuosic solos, as in the rapid fillips of 64th notes that periodically enliven Heinrich von Biber’s “Passacaglia ‘Guardian Angel.’”

Some mixed choral groups strive for the purer, “whiter” sound of boy sopranos; the men and women of VOCES8 possess a fuller-bodied but well-balanced tonal palette. They are invariably expressive and versatile, qualities that were evident in refined renderings of the German Advent carol “Mary Walks Amid the Thorns,” Benjamin Britten’s “A Hymn to the Virgin” and Owain Park’s inventive “Antiphon for the Angels,” which was written in 2018 for VOCES8 and Ms. Podger. Opening and closing with hymn-like

prayer, the work’s frequent character shifts are underlined by tumbling or soaring riffs for the violin.

The second concert, on Dec. 5, included the Aeolians of Oakwood University—an African-American choral group whose segment was filmed in Alabama—in carols, spirituals and more. The sight of 42 “distanced” singers, wearing masks in compliance with government regulations, added special poignancy to “Silent Night,” the first work heard.

Despite these hindrances, conductor Jason Max Ferdinand and his choral forces, accompanied by guest pianists and members of the Alabama Symphony, excelled in bringing out musical nuances, changes in tonal color and textual content. Standouts included “In the Bleak Midwinter” and Carlos Oliver Simon’s finger-snapping conflation of two spirituals with

are offering holiday pops concerts online, more intriguing fare awaits from Grammy Award-winning Apollo’s Fire, an early music ensemble in Cleveland. Beginning Dec. 18, ticket purchasers can watch a video of its distinctive 2018 concert “Christmas on Sugarloaf Mountain—An Irish-Appalachian Celebration,” available for 30 days. Led by conductor-harpsichordist Jeannette Sorrell, and including the Apollo Singers, the program reflects the heritage of Irish and Scottish immigrants. Carols, reels, wassails, barn dances and shape-note hymns are accompanied by fiddles, bagpipes, dulcimer and more. A short excerpt on YouTube provides a sense of the fun.

Due to the pandemic, performances of the normally ubiquitous Handel’s “Messiah” will be curtailed in many cities. From Dec. 20 to the end of the holidays, the Handel & Haydn Society in Boston, which gave the complete work’s U.S. premiere in 1818, will stream Part I of the “Messiah” and the Hallelujah Chorus on its Facebook and YouTube channels. On Dec. 21, Kent Tritle will lead the Oratorio Society of New York in a similarly truncated, free version of the “Messiah,” filmed in a barn and available through Jan. 10, 2021.

For a complete online “Messiah,” we must look again to London, where the Academy of Ancient Music will oblige on Dec. 19 with its first webcast of this annual event, available to purchasers for 48 hours as part of the “Live From the Barbican” series. This is cause for rejoicing—with a chorus of hallelujahs.

*Ms. Jepson reviews classical albums and concerts for the Journal.*



SPORTS

Mahomes, Chiefs Keep On Rolling

By Andrew Beaton

Sunday began disastrously for Kansas City Chiefs quarterback Patrick Mahomes. The Miami Dolphins intercepted him. They sacked him for 30 yards on one play. Then they intercepted him again.

But the problem for the Dolphins was that football games don't last one quarter. They have four quarters. And since Mahomes entered the NFL, nobody has really stopped him for four quarters.

Mahomes finished with 393 passing yards and two touchdowns. There was also a Tyreek Hill run for a touchdown, a Mecole Hardman punt return for a score and a safety by the defense. By the time the game was over, the Chiefs had turned a 10-0 deficit into a 30-10 lead that ended in a 33-27 win. Mahomes finished with more interceptions (three), than he had previously thrown all season (two), and they still won with ease.

It was a remarkable display of what has defined the Kansas City offense ever since Mahomes took over. Opponents can force incompletions, sack him and even intercept him. They can't contain him for an entire game.

The swift turnaround was oddly familiar to anyone who remembered Mahomes's last game in Miami. That was in a game called the Super Bowl—when Mahomes also rallied from 10 points down to win.

Mahomes has started 49 games in the NFL, including the playoffs. The Chiefs have been held under 20 points in just one of those—and in that game Mahomes still threw for 300 yards.

Against the Dolphins, in the second and third quarters alone, the Chiefs put up 30 points and raced out to a huge lead until rookie quarterback Tua Tagovailoa took Miami back within six. There was a brief moment when it looked entirely plausible the Dolphins had managed to stymie Mahomes just enough.

Then Mahomes marched the Kansas City offense down field once more to ice the game.



Chiefs quarterback Patrick Mahomes



Above, Rebecca Vasquez, right, and Brian Zweifel in Verona, Wis. Hunters like Jonathon Nguyen, below, help control Texas's population of feral hogs.

Hunting Booms During Pandemic

License sales, in long decline, jumped this year as newcomers ventured into the wild

By Ben Kesling and Rachel Bachman

On Thanksgiving morning, Rebecca Vasquez told her boyfriend to sleep in. She wanted to try to bag her first deer by herself.

Soon after she hiked to a perfect spot, an 8-point whitetail buck wandered within range and she dropped him clean with her .270 Browning rifle. Her boyfriend heard the shot and came running down to the field.

"He said it was the biggest buck he'd ever seen on the property," said the 27-year-old, who's new to hunting this year. When he told her he was proud—and jealous—she was officially hooked on hunting.

The coronavirus pandemic has shut down Manhattan office buildings, small-town diners and many other aspects of normal life, but it's been a boon to hunting. It's an activity seemingly designed for a pandemic: outdoors, thriving in small groups and featuring built-in social distancing.

Following decades of decline brought on by demographic and lifestyle changes, hunting rebounded this year thanks to seasoned hunters spending more time in the woods, rekindled interest among lapsed hunters and a wave of first-timers like Vasquez. The pandemic has given more people the time to try the sport, the urge to escape long days at home and the opportunity to explore the outdoors while many vacation options are closed off.

Vasquez, a forester for the State of Wisconsin, had long wanted to take up hunting but never found the time to learn to shoot or sit in the woods for days. Her boyfriend no longer had his yearly hunting companions but he wanted to get back out. Lockdown meant there wasn't anybody else to go with so Vasquez got a new rifle as an early Christmas present and stepped in.

"All the ducks were in a row this



CLAY ROBERTS/TEXAS PARKS AND WILDLIFE DEPARTMENT

year," she said.

Hunting licence sales are up more than 12% nationwide from last year, according to the National Shooting Sports Foundation, a firearms trade group. If the trend continues through the end of the year, those license sales translate to 1 million more hunters this year than last, according to Jim Curcuruto, director of research with the foundation.

Fishing has also seen greater interest, with 3 million more licenses sold nationwide this year than last, a 14% increase, said Stephanie Vatalaro, spokeswoman for the Recreational Boating and Fishing Foundation.

Hunting is tougher for newcomers to try because it requires pricier equipment and, often, completion of a hunter-education course to buy a license. It also typically requires a mentor to guide someone on a first hunt. The pandemic has helped toppling some of those barriers.

Jonathon Nguyen of Victoria, Texas, grew up a city kid who became interested as an adult in firearms for personal safety. Friends had talked about hunting, so he signed up for a mentored hunt workshop with the Texas Parks and

Wildlife Department. The program teaches the basics to adults who didn't grow up in the sport, and this year brought more than twice as many applicants as there were slots for the workshops, which include a guided hunt.

After a day of safety instruction and equipment-testing at a rifle range, Nguyen and the rest of his group headed out Wednesday morning to a state park outside Austin.

"Whenever the sun comes out and you put your phone down and you look around, you get to see how everything works and how the birds talk to each other," said Nguyen, a 26-year-old electrician. His awe gave way to adrenaline when a plump doe appeared and Nguyen's mentor gave the go-ahead.

"I was shaking a little bit, so I calmed down and took the shot," he said. He dropped the deer with one shot. Nguyen emerged from the morning with 30 pounds of meat that he and his wife plan to grind it into patties and sausage—and a new love of hunting.

Backcountry Hunters and Anglers, a nonprofit advocacy group, recently hosted a Zoom event on

how to field-dress a rabbit that brought 400 viewers, far more than expected, said Land Tawney, the group's CEO. In Pennsylvania, Travis Lau of the state's Game Commission said he's even gotten inquiries on how to dress and cook a groundhog.

The National Rifle Association, in recent years best known for its political fights about concealed handguns and assault-style rifles, has seen an uptick in membership because of the renewed interest in hunting, according to Erica Tergeson, director of hunting policy for the group. The resurgence is giving the NRA a chance to broaden its base.

Shooting advocacy groups lobbied hard last spring for government officials to deem gun stores essential businesses in order to avoid Covid-related shutdowns, which helped keep sales up.

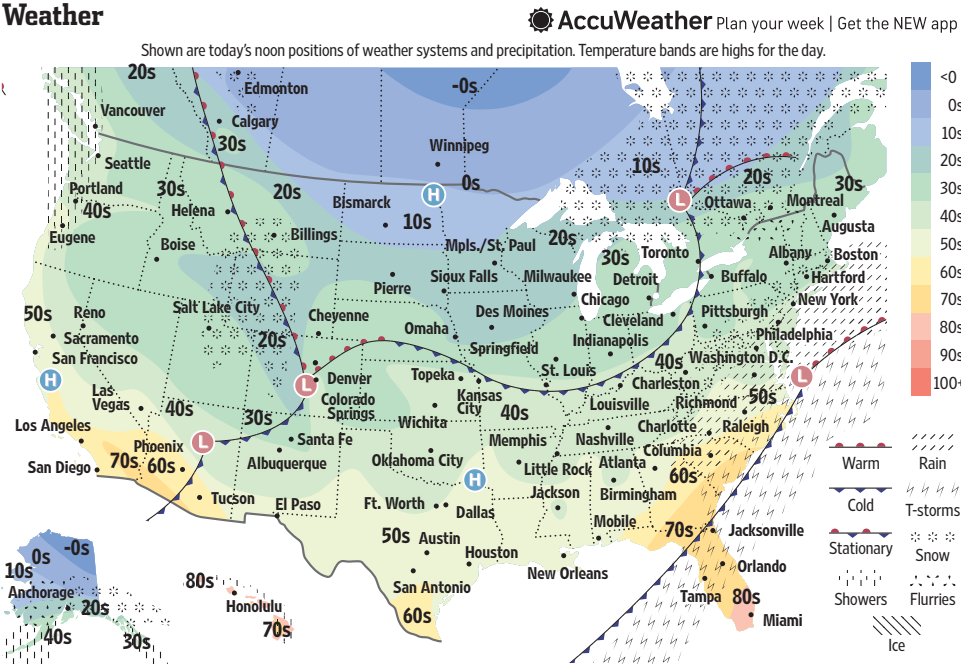
Hunters play a critical role in supporting wildlife and conservation, something outsiders might not realize. California generated \$26.5 million last year from the sale of hunting licenses, various tags and other required validations, a sum that goes to support things like wildlife-habitat improvement and land acquisition.

Greg Kazmierski, owner of Buck Rub Outfitters in Pewaukee, Wis., knows all about the industry's trends after 42 years dealing with bows and arrows, and hopes this year will signal a shift in fortunes.

At his shop, he's low on broadheads and some other supplies that have become hard to get. He's also low on used bows, which new hunters have been snapping up. In between fittings of compound bows for two brand-new archers, Kazmierski talked about welcoming the business, and the new interest of young people.

"We've been wondering where these people were for the past decade," he said with a gruff laugh.

Weather



U.S. Forecasts

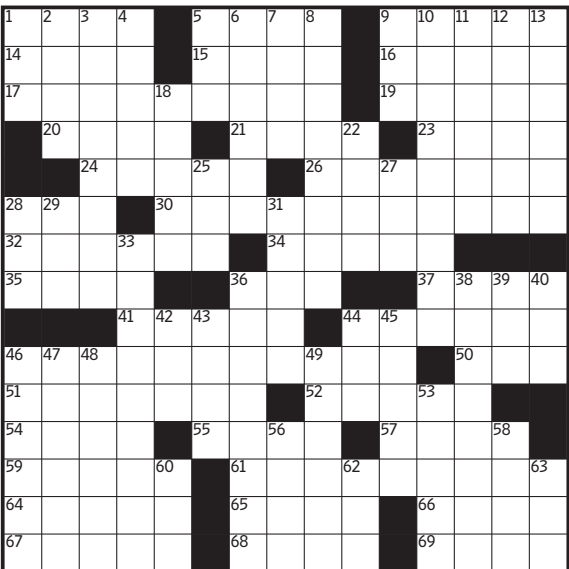
s...sunny; p...partly cloudy; c...cloudy; sh...showers; t...tstorms; r...rain; sf...snow flurries; sn...snow; l...ice

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Anchorage	29	20	sn	23	20	sn
Atlanta	56	36	r	53	40	pc
Austin	56	37	s	68	37	s
Baltimore	44	29	r	43	27	s
Boise	35	20	pc	36	28	c
Boston	39	29	c	35	18	s
Burlington	36	22	pc	24	6	pc
Charlotte	58	32	r	50	33	pc
Chicago	31	22	pc	33	28	c
Cleveland	36	25	pc	33	27	c
Dallas	50	35	s	52	33	pc
Denver	35	18	c	33	19	pc
Detroit	36	20	pc	31	25	pc
Honolulu	84	74	pc	84	72	r
Houston	52	43	pc	59	41	c
Indianapolis	35	24	s	34	26	c
Kansas City	40	25	pc	37	19	c
Las Vegas	57	37	s	55	34	s
Little Rock	47	27	s	42	32	pc
Los Angeles	65	47	pc	68	45	s
Miami	83	68	pc	82	69	pc
Milwaukee	29	18	pc	32	28	c
Minneapolis	22	13	c	27	19	c
Nashville	46	28	pc	48	40	c
New Orleans	56	45	pc	60	51	c
New York City	43	31	sn	38	25	s
Oklahoma City	42	29	pc	35	23	sn

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Omaha	29	17	pc	30	13	c
Orlando	77	61	t	76	60	c
Philadelphia	43	31	r	40	26	s
Phoenix	63	40	s	62	38	s
Pittsburgh	38	25	sn	33	26	pc
Portland, Maine	36	25	sf	30	10	s
Portland, Ore.	47	41	c	46	42	r
Sacramento	56	35	pc	56	36	c
St. Louis	40	26	s	38	27	pc
Salt Lake City	33	22	sn	32	21	pc
San Francisco	57	45	pc	57	46	c
Santa Fe	39	18	s	35	13	s
Seattle	49	42	c	48	45	r
Sioux Falls	24	17	c	29	17	sn
Wash., D.C.	45	31	r	42	30	s

City	Today			Tomorrow		
	Hi	Lo	W	Hi	Lo	W
Frankfurt	45	40	c	48	40	sh
Geneva	46	40	pc	49	40	r
Havana	85	64	s	84	62	c
Hong Kong	68	56	c	65	46	pc
Istanbul	57	50	r	53	47	r
Jakarta	88	76	t	88	76	pc
Jerusalem	64	44	t	54	45	pc
Johannesburg	78	57	t	75	56	t
London	53	46	pc	51	46	pc
Madrid	57	43	c	52	39	pc
Manila	88	77	pc	86	76	t
Melbourne	93	72	s	87	66	pc
Mexico City	74	49	s	75	50	pc
Milan	43	36	pc	42	38	pc
Moscow	25	22	c	26	20	sn
Mumbai	85	76	c	87	77	pc
Paris	53	49	sh	53	42	r
Rio de Janeiro	89	77	t	87	76	t
Riyadh	71	51	s	72	50	pc
Rome	58	40	s	58	44	pc
San Juan	84	74	s	83	72	pc
Seoul	25	13	s	25	11	s
Shanghai	42	32	c	43	34	pc
Singapore	87	77	sh	86	77	t
Sydney	74	70	sh	77	73	sh
Taipei City	65	58	r	65	60	r
Tokyo	57	39	pc	49	38	s
Toronto	36	24	pc	26	18	c
Vancouver	46	41	c	47	42	r
Warsaw	37	29	c	38	33	c
Zurich	40	33	pc	43	37	r

The WSJ Daily Crossword | Edited by Mike Shenk



NOTHING LEFT | By Drew Schmenner

Across			Down		
1	Count at the gym	30	Composes a celebrity memoir, say	54	Classic gas station brand
5	Watchful one	32	Block and tackle component	55	NYPD figures
9	They have a prominent House in London	34	Muscularly fit	57	Group for seniors
14	Misbehaving minor	35	Leaning Tower location	59	Strategy that's deployed first
15	Learning method	36	Dot on a die	61	Priest's duty, and a fitting final answer after 17-, 30- and 46-Across
16	Ward off	37	Discussion point on an agenda	64	Heaps
17	Cause for Harvey Milk and Larry Kramer	44	Thick soup	65	Jazz legend Fitzgerald
19	Big name in grills	46	They may be responsible for some long lines	66	___ out (fall asleep)
20	Used the pool	50	Great weight	67	"Holy cow!"
21	There are three per side per inning	51	Legume in a Louisiana rice dish	68	Bit of watermelon waste
23	Traveled by bike	52	"I know! I know!"	69	Online arts and crafts marketplace
24	Flooded				
26	Grizzled sailors				
28	It merged with Time Warner in 2001				

31	"The Girl With the Dragon Tattoo" author Larsson
33	Sluggard
36	Chips-in-a-can brand
38	Ore-Ida morsel
39	Sense of self
40	Fellows
42	Wonder
43	Income sources for retirees, for short
44	Scoreboard units: Abbr.
45	Schindler of "Schindler's List"
46	Like a monogrammed polo shirt
47	"Supermarket Sweep" host Jones
48	Revenue source for a magazine
49	Major bother
53	Corn, in Britain
56	Story
58	Farm enclosures
60	Baseball bat wood
62	Smidgen
63	The limit, metaphorically

Previous Puzzle's Solution

CAMP	AEGIS	AFRO
OLIO	VINECK	COIN
BILL	MEDLEY	ROLL
BEE	MONUS	MOLLIV
S	SOUP	ERRS
ATONE	MAIL	SOFF
ARIA	AIRTO	RIO
SUBPRIME	LENDING	
ABE	OWENS	IONS
PARAGONS	SLITS	
SITUAT	STUBS	NOT
TANG	AUTOREPA	IR
ERIE	SMILE	ISLE
MATS	KAREN	EASY

The contest answer is LIVE ON BORROWED TIME. As suggested by the answer SUBPRIME LENDING, the letters in the squares below the squares that contain prime numbers spell the contest answer.

► Solve this puzzle online and discuss it at [WSJ.com/Puzzles](http://WSJ.com/Puzzles).



# OPINION

## Dear NASA: What’s in It for Me?



**INSIDE VIEW**  
*By Andy Kessler*

Years ago I visited a friend at JPL, the Jet Propulsion Laboratory in Southern California, and he asked if I wanted to meet the captain of the Voyager 2, the space probe launched in 1977, then headed toward Neptune. “Absolutely!” In the middle of a messy room sat a young woman drinking coffee and smoking a cigarette—the captain!—next to a toaster-size gray box with a white dimmer-like knob on top of it. Radio signals take hours to reach the Voyager, and between long stretches of boredom, the captain could use the knob to adjust its antenna. My friend was captain the previous week, and now it was her turn.

As we recalled during the 50th anniversary of the lunar landing last year, space travel is a great challenge, a destiny just out of reach—until it isn’t. It’s aspirational and inspirational. Even so, wise guys (like me) note that after billions poured into the space program, all we got were Tang and Velcro. Earthwise, that’s not so far off. It’s called space because, let’s face it, there’s not much in it.

Yes, communication satellites are important, as is GPS, which helps Uber steer a car toward you. But note that GPS first got off the ground in 1973 because it was funded for Nudet, or nuclear detona-

tion detection—military tech, not space exploration. To be fair, NASA was an early customer of Silicon Valley, but quickly abandoned state-of-the-art chips in favor of highly reliable older ones.

Still, progress marches along. We now have a Space Force, founded a year ago this week. Boldly go! Last month, a privately funded SpaceX rocket and capsule safely ferried four astronauts to the International Space Station, an amazing accomplishment for all anti-big-government types. Astronauts will conduct experiments of unknown value to earthly pursuits. There have been 3,000 such experiments in 20 years, though nothing earth-shattering. Can spiders build webs in space? Not quite the right stuff. Last week Chuck Yeager died. Oh, and an Israeli former space officer says the Earth has been contacted by a “Galactic Federation.” Uh huh.

Don’t get me wrong, I’m fascinated by fiery launches and rocket stages that land on floating platforms for reuse. But I’m more in the “What’s in it for me?” camp. Communications, imaging and even travel benefit all of us. Going to Mars? I’m not so sure.

How about we mine asteroids for metals and even water? Amazon’s Jeff Bezos and Google’s Eric Schmidt were big proponents. But that funding spreadsheet never worked because, upon landing on Earth, the prices of those commodities would quickly

drop through the floor. Good for earthlings, but not so good for return on investment, which is probably why it hasn’t been attempted.

China’s robotic Chang’e-5 spacecraft went to the moon to collect rocks (no they’re minerals—*Jesus, Marie*). Uh, couldn’t we just lend them some of ours from 50 years ago? No one has yet found “Space Odyssey” monoliths

**Space exploration could provide big technological benefits, but we’re still waiting.**

on the moon, but one just showed up in Utah. Weird. In October, using infrared imaging, NASA actually did find water on the moon’s sunlit side. This after the Europeans’ 2004 discovery of ice on the south pole of Mars. Rockets need hydrogen and oxygen for fuel, so maybe interplanetary travel will actually be a possibility someday.

Or so dreams Elon Musk, who envisions a million-population city on Mars by 2050. He thinks he’ll send cargo ships to Mars in 2024 and then humans will follow in February 2027 when Earth and Mars are closer to each other. Watch the Netflix series “Away” for a taste. I’m skeptical. Mr. Musk often has a fantastical relationship with schedules, so maybe pad a few years, or decades, on.

Tinfoil-hat toppers, and many in Silicon Valley, fear

Armageddon is coming and see Mars as our safety valve. Mr. Musk wants “enough of a seed of human civilization somewhere else” (perhaps enough to keep buying Teslas). Let’s hurry up and colonize Mars so humans can escape World War III or Covid-30. Maybe he watches too much sci-fi. On his own nickel, though, go for it.

On Wednesday Mr. Musk’s SpaceX tested a new Starship SN8 rocket prototype. Designed for Mars, the 8-mile test flight was a success but its return ended in a fireball—what Mr. Musk called a “rapid unscheduled disassembly.” Gotta stick the landing!

Meanwhile, back on the third rock from the sun, maybe there is utility to all this. Mr. Musk also intends the Starship to make 39-minute suborbital flights between New York and Shanghai, compared with 15 hours today for the 7,000-mile journey. Take a boat to a floating platform, launch into the lower stratosphere, reach a peak of 16,000 miles an hour (Mach 20) and then re-enter and carefully land on another floating launchpad offshore.

If all goes well, and I mean all, SpaceX thinks they’ll run commercial flights by the end of the decade at a cost of \$2 million. That’s \$20,000 a passenger—no meal. I’ll believe it when I see it, but when they say seat backs in their full, upright position and seat belts securely fastened, I think I’ll listen. Hopefully, the captain has more than a dimmer knob.

*Write to kessler@wsj.com.*

## Coexistence Comes to an Israeli Soccer Field

**By Benny Avni**

On Monday a member of Abu Dhabi’s ruling family, Sheikh Hamad bin Khalifa al Nahyan, bought a 50% stake in an Israeli soccer team, Beitar Jerusalem, for \$92 million. “Go Beitar!” the sheikh said. Actually, that’s a translation from—well, which language? The chant, using an Arabic word long incorporated into Hebrew, is “Yalla Beitar, yalla!”

Regrettably, that isn’t the only chant used by the team’s fans in the Israeli capital. Sometime in the 1990s I took my nephew to a Beitar soccer game at Teddy, its stadium named after Teddy Kollek, Jerusalem’s legendary mayor (1965-93). The chant “Death to the Arabs” started in the stands as soon as the game began. This was before Israeli television did documentaries on a Beitar fan group of hooligans calling itself “La Familia,” so it was completely new, and shocking, to me.

By then I was living in New York and following the Yankees more closely than my Israeli team, so I asked my nephew, a soccer maven, if the opposing team, Hapoel Haifa, had any Arab players. Nope. The chant was directed at no particular person. More like: *Arabs are bad, so anyone playing against us is an Arab, and therefore death-worthy.*

Beitar fans didn’t invent soccer hooliganism. Tottenham, a North London team identified with the Jews, has

long been subject to anti-Semitic chants. Anti-Muslim and anti-African chants are sung at stadiums across Europe. Violence often ensues. Yet in Israel, where almost anything can be made into a referendum on political and national character, Beitar fans came to symbolize the worst in right-wing behavior.

Like all Israeli sports teams, Beitar Jerusalem has its origin in politics. Before Israel’s creation in 1948, athletic teams from major cities were party-affiliated. Maccabi

**Beitar Jerusalem fans once shouted, ‘Death to the Arabs!’ Now one owns half the team.**

represented the urban political center; Hapoel (“the worker”), the socialist Zionists; and Beitar, the “revisionist” right-wing faction from which Israel’s current ruling party, Likud, was born.

Beitar is the Hebrew acronym of the Joseph Trumpeldor Alliance, named after one of Zionism’s military heroes. The movement was founded by Ze’ev Jabotinsky, a fighter and prolific writer who was an early proponent of Jewish control over the entire land of Israel. His most famous essay, “Iron Wall” (1923), has long been cited by detractors as proof of anti-Arabism on the right.

But Jabotinsky and his revisionist movement weren’t anti-Arab, and the racist chants at Teddy would have angered him. In “What the Zionist-Revisionists Want” (1926), Jabotinsky wrote: “Our attitude toward the Palestinian Arabs is determined by the full recognition of one objective fact: Even after the formation of a Jewish majority a considerable Arab population will always remain in Palestine. If things fare badly for this group of inhabitants then things will fare badly for the entire country. The political, economic and cultural welfare of the Arabs will thus always remain one of the main conditions for the well-being of the land of Israel.”

Nor was his most famous essay an Arab-bashing tract. Jabotinsky argued that Jews must create their state and face the belligerence of Arab leadership head on. Once the state was secure behind an “iron wall,” he wrote, the Arabs will “drop their extremist leaders, whose watchword is ‘never!’ and pass the leadership to the moderate groups, who will approach us with a proposal that we should both agree to mutual concessions.”

Is that prediction, made in 1923, feasible a century later? “No. No, no and no,” John Kerry said in December 2016, when he was secretary of state. “There will be no advance and separate peace with the Arab world without the Palestinian process and

Palestinian peace.” He called this a “hard reality.”

The founder of the Beitar movement was a much better reader of world affairs than Mr. Kerry, a Bostonian who in 2004 said his favorite Red Sox player was “Manny Ortez” (the team’s stars included Manny Ramirez and David Ortiz). It took a while, but every Arab normalization deal with Israel—and purchase of an Israeli soccer team—now proves Jabotinsky right and Mr. Kerry wrong.

I’m no Beitar Jerusalem fan. Like my late father, I root for Hapoel Tel Aviv, which has ugly fans of its own. But back at Teddy, extremist supporters must be confused. They have long demanded that Beitar never sign an Arab player. Now the team’s future hinges on a co-owner from the United Arab Emirates. “We see before our eyes the phenomenal results of the fruits of peace and brotherhood among the people and we are mapping a new path toward bringing the hearts of people together through sports,” said Sheikh Hamad Monday.

Can “Yalla Arabs, Yalla!” be far behind as a cheer at Teddy? Isn’t the Mideast a confusing place?

*Mr. Avni is a New York-based foreign-policy columnist.*

Mary Anastasia O’Grady is away.

**BOOKSHELF** | By Emily Bobrow

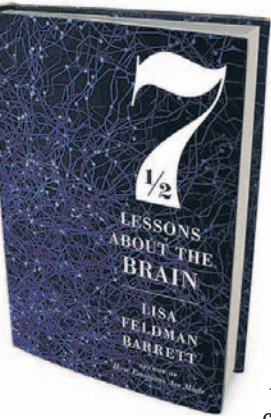
## Gray Matter: A User’s Manual

**Seven and a Half Lessons About the Brain**

By Lisa Feldman Barrett  
(Houghton Mifflin Harcourt, 180 pages, \$24)

Are you doing something rash and unwise? Blame your “lizard brain.” Our reptilian instincts, which date from when we were all cold-blooded creatures around 300 million years ago, supposedly guide all of our primal urges, from throwing a punch to having an affair. Scientists have long posited that time and evolution stratified the human brain, with the oldest and crudest lizard layer lurking at the bottom, followed by the mammalian limbic system, which controls emotion, and topped by the uniquely human neocortex, which guides rational thought. This theory not only suggests that humans are the most evolved creatures, given our deluxe add-ons, but also explains the tug of war between our animal impulses and logical ambitions—an inner struggle Plato observed more than 2,000 years ago.

But according to Lisa Feldman Barrett, a professor at Northeastern University, the idea that the human brain developed a way to rein in our inner lizard is one of the most persistent and widespread errors in all of science.



In her slim but potent “Seven and a Half Lessons About the Brain,” Ms. Barrett eagerly dispels this and other myths about the gray matter between our ears. She writes that the notion that the human brain has three discrete layers emerged in the mid-20th century, when the best technology available was a microscope. Based on visual inspection, the human brain does indeed look like it has parts that are not in the brains of other animals. But when scientists began examining the molecular makeup of brain cells in the 1990s, they discovered

that neurons from various animal species may look different but often have the same genes, suggesting they share an evolutionary origin.

More dramatically, Ms. Barrett writes that scientists have recently discovered that the brains of all mammals—and most likely all vertebrates—follow a single manufacturing plan. This means every brain has the same essential ingredients but with species-specific mutations to aid survival in different environments. This, argues Ms. Barrett, undermines the idea that the human brain stands apart as the pinnacle of natural selection. Sure, our brain seems impressive, but we are simply one animal among many with a noodle adapted to the task of survival. “Other animals are not inferior to humans,” Ms. Barrett writes. “Your brain is not *more* evolved than a rat or lizard brain, just *differently* evolved.”

Ms. Barrett is not afraid of picking arguments. In her 2017 book “How Emotions Are Made,” she used research from her lab and others to contest decades of conventional wisdom about emotions. (Her basic argument is that emotions are not innate, universal experiences, but cultural concepts rooted in nuanced physical sensations that may differ from person to person.) With this book, she compellingly explains that much of what we thought we knew about the brain is wrong.

Perhaps the biggest misconception, Ms. Barrett writes, is that our brains evolved for thinking. Sure, our fancy brains are responsible for everything from suspension bridges to “Infinite Jest,” but these are byproducts of its main purpose: to regulate our physical resources to ensure our survival. Every brain essentially manages what Ms. Barrett calls a “body budget,” tracking resources like water, salt and glucose. “Every action you take (or don’t take) is an economic choice,” she explains, and our brains are engaged in constant guesswork about when it’s best to eat or flee.

As animals evolved larger bodies with more sophisticated systems for pumping blood and oxygen, the work of keeping these bodies running smoothly demanded a more advanced

**The human brain did not evolve for thinking. Its main purpose is to regulate our physical resources and ensure our survival.**

command center. If the earliest brains were like a single bank account, the brains for more complex creatures were like the accounting departments of big companies. The human brain, a product of hundreds of millions of years of evolution, now supervises over 600 muscles, balances dozens of hormones and regulates the energy of billions of brain cells, among other unconscious feats. But for all of its complexity, our brain’s “most important job” is to invest our energy in ways that pay off in terms of food, shelter, affection or whatever else we might need to pass our genes to the next generation.

These instincts are unconscious, but we can witness them at play. Writing this review, for example, cost me some sleep. In exchange for this short-term body-budget deficit, I am hoping to receive all sorts of things to help ensure my survival: money, attention, a relationship with an editor who may offer future work. But if I kept this schedule every day, the overdraft on my body budget would probably get me sick.

In breezy language, Ms. Barrett covers a daunting amount of territory. It turns out that it is wrong to believe that parts of the brain have exclusive functions, or that the left and right hemispheres have contrasting properties. No neuron, apparently, has a single job, and different groups of neurons can produce the same result. As for whether our personalities are the product of nature or nurture, Ms. Barrett argues that the relationship between our genes and our environment is “so deeply entwined that it’s unhelpful to call them separate names.”

The human brain is essentially “under construction” for the first 25 years, Ms. Barrett writes. Babies are born with many more neural connections than they need, and it is the job of caregivers to help strengthen necessary connections and remove unnecessary ones—a process Ms. Barrett calls “tuning and pruning.” Our impressively adaptable brain is what allows humans to thrive in places as diverse as the desert and the Arctic, but it comes at a cost. Caregiver neglect or inadequate nutrition can seriously harm a nascent brain, with lasting consequences.

This book’s brevity leaves plenty of room for questions: As Ms. Barrett admits, “there are still many more lessons to learn.” Why, I wondered, are our brains so much more complex than those of other animals? Does survival alone explain human ingenuity? And what is the use of those brain-based experiences that tax our body budget with little upside, such as anxiety and depression? “Our kind of brain isn’t the biggest in the animal kingdom, and it’s not the best in any objective sense,” Ms. Barrett concludes. “But it’s ours. It’s the source of our strengths and our foibles . . . It makes us simply, imperfectly, gloriously human.”

*Ms. Bobrow writes the Journal’s Weekend Confidential column.*

## On the One Hand, There’s a Pandemic . . .

**By Bridget Baiss**

Staring at my rigid and deformed left thumb and the apple I wish I could slice, I remind myself to be patient. Slicing, opening jars, and buttoning clothes will have to wait, like dinner parties, live theater and my daughter’s field-hockey games. If all goes well, my functional left thumb and the Covid vaccine will be available by summer.

One morning in January 2019, after dropping my daughter at school in New York City, I was struck by a large SUV and sent flying onto the pavement. The result was a severely broken left forearm, cuts, bruises and a damaged left thumb joint.

The driver hit the brakes on impact. I try not to think about the injuries I might have suffered otherwise. But the trauma still flashes in my brain every time I step off a curb or see a speeding car.

After months of unsuccessful physical therapy and the strain of the pandemic, this fall my husband, our daughter and I moved to a Washington suburb. Stable enough at last, I scheduled surgery for my thumb.

**On the other, I’m all thumbs because I can use only one of them.**

It was logical. The perfect time to repair my thumb was now while we’re isolated with nowhere to go. Thankfully, my husband and daughter have been at home with me. Otherwise, they’d be at work or school and I’d be stuck alone elevating my immobilized left hand as I watched cooking and craft shows and vicariously lived my old life.

“Can you open that soda can, unscrew the toothpaste cap, zip up my coat, drive me

to the doctor?” My needs seem endless. They have been incredibly helpful but matched with Covid fatigue, our healthy family has struggled.

When I went ahead with the surgery, I didn’t fully grasp how completely losing the use of my left hand would hinder my life and take a toll on my emotional well-being.

Compared with the emergency surgery right after the accident, in which a long metal plate was screwed in to set my left forearm, this procedure was remarkably more inconvenient. A fully opposable thumb is uniquely human. I now realize I took for granted washing my hair, getting dressed, using the bathroom, typing on my laptop.

One of my coping strategies had been to get dressed every day in something casual but stylish enough that I’d feel comfortable going to a cafe or happy hour. Now I can forget about buttoning up my favorite jeans and wearing

shoes with laces or pull-on boots. Thank God for black spandex leggings and Velcro tennis shoes.

I rewatched Daniel Day-Lewis’s Oscar-winning performance as Christy Brown in “My Left Foot” for a reality check on my annoying but incomparably minuscule handicap. Six weeks postsurgery and finally brace-free, I recently dropped a jar of sweet pickles while struggling to open it.

Like my thumb, our world will never be as it was. But, along with the pandemic, my thumb impairment has expanded my humility and gratitude.

I’m deeply grateful the accident didn’t leave me paralyzed, that I have a stable home, that I have family and friends, and that I’m right-handed so I can still sign a Covid liability waiver.

*Ms. Baiss is a writer and voice-over artist.*







# Antibodies As Covid Insurance

By Scott Gottlieb

The U.S. can buy a Covid insurance policy for next year. The federal government should scale up production of antibody drugs to make as many doses as possible. The Food and Drug Administration has cleared two such drugs, from Regeneron and Eli Lilly, for emergency use. For newly diagnosed patients, they reduce the risk of severe disease.

Making them is relatively straightforward, but supply is limited because the government didn't find enough manufacturing space in the spring. Regeneron and Lilly took extraordinary steps to increase their own production. They knew they had to make these drugs in the U.S., lest other nations try to nationalize production and pocket the medicines.

## A stockpile of medications from Regeneron and Eli Lilly to prepare in case vaccines aren't enough.

Each company freed up much of its domestic manufacturing capacity by shifting production of other drugs to places like Europe. Each company also joined forces with another large manufacturer to secure additional production capacity—Amgen teamed up with Eli Lilly, and Roche worked with Regeneron. The federal government relaxed certain rules to enable these collaborations. This will produce a combined supply of six million to seven million doses next year.

But that isn't enough. Most biotech companies prepare for disruptions in manufacturing by freezing and stockpiling enough of their most profitable drugs to last about two years. Why not pay these plants to use their capacity for antibody production? Companies can dip into reserves to avoid creating a shortage of other important medicines.

A manufacturer can't flip to making antibodies overnight. It'd take about six months to convert a facility to the Covid drug and another six months to return it to its original purpose. But a big facility that makes the Covid antibodies at full throttle for about eight months could rack up some 2.5 million doses.

The government can help backstop the risks to any manufacturer willing to become a contract manufacturer for the Covid medication. The government can agree to buy the antibody and stockpile it at a price that makes it worthwhile. Regeneron and Lilly would be paid to license their drugs for such an arrangement.

The government can freeze some of the active pharmaceutical ingredient and store it away as a hedge against another tough Covid winter next year. The raw ingredient can stay frozen for at least three years. And making the active ingredient is the hard part. Thawing it and turning it into finished drug would take less than a month.

I've written about the antibody drugs several times on these pages. They were always the best bet for reducing the death and suffering from Covid this fall. Yet supply is severely constrained, and the two available drugs must be rationed, somewhat arbitrarily, because the government didn't do everything possible last spring to ramp up manufacturing.

There is still an opportunity to invest in making more antibodies. Not everyone will be able to get vaccinated, and some will choose not to. There will be many patients who need these medicines.

Dr. Gottlieb is a resident fellow at the American Enterprise Institute and was commissioner of the Food and Drug Administration, 2017-19. He serves on the boards of Pfizer and Illumina.

By Paul A. Gigot

Joe Biden says it is "time to heal" America's divisions after the Trump presidency, and The Wall Street Journal has praised him for saying so. Presumably he intends less rancor with the press as part of this mandate, but on that score my run-in with the Biden team this weekend was very Trumpian.

The catalyst was our Saturday op-ed by Joseph Epstein, "Is There a Doctor in the White House? Not if You Need an M.D." Mr. Epstein, a longtime contributor, criticized the habit of people with Ph.D.s or other doctorates calling themselves "Dr." as highfalutin, using Jill Biden as Exhibit A. Mr. Epstein can be acerbic, and his piece began: "Madame First Lady—Mrs. Biden—Jill—kiddo: a bit of advice on what may seem like a small but I think is a not unimportant matter. Any chance you might drop the 'Dr.' before your name?"

This has triggered a flood of media and Twitter criticism, including demands that I retract the piece, apologize personally to Mrs. Biden, ban Mr. Epstein for all time, and resign and think upon my sins. The complaints began as a trickle but became a torrent after the Biden media team elevated Mr. Epstein's work in what was clearly a political strategy.

Mrs. Biden's press spokesperson, Michael LaRosa, issued a tweet in early afternoon: "@jamestaranto, you and the @WSJ should be embarrassed to print the disgusting and sexist attack on @DrBiden running on the @WSJopinion page. If you had any respect for women at all you would remove this repugnant display of chauvinism from your paper and apologize to her." James Taranto is the Journal's op-ed editor, but I am responsible for the opinion pages.

Elizabeth Alexander, the soon-to-be first lady's communications director, also chimed in: "Sexist and shameful. Be better @wsj." Ms. Alexander called me after her tweet to register her disapproval personally, which is fine. Her job is to flack for

her boss, and part of my job is to listen to complaints. We had a frank exchange of views, as the diplomats say, and I invited her to send in a letter for publication.

Meanwhile, Team Biden continued to push the sexist theme. Doug Emhoff, husband of Kamala Harris, tweeted: "Dr. Biden earned her degrees through hard work and pure grit. She is an inspiration to me, to

## Its strategists promote an identity politics campaign against an op-ed on Jill Biden's use of 'Dr.'

her students, and to Americans across this country. This story would never have been written about a man."

Pete Buttigieg's husband, Chasten Buttigieg, tweeted: "The author could've used fewer words to just say 'ya know in my day we didn't have to respect women.'"

Why go to such lengths to highlight a single op-ed on a relatively minor issue? My guess is that the Biden team concluded it was a chance to use the big gun of identity



Jill and Joe Biden after his speech at the 2012 Democratic convention.

politics to send a message to critics as it prepares to take power. There's nothing like playing the race or gender card to stifle criticism. It's the left's version of Donald Trump's "enemy of the people" tweets.

The difference is that when Mr. Trump rants against the press, the press mobilizes in opposition. In this case the Biden team was able to mobilize almost all of the press to join in denouncing Mr. Epstein and the Journal. Nearly every publication wrote about the Biden response, reinforcing the Biden-New York Times line: "An Opinion Writer Argued Jill Biden Should Drop the 'Dr.' (Few Were Swayed.)"

This strategy worked to protect Joe and Hunter Biden during the campaign, so it's no surprise that they're keeping it up as they head to the White House. Northwestern University, where Mr. Epstein taught for many years, did its part by denouncing him in a statement and appearing to purge his emeritus listing from its website. This is how cancel culture works.

The outrage is overwrought because, whether you agree or disagree, Mr. Epstein's piece was fair comment. The issue of Jill Biden's educational honorific isn't new. As long ago as 2009, the Los Angeles

# George Shultz Helped Democracy Flourish in Asia

By Paul Wolfowitz

Helping to forge the relationship between President Ronald Reagan and Soviet leader Mikhail Gorbachev made George Shultz—who turned 100 on Sunday—one of the most consequential secretaries of state of the 20th century. His expert diplomacy led to a peaceful end of the Cold War, bringing freedom to some 400 million Soviet subjects—something that seemed an impossible dream when Reagan took office in 1981. But the triumph of the Reagan-Shultz working relationship went beyond management of the Soviet challenge. The two men helped initiate a democratic wave that swept through Asia and Latin America in the 1980s and '90s.

Working directly for Mr. Shultz on Asia in the 1980s, I saw how he and Reagan righted a U.S.-China relationship that had become unbalanced. A progression of American officials had forgotten that Beijing needed us far more than we needed them to deal with the Soviets. "I am not here to play cards. I am here to build our bilateral relationship" based on our mutual interests, Mr. Shultz announced during his first visit to China in February 1983. His statement conveyed to China's leaders that he valued the relationship for the benefits it could bring to our two countries, not because of Chinese hints that they might move closer to the Soviets.

Mr. Shultz also restored balance to the U.S.-China relationship by demonstrating through words and deeds that U.S. allies—particularly Japan—came first, and that he would prefer no deal to a bad one. An incident during that same visit demonstrated his readiness to walk away if pushed too far. At a large luncheon with American businessmen in Beijing, Mr. Shultz's temper slowly rose as his hosts pressed him with the official Chinese position on issue after issue. Finally, someone

asked why American companies weren't allowed to sell nuclear reactors to China while their European competitors faced no such restrictions. Mr. Shultz replied calmly, and with decided coolness, that the limits were necessary because of "legitimate concern about nuclear proliferation. Your question suggests in rather cavalier fashion that you brush it off. I don't brush it off."

## Reagan's secretary of state also worked to restore balance to the American relationship with China.

Then he walked out, commenting as we left that Chinese intelligence services would report all the pressure he was under from American businessmen. Unspoken was the thought that they would also have to report: George Shultz has steel in his backbone.

A few months ago on these pages Mr. Shultz reflected on how Xi Jinping is turning the clock back to the Maoist economic model while "wrecking Hong Kong" and in the process losing "international trust." He acknowledged with some obvious pain that "today's China is different from the one I once worked with constructively."

By forging a stable relationship with Beijing's leaders during a better

time, Reagan and Mr. Shultz created an opening that allowed for some positive developments. Among the most important was the political transformation of Taiwan from a harshly authoritarian government to history's first successful Chinese democracy. If the mainland one day returns to the path of reform, Taiwan offers an invaluable example of what people from a Chinese culture can do.

Taiwan is one of those rare instances—Spain under Francisco Franco is arguably another—in which an authoritarian ruler deliberately paved the way for a democratic successor regime. In 1988 Taiwan's leader Chiang Ching-kuo announced to his inner circle that the "tide is changing" and Taiwan would have to get on the path of reform. He likely had in mind the Soviet Union and two democratic success stories in Asia during Mr. Shultz's tenure at the State Department.

Following the murder of Philippine opposition leader Benigno Aquino by government agents as he returned home from exile in 1983, American diplomatic strategy focused on the need for institutional reform—political, economic and military—which encouraged Filipinos to believe they could take charge of their own future. And take charge they did. In February 1986, a "people power" revolution led by Aquino's widow, Corazon, ousted the corrupt and brutal dictatorship of Ferdinand Marcos. The following year South Korea also began to follow a

democratic path, also with American encouragement.

Dean Acheson once said he never forgot that Harry Truman, who had no college degree, was the president while he, a distinguished lawyer and a Yale and Harvard Law graduate, was a "mere mandarin." Mr. Shultz similarly gives Reagan the lion's share of the credit for their extraordinary successes together, disputing the critics who "hammered away" at Reagan's faults while ignoring his "great achievements." Mr. Shultz attributes that success to challenging "conventional wisdom" and changing "the national and international agenda on issue after issue."

In Mr. Shultz's view, vision and foreign policy must come from the president; the secretary of state's job is to help shape and then implement that policy. The considerable influence of American diplomacy can't be brought to bear effectively without that understanding between a president and his secretary of state. Hopefully we'll have the benefit of George Shultz's wisdom for many more years. Thankfully, we will always have his example.

Mrs. Wolfowitz, a visiting scholar at the American Enterprise Institute, served as assistant secretary of state for East Asia & Pacific Affairs (1982-86), ambassador to Indonesia (1986-89), undersecretary of defense for policy (1989-93) and deputy defense secretary (2001-05).

# Tear Down This Judicial Paywall

By Sarah Sanga And David Schwartz

It's been a season of federal lawsuits. There have been multiple actions by the Trump campaign and his allies to contest the election results. Google and Facebook are the subject of Justice Department antitrust actions. If you follow this stuff, you might be interested in reading the court records themselves—but it'll cost you. Ten cents a page, according to the federal judiciary, even if you read them online.

That's crazy. These are public records sitting in the public domain, and the judiciary is the only branch of the federal government that charges for online access. The latest White House press briefing will run you precisely zero dollars. Food and Drug Administration reports? Congressional roll call votes? All free.

The law authorizing judicial fees is a relic of a time before the internet, when accessing court records meant physically going to the courthouse and asking a clerk to copy them page by page. It should have been repealed de-

CADES ago when the records went online.

Last week the House passed the Open Courts Act, a bipartisan bill that would eliminate access fees and align the judiciary with the rest of the federal government. The Senate should follow suit and the president should sign this into law. Sadly, the chances of it happening soon are slim.

The benefits of making public records free are obvious. A core function of government is to assemble and disseminate information for the benefit of the public. The federal government, for all its shortcomings, is astonishingly good at this. Just ask the thousands of analysts on Wall Street who use Securities and Exchange Commission filings to price securities accurately. Or the legions of lawyers, journalists, scholars and members of the public who use federal records to anticipate and study new regulations, craft legal strategies for businesses big and small, and hold the government accountable.

Access fees account for only 2% of the judiciary's budget, or \$145 million in FY2019. To cover the

shortfall, Congress should increase judicial appropriations accordingly.

Transparency would bring economic benefits that vastly outweigh the costs. But more important, a well-functioning democracy requires transparency. The people can't hold government accountable if they don't know what it's doing.

Curiously, the judiciary itself has found creative ways to ignore the case for accountability and argue against access to public court records. In a letter to the House Judiciary Committee, the Judicial Conference of the United States proclaims that it "adamantly opposes" the bill. Its principal objection is that Congress has failed to appreciate "the enormous cost implications" of making public records free.

Nonsense. The judicial payroll is inefficient and shields an entire branch of government from scrutiny. Tear it down.

Messrs. Sanga and Schwartz are professors at Northwestern Pritzker School of Law and co-founders of SCALES Open Knowledge Network.

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WORLD WATCH

WORLD NEWS



**ANNIVERSARY MARCH:** Protesters marched in Warsaw on the anniversary of the 1981 martial-law crackdown by Poland’s communist regime. The rally was organized by Women Strike, a movement formed in response to an Oct. 22 court ruling curtailing abortions. The women’s protests have morphed into the largest antigovernment movement since communism fell three decades ago.

AFGHAN  
**Security Forces Kill Dozens of Taliban**

Afghan security forces killed at least 51 Taliban fighters in the southern province of Kandahar, in a flare-up in violence as the two pursue peace talks in Qatar while simultaneously competing for territory at home.

The defense ministry said the strikes against Taliban positions in five districts on Saturday night, a mixture of ground and air assaults which also destroyed four Taliban ammunition depots, were in response to insurgent attacks.

A delegation comprising the army, provincial police and the Kandahar governor was investigating allegations from local residents that government airstrikes had killed civilians in Arghandab district, the ministry said.

The Taliban said 13 civilians had been killed in an airstrike, while a spokesman for the provincial governor said seven civilians had died after the Taliban detonated explosives carried in a Humvee.

Col. Sonny Leggett, spokesman for U.S. forces in Afghanistan, said the U.S. had conducted a strike against the Taliban in a different district, adding that the Taliban claim of civilian casualties was false.

A video filmed by a local resident in Arghandab, and reviewed by The Wall Street Journal, showed the bodies of 11 people, including at least seven children.

—Sune Engel Rasmussen

NIGERIA  
**Hundreds of Students Missing After Attack**

Hundreds of students are missing after gunmen attacked a secondary school in northwestern Nigeria, police said.

The Government Science Secondary School in the town of Kankara was attacked Friday night by a large group of armed bandits, Katsina State police spokesman Gambo Isah said.

Police engaged the attackers “in a gun duel which gave (some of) the students the opportunity

to scale the fence of the school and run for safety,” Mr. Isah said. About 400 students are missing, while 200 are accounted for, Mr. Isah said. The school is believed to have more than 600 students.

It is the latest attack on a school by gunmen in Nigeria. The attack is believed to have been carried out by one of several groups of bandits that are active in northwestern and kidnapping for ransom.

The most serious incident occurred in 2014, when the jihadist group Boko Haram kidnapped 276 girls from their school dormitory in Chibok. About 100 of the girls are still missing.

—Associated Press

RUSSIA  
**Sub Fires Missiles In Nuclear-War Test**

A Russian nuclear submarine successfully test-fired four intercontinental ballistic missiles in a show of readiness of Moscow’s nuclear forces amid tension with the U.S.

The Defense Ministry said that the Vladimir Monomakh submarine of the Pacific Fleet launched four Bulava missiles in quick succession from an underwater position in the Sea of Okhotsk. Their dummy warheads hit their designated targets on the Chiza shooting range in the Arkhangelsk region in northwestern Russia more than 3,400 miles away, the ministry said.

The Vladimir Monomakh is one of the new Borei-class nuclear submarines that carry 16 Bulava missiles each and are intended to serve as the core of the naval component of the nation’s nuclear forces for decades to come. Another submarine of the same type performed a similar launch of four Bulava missiles in 2018—a costly demonstration of the efficiency of the country’s nuclear deterrent mimicking the conditions of a major nuclear conflict.

In a report to President Vladimir Putin, Defense Minister Sergei Shoigu said that Saturday’s launch wrapped up large-scale drills of Russia’s strategic nuclear forces that began Wednesday.

—Associated Press

**Disgruntled Indian Workers Attack An iPhone Factory**

By Vibhuti Agarwal  
And Eric Bellman

NEW DELHI—Angry Indian workers broke windows and overturned cars at the office of a factory that makes iPhones and has often been touted by the government as an example of India’s efforts to boost manufacturing and lure companies looking to diversify away from China.

Indian television showed workers throwing stones, tossing office furniture and setting fire to a sign at Wistron Corp.’s operations near Bangalore. Labor leaders said workers at the Taiwanese-owned company that is a contract manufacturer for Apple Inc. were upset about wages and working hours.

Police said Sunday they had detained 100 people and were investigating the incident, as well as claims by workers that they hadn’t been paid.

A Wistron spokeswoman, Joyce Chou, said: “We follow the law and are supporting the authorities with their investigation.” She said the company was “deeply shocked” by the unrest.

An Apple spokesman in the U.S. said it has launched an investigation. “Apple is dedicated to ensuring everyone in our supply chain is treated with dignity and respect,” he said.

A top Indian union official, M.D. Harigovind, general secretary of the All India Trade Union Congress, blamed the unrest on what he called “the brutal exploitation of workers and sweatshop-like conditions” at the company.

Intent on wooing businesses looking to diversify away from China and to offset the impact of Covid-19 on growth, Prime Minister Narendra Modi has accelerated efforts to transform India’s image as a difficult place to do business, promising a more predictable

and open regulatory regime, a simpler corporate tax structure and incentives for targeted industries.

This year, India made it easier for some types of companies to fire workers as part of its effort to deregulate the economy and boost growth. It has also made it harder for workers to unionize and strike. At the same time, it expanded social-security programs to include many contract workers.

India has also eased rules around commerce in agricultural products, leading to protests by farmers. Thousands have camped around the capital, New Delhi, blocking traffic and demanding a reversal of new laws that farmers in some regions worry will weaken the safety net they depend on.

India is one of the largest

**Protest about wages and hours adds to rising labor unrest in the country.**

phone markets in the world, so manufacturers have an incentive to be closer to their customers to avoid the cost of importing handsets and parts as well as tariffs.

Samsung Electronics Inc. is building one of its biggest plants in the world near New Delhi. And Foxconn Technology Group has gone from a few hundred employees in southern India to more than 30,000 in recent years.

Wistron’s plant, which has been making iPhones for a few years, was one of the first high-profile victories of the Modi government’s efforts and was often pointed to as proof that India could make even some of the most sophisticated phones.



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# BUSINESS & FINANCE

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THE WALL STREET JOURNAL.

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Last Week: **S&P** 3663.46 ▼0.96% **S&P FIN** ▼1.77% **S&P IT** ▼1.43% **DJ TRANS** ▼0.55% **WSJ \$IDX** ▲0.12% **LIBOR 3M** 0.217 **NIKKEI** 26652.52 ▼0.37% See more at [WSJ.com/Markets](https://www.wsj.com/markets)

## Small Stocks Lead Market Charge Ahead

Shares have surged past their larger peers for 2020 as rally carries into December

By Karen Langley

Shares of small U.S. companies have surged past their larger peers for 2020 after last month's furious rally carried into December.

Fueled by improving expectations for the economy, thanks to promising Covid-19 vaccine trials, the Russell 2000 small-cap index notched its best-ever month in November. Then it kept rising. So far in December, it has advanced 5%, well ahead of the 1.2% rise in the S&P 500 large-cap benchmark. Many investors expect small-cap stocks to continue leading the way.

Among the stocks lifting the small-cap index: **Macy's Inc.**, up 8.5% in December; **Spirit Airlines Inc.**, up 16%; **Denny's Corp.**, up 20%; and **U.S. Steel Corp.**, up 29%.

The Russell 2000's gain for the year surpassed that of the S&P 500 on Tuesday for the first time in 2020, according to Dow Jones Market Data. The small-cap gauge is now up 15% this year, compared with a 13% gain for the large-cap index. If the Russell 2000 maintains its edge, it would outperform the S&P 500 for the first time since 2016, according to Dow Jones Market Data. Both indexes still trail the technology-focused Nasdaq Compos-

ite, which is up 38%.

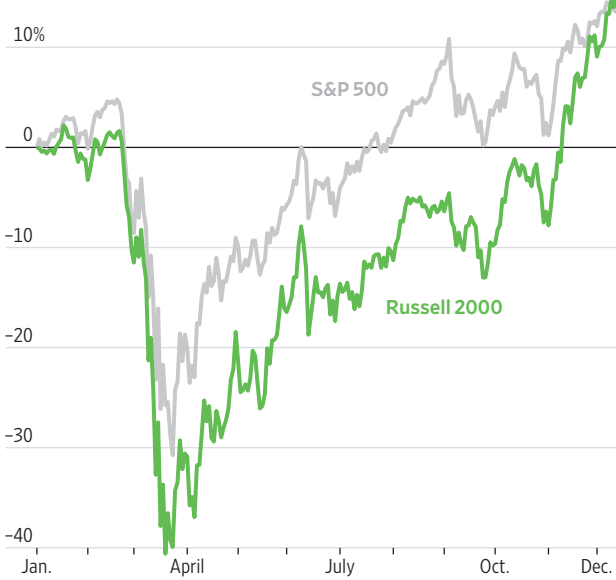
The Russell 2000's comeback is a dramatic turnaround from earlier in the year. The index plummeted 42% from its January high to its March low—a deeper plunge than that of the S&P 500—as the coronavirus hampered activity and reshaped economic expectations. Small-caps spent the following months recovering much of that loss, but only in recent weeks made their dramatic run.

"November was frankly unbelievable," said Lamar Villere, portfolio manager at investment firm Villere & Co., which manages \$2 billion. "We'd been shouting 'til we were blue in the face that small-caps were getting left behind in the recovery, and as soon as the vaccines came out, the small-caps had just a stunning run."

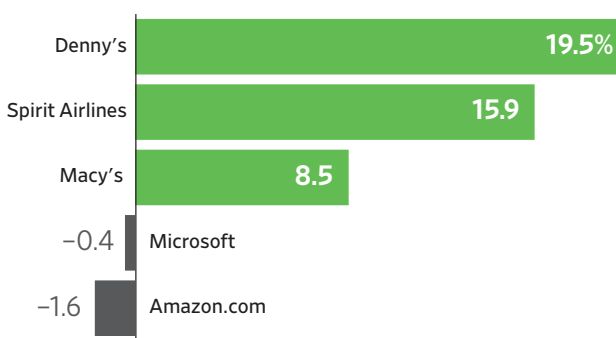
Investors this week will parse weekly jobless claims data for insights into the labor-market recovery and scrutinize earnings reports from companies including **Darden Restaurants Inc.** and **Nike Inc.** for signs of consumer behavior.

Small-caps typically do well during economic recoveries, and the encouraging reports about vaccine candidates have contributed to an expectation that hard-hit industries will bounce back next year. Economists project the rollout of vaccines to boost growth in next year's second quarter, and data Friday showed U.S. consumers grew more confi-

Index performance: this year



Share-price performance since the end of November



\*2020 performance through Friday

†Next-12-months price-to-earnings ratio of Russell 2000 divided by next-12-months price-to-earnings ratio of Russell 1000.

Sources: FactSet (share-price and index performance); Dow Jones Market Data (annual index performance); BofA US Equity & Quant Strategy, Russell Investment Group, I/B/E/S, Compustat (relative valuations)

dent about the economy in late November and early December.

Expectations for an improving economy are also evident in investors' recent preferences among large-cap stocks. The energy sector is leading the S&P 500 in December with a 12% advance, and the financials group is also outperforming. Those sectors are still by far the biggest losers in the index this year, off 33% and 7.8%, respectively.

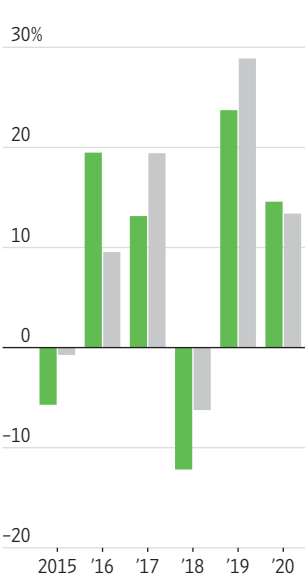
The long-dominant infor-

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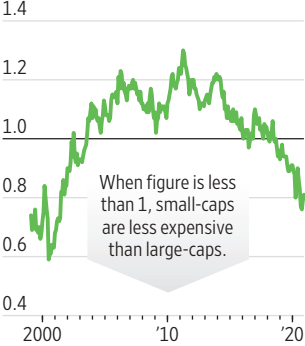


Spirit Airlines shares are up 16% in December so far.

Annually\*



Relative valuation: Small-cap vs. large-cap†



## Tech-Firm Departures Take Some Shine Off Bay Area

By Eliot Brown and Aaron Tilley

For much of the past decade, the San Francisco Bay Area has strained to absorb the torrid growth of the tech sector. As head counts of highly paid engineers swelled, housing costs soared, traffic gridlock rose and homeless tents spread on city streets.

Now a small but prominent roster of tech companies and investors are doing something about it: leaving.

The region's latest emigrant is database giant **Oracle Corp.**, a fixture of Silicon Valley for decades that last year signed a 20-year deal to put its name on the San Francisco Giants' stadium, Oracle Park. The \$180 billion tech giant on Friday said it had changed its headquarters location to Austin, Texas, from Redwood City, Calif.

Oracle provided few details, saying it is implementing more flexible remote-work policies but wouldn't move staff. It follows an announcement earlier this month by **Hewlett Packard Enterprise Co.**, another business-technology company with deep roots in Silicon Valley, that it is moving its headquarters to Houston—as well as similar moves by a number of well-known venture capitalists announced in recent months. Elon Musk, who had long lived in Los Angeles and commuted to **Tesla Inc.**'s operations near San Francisco, last week said he had moved to Texas. And he criticized the policies of the state as restrictive—echoing the arguments of many of those leaving the Bay Area.

These high-profile departures are causing some soul searching in Silicon Valley—taking some sheen off the area's reputation as the unparalleled tech capital. While reasons vary, many moves appear to have been sparked by the Covid-19 pandemic that has reshaped notions of where and how we work, and companies, investors and employees are generally moving to places that are warmer, with lower taxes and cost of living.

"Covid basically encouraged people to work remotely and experiment with other places to live," said Keith Rabois, a well-known San Francisco-based venture capitalist moving to Miami.

Mr. Rabois, a Republican often at odds with policies enacted by San Francisco's liberal government, said he was frustrated with declining quality-of-life issues like homelessness and the state's relatively high

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## Facebook Fears Hate-Group Fallout in India

By Jeff Horwitz and Newley Purnell

Dozens of religious extremists burst into a Pentecostal church outside New Delhi in June, claiming it was built atop a Hindu temple. The group installed a Hindu idol in protest, and a pastor says he was punched in the head by attackers.

Members of a Hindu nationalist organization known as **Bajrang Dal** claimed responsibility in a video describing the incursion that has been viewed almost 250,000 times on Facebook. The social-media company's safety team earlier this year concluded Bajrang Dal supported violence against minorities across India and likely qualified as a "dangerous organization" that should be banned from the platform, according to people familiar with the matter.



Members of Bajrang Dal arrived in August for a demonstration.

**Facebook Inc.** balked at removing the group following warnings in a report from its security team that cracking down on Bajrang Dal might endanger the company's business prospects and its staff in India, the

people said. Besides risking infuriating India's ruling Hindu nationalist politicians, banning Bajrang Dal might precipitate physical attacks against Facebook personnel or facilities, the report warned.

Such conflicting concerns underscore the struggle Facebook faces in policing hate speech that exists in the sea of content posted to its platform. The calculus is especially complicated in India, Facebook's largest market by users. Facebook has staff on the ground, recently invested \$5.7 billion in a new retail venture and interacts with a government whose politicians have ties to Hindu nationalist groups.

"We enforce our Dangerous Individuals and Organizations policy globally without regard to political position or party affiliation," said Facebook spokesman Andy Stone, calling its process for determining what entities to ban careful, rigorous and multidisciplinary.

Mr. Stone said the security team's warning that banning Bajrang Dal could endanger Facebook's interests and employees was "a subject for dis-

cussion as part of the standard process." He declined to say whether Facebook ultimately determined the group didn't qualify as being dangerous.

Adherents of **Bajrang Dal**, which was deemed a militant religious organization by the U.S. Central Intelligence Agency, have been convicted of hate crimes and religiously motivated killings, and some Facebook communities devoted to it celebrate images of people beaten or killed for their alleged offenses against Hinduism. There were more than 5.5 million interactions this year from a handful of groups and pages devoted to Bajrang Dal, according to data from **CrowdTangle**, a Facebook-owned analytics tool.

Facebook policy doesn't allow groups that participate in violence to have a presence on its platform.

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## AstraZeneca to Buy Alexion for \$39 Billion

By Jenny Strasburg and Joseph Walker

LONDON—**AstraZeneca PLC** said it agreed to buy Boston-based **Alexion Pharmaceuticals Inc.** for \$39 billion in cash and stock, a move that would bolster the British drug giant's footprint in rare diseases.

The deal comes at a pivotal time for AstraZeneca, which is in late-stage development of a leading Covid-19 vaccine developed in partnership with the University of Oxford. The vaccine is being reviewed by U.K. and European drug regulators, and could be authorized for emergency use in the U.K. within weeks, scientists involved in it have said.

The company has embarked on one of the most ambitious efforts to manufacture and distribute the vaccine among a handful of Western pharmaceutical giants, assuming it gets the green light for its shot.

With the Alexion deal, it will also be trying to orchestrate a giant corporate merger at the same time.

AstraZeneca said Alexion would give it a foothold in the lucrative field of rare-disease drugs and help fuel revenue and cash flow in the coming years. The bulk of Alexion's \$6 billion in annual sales comes from **Soliris**, which treats a rare blood disorder. It is among the most expensive drugs in the world.

AstraZeneca executives said the deal would help expand Alexion's drug sales in new markets, particularly China. It would also improve profit margins by eliminating expenses over three years, by reducing infrastructure costs such as office space and distribution centers.

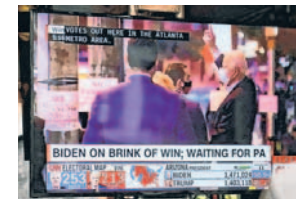
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## Investor's Bond Bets Backfire

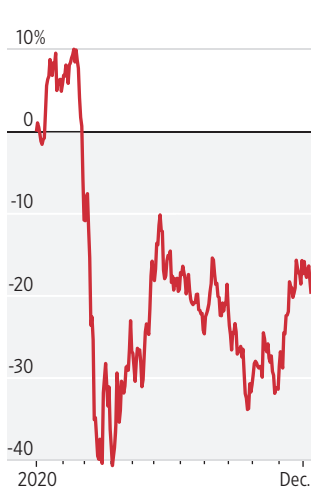
By Matt Wirz

British billionaire Mark Coombs made his fortune winning outside bond wagers in emerging markets like Brazil and Russia. Recently, his luck has soured.

Big trades he made in Argentina, Ecuador and Lebanon all backfired simultaneously in 2020. Ensuing losses hammered shares of his investment firm, **Ashmore Group**, and cost the reclusive trader around \$325 million in personal paper losses, according to data from S&P Global Market Intelligence.

Once an approximately \$100 billion powerhouse, Ashmore's assets under management had fallen to \$85.5 billion by September through a combination of withdrawals and investment losses. Clients including the Connecticut state retirement plan have pulled billions of dollars from the company, and competing money managers have placed bets against Ash-

Share-price performance, Ashmore Group PLC



Source: FactSet

more stock. The outflows contrast with the roughly \$250 billion investors poured into bond mutual funds this year through September, according to data from the Investment Company Institute. The losing

streak has drawn unwanted attention to Mr. Coombs, who strives to avoid the limelight. "He's not your typical billionaire jetting around and buying megayachts," one former colleague said. "He hates having pictures taken of him and is incredibly, fiercely private."

Mr. Coombs built Ashmore over the past two decades with a signature mix of radical frugality—from his wardrobe to staff salaries—and contrarian trades in risky countries. He has weathered previous rough patches and is responding to the current one in similar fashion—by buying more bonds.

"We've done our thing, we've bought assets where we saw...cheap prices," he said on a video call with analysts in September.

Ashmore's European total return fund, for example, boosted the face amount of Ecuadorian bonds it held to \$323 million in June from

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## Small Stocks Surge

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mation technology sector, by contrast, is lagging behind this month, while highflying megacap stocks **Amazon.com Inc.**, **Microsoft Corp.** and **Facebook Inc.** have suffered losses. The tech sector continues to lead the way in 2020 with a 35% gain.

Small-cap companies often have a less diversified range of business and more volatile earnings than larger corporations, making them more likely to falter during an economic downturn. The average market capitalization of stocks in the Russell 2000 is just under \$3 billion, compared with \$62.5 billion for constituents of the S&P 500, according to data from the index providers at the end of November.

Many small stocks are closely tied to the health of the domestic economy. Another small-cap gauge, the S&P Small Cap 600, derives 79% of its revenue from the U.S., versus 60% for the S&P 500, according to FactSet estimates. This exposure can make smaller firms quick to benefit as the economy accelerates.

"Small-cap stocks have history on their side at this point. Generally coming out of recessions they tend to outperform large cap," said Duke Laflamme, chief investment officer at Eaton Vance WaterOak Advisors. "I don't think it's any different this time around."

Adding to the appeal, small-

cap stocks are looking inexpensive—at least compared with their counterparts. A BofA Global Research analysis comparing valuations of the Russell 2000 with those of the large-cap Russell 1000 index found the relative discount for small-caps in recent months was the largest since 2001.

That's even though stocks overall have grown pricier relative to their earnings. The Russell 2000 traded at the end of November at 18.1 times its projected earnings over the next 12 months, above an average since 1985 of 15.3, according to BofA.

Some money managers say they believe the relative discount will help focus attention on smaller companies, particularly as an accelerating economy primes a wider range of businesses for growth.

**'November was frankly unbelievable,' says Lamar Villere.**

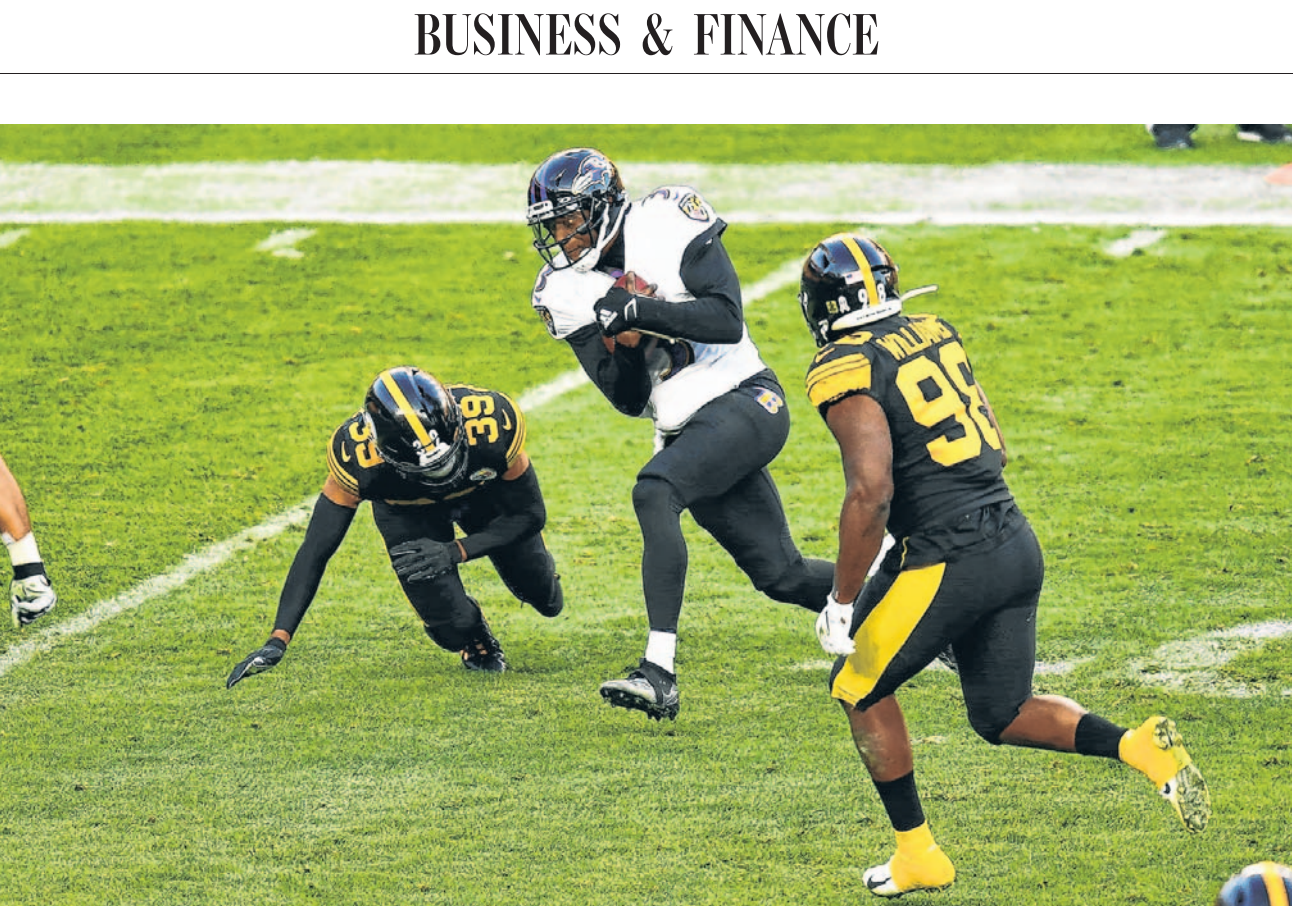
Nancy Prial, co-CEO and senior portfolio manager at Essex Investment Management, said her firm has bought shares of industrial and financial companies in the micro-, small- and midcap categories in recent months, while trimming positions in work-from-home stocks.

"We think that we are at the beginning of a small-cap cycle," she said. "They're underowned, we believe they're underloved and as that valuation discount narrows, that will be an opportunity for these sectors to really show some strong outperformance."



Mary Altaref/Associated Press

Macy's shares are up 8.5% in this month.



Joe Sargent/Getty Images

The planned Thanksgiving night game between the Ravens and Steelers was postponed to a less desirable Wednesday time slot.

## NFL Ad Deals Scrambled

Ratings drop prompts networks to give back time as compensation to commercial buyers

By ALEXANDRA BRUELL AND JOE FLINT

A pro football game on a Wednesday afternoon is rare. Advertisers getting a pricing discount for NFL games is also usually unheard of.

But it's happening. TV networks are feeling the strains of disappointing NFL ratings, as they are forced to restructure deals with advertisers to make up for the smaller audience, and their opportunity to make money off remaining games during the lucrative holiday season narrows.

NBC made the unusual move of lowering the price it charged advertisers that already had committed to run in a Baltimore Ravens vs. Pittsburgh Steelers game planned for Thanksgiving night after a Covid-19 outbreak on the Ravens forced the game's postponement to the following Wednesday.

Some networks also have considered letting advertisers pay less for commercials during NFL games and other programming than they originally pledged.

Meanwhile, a large amount of the remaining commercial time available in games is being given to marketers as compensation for the underperformance so far, leaving little ad time that can be sold in the final quarter of the season. Such so-called make-good commercials are given if a network underdelivers on the audience it promised an advertiser.

NFL games provide TV's

most in-demand and expensive ad inventory, because they regularly gather the largest live audiences at a time of increasing audience fragmentation.

But this year, NFL ratings have taken a hit as pandemic-related postponements have pushed some games to less desirable times and the coronavirus has sidelined some star players. Unexpected competition from other sports leagues whose seasons were delayed from earlier in the year also has taken a toll on ratings.

Last NFL season, not including the playoffs, networks that broadcast the games generated \$3.6 billion in TV ad revenue, according to Kantar.

NBC was perhaps the hardest-hit this Thanksgiving, typically a big day for NFL viewership. The Ravens-Steelers game, which originally cost advertisers an average of \$1 million for 30 seconds of commercial time, drew only 11 million viewers, almost a 50% decline from the audience for last year's Thanksgiving game on NBC.

Some Thanksgiving advertisers that appeared in the NBC game on Wednesday didn't pay at all, instead accepting the commercial time as a make-good for games earlier in the season that delivered disappointing ratings, according to people familiar with the matter.

"We've worked with every one of our partners individually to find what works best for them," an NBC Sports spokesman said in an email. "We will have delivery solutions for all of our NFL advertisers this season."

CBS said it isn't adjusting ad pricing for its NFL broadcasts and continues to transact selectively in the scatter market.

Networks tend to overpromise and underdeliver when they sell advertising, since they can usually easily make up for any ratings shortfalls with make-goods. Even with make-goods factored in, there typically is still plenty of valuable inventory available for last-minute buyers in what is known as the scatter market.

This year, that is harder to do with sports advertising because so many events and games have been canceled or postponed. The end result is that there isn't enough commercial inventory to cover

7%

Decline in ratings for NFL games compared with 2019

make-good requirements and avoid a pileup of IOUs, according to ad and media executives.

Adding to the challenge is that while sports ratings are down, entertainment programming is experiencing far greater declines, which means networks often can't make up for the sports shortfalls by putting advertisers into their prime-time schedules.

Through the first 13 weeks of the season, TV and digital NFL ratings were down 7% across the broadcast and cable networks that carry games, according to Nielsen data. Viewership among men in the 18-49 and 25-54 age categories that advertisers target during games was more significantly affected.

While NFL ratings are down, the games are still at-

tracting millions of viewers and providing a bright spot in an otherwise gloomy TV ad market.

And the demand is there from marketers. This year, since much of the remaining inventory is being used for make-goods, some brands vying for an available NFL commercial spot are being asked to pay premiums as much as 50% over what they would pay before the season, when they tend to get better rates, said one ad buyer. It is a significant increase over past years' scatter-market premiums.

Much of the ratings drop is attributed to the 2020 presidential election coverage siphoning away viewers and the pandemic's wreaking havoc on the league. Aside from reschedulings and some sidelined stars, the league has faced a backlash from some fans over its social justice efforts, including its embrace of Black Lives Matter. These factors are compounded by the secular decline of traditional TV viewing, in which ratings have been eroded by the up-tick in ad-free streaming services.

In one more wrinkle, the networks would have liked the option to use NFL inventory for make-goods after other sports' own ratings struggles.

But NFL ratings would have had to be up 15% to make up for underdelivery in other sports, including baseball and college football, said Michael Law, president of Dentsu's media-buying group Amplifi.

Since that didn't happen, networks have been more creative with make-goods, in some cases considering pricing adjustments often referred to as cash back, as well as digital inventory and sponsorship opportunities, he said.

## AstraZeneca To Acquire Alexion

Continued from page B1

Directors of both companies have approved the acquisition, which they expect to close in the third quarter of 2021. The Alexion deal will be AstraZeneca's last large acquisition for the near term, said Chief Financial Officer Marc Dunoyer.

AstraZeneca has reinvented itself in recent years as a cancer-drug powerhouse. It had suffered years of shrinking revenue as blockbusters in its portfolio were hit by generic competition when patents expired.

AstraZeneca said its cash-and-stock agreement amounts to \$175 an Alexion share, based on the one-month average value of AstraZeneca's U.S.-traded American depositary receipts. The offer is split between \$60 in cash and 2.1243 American depositary shares. That represents a 40% premium to Alexion's one-month share-price average, AstraZeneca said. Alexion's shares closed Friday at \$120.98.

The acquisition terms provide that Alexion will be liable to pay a breakup fee of as much as \$1.2 billion to AstraZeneca in certain instances that lead to the deal not being completed. AstraZeneca will be required to pay Alexion a breakup fee of



Zhang Yuyue/Xinhua/ZUMA Press

Alexion would give AstraZeneca a foothold in rare-disease drugs.

\$1.4 billion.

The companies have been talking for several months, said AstraZeneca Chief Executive Pascal Soriot. Dr. Soriot said that the disruption should be minimal for AstraZeneca's work rolling out a global Covid-19 vaccine, adding that for a deal this attractive, "You do it when the opportunity arises."

He and Mr. Dunoyer told reporters on a call Saturday that AstraZeneca and Alexion don't overlap a great deal geographically, and Alexion's roughly 3,000 employees will be fairly simple to integrate.

AstraZeneca expects to have regulatory approvals by the third quarter, possibly sooner, by which time they will be well into the vaccine rollout, the executives said. "Our belief is that by Q3 the world won't have returned to total normalcy, but close enough," Dr. Soriot said.

By agreeing to buy Alexion, AstraZeneca is aiming to diver-

sify a portfolio that had become heavily focused on cancer drugs and into one of the pharmaceutical industry's most dynamic areas—the market for therapies for rare diseases.

Rare-disease drugs are attractive to drugmakers because they don't need large sales forces and can charge high prices that health insurers are typically willing to pay because they only have one or two members requiring the treatment.

Other big drugmakers have paid up to enter the rare-disease drugs market. Most recently, in 2018, Takeda Pharmaceutical Co. agreed to buy Shire for \$62 billion. In 2017, Johnson & Johnson agreed to buy Actelion for \$30 billion.

Still, Soliris's patent protection is waning, and the drug faces potential competition that could undercut sales. In June, Alexion reached a legal settlement with Amgen Inc. to delay its launch of a copycat drug un-

til 2025.

The delay gives Alexion crucial breathing room to persuade doctors to switch their patients onto a new drug called Ultomiris that is protected from U.S. competition until at least 2030. The company says the advantages of Ultomiris over Soliris include less frequent shots and a lower price. The average annual cost of Soliris is about \$600,000, and \$458,000 for Ultomiris, an Alexion spokeswoman said.

Soliris sales are expected to be \$4.2 billion globally this year, according to FactSet; Ultomiris sales are projected to be \$1.1 billion.

In 2016, Alexion's chief executive and chief financial officer were forced to step down during a company investigation into improper sale and accounting practices. David Brennan, a former AstraZeneca chief executive on Alexion's board, took over on an interim basis.

Ludwig Hantson took the helm of Alexion in 2017, promising to revamp the company's business culture and soon began cutting costs through workforce reductions and paring down its R&D pipeline.

The deal comes as AstraZeneca has suffered setbacks in its Covid-19 vaccine development. It has faced criticism over disclosures around an early clinical-trial dosing mistake and a range of recent vaccine-effectiveness results that confused outside researchers, some of whom called for more data before authorization of the shot.

—Jonathan D. Rockoff contributed to this article.



BUSINESS NEWS

# Elliott Takes Stake In Public Storage

By CARA LOMBARDO

**Elliott Management** Corp. has built a significant stake in **Public Storage** and privately nominated six directors to the self-storage giant's board, according to people familiar with the matter.

Representatives of Elliott and Public Storage, which has a market value of \$38 billion, have had multiple discussions in recent weeks about changes that could be made at the company, the people said.

It couldn't be learned exactly what Elliott is pushing for Public Storage's management to do to boost its stock price, which has stumbled in the past few years after a decadeslong march upward. The company's shares are up around 3% this year, compared with a roughly 13% rise in the S&P 500.

Public Storage on Sunday confirmed that Elliott Management had submitted the names of six nominees and had been in discussions with the company

after The Wall Street Journal reported on the talks. Public Storage also announced the retirements of three of its longest-serving board members and named three new members.

Public Storage, recognizable by its bright orange logo, is a Glendale, Calif., real-estate investment trust that specializes in developing, owning and operating self-storage units. Founded in 1972, it was one of the earliest major self-storage companies but has been under pressure as competition from the likes of **Extra Space Storage** Inc. and **CubeSmart** heats up.

Elliott submitted its nominations to Public Storage within the past few weeks, ahead of the Dec. 12 close of the four-week window to do so, the people said. Elliott's six nominations account for a minority of Public Storage's 13-person board.

Elliott has shied away from proxy fights in recent years after bruising public clashes with companies

# Huntington, TCF Set Deal

Ohio bank to acquire Detroit lender for nearly \$6 billion in latest regional merger

By CARA LOMBARDO AND ORLA McCaffrey

**Huntington Bancshares** Inc. agreed to merge with **TCF Financial** Corp. in the latest in a recent string of regional-bank tie-ups.

The companies on Sunday announced an all-stock deal. It would be one of the larger recent bank combinations, valuing Detroit-based TCF at nearly \$6 billion, or about an 11% premium. Columbus, Ohio-based Huntington has a market value of \$13 billion.

Together, the banks would have about \$170 billion in assets, with a network of branches that stretches from Pennsylvania to Arizona and is especially concentrated in Midwestern states such as Illinois and Michigan.

The deal, if completed, would vault Huntington closer to its fiercest in-state competitors, **Fifth Third Bancorp** and **Key Corp.**, which have about \$200 billion and \$170 billion in assets, respectively.

TCF's nine-state network would add about 475 new branches and five states where Huntington lacks a physical presence. Huntington's 839 branches are spread across seven states.

The combined company will have two headquarters—one for its larger commercial segment in Detroit, and one for its consumer business in Columbus, Huntington Chief Executive Steve Steinour said. He will remain CEO while TFC's executive chairman, Gary Torgow, will remain chairman. Talks between the men, who have known each other for decades, began in October and progressed quickly, Mr. Steinour said.

Huntington has a reputation as an acquisition hound. It bought fellow Ohio bank First-

Merit Corp. in 2016 in a deal that significantly strengthened its Midwestern presence. TCF is no stranger to deal making either.

The merger comes less than two years after it closed on a deal with Chemical Financial Corp. that roughly doubled its size.

Bank deals have picked up pace this year, especially among regional banks that have been seeking scale to better compete with larger competitors such as JPMorgan Chase & Co. and Bank of America Corp.

With larger budgets to develop flashy apps and support a wide network of branches, big national banks have been adding customers and expanding into regions that were once dominated by regional banks. Consolidating allows banks to eliminate overlapping costs for things like regulatory compliance and digital investment that often weigh on earnings.

Low interest rates are particularly tough on regional

banks, which rely more on lending profits than their larger counterparts. Net interest margin, or the difference between what a bank pays its depositors and earns from lending, hit a record low for commercial banks in the third quarter.

First Citizens Bancshares Inc. agreed to buy CIT Group Inc. in October in a deal that would create a bank with about \$100 billion in assets. In November, PNC Financial Services Group Inc. agreed to buy the U.S. arm of Spain's BBVA for \$11.6 billion, a combination that would create the fifth-largest U.S. retail bank, with more than \$550 billion in assets.

Two larger regional banks, BB&T and SunTrust, merged last year to become Truist Financial Corp., the largest bank deal since the financial crisis ushered in stricter regulations.

"This merger is an ideal opportunity; it bolsters both of us," Mr. Steinour said in an interview. "We'll be able to do things together that neither of us could do independently."

# Vista Equity to Buy Software Company

By CARA LOMBARDO AND MIRIAM GOTTFRIED

Private-equity firm **Vista Equity Partners** agreed to buy educational-software maker **Pluralsight** Inc., according to people familiar with the matter.

The deal values Pluralsight at \$20.26 a share, or \$3.5 billion including debt, the companies said.

Farmington, Utah-based Pluralsight is a cloud-based online-education platform for software developers that sells to both businesses and individuals.

Private-equity firms like Vista were already focused on business-software providers, with their recurring-revenue models, before the pandemic increased interest in companies whose offerings make it easier

to reach employees and students remotely.

In March, Vista rival Thoma Bravo LP took education-software company Instructure Inc. private in a roughly \$2 billion deal. Based in Austin, Texas, Vista is a pioneer in software investing and manages more than \$73 billion in assets across multiple strategies.

A deal for Pluralsight would be the latest evidence that the firm is plowing ahead after Chief Executive Robert Smith admitted to criminal tax evasion in October and agreed to pay \$139 million as part of a nonprosecution agreement.

Brian Sheth, Vista's co-founder, president and lead deal-maker, left the firm in the wake of the settlement last month.

# Mouthwash Touted as a Virus Killer

By SAABIRA CHAUDHURI

Wash your hands, wear a mask and don't forget to gargle with mouthwash.

That is the message **Unilever** PLC and **Colgate-Palmolive** Co. are carefully starting to push after research they commissioned showed that certain types of mouthwash and toothpaste could potentially help deactivate the virus that causes Covid-19.

Now, Unilever is launching mouthwash brands in new markets, while Colgate has shared the results of its study with dentists.

Reducing virus particles in the mouth could help fight against the pandemic, the companies said, because Covid-19 can be spread through droplets generated when an infected person coughs, sneezes or speaks. Both companies said the mouth-

washes dissolve the outer protective layer of virus particles, preventing them from attaching to cells and infecting them.

But based on tests so far they can't definitively say how long the benefit would last or what impact coughing would have. That makes it hard to judge how useful oral-hygiene products could be in curbing transmission.

Unilever said an October lab-based study it commissioned found mouthwash containing cetylpyridinium chloride, or CPC—an ingredient used by dentists for its antibacterial properties—reduced SARS-CoV-2 particles by 99.9% after 30 seconds of rinsing.

"While we are clear that this is not a cure or proven way to prevent the transmission of coronavirus, the results are very promising," said Glyn Roberts, Unilever's head of research



Colgate and Unilever research suggested the health benefit.

activate other viruses. Mouthwash makers say sales have risen this year amid broader demand for hygiene products.

Angela Rasmussen, an associate research scientist at Columbia University's Center of Infection and Immunity who reviewed the results of the study commissioned by Unilever, said the findings were promising but results from human trials are needed.

Meanwhile, Unilever is launching mouthwash with CPC in a string of new markets, from Italy and France to India and Indonesia.

Colgate, the world's largest toothpaste maker, said its lab tests, conducted by Rutgers New Jersey Medical School, also showed some kinds of toothpaste, mouthwash and mouth spray can virtually eliminate the virus that causes Covid-19.



Major cruise lines have been pushing back their restart dates.

# Conditions to Be Met Before Cruises Restart

By DAVE SEBASTIAN

The coronavirus pandemic has halted cruises in much of the world and idled the fleets of **Carnival Corp.**, **Royal Caribbean Group** and **Norwegian Cruise Line Holdings** Ltd.

The operators are promising to resume sailing in the U.S. in 2021, but health officials want them to clear certain requirements first. Here is what to know:

## When will cruise ships sail again in the U.S.?

Major cruise lines keep pushing back their restart dates as coronavirus cases continue rising in the U.S.

Carnival's flagship line, Carnival Cruise Line, has paused all cruises through the end of February. In November, it said it planned to restart sailing first in Miami and Port Canaveral, Fla., to be followed by Galveston, Texas. The company also owns Aida, Costa, Cunard, Holland America, P&O, Princess and Seabourn lines. Sailing suspensions vary by line and ship, with some idled as far back as 2022.

Royal Caribbean has suspended U.S. and most global sailings through Feb. 28. Certain sailings have been pushed further into 2021.

The company operates its namesake line, Celebrity Cruises, Silversea, Azamara, TUI Cruises and Hapag-Lloyd Cruises.

Norwegian has paused all

voyages through Feb. 28 on its namesake line and through March 31 on Oceania Cruises and Regent Seven Seas Cruises.

## Is it safe to go on a cruise?

The Centers for Disease Control and Prevention discourages cruise travel, including river cruises, around the world. In November, the agency raised its assessment of the risk of cruise travel to "very high" as the U.S. and other parts of the world saw a resurgence in Covid-19 cases.

Some in the cruise industry disagree. Norwegian Chief Executive Frank Del Rio told The Wall Street Journal in September that protocols proposed by the industry would result in a safer environment "than if you're sitting 4 inches away from someone on a crowded airplane on a four-hour flight."

## What happened when cruise operators restarted sailing outside the U.S.?


In early December, Royal Caribbean's pilot "cruise to nowhere" sailing out of Singapore turned back after a few days at sea after an 83-year-old passenger initially tested positive for Covid-19. The result turned out to be a false positive.

In November, seven passengers and two crew members tested positive on a SeaDream Yacht Club vessel during a trip that set sail from Barbados, leading the Norwegian operator to scrap sailings for the rest of the year.

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BUSINESS & TECHNOLOGY

# CNN Soars With Boss's Fate Uncertain

Cable network holds leads in key ratings categories amid Zucker contract talks

By Benjamin Mullin

CNN is riding a ratings high in the aftermath of the election. Whether the network boss who oversaw those gains will stick around is an open question.

CNN averaged more total-day viewers than Fox News since Election Day through Dec. 8, a 35-day span, the first stretch in that category in 19 years. CNN also bested the competition over that period among viewers ages 25 to 54, a demographic advertisers target on news channels. Fox News retained the No. 1 spot in total prime-time ratings.

As CNN tries to maintain momentum, network parent WarnerMedia, a unit of AT&T Inc., is in talks with CNN President Jeff Zucker on whether to renew his contract, with those discussions expected to heat up in coming weeks, people close to the situation say. Mr. Zucker had signaled to associates internally that he wasn't sure whether he

wanted to stay on, and would weigh his options after the election.

The contract negotiations are happening at the same time CNN has become a target of takeover interest in the private-equity world. Recently, Mr. Zucker was made aware of investor interest in taking the network private, according to people familiar with the matter. One scenario floated was a management buyout that would see Mr. Zucker lead the network under new ownership, some of the people said. Mr. Zucker has indicated that would-be suitors should contact AT&T.

WarnerMedia Chief Executive Jason Kilar said at a recent company town hall that CNN wasn't for sale. People close to Mr. Kilar say he is hopeful Mr. Zucker will stay with the company.

Cable-news viewership has declined across the board from the peaks networks reached during the week of the election. CNN scored the biggest gains in key categories during the run-up to the election and its immediate aftermath, and has retained enough of that audience to vault ahead of longtime leader Fox News in key categories. Since the election through



CNN scored the biggest viewership gains during the run-up to the election and its immediate aftermath.

Dec. 8, CNN averaged about 1.7 million viewers for the total day, compared with roughly 1.56 million for Fox News. CNN was also first in prime-time among viewers 25 to 54, averaging about 818,000, but Fox News was tops in total prime-time viewers.

Like its competitors in the cable news sector, Fox News is on track to deliver its highest-rated year ever. For the full year, Fox News is pacing toward first place among cable

news networks in several key ratings categories, including total day viewership, total day viewership in the key news demographic, prime-time viewership and prime-time viewership in the demographic.

Fox News, which has been the king of cable news ratings for nearly two decades, has recently faced stepped-up competition from pro-Trump networks Newsmax and One America News Network, which won over viewers loyal to

President Trump by playing up his unsubstantiated claims of widespread fraud in the election.

Newsmax has seen its ratings in the key news demographic surge around the election, according to Nielsen. The network has averaged about 372,000 prime-time viewers since Election Day through Dec. 8, a more than 500% increase compared with its prime-time audience during the week before the election.

Still, Newsmax is far smaller than Fox News, which averaged about 3.1 million prime-time viewers during that period.

Fox News and Wall Street Journal parent News Corp share common ownership.

MSNBC is in third place in several key ratings categories since the election. The network has had some bright spots, drawing more total viewers than its competitors on weekdays since the election was called on Nov. 7, according to a spokeswoman. MSNBC said "The Rachel Maddow Show" has drawn more viewers in its time slot than competing shows in December. NBCUniversal News Group Chairman Cesar Conde recently tapped network executive Rashida Jones to be the news channel's next president.

CNN's ratings victories could be temporary. The network occasionally gains ground on its competitors in the short run as casual viewers tune into CNN during intense periods of breaking news. CNN eclipsed Fox News among prime-time viewers in the key demographic in August 2019, but Fox News won the most prime-time viewers that month and ultimately won the quarter.

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CLASS ACTION

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

CITY OF WESTLAND POLICE AND FIRE RETIREMENT SYSTEM, Individually and on Behalf of All Others Similarly Situated,

Plaintiff,

vs.

METLIFE INC., et al.,

Defendants.

Civil Action No. 1:12-cv-00256-LAK

CLASS ACTION

SUMMARY NOTICE OF PROPOSED SETTLEMENT OF CLASS ACTION

TO: ALL PERSONS AND ENTITIES THAT PURCHASED OR OTHERWISE ACQUIRED THE COMMON STOCK OF METLIFE INC. ("METLIFE" OR THE "COMPANY") IN THE COMPANY'S AUGUST 3, 2010 OFFERING AT \$42.00 PER SHARE OR THE COMPANY'S MARCH 4, 2011 OFFERING AT \$43.25 PER SHARE, OR DURING THE PERIOD BETWEEN FEBRUARY 9, 2011, AFTER THE PUBLICATION OF METLIFE'S FOURTH QUARTER AND FULL YEAR 2010 RESULTS, AND OCTOBER 6, 2011, INCLUSIVE.

THIS NOTICE WAS AUTHORIZED BY THE COURT. IT IS NOT A LAWYER SOLICITATION. PLEASE READ THIS NOTICE CAREFULLY AND IN ITS ENTIRETY. THIS NOTICE IS INTENDED TO ADVISE YOU OF THE SETTLEMENT. IT IS NOT AN EXPRESSION OF ANY OPINION OF THE COURT AS TO THE FAIRNESS OF THE SETTLEMENT.

YOU ARE HEREBY NOTIFIED that a hearing will be held on April 14, 2021 at 10:00 a.m., before the Honorable Lewis A. Kaplan at the Daniel Patrick Moynihan United States Courthouse, 500 Pearl Street, New York, NY 10007, to determine whether: (1) the proposed settlement (the "Settlement") of the above-captioned Litigation as set forth in the Stipulation of Settlement ("Stipulation") for \$84,000,000.00 in cash should be approved by the Court as fair, reasonable and adequate; (2) the Judgment as provided under the Stipulation should be entered dismissing the Litigation with prejudice; (3) to award Lead Counsel attorneys' fees and costs, charges and expenses out of the Settlement Fund (as defined in the Notice of Proposed Settlement of Class Action ("Notice")), which is discussed below) and, if so, in what amount; (4) to pay Lead Plaintiff out of the Settlement Fund for its costs and expenses in representing the Classes and, if so, in what amount; and (5) the Plan of Allocation should be approved by the Court as fair, reasonable and adequate.

The recent outbreak of the Coronavirus (COVID-19) is a fluid situation that creates the possibility that the Court may decide to conduct the Settlement Fairness Hearing by video or telephone conference, or otherwise allow Members of the Classes to appear at the hearing by phone, without further written notice to the Classes. In order to determine whether the date and time of the Settlement Fairness Hearing have changed, or whether Members of the Classes must or may participate by phone or video, it is important that you monitor the Court's docket and the Settlement website, www.MetLifeSecuritiesLitigation.com, before making any plans to attend the Settlement Fairness Hearing. Any updates regarding the Settlement Fairness Hearing, including any changes to the date or time of the hearing or updates regarding in-person or telephonic appearances at the hearing, will be posted to the Settlement website, www.MetLifeSecuritiesLitigation.com. Also, if the Court requires or allows Members of the Classes to participate in the Settlement Fairness Hearing by telephone, the phone number for accessing the telephonic conference will be posted to the Settlement website, www.MetLifeSecuritiesLitigation.com.

IF YOU PURCHASED OR ACQUIRED METLIFE COMMON STOCK IN THE AUGUST 3, 2010 OFFERING, THE MARCH 4, 2011 OFFERING OR BETWEEN FEBRUARY 9, 2011 AND OCTOBER 6, 2011, INCLUSIVE, YOUR RIGHTS WILL BE AFFECTED BY THE SETTLEMENT OF THIS LITIGATION.

To share in the distribution of the Settlement Fund, you must establish your rights by submitting a Proof of Claim and Release form by mail (postmarked no later than February 26, 2021) or electronically (no later than February 26, 2021). Your failure to submit your Proof of Claim and Release by February 26, 2021, will subject your claim to rejection and preclude your receiving any of the recovery in connection with the Settlement of this Litigation. If you are a Member of one or both of the Classes and did not timely and validly request exclusion therefrom in accordance with the requirements set forth by the Court in connection with the Notice of Pendency of Class Action, you will be bound by the Settlement and any judgment and release entered in the Litigation, including, but not limited to, the Judgment, whether or not you submit a Proof of Claim and Release.

If you have not received a copy of the Notice, which more completely describes the Settlement and your rights thereunder (including your right to object to the Settlement), and a Proof of Claim and Release, you may obtain these documents, as well as a copy of the Stipulation and other Settlement documents, online at www.MetLifeSecuritiesLitigation.com, or by writing to:

MetLife Securities Litigation  
Claims Administrator  
c/o Gilardi & Co. LLC  
P.O. Box 43310  
Providence, RI 02940-3310

Inquiries should NOT be directed to Defendants, the Court, or the Clerk of the Court.

Inquiries, other than requests for the Notice or for a Proof of Claim and Release, may be made to a representative of Lead Counsel:

ROBBINS GELLER RUDMAN & DOWD LLP  
Rick Nelson  
c/o Shareholder Relations  
655 West Broadway, Suite 1900  
San Diego, CA 92101  
Telephone: 800-449-4900

IF YOU ARE A MEMBER OF ONE OR BOTH OF THE CLASSES, YOU HAVE THE RIGHT TO OBJECT TO THE SETTLEMENT, THE PLAN OF ALLOCATION, THE REQUEST BY LEAD COUNSEL FOR AN AWARD OF ATTORNEYS' FEES AND EXPENSES AND/OR THE AWARDS TO LEAD PLAINTIFF PURSUANT TO 15 U.S.C. § 77z-1(a)(4) and/or 15 U.S.C. § 78u-4(a)(4) IN CONNECTION WITH ITS REPRESENTATION OF THE CLASSES. ANY OBJECTIONS MUST BE FILED WITH THE COURT AND SENT TO LEAD COUNSEL AND METLIFE'S COUNSEL BY FEBRUARY 26, 2021, IN THE MANNER AND FORM EXPLAINED IN THE NOTICE.

DATED: November 24, 2020

BY ORDER OF THE  
UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

1 The Stipulation can be viewed and/or obtained at www.MetLifeSecuritiesLitigation.com. Capitalized terms not otherwise defined herein have the meaning given to them in the Stipulation.

BANKRUPTCIES

UNITED STATES BANKRUPTCY COURT  
SOUTHERN DISTRICT OF NEW YORK

In re: GRUPO AEROMEXICO, S.A.B. de C.V., et al., Debtors.

Chapter 11  
Case No. 20-15663 (SCC) (Jointly Administered)

NOTICE OF DEADLINE FOR THE FILING OF PROOFS OF CLAIM (GENERAL BAR DATE IS JANUARY 15, 2021 AT 5:00 P.M. (PREVAILING PACIFIC TIME))

PLEASE TAKE NOTICE OF THE FOLLOWING: On June 30, 2020 (the "Petition Date"), Grupo Aeromexico, S.A.B. de C.V. and certain of its affiliates (collectively, the "Debtors") each filed a voluntary petition for relief under chapter 11 of title 11 of the United States Code (the "Bankruptcy Code") in the United States Bankruptcy Court for the Southern District of New York (the "Court"). Set forth below are the names, federal tax identification numbers, and the case numbers for each of the Debtors in the above-captioned chapter 11 cases (the "Chapter 11 Cases").

On November 18, 2020, the Court entered an order [ECF No. 648] (the "Bar Date Order") establishing certain deadlines for the filing of proofs of claim ("Proofs of Claim") in the Debtors' Chapter 11 cases.

Pursuant to the Bar Date Order, all persons, entities and governmental units who have a claim or potential claim against any of the Debtors that arose on or before June 30, 2020, no matter how remote or contingent such right to payment or relief may be, must file a PROOF OF CLAIM on or before January 15, 2021 at 5:00 p.m. (prevailing Pacific Time) (the "General Bar Date"). Proofs of Claim may be filed by delivering a completed, signed, original of the Proof of Claim form, together with any accompanying documentation required by Bankruptcy Rules 3001(c) and 3001(d), by (a) if to the Clerk of the Court, electronic submission through PACER (Public Access to Court Electronic Records at <http://ecf.nysb.uscourts.gov>), or if submitted through non-electronic means, U.S. Mail or hand delivery system at the following address: Clerk of the Court, United States Bankruptcy Court, One Bowling Green, New York, NY 10004-1408, (b) regular mail to Grupo Aeromexico, S.A.B. de C.V. Claims Processing Center, c/o Epix Corporate Restructuring, LLC, 10300 SW Allen Blvd., Beaverton, OR 97005, (c) overnight mail, courier service, hand delivery, or in person to Grupo Aeromexico, S.A.B. de C.V. Claims Processing Center, c/o Epix Corporate Restructuring, LLC, 10300 SW Allen Blvd., Beaverton, OR 97005, (d) completing the electronic Proof of Claim Form (an "Electronic Proof of Claim") available online at the Debtors' Case Information Website using the interface available on such website located at <https://dm.epiq11.com/case/aeromexico> under the link entitled "File a Claim" (the "Electronic Filing System"), in each case so that it is actually received no later than 5:00 p.m. (prevailing Pacific Time) on the applicable Bar Date.

Proof of Claim Forms submitted by facsimile or e-mail will not be accepted.

ANY PERSON OR ENTITY (EXCEPT A PERSON OR ENTITY WHO IS EXCUSED BY THE TERMS OF THE BAR DATE ORDER) WHO FAILS TO FILE A PROOF OF CLAIM ON OR BEFORE THE APPLICABLE BAR DATE IN ACCORDANCE WITH THE INSTRUCTIONS ABOVE WILL BE (A) FOREVER BARRED FROM ASSERTING THAT CLAIM (OR FILING A PROOF OF CLAIM WITH RESPECT TO THAT CLAIM), AND THE DEBTORS AND ALL OTHER CREDITORS MAY BE DISCHARGED FROM ANY AND ALL LIABILITY WITH RESPECT TO THAT CLAIM AND (B) WILL BE BARRED FROM RECEIVING ANY DISTRIBUTION IN THE DEBTORS' CHAPTER 11 CASES ON ACCOUNT OF THAT CLAIM.

Proof of Claim forms with English and Spanish instructions may be obtained free or charge by visiting Epix's website at <https://dm.epiq11.com/case/aeromexico/info> or by contacting Epix by emailing [aeromexicoinfo@epiglobal.com](mailto:aeromexicoinfo@epiglobal.com), calling (855) 217-3578 or, if calling from outside the United States or Canada, +1 (503) 520-4473, or by writing to Grupo Aeromexico, S.A. de C.V. Claims Processing Center, c/o Epix Corporate Restructuring, LLC, 10300 SW Allen Blvd., Beaverton, OR 97005. The Electronic Proof of Claim form may be accessed online at the Debtors' Case Information Website using the interface available on such website located at <https://dm.epiq11.com/case/aeromexico/info> under the link entitled "File a Claim." Epix cannot advise you how to file, or whether you should file, a Proof of Claim or Reorganization.

The Bar Date Order provides that passengers with electronic vouchers arising from the Debtors' Customer Programs (as defined in the Final Order Authorizing (i) Debtors to Honor Prepetition Obligations to Customers and Related Third Parties and to Otherwise Continue Customer Programs (ii) Relief from Stay to Permit Setoff in Connection with the Customer Programs and (iii) Financial Institutions to Honor and Process Checks and Transfers) (the "Customer Programs Order") do not need to file a Proof of Claim to the extent honoring such claim is authorized by the Customer Programs Order. Information and instruction on redeeming electronic vouchers can be found on the Debtors' website at <https://aeromexico.com/en-us/redeem-electronic-voucher>.

Additional information on the Bar Date specifically for passengers can be found on the Debtors' case management website at <https://dm.epiq11.com/case/aeromexico/info> and on the Debtors' website at <https://aeromexico.com/en-us/redeem-electronic-voucher>.

The Debtors in these cases, along with each Debtor's registration number in the applicable jurisdiction, are as follows: Grupo Aeromexico, S.A.B. de C.V. 286676; Aerovias de Mexico, S.A.B. de C.V. 108984; Aerolitoral, S.A. de C.V. 217315; Aerovias Empresa de Cargo, S.A. de C.V. 437094-L. The Debtors' corporate headquarters is located at Paseo de la Reforma No. 243, piso 25 Colonia Cuauhtemoc, Mexico City, C.P. 06500.



Oracle will shift its base to Texas. Its Redwood City, Calif., campus.

## Departures Dim Silicon Valley Aura

Continued from page B1

taxes, among other issues, and he realized he could do his job well from afar.

"It became clear there were much better places to live," he said.

Despite the moves, Silicon Valley's place in global technology is still unrivaled. Five of the eight most valuable U.S. companies are based in the region. Major employers like Facebook Inc. and Google parent Alphabet Inc. have added office space in the region even during the pandemic. And the Bay Area has continued to churn out major new companies that captivate investors. The week of Oracle's announcement, delivery-company DoorDash Inc. and home-sharing company Airbnb Inc. went public with soaring valuations.

Venture-capital funding this year has continued to go to Bay Area startups at disproportionate levels, even though the pandemic has made in-person meetings with investors there uncommon.

Once offices reopen, even if a large chunk of workers stay remote, many investors and executives say the value of proximity is so high that they expect the region's prominence to continue.

Patrick Eggen, co-founder of the venture-capital firm Counterpart Ventures, says his firm's location in San Francisco's South Park neighborhood has been critical to its success—and will be after the pandemic.

"My business is all relationship-oriented. In-person meetings are the artery of that existence," he said. "It gives me an edge being here."

Even if the Bay Area's dominance is reduced, "you still have the highest concentration of talent, companies and capital," he said. "The cluster is still here."

That clustering is considered a major reason for Silicon Valley's dominance. Large companies grow off each other, with engineers leaving established companies to create

their own startups, and rivals constantly poaching from one another. Investors often say they are more comfortable funding companies in their backyards.

Still, as the tech sector has gone from a niche to America's dominant industry, the region has strained to keep up, leading to growing discomfort.

Between 2005 and 2019, employment in the five counties that make up the bulk of the Bay Area grew by 29%, adding 674,000 jobs, according to California's Employment Development Department.

Yet construction permits were issued for just 211,000 units, according to the U.S. Census Bureau. Planners say the ratio of new jobs to new housing units should be around 1.5 to one.

The result has been soaring prices for housing and cost of living, which in turn fuel ever higher costs for paying employees.

Well before the pandemic, tech companies began adding offices in places like Seattle,

## The soaring cost of Bay Area living has frustrated some employers.

Nashville and Austin. Salesforce.com Inc., whose Salesforce Tower headquarters dominates San Francisco's skyline, has in recent years put the same name on buildings in Indianapolis, New York and Chicago. Financial-tech company Stripe Inc., which had been hiring engineers to work remotely before the pandemic, this year offered employees \$20,000 to move elsewhere—and accept a reduced salary based on the location.

"There's a finite space in the Valley, and there's a need to scale and continue to expand," said Aaron Levie, CEO of Box Inc., a Redwood City, Calif.-based cloud company.

Six years ago, Mr. Levie opened up a small office in Austin. Now, it is Box's largest outside of Silicon Valley, with several hundred employees. Given the growing size of the tech sector, he said, it will need "to attract talent wherever it can."

NOTICE TO OWNERS OF VACATION TIMESHARES IN THE YACHT CLUB CONDOMINIUMS, BRANSON MO: The Yacht Club Vacation Owners Association, Inc., filed a legal action seeking Bankruptcy Court permission to sell your timeshare interests in the Condominiums and use sale proceeds to first pay Association creditors and then to distribute sale proceeds on account of timeshare interests, subject to certain deductions and offsets. The lawsuit was filed November 23, 2020, in the U.S. Bankruptcy Court for the Western District of Missouri, Case No. 20-41555, Adversary No. 20-03020-btf. The current deadline to answer the Complaint is December 30, 2020. If you are a timeshare owner who has not received a copy of the lawsuit by U.S. Mail, you may review the Complaint and Summons at [www.Bransonyachtclub.com/Owners/Adversary](http://www.Bransonyachtclub.com/Owners/Adversary). If you are a current timeshare owner, you must file an answer in this adversary proceeding, or the Court may grant the relief sought by default.

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CYPRESS GROUP HOLDINGS, INC. (the "Company")  
NOTICE IS GIVEN pursuant to Section 1048 of the Companies Act 1981 of Bermuda that the Company intends to merge with Access Home Holdings Ltd., a Bermuda Company, and the surviving company shall continue as a company in the State of Florida in the United States of America.  
Dated: December 11, 2020 at New York, New York.

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TECHNOLOGY

# Distancing Challenges Firms’ Merger Process

By NINA TRENTMANN

Integrating two businesses after a merger or an acquisition is becoming even more of a challenge as the pandemic continues to disrupt how businesses operate. The missing piece: personal interaction.

Nine months into the pandemic, as business travel remains restricted and many employees continue to work from home, chances for executives and key employees to meet face-to-face are limited. Even as deals are being struck at a hectic pace, executives say they are striving to figure out how to integrate companies and teams without face-to-face contact. “Building relationships and culture is very difficult over

the computer or the phone,” said Brian Salsberg, head of the integration practice at Ernst & Young LLP, the professional services firm.

**Park Place Technologies** LLC, a Cleveland-based provider of data-center services, in November purchased Curvature Inc., another information-technology support business. To keep all employees informed of the changes at the company, Park Place now is producing a weekly podcast and hosting virtual town-hall meetings, Chief Executive Chris Adams said.

“The most challenging aspect is assimilating all of our new employees into the Park Place culture when we can’t physically be together,” Mr. Adams said.

Sending little welcome gifts, such as T-shirts, mugs and post-ers, to remote employees helps create excitement, said EY’s Mr. Salsberg. Others recommend remote dinners or cocktail hours to bridge the gap.

**Adobe** Inc. employees can sign up to become buddies of their new colleagues at Workfront, a work-management platform that the software company recently acquired, in a deal that was completed this month. “We are still trying to figure out how to create that connection,” said Amit Ahuja, a vice president at Adobe, adding that “people love” the Buddy program.

U.S. companies have secured approvals and transferred ownership in over 6,450 merger-



Adobe, which held a 2019 in-person event, used a newly acquired platform to connect workers remotely.

and-acquisition deals since March 1, roughly when the pandemic led to remote work, Dealogic said. More such deal closings are in the pipeline, including **S&P Global** Inc.’s plan to buy **IHS Markit** Ltd. for an estimated \$44.4 billion.

Some of the technical as-

pects of an integration, such as planning or merging systems, can be done as or more effectively in a remote environment, executives say. But connecting with people, developing a common language and sharing a vision can be much harder.

At S&P Global and IHS

Markit, executives from both companies will be leading the integration after the transaction closes, said finance chief Ewout Steenberg. He met with key executives at IHS Markit, following Covid-19 guidelines, but the negotiations continued remotely after that.

## Facebook Fears India Fallout

Continued from page B1

A Bajrang Dal spokesman said its members don’t take part in illegal activities and it doesn’t have conflicts with other religious groups.

Facebook’s security team issued warnings about risks from banishing two other right-wing Hindu nationalist groups active on the platform: Sanatan Sanstha and Sri Ram Sena, according to people familiar with the matter. A Sanatan Sanstha spokesman said the group isn’t dangerous and doesn’t engage in hate speech on Facebook. A Sri Ram Sena representative didn’t respond to requests for comment.

Facebook’s human-rights staff internally designated India a “Tier One” country, meaning it is at the highest risk of societal violence and therefore requires heightened efforts by the company to protect vulnerable populations, according to people familiar with the matter. This ranks it alongside Myanmar, Sri Lanka and Pakistan. Facebook staff’s designation of India hasn’t previously been reported.

Facebook has a significant presence in India, with five offices including in New Delhi and Mumbai. Those facilities and their people are what the company’s security team zeroed in on as potential risks of retaliation from extremists.

Hindus make up more than 75% of the population in India, while Muslims are about 14% and Christians, 2%.

The Wall Street Journal reported in August that Facebook’s top public-policy executive in India, Ankhi Das, opposed efforts to apply hate-speech rules to some Hindu nationalist politicians and groups. Bajrang Dal was among those entities that was flagged internally for promoting or participating in violence.

Ms. Das left Facebook in October, saying in an internal post she was stepping down to pursue her interest in public service. Ms. Das didn’t respond to requests for comment.

A group of Facebook employees said in an internal letter and posts on Facebook discussion groups that the presence of Bajrang Dal on its platform, among other organizations, casts doubt on Facebook’s commitment to tackle hate speech in India.

Bajrang Dal has more than 2,000 offices across India and some of its members have undertaken violence against Christians, Muslims and secularists. The group is a militant youth wing of a group affiliated with the Hindu nationalist Rashtriya Swayamsevak Sangh organization, for which Prime Minister Narendra Modi worked for de-

CADES before his landslide election victory in 2014. A spokesman for the Rashtriya Swayamsevak Sangh referred queries to the Bajrang Dal. A spokesman for the prime minister’s office didn’t respond to a request for comment.

At Facebook, the review of the group had been listed as “blocked” for most of the year in its internal project management system, a label that usually meant that work had stopped, people familiar with the matter said. A note from an employee in Facebook’s internal task management system, described to the Journal by people who saw it, recommended that a ban not occur “due to complexities” arising from Bajrang Dal’s political affiliations.

Facebook’s Mr. Stone said the employee’s comments didn’t reflect the views of the relevant teams and was made outside of the formal dangerous-organizations review process. He said the labeling of the review as “blocked” didn’t mean the topic was off-limits, but instead that the actions in the task weren’t being actively pursued.

“The Bajrang Dal has a violent history, and the link between content linked to that group and offline violence is indisputable,” said Dia Kayyali of Witness.org, part of a coalition of human-rights groups that have been talking to Facebook staff about religious violence in India. If Facebook “can’t both have offices in India and push back on organizations that are causing real world violence, there should be a conversation about the implications of that.”

The video from the Pentecostal church was posted to Facebook by Jeet Vashisth, who said in an interview that he is a district president for Bajrang Dal. Filmed some time after the intrusion occurred, it shows several men standing before a monkey-headed idol of the Hindu god Hanuman and marching through the neighborhood chanting “Bajrang Dal.”

“I and other Hindu brothers came here and forcefully re-established the temple,” Mr. Vashisth, 21 years old, said in the video, which garnered thousands of likes and comments.

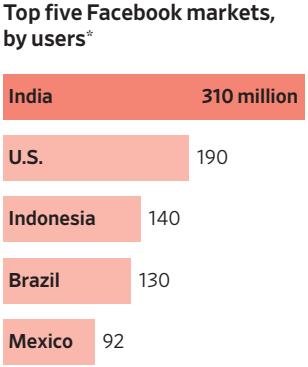
Mr. Vashisth denied church representatives were assaulted. “Our organization only works for the service and protection of the Hindu society,” he said.

Facebook took the video down following Journal queries about it.

Pastor Varun Malik said he was punched in the head by one of the invaders. “I was really afraid,” he said. Church officials said they reported the incident to police but no action has been taken against the men.

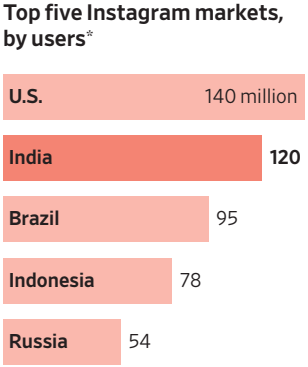
Minakshi Singh, general secretary at Unity in Christ, a group of churches that includes the Pentecostal church, accused Facebook of “spreading poison.”

“They’re not taking material off the service that is inflammatory,” she said. “We’re not safe in India.”



\*Users who can be reached by advertisers


Note: Figures as of October, based on extrapolations of data from Facebook’s self-service ad tools. Source: DataReportal



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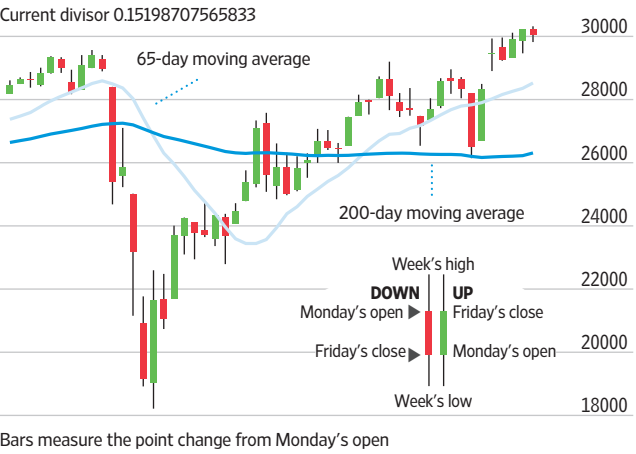
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Trailing P/E ratio 29.58 20.94

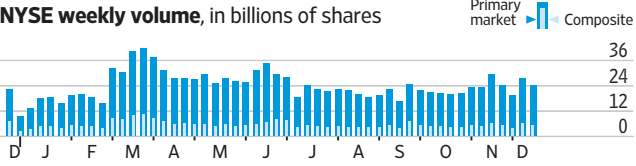
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Dividend yield 2.03 2.23

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<b>Dow Jones</b>											
Industrial Average	30319.70	29820.84	<b>30046.37</b>	-171.89	<b>-0.57</b>	18591.93	● 30218.26	<b>6.8</b>	5.3	<b>7.2</b>	
Transportation Avg	12917.86	12595.03	<b>12672.38</b>	-69.70	<b>-0.55</b>	6703.63	● 12803.02	<b>17.6</b>	16.2	<b>6.9</b>	
Utility Average	863.63	849.30	<b>855.10</b>	-1.03	<b>-0.12</b>	610.89	● 960.89	<b>-0.2</b>	-2.7	<b>3.9</b>	
Total Stock Market	38693.59	37877.81	<b>38201.70</b>	-252.60	<b>-0.66</b>	22462.76	● 38576.35	<b>17.9</b>	15.6	<b>11.6</b>	
Barron's 400	828.38	817.87	<b>823.98</b>	-0.23	<b>-0.03</b>	455.11	● 828.38	<b>14.1</b>	12.5	<b>5.4</b>	

<b>Nasdaq Stock Market</b>											
Nasdaq Composite	12607.15	12214.74	<b>12377.87</b>	-86.36	<b>-0.69</b>	6860.67	● 12582.77	<b>41.7</b>	38.0	<b>21.7</b>	
Nasdaq 100	12651.35	12226.13	<b>12375.41</b>	-153.07	<b>-1.22</b>	6994.29	● 12635.72	<b>45.8</b>	41.7	<b>24.6</b>	
<b>S&amp;P</b>											
500 Index	3712.39	3633.40	<b>3663.46</b>	-35.66	<b>-0.96</b>	2237.40	● 3702.25	<b>15.6</b>	13.4	<b>11.3</b>	
MidCap 400	2264.67	2220.91	<b>2239.94</b>	-5.00	<b>-0.22</b>	1218.55	● 2249.57	<b>10.6</b>	8.6	<b>5.9</b>	
SmallCap 600	1103.95	1074.03	<b>1086.59</b>	1.15	<b>0.11</b>	595.67	● 1095.22	<b>8.4</b>	6.4	<b>5.5</b>	

<b>Other Indexes</b>											
Russell 2000	1935.27	1881.70	<b>1911.70</b>	19.25	<b>1.02</b>	991.16	● 1922.7	<b>16.7</b>	14.6	<b>7.9</b>	
NYSE Composite	14476.68	14260.89	<b>14355.29</b>	-62.04	<b>-0.43</b>	8777.38	● 14417.33	<b>4.8</b>	3.2	<b>4.3</b>	
Value Line	566.68	555.33	<b>559.24</b>	-2.76	<b>-0.49</b>	305.71	● 562.82	<b>3.3</b>	1.3	<b>0.2</b>	
NYSE Arca Biotech	5647.52	5409.04	<b>5542.42</b>	-77.22	<b>-1.37</b>	3855.67	● 6142.96	<b>8.9</b>	9.4	<b>9.8</b>	
NYSE Arca Pharma	694.90	680.29	<b>689.40</b>	5.38	<b>0.79</b>	494.36	● 691.7	<b>8.0</b>	5.5	<b>8.2</b>	
KBW Bank	96.16	93.12	<b>94.19</b>	-1.43	<b>-1.50</b>	56.19	● 114.12	<b>-16.4</b>	-16.9	<b>-3.9</b>	
PHLX <sup>®</sup> Gold/Silver	145.03	137.94	<b>138.61</b>	-0.73	<b>-0.53</b>	70.12	● 161.14	<b>38.2</b>	29.6	<b>21.7</b>	
PHLX <sup>®</sup> Oil Service	47.53	43.50	<b>46.23</b>	0.963	<b>2.13</b>	21.47	● 80.99	<b>-37.6</b>	-40.9	<b>-30.2</b>	
PHLX <sup>®</sup> Semiconductor	2825.94	2675.37	<b>2704.08</b>	-88.95	<b>-3.18</b>	1286.84	● 2816.27	<b>50.6</b>	46.2	<b>29.5</b>	
CBOE Volatility	25.14	20.10	<b>23.31</b>	2.52	<b>12.12</b>	12.10	● 82.69	<b>84.6</b>	69.2	<b>35.6</b>	

<sup>®</sup> Nasdaq PHLX

S&P 500 Index

3663.46 ▼35.66, or 0.96% last week

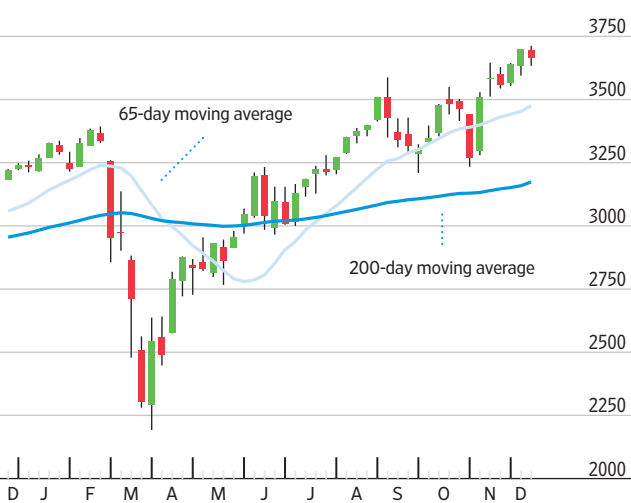
High, low, open and close for each of the past 52 weeks

Trailing P/E ratio \* 41.52 24.85

P/E estimate \* 25.85 19.27

Dividend yield \* 1.65 1.84

All-time high 3702.25, 12/08/20

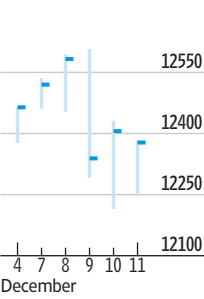


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Compare the performance of selected global stock indexes, bond ETFs, currencies and commodities at [wsj.com/graphics/track-the-markets](#)



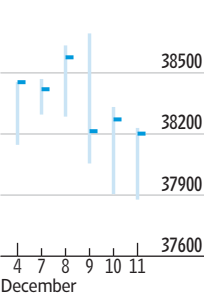
Nasdaq Composite

▼ 86.36, or -0.69% last week



DJ US TSM

▼ 252.60, or -0.66% last week



Commodities and Currencies

	Last Week Close	Net chg	% Chg	YTD % chg
<b>DJ Commodity</b>	<b>701.10</b>	6.88	<b>0.99</b>	9.15
TR/CC CRB Index	<b>161.25</b>	1.35	<b>0.85</b>	-13.21
Crude oil, \$ per barrel	<b>46.57</b>	0.31	<b>0.67</b>	-23.73
Natural gas, \$/MMBtu	<b>2.591</b>	0.016	<b>0.62</b>	18.36
Gold, \$ per troy oz.	<b>1839.80</b>	3.90	<b>0.21</b>	21.08
<b>U.S. Dollar Index</b>	<b>90.98</b>	0.28	<b>0.31</b>	-5.61
WSJ Dollar Index	<b>85.96</b>	0.10	<b>0.12</b>	-4.03
Euro, per dollar	<b>0.8257</b>	0.0006	<b>0.07</b>	-7.41
Yen, per dollar	<b>104.02</b>	-0.17	<b>-0.17</b>	-4.26
U.K. pound, in dollars	<b>1.32</b>	-0.0210	<b>-1.56</b>	-0.25

	Low	52-Week Close (●)	High	% Chg
<b>DJ Commodity</b>	433.70	● 701.75	<b>11.08</b>	
TR/CC CRB Index	106.29	● 187.39	<b>-12.27</b>	
Crude oil, \$ per barrel	-37.63	● 63.27	<b>-22.47</b>	
Natural gas, \$/MMBtu	1.482	● 3.354	<b>12.85</b>	
Gold, \$ per troy oz.	1472.60	● 2051.50	<b>24.68</b>	
<b>U.S. Dollar Index</b>	90.70	● 102.82	<b>-6.37</b>	
WSJ Dollar Index	85.77	● 97.02	<b>-4.74</b>	
Euro, per dollar	0.8231	● 0.9352	<b>-8.18</b>	
Yen, per dollar	102.37	● 112.11	<b>-4.87</b>	
U.K. pound, in dollars	1.15	● 1.35	<b>-0.77</b>	

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New to the Market

More on Page B8

Public Offerings of Stock

IPOs in the U.S. Market

Initial public offerings of stock expected this week; might include some offerings, U.S. and foreign, open to institutional investors only via the Rule 144a market; deal amounts are for the U.S. market only

Expected pricing date	Filed	Issuer/business	Symbol/primary exchange	Shares (mil.)	Pricing Range(\$)	Low/High	Bookrunner(s)
12/15	11/4	Upstart Holdings Inc Software-Financial Technology company engaged with leading a cloud-based AI lending platform	<b>UPST</b> Nq	<b>12.0</b>	20.00/22.00		GS, BofA Securities, Citi, Jefferies, Barclays
12/15	11/13	BioAtla Inc Clinical-stage biopharmaceutical company developing our novel class of highly specific and selective antibody-based therapeutics for the treatment of solid tumor cancer.	<b>BCAB</b> Nq	<b>9.4</b>	15.00/17.00		JPM, Jefferies, Credit Suisse
12/15	11/20	Wish Software-E-Commerce company engaged with operating an online platform for a variety of products.	<b>WISH</b> Nq	<b>46.0</b>	22.00/24.00		GS, JPM, BofA Securities, Citi, DB, UBS, RBC Cptl Mkts, Credit Suisse

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.

Lockup expiration	Issue date	Issuer	Symbol	Offer price(\$)	Offer amt (\$ mil.)	Through Friday (%)	Lockup provision
Dec 16	June 19, '20	Genetron Holdings	<b>GTH</b>	16.00	200.0	<b>-18.8</b>	180 days
	June 16, '20	Royalty Pharma	<b>RPRX</b>	28.00	1855.0	<b>51.5</b>	180 days
	June 19, '20	Progenity	<b>PROG</b>	15.00	100.0	<b>-68.5</b>	180 days
	June 18, '20	Forma Therapeutics Holdings	<b>FMTX</b>	20.00	200.0	<b>130.9</b>	180 days
	June 19, '20	Repare Therapeutics	<b>RPTX</b>	20.00	125.0	<b>81.9</b>	180 days

Sources: Dealogic; Dow Jones Market Data

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	Takedown date/Registration date	Deal value (\$ mil.)	Bookrunner(s)
<b>Repligen Corp</b> Healthcare	Dec 7 April 29, '19	<b>\$312.2</b>	JPMorgan Stifel
<b>Kura Oncology Inc</b> Healthcare	Dec 8 Dec 7, '20	<b>\$345.1</b>	SVB Leerink, Credit Suisse, Barclays, Stifel
<b>Sutro Biopharma Inc</b> Healthcare	Dec 8 Oct. 4, '19	<b>\$126.0</b>	Cowen & Company LLC, Piper Sandler, WFS
<b>iBio Inc</b> Healthcare	Dec 8 Nov. 25, '20	<b>\$35.0</b>	Cantor Fitzgerald & Co
<b>Marinus Pharmaceuticals Inc</b> Healthcare	Dec 8 July 9, '20	<b>\$70.0</b>	Cantor Fitzgerald & Co
<b>Sequans Communications SA</b> Computers & Electronics	Dec 8 Nov. 16, '20	<b>\$13.9</b>	B Riley Securities Inc
<b>Atara Biotherapeutics Inc</b> Healthcare	Dec 8 Feb. 27, '18	<b>\$175.0</b>	Citi, Evercore Inc, Mizuho
<b>Syndax Pharmaceuticals Inc</b> Healthcare	Dec 8 Aug. 30, '19	<b>\$143.8</b>	GS, Citi, Cowen & Company LLC
<b>Arcturus Therapeutics Holdings Inc</b> Healthcare	Dec 7 Dec 7, '20	<b>\$150.2</b>	Piper Sandler, Guggenheim Partners, WFS, R W Baird & Co
<b>Volaris</b> Transportation	Dec 8 Oct 7, '20	<b>\$173.4</b>	MS, Evercore Inc, Santander, Citi, BofA Securities
<b>GrowGeneration Corp</b> Retail	Dec 9 Dec 7, '20	<b>\$150.0</b>	Oppenheimer Inc
<b>IGM Biosciences Inc</b> Healthcare	Dec 8 Nov. 5, '20	<b>\$200.0</b>	Jefferies, Stifel, Guggenheim Partners, RBC Cptl Mkts
<b>Delcath Systems Inc</b> Healthcare	Dec 9 Oct. 24, '18	<b>\$19.3</b>	Canaccord Genuity, Roth Cptl Ptnrs
<b>HOOKIPA Pharma Inc</b> Healthcare	Dec 8 May 15, '20	<b>\$40.0</b>	MS, SVB Leerink
<b>Ichor Holdings Ltd</b> Computers & Electronics	Dec 9 Aug. 3, '20	<b>\$127.0</b>	Stifel, Cowen & Company LLC
<b>Curis Inc</b> Healthcare	Dec 9 May 3, '18	<b>\$169.6</b>	Cantor Fitzgerald & Co, JonesTrading Institutional Services LLC
<b>BRP Group Inc</b> Insurance	Dec 8 Dec 8, '20	<b>\$258.1</b>	JPM, BofA Securities, WFS, MS, Jefferies, W. Blair LLC
<b>Cel-Sci Corp</b> Healthcare	Dec 9 Aug. 3, '18	<b>\$14.7</b>	Kingswood Capital Management LLC, Aegis Cptl
<b>Atlantica Sustainable Infrastructure plc</b> Utility & Energy	Dec 9 Aug 6, '18	<b>\$145.5</b>	BofA Securities
<b>Fiserv Inc</b> Computers & Electronics	Dec 9 Sept. 20, '18	<b>\$1,960.0</b>	BofA Securities, Citi, KKR, PNC Bank NA, Trust Financial Corp, WFS
<b>Rocket Pharmaceuticals Inc</b> Healthcare	Dec 9 June 17, '19	<b>\$260.0</b>	JPM, SVB Leerink, Piper Sandler, Piper Sandler
<b>AquaBounty Technologies Inc</b> Agriculture	Dec 10 April 6, '18	<b>\$56.7</b>	Oppenheimer Inc, Lake Street Capital Markets LLC
<b>Leaf Group Ltd</b> Publishing	Dec 10 Oct. 14, '20	<b>\$30.0</b>	Canaccord Genuity
<b>Avid Bioservices Inc</b> Healthcare	Dec 10 Jan. 12, '18	<b>\$30.0</b>	RBC Cptl Mkts
<b>Pixelworks Inc</b> Computers & Electronics	Dec 10 Nov. 6, '20	<b>\$12.0</b>	Roth Cptl Ptnrs, Craig-Hallum Group
<b>Sea Ltd</b> Computers & Electronics	Dec 10 March 1, '19	<b>\$2,574.0</b>	GS, JPM
<b>Pebblebrook Hotel Trust</b> Real Estate/Property	Dec 11 Feb. 21, '20	<b>\$450.0</b>	BofA Securities, Raymond James & Associates Inc
<b>Protagonist Therapeutics Inc</b> Healthcare	Dec 10 Dec. 10, '20	<b>\$100.0</b>	JPM, SVB Leerink, Piper Sandler, BMO Cptl Mkts
<b>Nabiva Therapeutics plc</b> Healthcare	Dec 10 Sept. 1, '20	<b>\$15.0</b>	HC Wainwright & Co LLC
<b>Napco Security Systems Inc</b> Telecommunications	Dec 11 Aug 17, '20	<b>\$58.1</b>	B Riley Securities Inc, Needham & Co LLC
<b>9 Meters Biopharma Inc</b> Healthcare	Dec 11 Oct. 2, '20	<b>\$30.0</b>	W. Blair LLC, Trust Financial Corp

Public and Private Borrowing

Treasurys

Monday, December 14      Thursday, December 17

Auction of 13 and 26 week bills; announced on December 10; settles on December 17      Auction of 4 and 8 week bills; announced on December 15; settles on December 22

Currencies

U.S.-dollar foreign-exchange rates in late New York trading

Country/currency	Fri in US\$	US\$ vs per US\$	YTD chg (%)	Country/currency	Fri in US\$	US\$ vs per US\$	YTD chg (%)
<b>Americas</b>				<b>Vietnam</b> dong .00004323 23132 <b>-0.2</b>			
<b>Argentina</b> peso .0122 82.1450 <b>37.2</b>				<b>Europe</b>			
<b>Brazil</b> real .1974 5.0661 <b>26.0</b>				<b>Czech Rep.</b> koruna .04593 21.774 <b>-4.0</b>			
<b>Canada</b> dollar .7830 1.2772 <b>-1.7</b>				<b>Denmark</b> krone .1627 6.1448 <b>-7.8</b>			
<b>Chile</b> peso .001362 734.30 <b>-0.7</b>				<b>Euro area</b> euro 1.2112 .8257 <b>-7.4</b>			
<b>Colombia</b> peso .000291 3438.10 <b>4.8</b>				<b>Hungary</b> forint .003420 292.44 <b>-1.0</b>			
<b>Ecuador</b> US dollar 1 1 <b>unch</b>				<b>Iceland</b> krona .007825 127.80 <b>5.5</b>			
<b>Mexico</b> peso .0496 20.1428 <b>6.4</b>				<b>Norway</b> krone .1134 8.8150 <b>0.4</b>			
<b>Uruguay</b> peso .02356 42.4500 <b>14.3</b>				<b>Poland</b> zloty .2723 3.6720 <b>-3.2</b>			
<b>Asia-Pacific</b>				<b>Russia</b> ruble .01367 73.150 <b>17.9</b>			
<b>Australian</b> dollar .7533 1.3275 <b>-6.8</b>				<b>Sweden</b> krona .1182 8.4598 <b>-9.7</b>			
<b>China</b> yuan .1527 6.5467 <b>-6.0</b>				<b>Switzerland</b> franc 1.1235 .8901 <b>-8.0</b>			
<b>Hong Kong</b> dollar .1290 7.7515 <b>-0.5</b>				<b>Turkey</b> lira .1272 7.8612 <b>32.1</b>			
<b>India</b> rupee .01356 73.741 <b>3.3</b>				<b>Ukraine</b> hryvnia .0357 28.0500 <b>18.5</b>			
<b>Indonesia</b> rupiah .0000710 14080 <b>1.4</b>				<b>UK</b> pound 1.3227 .7560 <b>0.2</b>			
<b>Japan</b> yen .009614 104.02 <b>-4.3</b>				<b>Middle East/Africa</b>			
<b>Kazakhstan</b> tenge .002385 419.34 <b>9.8</b>				<b>Bahrain</b> dinar 2.6522 .3771 <b>...</b>			
<b>Macau</b> pataca .1252 7.9880 <b>-0.4</b>				<b>Egypt</b> pound .0636 15.7115 <b>-2.1</b>			
<b>Malaysia</b> ringgit .2468 4.0515 <b>-1.0</b>				<b>Israel</b> shekel .3070 3.2571 <b>-5.7</b>			
<b>New Zealand</b> dollar .7081 1.4122 <b>-4.9</b>				<b>Kuwait</b> dinar 3.2760 .3052 <b>0.7</b>			
<b>Pakistan</b> rupee .00624 160.150 <b>3.3</b>				<b>Oman</b> sul rial 2.5976 .3850 <b>-0.01</b>			
<b>Philippines</b> peso .0208 48.130 <b>-5.1</b>				<b>Qatar</b> rial .2746 3.641 <b>-0.1</b>			
<b>Singapore</b> dollar .7480 1.3369 <b>-0.7</b>				<b>Saudi Arabia</b> riyal .2667 3.7499 <b>-0.04</b>			
<b>South Korea</b> won .0009159 1091.80 <b>-5.5</b>				<b>South Africa</b> rand .0661 15.1396 <b>8.2</b>			
<b>Sri Lanka</b> rupee .0053562 186.70 <b>3.0</b>							
<b>Taiwan</b> dollar .03548 28.182 <b>-5.8</b>							
<b>Thailand</b> baht .03321 30.110 <b>1.2</b>							
				Close Net Chg % Chg YTD %			
				<b>WSJ Dollar Index</b> 85.96 0.17 0.20 <b>-4.03</b>			



# CLOSED-END FUNDS

Listed are the 300 largest closed-end funds as measured by assets. Closed-end funds sell a limited number of shares and invest the proceeds in securities. Unlike open-end funds, closed-ends generally do not buy their shares back from investors who wish to cash in their holdings. Instead, fund shares trade on a stock exchange. NA signifies that the information is not available or not applicable. **NS** signifies funds not in existence for the entire period. 12 month yield is computed by dividing income dividends paid (during the previous 12 months for periods ending at month-end or during the previous 52 weeks for periods ending at any time other than month-end) by the latest month-end market price adjusted for capital gains distributions. Depending on the fund category, either 12-month yield or total return is listed.

Source: Lipper

Friday, December 11, 2020

Fund (SYM)	NAV	Close/Disc	Prem	52 wk Ret
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## General Equity Funds

Adams Diversified Equity	ADX	19.49	16.94	-13.1	15.7
Boulder Growth & Income	BIF	13.40	11.06	-17.5	-0.7
Central Secs	CET	38.32	31.21	-18.6	1.5
Cohen&SteersQualinc	RQI	12.82	12.39	-3.4	-9.5
Cohen&SteersQualinc	RQI	12.82	12.39	-3.4	-9.5
Cohen&SteersQualinc	RQI	12.82	12.39	-3.4	-9.5
Columbia Sel Pm Tech Gr	STK	26.51	26.49	-0.1	23.4
DNP Select Income	DNP	9.13	10.29	-12.8	-12.4
Duff&Ph Utli&Infra Inc Fd	DPG	13.57	12.13	-10.6	-10.7
EtnVncEgtyInc	EOI	16.52	15.80	-4.4	8.5
EtnVncEgtyIncoll	EOS	20.61	20.79	+0.9	28.4
EVRS&MnDvsEqInc	ETJ	9.96	10.28	+3.2	21.5
ETNVncT&MgdBvWrtInc	ETB	14.44	14.61	+1.2	-1.8
ETNVncT&MgdBvWrtOpp	ETV	14.26	14.95	+4.8	11.0
EvTx&MnDvsEqInc	ETY	12.53	12.17	-2.9	6.9
EvTx&MnDvsEqInc	ETX	10.10	9.44	-6.5	1.4
EVTX&MnGblDvEqInc	EWG	9.13	8.53	-6.6	8.6
First Trust Energy Inc	FEN	13.28	11.33	-14.7	-39.2
First Tr Enhanced Eq	FFA	18.05	16.90	-6.4	9.8
First Tr MLP&EnergInc	FTI	7.19	6.06	-15.7	-38.6
Gabelli Healthcare	GRX	13.40	11.44	-14.6	9.4
Gab Utilty	GUT	4.08	7.85	+9.24	20.3
GAMCO Gold&NatRes	GGN	3.96	3.50	-11.6	-6.1
J Han Finl Optmty	GGT	20.76	23.79	+7.1	-7.6
Nuv Dow 30 Dvn Overwite	NA	15.13	NA	-10.1	NA
Nuv CorEqAlpha	JAX	NA	13.79	NA	13.1
Nuv Real Est	JRS	NA	8.54	NA	12.2
Nuveen RI Asst Inc & Gro	JRI	NA	13.06	NA	-19.2
Nuveen SP500 Dvn Fd	JSPX	NA	15.30	NA	-1.5
Nuveen SP500 BuyIn Fd	BXMX	NA	12.74	NA	0.1
Reaves Utility Income	UTY	32.40	32.75	+1.1	-4.6
Tortoise Energy Infra Crp	TYG	NA	21.92	NA	-67.1

## Calamos & Preferred Stock Funds

Calamos Strat Tot	CSQ	NA	15.30	NA	24.4
Cohen&SteersLdrPrfInfr	LDP	25.88	25.63	-1.0	5.1
Cohen&SteersLdrPrfInfr	LDP	25.88	25.63	-1.0	5.1
First TrlntrDvnEqInc	FPF	24.10	22.92	-4.9	4.0
J Han PrefInc	HPI	19.74	19.43	-1.6	-5.1
JHPrefIncl	HPF	19.39	18.60	-4.1	-7.0
HnckJPFdIncl III	HPS	17.36	16.90	-2.6	-2.9
J Han Pm	PDT	13.63	14.10	+3.4	-11.1
LMP CapInc	SCD	NA	11.69	NA	-10.6
Nuveen Pref & Inc Opp	JPC	NA	9.29	NA	-3.4
Nuveen Fd	JPS	NA	9.56	NA	2.3
Nuveen Pref & Inc Term	JPI	NA	24.37	NA	3.5
Nuveen TrAdyDvGr	JTD	NA	14.12	NA	-11.3
TCW Strat Income	TSI	5.68	5.68	0.0	4.9

## Convertible Sec's Funds

AdvntCnvrtrBln&Fnd	AVK	18.64	16.06	-13.8	15.0
GI Conv & Inc	NCV	6.05	5.51	-8.9	8.8

AGI Conv & Inc II	NCZ	5.42	4.89	-9.8	8.9
AGI Div & Conv	NCV	33.56	31.20	-7.0	37.1
AGI Eqty & Conv Inc	ANC	30.36	27.55	-9.3	30.5
Calamos Conv HI	CHY	NA	13.91	NA	33.7
Calamos Conv Op	CHI	NA	13.18	NA	31.1

## World Equity Funds

Aberdeen Emg Mkts EqInc	AEF	9.31	7.95	-14.6	10.1
Aberdeen Tot Dvn Div	AOD	10.07	8.75	-13.1	9.2
Calamos GloDyInc	CHW	NA	9.42	NA	21.3
China	CHN	32.30	29.63	-8.3	47.1
EV Tx&AdvGblDvInc	ETG	19.05	17.31	-9.1	4.8
EtnVncT&AdvOpp	ETO	26.20	23.93	-8.7	-2.7
First Tr Dvn Euro EqInc	FDEU	13.34	11.59	-13.1	-14.5
Gabelli Global Media	GGT	7.80	7.88	+1.0	15.0
Highland MultiAllo	HGLB	10.31	6.60	-36.0	-14.4
India Fund	IFN	22.45	19.73	-12.1	7.4
Japan Smaller Cap	JOF	NA	9.67	NA	10.4
Lazard Gbl Tot RetInc	LGI	19.16	17.37	-9.3	17.8
MS China StrFd	CAF	27.28	24.11	-11.6	14.4
MS India	HF	24.21	20.50	-16.0	2.2
New Germany	GF	22.64	19.64	-12.9	32.1
Templeton Dragon	TDF	26.66	25.45	-4.5	52.7
Templeton Em Mkt	EMF	20.27	18.58	-8.4	23.8
Wells Fargo Gbl Dv Oppty	EDD	NA	4.81	NA	-2.7

## U.S. Mortgage Bond Funds

BlkRck Income	BKT	6.24	6.10	-2.2	6.7
Invesco HI 2027 Tgt	MIT	8.80	8.56	-2.7	7.2

## Investment Grade Bond Funds

BlRck Core Bond	BHK	16.60	15.98	-3.2	4.9
BR Credit Alloc Inc	BSI	15.69	14.86	-5.3	6.7
Insight Select Income	INTI	22.46	21.18	-5.7	3.9
Invesco Bond	VBF	21.90	20.95	-4.3	3.6
J Han Income	JHS	16.24	15.63	-3.8	4.6
MFS Intmdt	MIN	3.96	3.78	-4.5	8.9
Western Asset Inf-Lk O&I	WIA	NA	13.32	NA	2.9
Western Asset Inf-Lk O&I	WIA	NA	12.10	NA	3.4
Westn Asset IG Dv Oppty	IGI	NA	21.74	NA	3.8

## Loan Participation Funds

Apollo Senior Floating	AFT	NA	14.05	NA	6.9
BR Debt Struct	DSU	11.58	10.28	-11.2	8.2
BR F/R Inc Str	FRA	13.85	12.17	-12.1	7.8
BlackRock Floating Rtn Inc	BGT	13.44	11.88	-11.6	7.7
Blackstone / GSO Strat	BGB	14.20	12.46	-12.3	9.3
Blackstone / GSO Str Filt Rtn	BSL	15.88	14.24	-10.3	8.0
Eagle Point Credit	ECC	NA	10.43	NA	15.8
EtnVncFltReteInc	EFT	14.35	13.45	-6.3	6.7
EV SenFltRt	EFR	14.12	12.78	-9.5	7.0
EV Senior	EVF	6.74	6.28	-8.6	6.3
FT/Sr Fltg Rte Inc Fd	FCT	12.72	11.63	-8.6	9.7
FT/Sr Fltg Rte 2022 Tgt Tr	FTT	9.41	9.00	-4.4	2.9
Highland Income	HFRO	12.95	9.86	-23.9	10.2
InvDyCrOpp	VTA	11.58	10.29	-11.1	8.7
InvSnrInc Tr	VVR	4.43	3.92	-11.5	6.8
Nuveen Credit Strat	JOC	NA	6.40	NA	16.5
NuvFloatRateIncl Fd	JFR	NA	8.77	NA	7.4
Nuveen Senior Income	NSL	NA	8.72	NA	7.4
PionrFltRate Tr	PHD	11.21	10.80	-3.7	6.3

## High Yield Bond Funds

AllianceBernHldInc	AWF	12.85	11.59	-9.8	6.9
Angel Oak FS Inc Trm	BNS	18.62	16.87	-9.4	7.4
Barings Gbl SD HY Bd	BGH	16.54	14.92	-9.8	9.7
BR Corporate HY	BLT	11.94	11.70	-2.0	8.0
BlackRock Ldr Dur Inc	BLY	16.98	15.69	-7.6	7.4
BNY Mellon Hl Yld Str	DHF	3.26	2.96	-9.2	8.5
CRSukHigh Yld	DHY	NA	2.30	NA	8.5
DoubleLine Inc Sol	DLS	NA	16.36	NA	10.7
DoubleLine Yld Opp	DLY	NA	18.75	NA	NS
First Tr Hl Inc Lng/Strt	FSD	16.38	14.59	-10.9	9.0
First Tr Hl Opp 2027	FTY	12.27	11.97	-6.1	NS
IVY HIGH INCOME OPP	NVH	14.51	13.07	-9.9	9.5
NeubHlYldStrt	NHS	12.53	11.83	-5.6	9.4
New Amer Hl Inc	HYB	9.83	8.60	-12.5	6.5
NexPoint StratOppty	NHF	17.66	10.70	-39.4	14.3
Nuveen CI Nov 2021 Tgt	JHB	NA	9.19	NA	4.4
Nuveen Crdt Opps 2022	JCO	NA	8.16	NA	6.8
Nuveen Global High Inc	JGH	NA	15.24	NA	7.6
PGIM High Yield Bond	GHY	16.19	14.31	-11.6	8.9
PGIM High Yield Bond	ISD	16.59	14.84	-10.5	8.5
PioneerHlncMtr	PHT	9.33	9.04	-3.1	8.4
Wells Fargo Income Oppty	EAD	NA	8.08	NA	8.8
WSt&SHIF Hl HIX	HIX	NA	6.93	NA	8.4
Western Asset Hl Inc Opp	HIO	NA	5.00	NA	7.7
Western Asset Hl Yld Dv HVI	HVI	NA	15.16	NA	7.4

## Other Domestic Taxable Bond Funds

Apollo Tactical Income	AIRC	NA	14.15	NA	7.2
Ares Dynamic Crd Alloc	ARD	NA	13.82	NA	8.9
BlackRock Mlti-Sctr Inc	BIT	18.38	17.14	-6.7	8.7
BlackRock Tax Muni Bd	BBN	25.38	26.79	+5.6	5.0
DoubleLine Opp Crd Fd	DBL	NA	19.63	NA	7.1
Duff&Ph Utill Cor	DUB	9.61	9.88	+2.8	5.9
EV LmtDurlnc	EVV	13.60	12.26	-9.9	9.8
Franklin Ldr Dur Income	FTF	9.43	8.79	-6.8	10.8
J Han Investors	JHI	18.14	17.14	-5.5	7.8
KKR Income Opportunities	KIO	NA	14.34	NA	10.5
MFS Charter	MCR	8.95	8.58	-4.1	8.1
Nuveen Taxable Muni Inc	NBB	NA	23.54	NA	4.8
PIMCO Corp & Inc Oppty	PCY	13.85	17.59	+27.0	9.1
PIMCO Corp & Inc Strat	PCN	13.98	16.98	+21.5	8.3
PIMCO HlncCo	PHK	NA	6.01	NA	11.1
PIMCO IncmStrFd	PFL	10.41	11.06	+6.2	9.7
PIMCO IncmStrFd II	PFI	9.27	9.78	+5.5	9.8
Putnam M&S Int	PMN	4.46	4.15	-7.0	8.6
Putnam Prem Inc	PPT	4.94	4.59	-7.1	9.1

Wells Fargo Multi-Sector	ERC	NA	11.91	NA	9.7
World Income Funds					
Abdn AP Inc Fd	CAF	4.89	4.37	-10.6	7.8
BmdynGbl Gbl Inc Oppts	BWG	NA	12.48	NA	7.0
EtnVncStDivInc	EVG	13.75	12.44	-9.5	7.2
MS EmMktDomDebt	EDD	7.34	6.36	-13.4	7.4
PIMCO Crd & Mrt Inc	PCI	19.96	20.44	+2.4	12.2
PIMCO Dynamic Income	PDI	24.56	26.18	+6.6	11.5
PIMCO Opportunity	POI	23.33	24.75	+6.1	9.1
PIMCO Strat Inc	RCS	NA	6.90	NA	9.7
Templeton Em Inc	TEI	8.92	7.85	-12.0	7.7
Templeton Gbl Inc	GIM	6.09	5.42	-11.0	4.5
Wst&StEmergDebt	EMD	NA	13.67	NA	8.8
Western Asset Gld Cr Dv Op	GDO	NA	17.99	NA	6.7

## National Muni Bond Funds

BlkRckInv Q Mun	BKN	16.69	17.24	+3.3	4.2
BlackRock Muni 2030 Tgt	BTT	26.75	25.21	-5.8	2.9
BlackRock Muni	BKF	14.71	15.09	+2.6	4.4
BlackRock Muni II	BLE	15.14	15.39	+1.7	4.6
BlkRck Muni Inc Qly	BYM	15.90	14.87	-6.5	4.0
BR MuniAssets Fd	MEA	14.39	14.80	+2.8	4.3
BR MuniEnhanced	MUN	14.28	12.07	-3.3	4.1
BR MuniHoldings Qly	MFL	15.12	14.17	-6.3	3.9
BR MH Qly 2	MUE	14.27	13.35	-6.4	4.3
BR MuniHoldings	MHD	17.26	16.13	-6.5	4.5
BR MuniVest Fd	MVF	9.88	9.16	-7.3	4.4
BR MuniVest 2	MVT	15.52	14.76	-4.9	4.4
BR MuniVest Fd	MYD	15.18	14.43	-4.9	4.7
BR MuniYld Qly	MOY	16.60	16.67	+0.4	4.1
BR MuniYld Qly 2	MQI	10.58	13.89	-4.7	4.1
BR MuniYld Qly 3	MVI	15.24	14.24	-6.6	3.9
BNY Mellon Muni Bd Infra	DBI	14.53	14.09	-3.0	4.5
BNY Mellon Str Muni Bond	DSM	NA	7.78	NA	4.7
BNY Mellon Strat Muni	LEO	8.60	8.60	0.0	4.9
DWS Muni Inc	KTF	12.80	11.49	-10.2	4.1
EV MuniBd	EDM	14.30	13.35	-6.6	4.3
EV MuniBd	EVN	14.21	13.46	-5.3	4.2
EV NatlMuniOpp	EOT	21.74	20.94	-3.7	3.7
InvAdvMunltrCrtl	VKI	NA	11.49	NA	4.9
Invesco MuniOpp	OIA	NA	7.78	NA	4.9
InvescoMuniOpp Tr	VMO	NA	12.97	NA	4.7
InvescoMunTr Vkk	IQI	NA	12.97	NA	4.6
InvescoQual Inc	IQI	NA	12.89	NA	4.7
InvTrlnvGrMun	VGM	NA	13.27	NA	4.7
InvescoValMunInc	IIM	NA	15.70	NA	4.5
MAINSTAY M&OFRMUNOP	MMO	NA	21.68	NA	4.7



MARKETS

# Fractional Shares Catch On With Young

New investors use programs to get broad exposure to stocks through ETFs

By Julia Carpenter

Fractional shares are an easy way for small investors to buy a piece of Tesla Inc. or Apple Inc., but many are using it as a way to slowly accumulate exchange-traded funds that give them a small piece of the broader market.

Cari Swanger, a 33-year-old pharmacist living in Seattle, opened her first SoFi Invest account this summer after she finished paying off her student loans. Ms. Swanger chose fractional investing and ETFs because they allowed her to diversify and minimize her risk.

“One share of Amazon or Tesla is a lot of money these days,” she said. “I made myself a promise: I’m not going to put all my money on one stock.”

Ms. Swanger’s first investment was \$50 in the **SoFi Select 500 ETF**, which tracks the S&P 500. She has since invested in the **SoFi Weekly Income ETF**, which invests in corporate bonds and in the **SoFi 50 ETF**, an ETF of the 50 most popular U.S. stocks

on SoFi.

**Apex Clearing Corp.**, a digital custodial and clearing firm, reports that in 2020 to date, it processed about 17 million fractional trades a month. On its platform, fractional trading made up 47% of total trading volume, with 43% of those trades in ETFs.

**Robinhood Financial LLC**, which reported more than three million new accounts this year, started offering a feature in May that allows users to regularly schedule investments and buy fractional shares.

“When we ask customers, ‘Hey, why did you do this?’ the No. 1 reason they tell us is they want to invest in this company or ETF long-term,” said Madhu Muthukumar, head of product management at Robinhood.

**Social Finance Inc.**, known as SoFi, estimates that about one-quarter of its clients’ fractional buys are ETFs, with some of the most popular being the **Vanguard S&P 500 ETF**; the **SoFi Select 500 ETF**; the **SPDR Global Stock Market ETF**, tracking companies in emerging markets; and the **Invesco QQQ Trust**, which tracks the Nasdaq-100 index. Fund prices range from almost \$50 a share for SPDR to more than \$300 for QQQ and Van-

guard S&P 500.

Investing in fractions of ETF shares works just like buying other fractional shares: Investors choose a dollar amount they would like to invest in the ETF, which a brokerage already has purchased, and then the fraction they hold is whatever portion of the share their dollar contribution is worth.

Ryan Lee, a 20-year-old business student at the University of New Hampshire, uses the investment app Stash to buy fractional shares of high-profile ETFs.

“I can diversify so easily with just \$5 at a time,” he said. “By using ETFs, I had diversification.”

Mr. Lee said he bought **QQQ** and the **iShares Russell 2000 ETF** at the beginning of his investment journey in 2018. They appealed to him because they increased his exposure to new parts of the market—QQQ to tech, the iShares Russell 2000 to track small-cap stocks—and diversified his investment portfolio.

“When I was putting \$100 into that tech ETF, I invested in more than just Apple,” he said.

Not all platforms offer the ability to buy ETFs through fractional trading. **Charles Schwab Corp.**, for example,



CARI SWANGER

Cari Swanger says fractional investing allowed her to diversify.

offers only S&P 500 stocks through its fractional platform, **Stock Slices**.

At **Fidelity Investments**, 18% of the trades on the frac-

tional and dollar-based investment platform have been in ETFs since it launched this February.

With this year’s retail frenzy in the backdrop, the

rise of fractional investors buying ETFs may ease the fear that these new investors will get wiped out when this market rally ends.

“If we’re worried about people speculating and getting themselves into trouble, it’s better they have well-diversified portfolios,” said Larry Harris, former Securities and Exchange Commission chief economist and professor of finance at the University of Southern California’s Marshall School of Business.

“The more we encourage people to hold well-diversified portfolios, the less likely they are to be wiped out and the less likely they are to shy away from the markets in the future when it would be unwise to do so.”

Ms. Swanger said she would continue to invest in ETFs. Over the course of the year, she has gradually increased her stake and estimates she has close to \$40,000 in fractional ETFs.

In some cases, she is able to buy whole shares of ETFs, but she said that overall, the fractional approach makes it easier for her to map out her investments.

“I didn’t want to put my earnings directly into [stock] shares,” she said.



Mark Coombs, left, CEO of Ashmore Group, shakes hands with Ecuadorean President Lenin Moreno.

## Investor’s Bond Bets Backfire

Continued from page B1  
about \$243 million in December 2019, according to Ashmore’s financial filings.

Still, what had been Ashmore’s largest mutual fund, which invests in short-term bonds, has lost 13.75% this year while a comparable index gained 4.15%, according to data from Morningstar Inc. The fund’s assets have shrunk by 69% to \$2 billion, forcing it to sell Argentine, Ecuadorean and Lebanese bonds, the Morningstar data and financial

reports show.

Meanwhile, funds managed by **BlackRock Inc.**, **Eaton Vance Corp.** and **Wellington Management LLP** have bet against Ashmore shares this year, though BlackRock terminated short positions on the stock in recent weeks, according to data from the U.K.’s Financial Conduct Authority. Ashmore shares fell 52% to \$3.55 in February and March and have since recovered about half the loss, closing at \$5.48 on Friday.

Connecticut’s state treasury decided in May to withdraw a roughly \$730 million account with Ashmore, according to regulatory filings. This autumn, **Goldman Sachs Group Inc.** discontinued Ashmore as an option in its employee 401(k) retirement plan, according to a document re-

viewed by The Wall Street Journal.

Competitors say Ashmore has grown too large for Mr. Coombs’s high-octane investment style and for his unwillingness to delegate. Mr. Coombs declined to be interviewed. Ashmore’s investments are decided by a six-member investment committee that Mr. Coombs heads, a person close to the company said.

“They’re trying to put a brave face on it, but this is the worst we’ve seen since the financial crisis,” said David McCann, an analyst at London-based brokerage Numis Securities who has a “reduce” rating on Ashmore stock.

Mr. Coombs grew up in London and attended Cambridge University, where he played rugby and studied law.

He worked for about 15 years as an emerging-markets investment banker before founding Ashmore in 1999.

The idea was to pioneer investing in emerging markets, where he believed growth would outpace the U.S. and Europe.

That has mostly played out—the face value of emerging-market debt outstanding climbed to \$26.5 trillion in 2018 from \$90 billion in 1984, around when Mr. Coombs first entered finance, according to data from Ashmore.

Former colleagues describe Mr. Coombs as a candid and visionary leader with a high IQ who is propelled by a fierce drive to make money, often going on buying binges in crises when bond prices crashed. Mr. Coombs can be charming with clients and in groups but in private is more taciturn, former colleagues said.

He lives in the same home he owned before becoming a billionaire and limits his clothing to multiple copies of one suit and tie, sometimes wearing old shirts with frayed cuffs to client meetings, former colleagues say. Mr. Coombs competes in triathlons and often eats a single meal a day to stay trim.

Mr. Coombs has kept costs low by packing employees tightly in the firm’s offices, paying below-market salaries and cutting personnel in lean years, analysts and former colleagues said.

The company’s first big break came in 2001 when Mr. Coombs sold all his Argentine bondholdings before the country defaulted. Dodging that bullet, along with large, win-

ning bets in Brazil and Russia, helped Ashmore deliver average annual returns around 18% at the time, one of the former colleagues said.

Mr. Coombs became an emerging-markets evangelist, persuading insurers, pensions and endowments to invest with him while paying hedge-fund-like fees. When the company listed on the London Stock Exchange in 2006, it was managing \$20 billion, and Mr. Coomb’s 47% stake was valued at about \$1.6 billion, according to data from S&P Global Market Intelligence.

The growth accelerated over the past decade as anemic interest rates stoked demand for high-yielding emerging-markets bonds. Ashmore’s investment dollars jumped to \$98 billion last year.

But even in emerging markets, interest rates fell and yield grew harder to find. To deliver, Mr. Coombs went big in three countries that paid high interest rates because they struggled with large deficits and political instability, leading to the unlucky trifecta of Argentina, Ecuador and Lebanon.

Some Wall Street analysts see cause for optimism in Ashmore’s disclosure that outflows slowed to \$800 million in the third quarter. Others expect the cash drain to intensify again in January when institutional investors rebalance portfolios.

Mr. Coombs said on the September analyst call that it is uncertain how many institutional clients will leave. “It could be half of them, it could be 10% of them, he said. “We just don’t know.”

## Ferrellgas To Place Parent in Bankruptcy

By SOMA BISWAS

Propane supplier **Ferrellgas Partners LP** has reached a prearranged deal with bondholders for the holding company with no employees to file for bankruptcy while keeping its operations out of chapter 11.

The proposed deal will allow the company’s employees, as well as Chairman and interim Chief Executive James Ferrell, to retain ownership of operating company Ferrellgas LP.

“We have reached an agreement with a substantial majority of our noteholders that will preserve our almost 100-year-old history and maintain ownership by our nearly 5,000 global employees,” Mr. Ferrell said.

The parent company, Ferrellgas Partners, plans to file for bankruptcy in the U.S. Bankruptcy Court in Wilmington, Del., the company said in a regulatory filing. Under a prepackaged bankruptcy plan, the company will convert over \$350 million in notes at the parent company into ownership units.

Ferrellgas has been in forbearance since the summer on the \$350 million in parent-company notes that came due on June 15, and holders of 74% of those notes have agreed to the deal under which the parent company will file for bankruptcy.

### THE TICKER | Market events coming this week

#### Monday

No major events are scheduled

#### Tuesday

##### Capacity utilization

Oct., previous 72.80%  
Nov., expected 73.00%

##### Empire Manufacturing

Nov., previous 6.3  
Dec., expected 6

##### Import price index

Oct., previous down 0.1%  
Nov., expected up 0.3%

##### Industrial production

Oct., previous up 1.1%  
Nov., expected up 0.4%

##### FOMC Meeting

##### Earnings expected\*

Estimate/Year Ago(\$)  
Nordson Corp. 1.53/1.79

#### Wednesday

##### Business inventories

Sep., previous up 0.7%  
Oct., expected up 0.6%

##### EIA status report

Previous change in stocks in millions of barrels  
Crude-oil stocks up 15.2  
Gasoline stocks up 4.2  
Distillates up 5.2

##### Mort. bankers indexes

Purch., previous down 5%  
Refinan., prev. up 2%

##### Retail sales, ex. autos

Oct., previous up 0.2%  
Nov., expected up 0.1%

##### Retail sales

Oct., previous up 0.3%  
Nov., expected down 0.3%

##### FOMC Meeting

Estimate/Year Ago(\$)  
Lennar Corp. 2.36/2.13  
Toro Co. 0.51/0.48

#### Thursday

##### Building Permits

Oct., previous 1.545 mil.  
Nov., expected 1.54 mil.

##### IA report: natural-gas

Previous change in stocks in billions of cubic feet  
down 91

##### Housing Starts

Oct., previous 1.53 mil.  
Nov., expected 1.52 mil.

##### Initial jobless claims

Previous 853000  
Expected 828000

##### Philadelphia Fed survey

Nov., previous 26.3  
Dec., expected 18

##### Earnings expected\*

Estimate/Year Ago(\$)  
Accenture 2.05/2.09  
FedEx 3.93/2.51  
General Mills 0.97/0.95

#### Friday

##### Productivity

2nd quarter, previous 170.5 bil. Deficit  
3rd quarter, prel., exp. 187.5 bil. Deficit

##### Leading indicators

Oct., previous up 0.7%  
Nov., expected up 0.5%

##### Earnings expected\*

Estimate/Year Ago(\$)  
Darden Restaurants 0.73/1.12  
Nike 0.62/0.70



JUSTIN SULLIVAN/GETTY IMAGES

Nike on Friday is expected to post quarterly earnings of 62 cents a share, down from a year earlier.

\* 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



# HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

## Dividends Will Have Their Day Again

Companies that pay out could shine once more

What do you call an investment strategy that would have left the likes of **Amazon**, **Facebook**, **Tesla**, **Netflix** and Google parent **Alphabet** out of your portfolio?

Aside from some unprintable words, “stodgy” might come to mind. But until recently, a portfolio that mechanically excluded such nonpayers of dividends would have done very well. They might again in practice, even if they shouldn’t in theory.

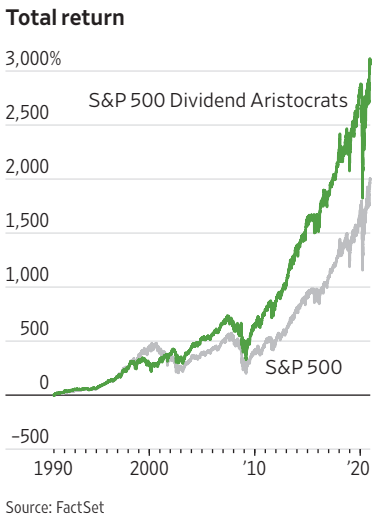
Franco Modigliani and Merton Miller, pioneers of modern financial theory, argued decades ago that investors should in theory be largely indifferent to dividends. Since the 1980s, the payouts have become quaint in the U.S. as companies have been able to freely buy back their shares. In the second quarter of this year, the yield from buybacks in the S&P 500 was 2.52% whereas the dividend yield was 1.75%, according to Yardeni Research.

The decision to pay out cash comes down to how much money investors think management can earn if they keep it. Activist investors have split on the issue recently with D.E. Shaw pushing **Exxon Mobil** to cut expenditures to maintain its fat dividend and Third Point asking **Walt Disney** to suspend its payout and invest in streaming instead.

Yet for something that theoretically shouldn’t matter, dividend-paying stocks have done swimmingly. The key seems to be focusing on those with high but sustainable payouts. Slicing large U.S. companies into quintiles by dividend yield found that the sec-



Third Point asked Disney to suspend its payout and invest in streaming.



ond-highest-yielding group beat the market most consistently each year over many decades. Measured from 1928 through 2019, a basket of dividend payers in that quintile saw a \$1 investment turn into \$25,395, according to Dartmouth College professor Kenneth French. A basket of nonpayers would have been worth \$2,139.

That result is all the more remarkable because dividends were a relatively small part of investors’ returns during the market’s most-rewarding decades. In the 1990s and 2010s they produced 16% and 17% of the S&P 500’s return, according to data from Morningstar and Hartford Funds. But they more than made up for it during less-ex-

citing periods like the 1940s and 1970s, when they made up 67% and 73% of the return, respectively.

Part of the answer for why dividends mattered is that reinvesting them during those bleak times paid off—easier said than done when investors get discouraged. But another is what sort of company pays them in the first place. A dividend payer is more likely to be a value stock. In June, the average price-to-book ratio of Dividend Aristocrats such as **AbbVie**, **3M** and **Colgate-Palmolive**, with at least a quarter-century of rising payouts, was less than half that of the S&P Growth Index, according to ProShares. Value is out of fashion now, like it was in the 1990s and other bullish periods, but cheap stocks shine when the party ends. The same might not be true for companies that mostly reward shareholders through buybacks since they are much quicker to slash them just as stocks plunge.

Longtime dividend payers hate angering shareholders by cutting payouts. That might force them to borrow money to fund those coupons or to skip good investment opportunities, but it also leads managers to avoid bad investments. They are better stewards of investors’ capital because they have to spend it more judiciously.

Dividends may not be the most efficient way of producing good companies. Still, it is hard to argue with the results. —*Spencer Jakab*

## Oil’s Recovery Isn’t A Sure Thing

Vaccines have buoyed hopes that oil demand will soon recover, and the Brent global benchmark is flirting with \$50 a barrel. But traders may be underestimating the responsiveness of U.S. supply.

It has been a terrible year for the oil industry. A price war followed by a pandemic forced many producers to slash spending. Historically, significant underinvestment in drilling has prompted a price increase when demand eventually rebounded, given the long lead time to find and develop new oil sources.

U.S. shale deposits changed that dynamic in recent years, though. The sector’s ability to ramp up production rapidly means the high prices that historically resulted from big cuts to capital expenditure no longer look to be such a sure thing.

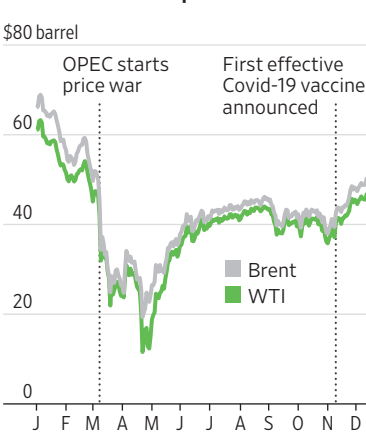
The U.S. industry has for years frustrated efforts by the Organization of the Petroleum Exporting Countries and its allies to increase prices by cutting production. A recent proposal to add the main U.S. export price, WTI Midland, to the global oil benchmark from 2022 is a testament to shale’s importance in global supply.

True, shale producers have consolidated this year and come under investor pressure to focus on cash flow rather than growth.

“The rules of the game have changed” and the industry no longer has access to the “incredible amounts of capital” it did just a year ago, says Benjamin Shattuck of energy consultant Wood Mackenzie.

Yet newfound discipline may not last. Oil is up about a quarter since early November, when the first effective vaccine was announced. At the current U.S. benchmark price of just under \$47, many reserves could be profitably lifted. “As you move above \$45 a barrel it gives you way more commercial drilling,” says Alisa Lukash of energy consultant Rystad En-

Crude-oil futures price



ergy, referring to U.S. shale. Governments also have accelerated their decarbonization plans this year, increasing the risk that oil left in the ground today might never be profitably recovered. And investor discipline might waver against a backdrop of ultralow interest rates.

Drilling is indeed creeping up, and producers are bringing on uncompleted wells. Even if U.S. producers hold firm, OPEC suppliers are pushing to roll back the record production cuts they made in April in their efforts to stabilize prices. Demand recovery can’t be taken for granted, either. Vaccines will allow a return to something like normal life in the U.S. and Europe, and fast-growing Asian markets will want more crude. Yet some of this year’s work-from-home changes could persist and, in the longer term, decarbonization policies will cut demand.

Fossil-fuel companies have overinvested in recent years to create gluts of oil, gas, liquefied natural gas and even refineries. Discipline in the face of today’s optimism about the post-Covid recovery would require a radical culture shift.

—*Rochelle Toplensky*

## AstraZeneca’s Alexion Splurge Could Attract a Crowd

**AstraZeneca’s** \$39 billion splurge to acquire **Alexion Pharmaceuticals** looks like a winner— as long as it can hang on at that price tag.

The European pharmaceuticals giant said Saturday it would acquire the rare-disease specialist for \$175 a share, with just over one-third of that payable in cash and the remainder in stock. AstraZeneca is paying a 45% premium to Alexion’s Friday closing price.

The deal has obvious benefits for both sides. AstraZeneca’s big prize in this deal is the blood disorder franchise, which generates roughly \$5 billion in annual sales.

That would rank right alongside the cancer drug Tagrisso as one of the company’s bestselling products. Competition for Soliris is unlikely to reach the market for several years, and rare-disease patients have historically been reluctant to switch treatments, even if a drug with superior data reaches the market.

Much of the public attention that AstraZeneca has received recently has surrounded its Covid-19 vaccine candidate, but it is unlikely to be a significant part of company sales for a long time. Alexion is far more material. AstraZeneca expects the deal to in-

crease earnings per share by at least 10% over the next three years. The company also said that the acquisition “supports” its “progressive dividend policy,” signaling a higher payout eventually.

As for Alexion, its stock price is down 40% since its 2015 high, despite those huge cash flows. Drug companies with one product accounting for the majority of their sales tend to trade at low earnings multiples. In the case of Alexion, Soliris and the next-generation drug Ultomiris account for more than 80% of its 2020 estimated revenue. Its shares fetch just 10 times this year’s adjusted profit

forecast. By that logic, those drugs are more valuable to a larger, more-diversified company like AstraZeneca, in the eyes of Wall Street.

But while the deal seems unlikely to run afoul of antitrust regulators, AstraZeneca shareholders shouldn’t count on that extra dividend boost just yet. Alexion could be attractive to other suitors, too. After all, the drug industry has no shortage of large companies with long-term growth challenges but fat wallets. And the deal price announced on Saturday is fairly light on cash. An interested bidder shouldn’t have trouble exceeding

that, though Alexion will owe AstraZeneca a break fee of \$1.2 billion in such a scenario.

“In today’s inflated market we believe investors could demand more,” from AstraZeneca “or another acquirer,” wrote SVB Leerink Analyst Geoffrey Porges in a note to investors on Saturday.

As such, investors should be carefully watching Alexion’s stock price when trading resumes on Monday.

The stronger it performs, the more likely it is that AstraZeneca Chief Executive Officer Pascal Soriot will have to sweeten the deal.

—*Charley Grant*

### MARKETS

## Bitcoin Upturn Spurs Demand for Better Tracking

By PAUL VIGNA

Bitcoin enthusiasts agree the digital currency hit a record recently. What they don’t agree on is the level of that milestone or when it was set.

Data provider Refinitiv recorded an all-time high of \$19,510 on Nov. 25. Research and news site **CoinDesk** recorded the high at \$19,921 on Dec. 1. Another startup-data provider, **Messari**, put the high at \$19,931, on Dec. 1. Other exchanges and data providers have their own numbers.

The fractured marketplace has prompted the introduction of a new crop of tools to help investors track the burgeoning, volatile industry. Since bitcoin exploded in popularity again this fall, S&P Dow Jones Indices has said it would create cryptocurrency indexes. Other firms have launched a bitcoin-volatility index and a tool that aims to be the Bloomberg screen of the crypto industry.

“That’s the biggest problem for trading, getting that historical data,” said Anthony Denier, chief executive of trading platform **Webull Financial** LLC, which began allowing its clients to trade cryptocurren-

cies last month. “Where do you pull the data from? There’s no NYSE, no ICE or Nasdaq that will match up exactly with every other provider,” he said.

The discrepancies in the bitcoin data reflect the nature of the industry itself. Bitcoin and hundreds of other cryptocurrencies trade on independent exchanges around the world. Every exchange manages its own data feed, comprising millions of trades. Some are regulated and transparent; others are notorious for unreliable volume numbers and fraudulent trading.

In traditional capital markets, exchanges like the New York Stock Exchange and Nasdaq Stock Market provide troves of data that help investors value the underlying assets in mutual, index and exchange-traded funds. That doesn’t exist in the crypto market.

Startups like Messari, CryptoCompare, CoinDesk and others have been trying to aggregate data within the industry for years, but as the market grows, traditional companies, like S&P, are jumping in.

S&P unveiled a partnership with the crypto-data provider



The discrepancies in the digital currency’s data reflect the nature of the industry itself.

Lukka earlier this month to create a suite of indexing products for cryptocurrencies. Although details about the projects are scarce, Peter Roffman, the global head of innovation and strategy at S&P, said the company plans to launch a couple of products early next year and create other lines of index products over time.

What mainly exists currently, he said, are market-

data feeds that average prices across a number of exchanges. That makes it difficult to come up with an acceptable definition of fair-market value.

“Our goal is to create transparency in markets that investors have interest in,” he said. “Something that I think a lot of people and organizations don’t realize is that crypto is different than traditional markets.”

There is a potential profit

to be made in providing these services. The firms involved make money by licensing the data to companies that will use them to build financial products like index funds. And with bitcoin’s marketplace growing, the opportunity grows as well.

“The demand for data has increased substantially,” said Charles Hayter, the CEO of London-based **CryptoCompare**. His firm licenses about

50 index products world-wide, and selling data brings in about half of its revenue.

This month, CryptoCompare launched a bitcoin-based volatility index, similar to the volatility index created by **Choe Global Markets** Inc. to measure volatility in stocks. This BVIX operates much like the CBOE’s VIX. It is a measure of implied volatility in bitcoin based on options trading on a European exchange called Deribit.

Messari is another firm that has tried to sift out unreliable exchange data. It created an index that pulls data from 10 exchanges it rates as reliable and builds volume, price and market-capitalization numbers from them.

The firm also recently rebuilt its website to operate as a comprehensive data feed for investors, something it hopes will become for crypto investors what the Bloomberg terminal is for traditional investors.

“The question becomes, are you going to go to 20 different walled gardens to hunt and peck and aggregate, or will it be one portal?” said Ryan Selkis, Messari’s founder and CEO.



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BEGINS ON  
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JOURNAL REPORT

# C-SUITE STRATEGIES

## The Best-Managed Companies of 2020

Microsoft is on top, followed by Apple, IBM and Amazon in the Drucker Institute's annual Management Top 250 ranking



TYLER COMRIE

BY PATRICK THOMAS

**T**he technology giants that shape so much of our lives dominate in yet another way: They lead the pack of the country's best-run companies. In a year when the coronavirus pandemic has devastated large swaths of the U.S. economy and reconfigured the ways millions of Americans shop, work, communicate and learn, tech stalwarts have remained in the uppermost echelon of the Management Top 250, an annual ranking based on the principles of the late management guru Peter Drucker. In the 2020 lineup, Microsoft Corp. unseated Ama-

zon.com Inc. as No. 1 by performing consistently well across each of the five main components of the overall ranking compiled by researchers at Claremont Graduate University's Drucker Institute: customer satisfaction, employee engagement and development, innovation, social responsibility and financial strength.

While their analysis captures data from the first few months of the pandemic, through the end of June, Drucker Institute researchers say the health crisis likely had a limited impact on their 2020 list. "What we've really noticed is that the companies that scored highest in our ranking last year seemed in the best shape to deal with the crisis," says Rick Wartzman, head of the KH Moon Center for a Func-

tioning Society, a part of the Drucker Institute.

Rivals in the cloud-computing market, Microsoft and Amazon have both benefited from the shift to remote work, as companies and employees embraced their products to adapt to office closures and social-distancing requirements aimed at curbing the spread of the coronavirus. But Amazon fell to No. 4 this year as Apple Inc. took the No. 2 spot, followed by International Business Machines Corp. Google parent Alphabet Inc. rounds out the tech-centric top five. Overall, researchers examined 886 companies this year, using 33 indicators of management effectiveness.

Silicon Valley has faced mounting scrutiny from *Please turn to page R4*

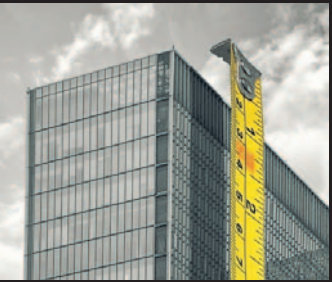
INSIDE

• Fine Tuning

What's new in how this year's rankings were calculated **R2**

The Recipe

A look at how the rankings measure management effectiveness—and how well **R2**



• Red flags

Some highly ranked companies have a weak spot in their scores **R5**





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age correlation: 0.66 multiplied by 0.66 equals 0.44.) That’s strong. The average correlation of our five areas with effectiveness is about the same as, for example, the correlation of the percentage of shots a National Basketball Association team makes with how many games it wins.

It’s also notable that our correlations have gotten stronger as we’ve incorporated new data sources to bolster the model. The average correlations for our five areas of corporate effectiveness are up by 0.02 over the past four years. Similarly, the average correlation for our 33 indicators with their respective areas of effectiveness has increased from 0.65 in 2016 to 0.70 in 2020.

All of this is to say that our model accurately captures an essential quality of large companies—again, what we label “effectiveness”—and the underlying factors that influence it.

Of course, there are lots of things that our model misses. As good as our model is, it doesn’t explain the other 56% of why a company is or is not effective.

Macroeconomic events, such as big swings in currency exchange rates or new trade policies, are likely to fall outside our scope. We also didn’t detect, at least in a timely way, several headline-grabbing management failures—the fatal flaw in Boeing Co.’s 737 Max software and General Electric Co.’s financial collapse in 2018, among them.

Nonetheless, by and large, our model has proved its ability to consistently separate out the best-managed companies from the rest.

One barometer of this has been the stock market. Although we don’t consider share price the be-all and end-all of how well a company is run, we do agree with Peter Drucker that it tends to be a pretty good gauge over time.

To that end, the S&P/Drucker Institute Corporate Effectiveness Index tracks the 100 companies among the S&P 500 that have both the highest effectiveness scores in our model and that also perform consistently across our various categories. For the 12 months ended Nov. 30, 2020, our index outpaced the S&P 500 by 402 basis points in total return, 21.48% versus 17.46%. (S&P Dow Jones Indices Inc. publishes this index through a co-branding agreement with the Drucker Institute, and the Institute earns a royalty from assets invested in financial products based on the index.)

Our model has been able to illuminate other trends, as well. Through our ongoing research, we have found that the most effectively managed companies in our ranking have been far less likely than their peers to lay off or furlough workers during the pandemic; have the most gender diversity among their top executives; and are led by individuals who are adaptable and tolerant of ambiguity—traits that have been especially important of late.

In the end, we are a proud testament to statistician George E. P. Box’s famous adage, “All models are wrong, but some are useful.”

*Dr. First is executive director of the Drucker Institute. He can be reached at [reports@wsj.com](mailto:reports@wsj.com).*

What the Rankings Measure, And How Well They Measure It

### The All-Stars

The companies in the 2020 Management Top 250 that scored at least one standard deviation above the mean for all companies examined in all five categories of the ranking. Overall rank in parentheses

Microsoft Corp. (1)

Apple Inc. (2)

Cisco Systems Inc. (6)

Procter & Gamble Co. (8)

Merck & Co. (11)

Nvidia Corp. (12)

Adobe Inc. (16)

Eli Lilly & Co. (39)

Source: Drucker Institute

The model does a good job gauging ‘effectiveness,’ and the underlying factors that influence it

By ZACHARY FIRST

When the Drucker Institute began building the model behind the Management Top 250 six years ago, we had no idea whether it would pan out.

Our theory was that all five of the areas we examine—employee engagement and development, customer satisfaction, innovation, social responsibility and financial strength—are interrelated and influence each other over time. Social scientists call this “reciprocal causation.”

It’s a bit like the way the systems of the human body—circulatory, nervous, respiratory, skeletal and so forth—are connected. Yet this really was just a hypothesis. There was no guarantee that pulling together dozens of metrics on hundreds and

hundreds of big companies, collected by a variety of data providers feeding into our five categories, wouldn’t turn into a statistical mess and nothing more.

It didn’t.

One way that we judge the model’s value and validity is by looking at correlations between each of our categories and a company’s overall management performance, or what we call “effectiveness.” Management scholar Peter Drucker defined effectiveness as “doing the right things well.”

Like “health,” you can’t see effectiveness per se. But you can assess whether a company is effectively managed by measuring individual indicators in the same way that you can measure whether someone is healthy by looking at their cholesterol count, neural activity, lung capacity and bone density.

The correlations of this type range from zero (the model explains nothing) to 1.0 (whereby the model explains everything).

In our case, the five areas can together explain 44% of a company’s effectiveness. (This is calculated by squaring the aver-

What’s New in the Rankings This Year

By RICK WARTZMAN AND KELLY TANG

As you digest the Management Top 250 for 2020, seeing which companies landed where on the list, our heads are already off in a different place: thinking about the rankings for 2021.

As soon as we put things to bed, we begin to contemplate modifications for the next year to the **Drucker Institute’s** gauge of corporate effectiveness, which is grounded in the teachings of the late management scholar Peter Drucker and is the basis of the Management Top 250. We define “effectiveness” as Mr. Drucker did: doing the right things well.

For 2020, we examined 886 major corporations in all, using 33 indicators across five categories: customer satisfaction, employee engagement and development, innovation, social responsibility and financial strength. Corporations are compared in each of these areas, as well as in their overall effectiveness, through standardized scores with a typical range of 0 to 100 and a mean of 50.

Sometimes, the adjustments we make to our statistical model are substantial.

In 2019, for example, we revamped the way that we determine financial strength by adding to our mix of metrics “economic value added,” or EVA, which takes stock of a company’s operating efficiency, asset management, capital discipline and profitable growth.

Other times, we make smaller tweaks, such as when we eliminated a few indicators in 2018 to prevent the possible overweighting of data from the same provider.

In either case, our aim is the same: to better reflect Mr. Drucker’s core principles and to bolster the model’s empirical validity. (Our data sources, methodology and other details going back to 2017 can be found at [drucker.institute/programs/company-rankings](http://drucker.institute/programs/company-rankings).)

This year, we undertook several revisions that were relatively minor—but that still affected how a number of prominent companies fared. For starters, we fine-tuned what’s included in the customer-satisfaction category, ascribing far less importance to certain indicators that track how marketing professionals assess a business’s brand reputation and whether a company has a data privacy and security policy or program. The reason: Neither re-

ally captures a consumer’s experience (as opposed to what some experts think or what a company says it’s going to do but may not deliver on).

We also honed our approach in the innovation category. In this arena, how a company stacks up on a variety of different indicators is calculated relative to the industry average. That way, we aren’t comparing how many patents are filed by a software firm with those from, say, a retailer.

The trouble is, companies don’t always reveal the activity they’re engaged in, particularly when it comes to investments in research and development, where many firms fail to report any expenditures. Previously in our model, this would register as \$0, pulling down the industry average and, in turn, giving those that

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THE BEST-RUN COMPANIES,  
AS RANKED BY THE  
DRUCKER INSTITUTE  
2020

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**Clorox Co. scored a big increase in customer satisfaction.**

did disclose their spending an artificially high score. To correct for that, we now derive the industry average only from companies that supply data.

In addition, this year for the first time we evaluated the extent of a company’s cutting-edge job postings—for positions in artificial intelligence, robotics, blockchain and so forth—and R&D-related job postings in the context of its total hiring.

For some in our rankings, these alterations had a notable impact. For instance, largely because of how we reworked our formula, **Amazon.com** Inc.’s innovation score fell by more than 76 points from 2019 to 2020—though it still ranked No. 1 in the category this year with an off-the-charts mark of 135.9.

Meanwhile, **Facebook** Inc.’s customer-satisfaction score declined from 41.6 in 2019 to an abysmal 26.3 this year, as **Clorox**

Co.—which has seen a surge in sales of coronavirus-killing cleaning products amid the pandemic—leapt from an already impressive 67.1 in that category to a sky-high 72.5. The movements for both companies were caused, in no small part, by how we changed our model.

While it can be kind of exciting to follow who is up and who is down from year to year, that is never our focus. What guides us is the data—not the drama—and a commitment to ensuring that the entire model is sound from a statistical standpoint.

To that end, the correlation between customer satisfaction and overall effectiveness increased to 0.58 in 2020 from 0.48 in 2019, while the correlation for the innovation category climbed to 0.77 from 0.71. Correlations of this type range from zero (signaling that the model explains nothing) to 1.0 (whereby the model explains everything).

As we look to 2021, we will continue to try to find that sweet spot: improving the model that we’ve built without going so far that we obscure the actual performance of the companies we cover.

*Mr. Wartzman is the head of the KH Moon Center for a Functioning Society, a part of the Drucker Institute, and Ms. Tang is the institute’s senior director of research. Email them at [reports@wsj.com](mailto:reports@wsj.com).*



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Customer Top 10

The top scores for customer satisfaction among the Management Top 250

International Business Machines Corp.	84.2
Caterpillar Inc.	76.6
Agilent Technologies Inc.	76.1
Procter & Gamble Co.	75.1
Cisco Systems Inc.	74.2
Accenture PLC	73.3
Clorox Co.	72.5
Molson Coors Beverage Co.	72.3
Ford Motor Co.	71.7
TE Connectivity Ltd.	71.6
Source: Drucker Institute	

Employee Top 10

The top scores for employee engagement and development among the Management Top 250

Zoom Video Communications Inc.	81.5
Salesforce.com	76.1
Facebook Inc.	75.1
Nvidia Corp.	75.0
Microsoft Corp.	74.1
Alphabet Inc.	72.9
Prologis Inc.	71.9
Intuit Inc.	71.7
VMware Inc.	70.9
Intuitive Surgical Inc.	70.8
Source: Drucker Institute	

Innovation Top 10

The top scores for employee engagement and development among the Management Top 250

Amazon.com Inc.	135.9
International Business Machines Corp.	127.1
Microsoft Corp.	114.7
Apple Inc.	113.7
Johnson & Johnson	97.5
General Electric Co.	96.5
Uber Technologies Inc.	91.8
Facebook Inc.	91.7
Alphabet Inc.	89.8
Jones Lang LaSalle Inc.	89.5
Source: Drucker Institute	

Social Top 10

The top scores for social responsibility among the Management Top 250

Microsoft Corp.	78.9
HP Inc.	78.5
Intel Corp.	77.3
Cisco Systems Inc.	76.5
Accenture PLC	74.1
AT&T Inc.	72.9
Texas Instruments Inc.	71.6
Xerox Holdings Corp.	71.5
Cummins Inc.	71.3
Medtronic PLC	71.2
Source: Drucker Institute	

Financial Top 10

The top scores for financial strength among the Management Top 250

Microsoft Corp.	90.9
Apple Inc.	90.3
Amazon.com Inc.	90.1
Alphabet Inc.	84.2
Facebook Inc.	83.8
Philip Morris	80.9
Mastercard Inc.	80.2
Cisco Systems Inc.	80.1
Etsy Inc.	78.3
Intel Corp.	78.2
Source: Drucker Institute	

The Best-Managed Companies

Continued from page R1

consumer and privacy advocates as well as policy makers, including antitrust investigations and calls for tighter regulation of digital platforms after a contentious election season. Yet the firms that lead the technology sector still have a lot going for them, says Zachary First, Drucker's executive director.

"There is something going on in technology right now around just basic management. These top tech firms are very well managed," Mr. First says. "I think it speaks to their public prestige, the extent to which they attract talent, customers, and they have this relentless focus on being high-performance organizations."

Microsoft's winning formula

Microsoft moved into the top spot in this year's ranking by scoring strong marks in innovation while doubling down on corporate culture and social impact.

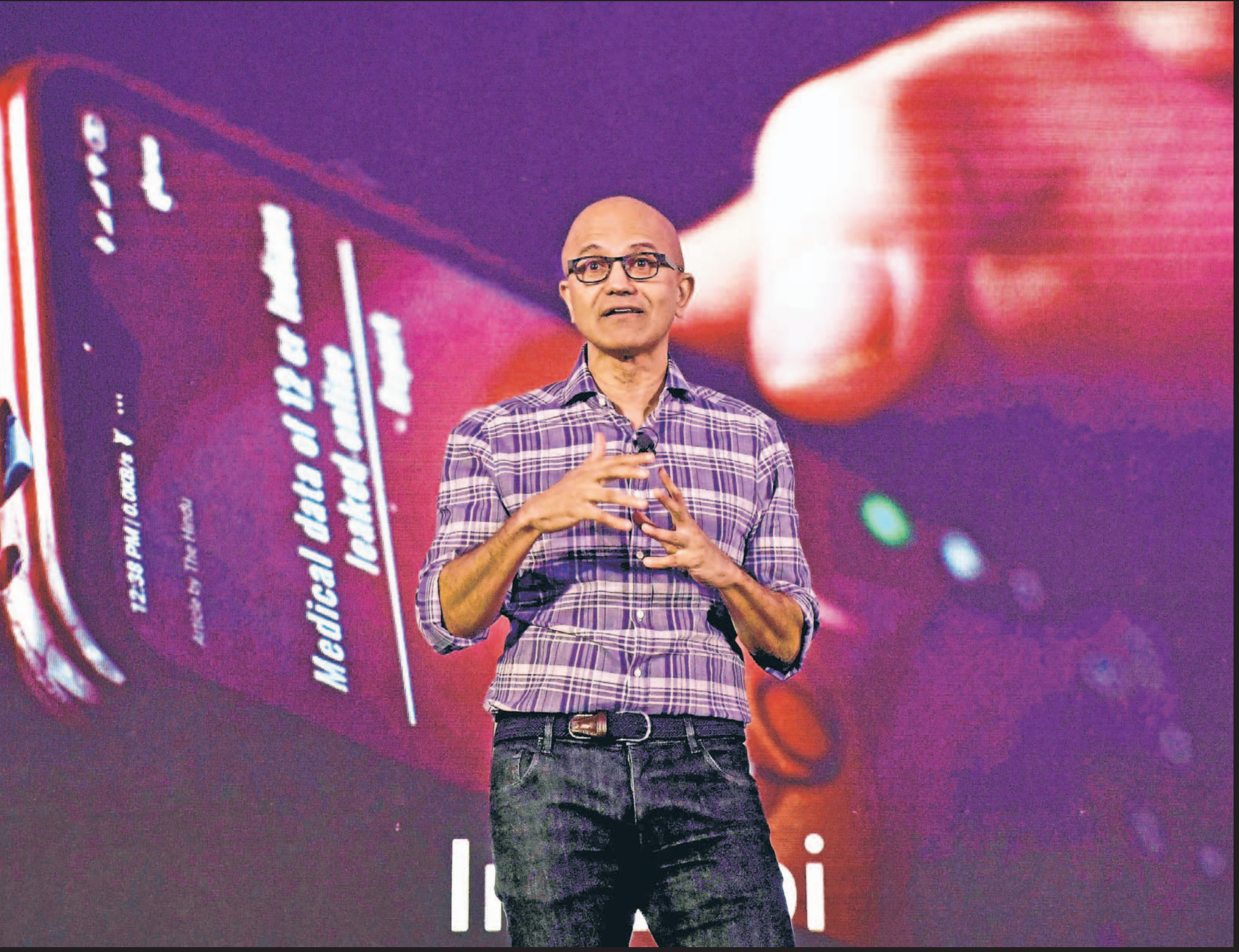
On the innovation front, the company notched increases in research-and-development spending, patent applications and trademark registrations. A high volume of trademarks is a good measure of the extent to which a company can commercialize its intellectual property, Drucker researchers say.

In the past, Microsoft missed key waves in technology innovation such as the rise of search engines, social media and mobile phones, says Suresh Kotha, a management professor at the University of Washington's Foster School of Business. But since Satya Nadella took over as chief executive in 2014, he has pushed to develop the company's cloud-computing business, turning it into a serious market competitor, Mr. Kotha says.

"They see these waves but they didn't take the action, and this one [cloud computing] they did," he says. "They got this wave correctly."

Already an earnings driver before the pandemic, cloud computing became more central for many of Microsoft's corporate customers as they moved to support employees working remotely.

Mr. Nadella has also sought to make Microsoft a more vocal corporate citizen, especially as the tech industry faces greater government and public scrutiny, and its social responsibility score ticked up this year in the Drucker ranking. In January, the company pledged to



Satya Nadella, CEO of top-ranked Microsoft, has pushed to develop the company's cloud-computing business and has sought to make Microsoft a more vocal corporate citizen.

eliminate its carbon emissions over the next decade and invest \$1 billion as part of a wider climate commitment. Microsoft aims to remove as much carbon from the atmosphere by 2050 as it has produced since its founding in 1975.

"The culture change was one of the things Satya Nadella did that makes it a great company," says Mr. Kotha.

In addition to cloud computing, Chief Technology Officer

though it is still the highest score for any company in that category. Its innovation score a year ago was more than double that of any other company's.

While Amazon stands out in innovation, its performance is more uneven elsewhere on Drucker's measures. It is about average on social responsibility, although the company has made efforts to improve in that regard, including

the planet and notes that it topped the American Customer Satisfaction Index for internet retailers last year. She adds Amazon prioritizes the safety and health of its employees and has invested millions of dollars to provide a safe workplace. The spokeswoman notes that Amazon offers Covid-19 testing opportunities to its employees, and points to several of its other innovations during the pandemic,

IBM recorded the eighth-highest innovation score since the ranking process began in 2012.

Kevin Scott touts Microsoft's progress over the past year in artificial intelligence and gaming alongside its investments in sustainability and collaboration software.

"We are constantly trying to pay attention to what the world is telling us about what it needs," Mr. Scott says, "and constantly looking for where the technology trends are heading."

Consumer sentiment's effect

Amazon dropped to No. 4 overall this year in part because its innovation score fell from an unprecedented level a year ago,

launching a \$2 billion internal venture-capital fund focused on technology investments to reduce the impact of climate change.

Amazon also posted a lower customer-satisfaction score than last year. The e-commerce giant, which has gone on a hiring spree this year to meet exploding demand, also continues to face criticism by labor organizers and lawmakers for its treatment of workers. It raised U.S. employees' minimum wage to \$15 an hour in 2018. The company's score in employee engagement and development improved slightly this year. "You have to have strength across the board to hold your own at that level," Drucker's Mr. First says of Amazon's 2020 ranking. "It's what makes Microsoft's ranking so impressive, that they are not just innovation at all costs. They are excellent across the board."

An Amazon spokeswoman says the company strives to be the most customer-centric company on

such as its Amazon Web Services initiative to accelerate Covid-19 diagnostics, research and testing.

Researchers also highlighted companies with particularly weak scores in one or more dimension of Drucker's scorecard. **Facebook**, for instance, had a disproportionately low customer-satisfaction score, compared with its performance in other categories, amid continuing criticism of its data-privacy practices and handling of misinformation.

While the social-media giant has ramped up its efforts to police political and coronavirus-related misinformation this year, Facebook continues to face criticism in Congress, where bipartisan calls for tighter regulation of online platforms are intensifying. Drucker researchers note the company was in about the bottom 1% of all companies they studied in customer satisfaction. In the overall ranking, Facebook fell six spots from 2019 to No. 12 this year.

The Drucker researchers say Facebook's overall statistical profile is comparable not to other tech companies but to big tobacco firms. Similar to **Philip Morris**, Facebook scored well in em-

ployee satisfaction and for its healthy balance sheet but faltered with customers. Tim Kendall, the company's former director of monetization, drew a similar comparison in testimony before Congress in September, speaking about the platform's design.

"We took a page from Big Tobacco's playbook, working to make our offering addictive at the outset," he told House lawmakers.

A Facebook spokesman declined to comment for this article.

Shifts inside legacy firms

While tech companies account for much of the top 10, some older blue-chip companies have also risen on the list of most effectively managed firms.

**Procter & Gamble**, the maker of Tide, Bounty and many other consumer products, moved up to No. 8 from No. 15 a year ago thanks to high scores across the ranking's five dimensions of performance. The company has benefited from consumer shifts spurred by the pandemic but also began making changes to its complex management structure that had sometimes put brand managers and country managers at odds.

One of the list's biggest gainers in the ranking this year was **General Electric Co.**, which rose 80 spots to No. 20, bolstered by a higher innovation score and a slightly better financial score. GE has struggled for years with declining profits and cash flow but recently completed its sale of its biotechnology business for \$21 billion in cash. Layoffs and cost-cutting have helped GE weather Covid-19's damage to the commercial airlines that buy the jet engines the company makes.

A GE spokeswoman pointed to Chief Executive Larry Culp's comments on the company's Oct. 28 earnings call: "We're encouraged by our progress amidst a challenging backdrop....We continue to deliver for our

customers and tackle the world's biggest challenges, from precision health to the safe return to flight to the energy transition."

IBM—a blue chip before many of today's leading tech companies existed—climbed three spots to No. 3 this year amid efforts to reposition itself as a cloud-services provider as customers flocked to rivals such as Amazon and Microsoft. The company bought open-source software firm Red Hat for around \$33 billion last year and named former cloud chief Arvind Krishna its CEO in April.

IBM has reported declining revenue in 30 quarters over the past decade, and it's financial-strength score in the ranking slipped this year. But the company recorded the eighth-highest innovation score since the ranking process began in 2012. IBM abandons patent applications at a higher rate than others, a sign of its commitment to move past obsolete technology. The company's employee and customer-satisfaction scores also rebounded after being down for several years.

"IBM's investments in hybrid cloud and AI technology, as well as in technologies of the future like quantum computing, are making IBM an employer of choice and a valuable partner for clients," a company spokesman says.

On the down side, it has been a tumultuous year for **Occidental Petroleum Corp.**, which fell off the Top 250 list entirely this year—from No. 180 last year—after it posted a decline in financial strength. The Houston-based oil producer slashed its dividend earlier this year to conserve cash amid low oil prices and weak demand due to coronavirus lockdowns. The company has also curtailed its capital spending and cut executive and employee salaries temporarily. Occidental has been saddled with debt following its \$38 billion deal to buy rival Anadarko Petroleum Corp. last year. The company declined to comment.

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Red Flags

Some companies that score well overall but have at least one weakness that bears watching

By CHRIS KORNELIS

**F**acebook raked in more than \$21 billion in revenue in the third quarter, has upward of 50,000 employees, and more than three billion people use at least one of its products in any given month. But it came in dead last in customer satisfaction among the top 100 U.S. companies in this year's Management Top 250 ranking, drawn down in part by a low net promoter score—which shows customers' willingness to recommend the company—from J.D. Power.

For a growing company with a healthy balance sheet, does it matter? Rick Wartzman, head of the **KH Moon Center for a Functioning Society** at the **Drucker Institute**, which created the statistical model used to rank the companies in the Management Top 250, argues that it does. Few companies, he says, perform well in all of the categories that Drucker measures—customer satisfaction, employee engagement and development, innovation, social responsibility and financial strength. But ranking below the 25th percentile in any category, he says, amounts to a red flag, a sign that the company is especially weak in that area.

"And that weakness," he says, "if it's severe enough and left untended over time, may ultimately undermine the whole enterprise."

There are 12 companies in the top 100 with a red flag in one of the five categories. Here is a closer look at some of them:

AT&T Inc.

Red Flag: Customer Satisfaction

AT&T's customer-satisfaction score landed in the 19.2nd percentile, hurt in part by a consistently low **American Customer Satisfaction Index** score. David VanAmburg, managing director at ACSI, says customer-satisfaction scores generally tend not to be much of an issue when you look at wireless service itself. But when you look at wireless companies that are also pay-TV and internet-service providers, such as AT&T, you start to see scores hit rock bottom. He says customers pay a lot for these services and expect a lot—particularly now that they are home using them all day. "And then we find that, generally speaking, the quality isn't up to our expectations," he says, adding that complaints include spotty internet service and slow downloads.

AT&T said in statement that "as of October 2020, our net promoter score (NPS) [from market-research firm Kantar] is up year-over-year across all of our products, and is at an all-time high for AT&T Fiber and wireless service." What's more, the company said, "J.D. Power's most recent study also ranked AT&T/DIRECTV number one nationally among TV providers and number one for broadband internet providers in every region we serve."

Boeing Co.

Red Flag: Financial Strength

Struggling with the grounding of the 737 MAX following a pair of crashes, and fewer orders as the pandemic crippled air travel, Boeing earned a red flag for its financial performance, ranking in the 10.5th percentile. Boeing's struggles were reflected in multiple sources that Drucker looks at for financial strength, including total shareholder return and economic profit, which is calculated by corporate analytics firm ISS EVA, a division of Institutional Shareholder Services, and measures operating profit mi-

nus a charge for use of capital. Rich Cleary, a vice president at ISS Corporate Solutions, a division of ISS, says Boeing's defense business has remained relatively stable, "but, obviously, commercial aviation has taken a hit this year."

A representative for Boeing pointed to CFO Greg Smith's comments in the company's third-quarter earnings call: "We're taking comprehensive action to preserve liquidity, navigate the pandemic, adapt to our new markets, improve performance, and position our company for the future."

Facebook

Red Flag: Customer Satisfaction

Facebook sits in the 1.1 percentile for customer satisfaction,

drawn down in part by a low net promoter score from J.D. Power.

Michael Vermillion, vice president of global business intelligence at J.D. Power, says Facebook likely is being hurt by a very low brand trust, which didn't improve as it sat at the center of the nation's political and cultural divide during the election season.

"To me, Facebook used to be a platform where I could share photos and experiences with friends and family," he says. This year, it turned into a place where you go to have arguments with strangers about politics, he says, adding "I spent a lot of time hiding posts or turning people off or turning off all the stuff I didn't want to see."

Facebook didn't respond to a request for comment.

General Electric Co.

Red Flag: Financial Strength

Sitting in the 10.3rd percentile for financial strength, GE drew a red flag for the category just as it did last year. Mr. Cleary says GE's turnaround efforts had been showing some promise, but the pandemic's effect on its aviation business has meant fewer engines sold.

"They had been moving in the right direction," he says, "but it seems Covid threw a wrench



Molson Coors, owner of Miller beers, placed in the 219th oercentile for financial strength.

Warning Signs

Companies among the top 100 overall in the Management Top 250 that have a red flag—a score below the 25th percentile, among all the companies examined, in one of the five components of the ranking.

**Facebook Inc.** (No. 12 overall) **1.1 percentile** in customer satisfaction

**Ford Motor Co.** (No. 19 overall) **22.3 percentile** in financial strength

**General Electric Co.** (No. 20 overall) **10.3 percentile** in financial strength

**AT&T Inc.** (No. 60 overall) **19.2 percentile** in customer satisfaction

**Boeing Co.** (No. 66 overall) **10.5 percentile** in financial strength

**Verizon Communications Inc.** (No. 69 overall) **24.1 percentile** in customer satisfaction

**Philip Morris International** (No. 78 overall) **2.3 percentile** in customer satisfaction

**Bristol-Myers Squibb** (No. 82 overall) **20.7 percentile** in customer satisfaction

**Molson Coors Beverage Co.** (No. 85 overall) **21.9 percentile** in financial strength

**Workday Inc.** (No. 92 overall) **18.6 percentile** in financial strength

**DuPont Co.** (No. 95 overall) **20.2 percentile** in financial strength

**Owens Corning Inc.** (No. 99 overall) **22.2 percentile** in financial strength

into those plans." A GE spokesperson points to comments CEO Larry Culp made in an Oct. 28 earnings call: "We're encouraged by our progress amid a challenging backdrop. We remain focused on the long term, not only in terms of our ability to perform but to realize our purpose and the full potential of GE."

Molson Coors Beverage Co.

Red Flag: Financial Strength

Though Americans haven't been shy about increasing their consumption during the pandemic, it hasn't been enough to keep Molson Coors out of red-flag territory. The beer giant picked up a red flag for its financial strength, ranking in the 21.9th percentile. Anthony Campagna, ISS EVA's global director of fundamental research, says that while at-home consumption of beer has gone up during the pandemic, Molson's commercial business has been hit hard by shutdowns. But the company's core financial hangups stem from the merger of Molson and Coors in 2015, he says, adding that the merger hasn't yet provided the kind of cost savings that the company had hoped for.

Molson said in a statement that it has delivered more than \$700 million in savings from 2017 to 2019, and is on target to generate \$600 million in savings from 2020 to 2022. In addition, the company a year ago launched a revitalization plan to drive top-line growth. "The decisions we've made over the past year, and quick actions and investments we are making, helped us beat top- and bottom-line expectations last quarter, and we believe will ensure the Molson Coors Beverage Co. is built to succeed well into the future," the company said.

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JOURNAL REPORT | C-SUITE STRATEGIES

Management Top 250

A ranking of U.S. companies by the Drucker Institute

The Management Top 250 ranking, developed by the Drucker Institute, measures corporate effectiveness by examining performance in five areas: customer satisfaction, employee engagement and development, innovation, social responsibility and financial strength. The ranking is based on an analysis of 33 data inputs provided by 14 third-party sources.

The five areas are weighted nearly equally in calculating a score that is the basis of the ranking. Not all data inputs are available for all companies in the ranking; companies are ex-

cluded from the ranking if fewer than two data inputs are available for any of the five areas.

The Management Top 250 includes the top U.S. companies from a universe of 886 publicly traded companies that were included in a Drucker Institute study. Red flags in the table indicate a score that is in the bottom 25% for those 886 companies.

To be included in the study universe, companies were a part of the Dow Jones U.S. Total Stock Market Index or the S&P

Composite 1500 Index (or both) and met at least one of these criteria: had stock that was a component of the S&P 500 index, had a stock-market capitalization of \$10 billion when snapshots were taken for the Drucker study on June 30, 2020, or had at least \$3 billion in annual revenue as of March 31, 2020.

All data collected by the Drucker Institute was the most current available as of June 30, 2020.

A detailed explanation of the methodology can be found at [WSJ.com/ManagementTop250](http://WSJ.com/ManagementTop250).

Rank	Company	Score	Change from 2019	Customer Satisfaction	Employee Engagement & Development	Innovation	Social Responsibility	Financial Strength	Sector
1	Microsoft Corp.	103.0	▲ 5.4	★★★★	★★★★★	★★★★★+	★★★★★	★★★★★	Technology
2	Apple Inc.	96.0	▲ 3.9	★★★★★	★★★★	★★★★★+	★★★★★	★★★★★	Technology
3	Intl Business Machines Corp.	95.7	▲ 14.9	★★★★★	★★★★	★★★★★+	★★★★★	★★★★	Technology
4	Amazon.com Inc.	93.9	▼ 26.3	★★★	★★★★	★★★★★+	★★★	★★★★★	Technology
5	Alphabet Inc.	86.4	▲ 0.9	★★★	★★★★★	★★★★★	★★★★★	★★★★★	Technology
6	Cisco Systems Inc.	85.3	▲ 0.1	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	Technology
7	Intel Corp.	84.5	▲ 5.0	★★★★	★★★★	★★★★★	★★★★★	★★★★★	Technology
8	Procter & Gamble Co.	83.5	▲ 7.9	★★★★★	★★★★	★★★★★	★★★★	★★★★★	Consumer Goods
9	Johnson & Johnson	80.5	▲ 0.6	★★★	★★★★	★★★★★	★★★★	★★★★★	Health Care
10	HP Inc.	80.2	▲ 1.3	★★★★★	★★★★	★★★★★	★★★★★	★★★★	Technology
11	Merck & Co.	77.9	▲ 9.3	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	Health Care/Life Sciences
12	Facebook Inc.	77.2	▼ 3.6	★🚩	★★★★★	★★★★★	★★★★	★★★★★	Technology
12	Nvidia Corp.	77.2	▲ 4.0	★★★★★	★★★★★	★★★★	★★★★★	★★★★★	Technology
14	Jones Lang LaSalle Inc.	74.2	N/A	★★★	★★★★	★★★★★	★★★★★	★★★	Real Estate/Construction
15	PepsiCo Inc.	74.1	▼ 3.2	★★★★★	★★★★	★★★★★	★★★★★	★★★★	Consumer Goods
16	Adobe Inc.	73.9	▲ 0.4	★★★★	★★★★★	★★★★	★★★★★	★★★★★	Technology
17	Accenture PLC	73.6	▲ 0.1	★★★★★	★★★★	★★★★	★★★★★	★★★★★	Business/Consumer Services
18	Lockheed Martin Corp.	73.5	▲ 5.2	★★★★	★★★★	★★★★★	★★★★	★★★★★	Consumer Goods
19	Ford Motor Co.	73.1	▲ 9.1	★★★★★	★★★	★★★★★	★★★★	★★🚩	Technology
20	General Electric Co.	72.6	▲ 11.7	★★★★★	★★★★	★★★★★	★★★★	★★🚩	Business/Consumer Services
21	Colgate-Palmolive Co.	72.1	▲ 6.7	★★★★	★★★★	★★★★	★★★★★	★★★★★	Consumer Goods
21	Salesforce.com Inc.	72.1	▲ 4.6	★★★★★	★★★★★	★★★★	★★★★★	★★★	Technology
23	3M Co.	72.0	▼ 7.4	★★★	★★★★	★★★★★	★★★★★	★★★★	Health Care/Life Sciences
23	NIKE Inc.	72.0	▼ 3.0	★★★★★	★★★	★★★★★	★★★★★	★★★★	Financial Services
23	Oracle Corp.	72.0	▲ 5.4	★★★★★	★★★★	★★★★★	★★★★★	★★★★	Retail/Wholesale
26	Amgen Inc.	71.5	▲ 4.9	★★★★★	★★★★	★★★★	★★★★★	★★★★	Health Care/Life Sciences
26	S&P Global Inc.	71.5	▲ 6.0	★★★★★	★★★★	★★★★	★★★★★	★★★★★	Financial Services
26	Target Corp.	71.5	▲ 10.9	★★★★	★★★	★★★★★	★★★★★	★★★★	Retail/Wholesale
29	Edwards Lifesciences Corp.	71.4	▲ 0.7	★★★★★	★★★★	★★★★★	★★★★★	★★★★	Health Care/Life Sciences
30	JPMorgan Chase & Co.	71.1	▲ 0.8	★★★★	★★★★	★★★★	★★★★★	★★★★★	Financial Services
30	Visa Inc.	71.1	▼ 1.0	★★★★★	★★★★	★★★	★★★★★	★★★★★	Financial Services
32	Caterpillar Inc.	70.9	▲ 6.0	★★★★★	★★★	★★★★★	★★★★	★★★★	Industrial Goods
33	Clorox Co.	70.8	▲ 3.8	★★★★★	★★★★	★★★★	★★★★★	★★★★	Consumer Goods
34	Walmart Inc.	70.6	▼ 5.8	★★★★	★★	★★★★★	★★★★	★★★★★	Retail/Wholesale
35	Mastercard Inc.	70.5	▼ 6.1	★★★	★★★★★	★★★★	★★★★	★★★★★	Financial Services
36	Automatic Data Processing Inc.	69.8	▲ 5.1	★★★★	★★★★	★★★★★	★★★★★	★★★★	Business/Consumer Services
37	Altria Group Inc.	69.3	▲ 0.9	★★★	★★★	★★★★★	★★★★	★★★★★	Consumer Goods
38	Honeywell International Inc.	69.2	▲ 4.9	★★★★★	★★★	★★★★★	★★★★	★★★★	Business/Consumer Services
39	Eli Lilly & Co.	69.0	▲ 4.0	★★★★	★★★★	★★★★	★★★★	★★★★★	Health Care/Life Sciences
40	Coca-Cola Co.	68.9	▲ 3.6	★★★★★	★★★★	★★★★★	★★★★	★★★★	Consumer Goods
40	Deere & Co.	68.9	▲ 6.1	★★★★	★★★★	★★★★★	★★★★	★★★	Industrial Goods
40	Dell Technologies Inc.	68.9	▲ 3.1	★★★★	★★★	★★★★★	★★★★	★★★★	Technology
43	Kimberly-Clark Corp.	68.6	▲ 7.4	★★★★	★★★★	★★★★	★★★★★	★★★★★	Consumer Goods
43	Medtronic PLC	68.6	▲ 3.4	★★★	★★★★	★★★★★	★★★★★	★★★	Health Care/Life Sciences
45	VMware Inc.	68.5	▼ 0.6	★★★★★	★★★★★	★★★	★★★★	★★★★	Technology
46	AbbVie Inc.	68.4	▲ 3.2	★★★	★★★★	★★★★★	★★★★★	★★★★★	Health Care/Life Sciences
46	General Motors Co.	68.4	▲ 0.6	★★★★★	★★★	★★★★★	★★★★	★★★	Automotive/Vehicles
48	Intuit Inc.	68.2	▼ 4.8	★★★★	★★★★★	★★★	★★★★	★★★★	Technology
49	Advanced Micro Devices Inc.	68.1	N/A	★★★★	★★★★	★★★★	★★★★★	★★★★	Technology
50	Hewlett Packard Enterprise Co.	67.8	▲ 7.9	★★★★	★★★	★★★★★	★★★★★	★★★	Technology
51	Abbott Laboratories	67.5	▲ 2.5	★★★	★★★★	★★★★★	★★★★★	★★★★	Health Care/Life Sciences
52	Texas Instruments Inc.	67.4	▼ 1.6	★★★	★★★★★	★★★★	★★★★★	★★★★★	Technology
53	Agilent Technologies Inc.	66.8	▲ 6.0	★★★★★	★★★★	★★★	★★★★★	★★★	Industrial Goods
53	Raytheon Co.	66.8	N/A	★★★★	★★★★	★★★★★	★★★★	★★★	Industrial Goods
55	Qualcomm Inc.	66.5	▲ 7.2	★★★	★★★★	★★★★★	★★★★	★★★★	Technology
56	Etsy Inc.	66.4	N/A	★★★★★	★★★	★★★★	★★★	★★★★★	Retail/Wholesale
57	Whirlpool Corp.	66.3	▲ 5.8	★★★	★★★★	★★★★★	★★★★	★★★★	Consumer Goods
58	Pfizer Inc.	66.2	▼ 1.1	★★★	★★★★	★★★★★	★★★★	★★★★	Health Care/Life Sciences
59	Home Depot Inc.	66.1	▼ 2.1	★★★	★★★	★★★★	★★★★	★★★★★	Retail/Wholesale
60	AT&T Inc.	65.6	▼ 0.5	★★🚩	★★★	★★★★★	★★★★★	★★★★★	Telecommunication Services
60	General Mills Inc.	65.6	▲ 1.8	★★★	★★★★	★★★★	★★★★★	★★★	Consumer Goods
62	Allstate Corp.	65.3	▼ 5.6	★★★★	★★★	★★★★★	★★★★	★★★★	Financial Services
62	eBay Inc.	65.3	▼ 0.7	★★★★	★★★	★★★★★	★★★★	★★★★	Technology
64	Cummins Inc.	65.1	▲ 3.3	★★★	★★★★	★★★★	★★★★★	★★★	Automotive/Vehicles
64	Hershey Co.	65.1	▼ 1.6	★★★★★	★★★★	★★★	★★★★★	★★★	Consumer Goods
66	Bank of America Corp.	65.0	▼ 4.3	★★★	★★★★	★★★★★	★★★★	★★★★	Financial Services
66	Boeing Co.	65.0	▼ 3.7	★★★★	★★★	★★★★★	★★★★	★★🚩	Industrial Goods
66	Rockwell Automation Inc.	65.0	▲ 4.0	★★★★★	★★★★	★★★★	★★★★	★★★★	Industrial Goods
69	Verizon Communications Inc.	64.9	▲ 0.6	★★🚩	★★★★	★★★★	★★★★★	★★★★★	Telecommunication Services
70	Applied Materials Inc.	64.4	▲ 4.2	★★★★	★★★	★★★★	★★★★	★★★★	Technology
70	Eaton Corp.	64.4	▲ 3.5	★★★★★	★★★	★★★	★★★★★	★★★★	Business/Consumer Services
72	Intuitive Surgical Inc.	64.3	▼ 1.1	★★★	★★★★★	★★★★★	★★★	★★★★	Health Care/Life Sciences
73	Estee Lauder Cos.	64.1	▼ 0.9	★★★★★	★★★★	★★★	★★★★	★★★★	Consumer Goods
74	Costco Wholesale Corp.	64.0	▲ 1.6	★★★★	★★★★	★★★★	★★★	★★★★	Retail/Wholesale

+ Rating in this category was greater than five stars.

N/A-Not included in 2019 rankings.

🚩 Score is in the bottom 25% of the 886 companies examined for this ranking

Sources: Drucker Institute, using data from American Customer Satisfaction Index, Burning Glass Technologies, Clarivate Analytics, CSRHub, Glassdoor, HIP Investor, ISS EVA, J.D. Power, Refinitiv Eikon, Prof. Dimitris Papanikolaou of Northwestern University and Prof. Amit Seru of Stanford University, PayScale, Supply Chain Resource Cooperative, Sustainalytics, Thomson Reuters Eikon and wRatings. Note: Alice Korngold, chief executive officer of Korngold Consulting in New York, developed the methodology for a portion of the social responsibility category.



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Rank	Company	Score	Change from 2019	Customer Satisfaction	Employee Engagement & Development	Innovation	Social Responsibility	Financial Strength	Sector
74	Illumina Inc.	64.0	▼ 2.3	★★★★	★★★★	★★★	★★★★★	★★★★	Health Care/Life Sciences
74	Mettler-Toledo International Inc.	64.0	▼ 0.6	★★★★★	★★★★	★★★	★★★★	★★★★	Industrial Goods
77	Best Buy Co.	63.9	▲ 0.9	★★★★★	★★★★	★★★	★★★★★	★★★★	Retail/Wholesale
78	Philip Morris International Inc.	63.7	▼ 0.4	★🚩	★★★★	★★★★★	★★★	★★★★★	Consumer Goods
79	Autodesk Inc.	63.6	▲ 2.3	★★★	★★★★	★★★	★★★★★	★★★★	Technology
79	Lam Research Corp.	63.6	N/A	★★★★	★★★★	★★★	★★★★	★★★★	Technology
81	American Express Co.	63.3	▼ 3.7	★★★	★★★★	★★★★	★★★★	★★★	Financial Services
82	Bristol-Myers Squibb Co.	63.2	▼ 2.0	★★🚩	★★★★	★★★★	★★★★	★★★★	Health Care/Life Sciences
82	CBRE Group Inc.	63.2	▲ 3.9	★★★★	★★★★	★★★★	★★★★	★★★★	Real Estate/Construction
84	Regeneron Pharmaceuticals Inc.	63.1	▲ 3.3	★★★★	★★★★	★★★	★★★★	★★★★★	Health Care/Life Sciences
85	Molson Coors Beverage Co.	62.9	▲ 4.6	★★★★★	★★★★	★★★	★★★★	★★🚩	Consumer Goods
85	Northrop Grumman Corp.	62.9	▲ 0.6	★★★	★★★★	★★★★★	★★★★	★★★	Industrial Goods
87	Moody's Corp.	62.8	▲ 5.0	★★★★★	★★★★	★★★	★★★★	★★★★	Financial Services
88	Hilton Worldwide Holdings Inc.	62.7	▼ 2.9	★★★★★	★★★★	★★★	★★★★	★★★	Leisure/Arts/Hospitality
88	Johnson Controls International PLC	62.7	▲ 2.4	★★★★	★★★	★★★★	★★★★★	★★★	Business/Consumer Services
88	Newmont Corp.	62.7	N/A	★★★	★★★★	★★★★	★★★★★	★★★★	Basic Materials/Resources
91	Linde PLC	62.6	N/A	★★★★	★★★★	★★★★	★★★★★	★★★	Basic Materials/Resources
92	Workday Inc.	62.5	▼ 0.3	★★★★	★★★★★	★★★	★★★★	★★🚩	Technology
93	Hormel Foods Corp.	62.4	▲ 5.3	★★★★★	★★★★	★★★	★★★★	★★★	Consumer Goods
94	PayPal Holdings Inc.	62.3	▲ 3.2	★★★	★★★★	★★★★	★★★★	★★★★★	Financial Services
95	DuPont Co.	62.2	N/A	★★★★★	★★★★	★★★★★	★★★	★★🚩	Basic Materials/Resources
95	Ecolab Inc.	62.2	▲ 5.0	★★★	★★★★	★★★★★	★★★★	★★★	Business/Consumer Services
95	Gilead Sciences Inc.	62.2	▲ 8.8	★★★	★★★★	★★★★	★★★★	★★★	Health Care/Life Sciences
95	Kellogg Co.	62.2	▲ 4.5	★★★	★★★	★★★★	★★★★★	★★★	Consumer Goods
99	Biogen Inc.	62.0	0.0	★★★	★★★★	★★★	★★★★	★★★★★	Health Care/Life Sciences
99	Owens Corning Inc.	62.0	▲ 6.4	★★★★	★★★★	★★★	★★★★★	★★🚩	Real Estate/Construction
101	Boston Scientific Corp.	61.9	0.0	★★★	★★★★	★★★★	★★★★	★★★	Health Care/Life Sciences
101	International Flavors & Fragrances Inc.	61.9	▲ 3.6	★★★★	★★★★	★★★★	★★★★★	★★★	Basic Materials/Resources
101	Vertex Pharmaceuticals Inc.	61.9	▲ 2.0	★★★★	★★★	★★★★	★★★	★★★★★	Health Care/Life Sciences
101	Walt Disney Co.	61.9	▼ 2.3	★★★	★★★★	★★★★	★★★★★	★★★★	Media/Entertainment
105	Electronic Arts Inc.	61.5	▲ 1.5	★★★★	★★★★	★★★	★★★★	★★★★	Consumer Goods
105	ResMed Inc.	61.5	▲ 2.5	★★★★	★★★★	★★★	★★★★	★★★★	Health Care/Life Sciences
105	TE Connectivity Ltd.	61.5	N/A	★★★★★	★★★	★★★	★★★★	★★★	Industrial Goods
108	Cadence Design Systems Inc.	61.4	▲ 4.7	★★★★	★★★★	★★★	★★★	★★★★★	Technology
108	Motorola Solutions Inc.	61.4	▼ 0.2	★★★	★★★★	★★★	★★★★★	★★★★	Technology
110	FMC Corp.	61.3	▲ 5.5	★★★★	★★★★	★★★★	★★★★	★★★	Basic Materials/Resources
110	United Parcel Service Inc.	61.3	▼ 9.9	★★★	★★★	★★★★	★★★★	★★★★	Transportation/Logistics
112	AES Corp.	61.2	▲ 6.8	★★★	★★★★	★★★★	★★★★	★★★	Utilities
113	Lululemon Athletica Inc.	61.1	▼ 2.4	★★★★	★★★★	★★★	★★★	★★★★★	Retail/Wholesale
114	Hasbro Inc.	61.0	▼ 0.2	★★★	★★★★	★★★★	★★★★	★★★	Consumer Goods
115	Becton Dickinson & Co.	60.9	▲ 4.0	★★★	★★★★	★★★★	★★★★	★★★	Health Care/Life Sciences
116	Campbell Soup Co.	60.7	▲ 5.9	★★★★	★★★	★★★	★★★★★	★★★	Consumer Goods
117	Tiffany & Co.	60.6	▲ 4.5	★★★★★	★★★★	★★★	★★★★	★★★	Retail/Wholesale
118	Starbucks Corp.	60.5	▼ 8.5	★★★	★★★★	★★★★	★★★★	★★★	Leisure/Arts/Hospitality
119	NetApp Inc.	60.4	▼ 1.4	★★★★	★★★★	★★★	★★★	★★★★	Technology
119	ServiceNow Inc.	60.4	▲ 2.4	★★★★	★★★★	★★★	★★	★★★★★	Technology
121	Citigroup Inc.	60.3	▼ 1.8	★★★	★★★	★★★★	★★★★★	★★★	Financial Services
121	W.W. Grainger Inc.	60.3	▲ 2.0	★★★★	★★★	★★★	★★★★	★★★★	Retail/Wholesale
123	Morgan Stanley	60.2	▼ 0.6	★★★★	★★★★	★★★	★★★★	★★★★	Financial Services
123	PVH Corp.	60.2	▲ 2.4	★★★★★	★★★★	★★★	★★★★	★★🚩	Consumer Goods
125	Avery Dennison Corp.	60.1	N/A	★★★★	★★★★	★★★	★★★	★★★★	Basic Materials/Resources
125	Brown-Forman Corp.	60.1	▼ 3.6	★★★★	★★★★★	★★★	★★★★	★★★★	Consumer Goods
125	McDonald's Corp.	60.1	▲ 4.6	★★★	★★🚩	★★★★★	★★★★	★★★★	Leisure/Arts/Hospitality
128	KLA Corp.	59.9	N/A	★★★★	★★★★	★★★	★★★	★★★★	Technology
129	Keysight Technologies Inc.	59.8	N/A	★★★★	★★★★	★★★	★★★★	★★★★	Industrial Goods
129	Weyerhaeuser Co.	59.8	▼ 4.8	★★★★	★★★★	★★★	★★★★★	★★	Real Estate/Construction
131	Equinix Inc.	59.7	▼ 0.4	★★★★	★★★★	★★★★	★★★	★★★	Business/Consumer Services
131	Illinois Tool Works Inc.	59.7	▲ 0.3	★★★	★★★	★★★★	★★★★	★★★★	Industrial Goods
131	T-Mobile US Inc.	59.7	▼ 1.4	★★★	★★★★	★★★	★★★	★★★★★	Telecommunication Services
131	Varian Medical Systems Inc.	59.7	▲ 5.5	★★★★	★★★★	★★★	★★★★	★★★	Health Care/Life Sciences
135	Nielsen Holdings PLC	59.5	▼ 0.4	★★★★	★★★	★★★★★	★★★★	★★🚩	Business/Consumer Services
136	Archer Daniels Midland Co.	59.4	▲ 6.5	★★★★	★★★	★★★	★★★★	★★★	Agriculture
137	Air Products & Chemicals Inc.	59.3	▼ 0.6	★★🚩	★★★★	★★★★	★★★★★	★★★★	Basic Materials/Resources
137	Danaher Corp.	59.3	▲ 2.1	★★★★	★★★	★★★★★	★★★	★★★★	Health Care/Life Sciences
137	Metlife Inc.	59.3	▲ 1.9	★★★	★★★★	★★★	★★★★	★★★★	Financial Services
137	VF Corp.	59.3	▲ 0.3	★★★★	★★★	★★★	★★★★	★★★	Consumer Goods
141	Capital One Financial Corp.	59.2	▼ 5.8	★★★	★★★★	★★★★★	★★★	★★🚩	Financial Services
141	Xilinx Inc.	59.2	N/A	★★★	★★★★	★★★★	★★★★	★★★★	Technology
143	Analog Devices Inc.	59.1	N/A	★★★★	★★★★	★★★	★★★★	★★★	Technology
143	Yum Brands Inc.	59.1	▲ 1.3	★★🚩	★★★★	★★★★	★★★★	★★★★	Leisure/Arts/Hospitality
145	Juniper Networks Inc.	59.0	▲ 4.1	★★★★★	★★★	★★★	★★★★	★★★	Technology
146	McCormick & Co.	58.9	▲ 3.2	★★★★	★★★	★★★	★★★★	★★★	Consumer Goods
146	Oshkosh Corp.	58.9	▲ 0.5	★★★★	★★★★	★★★	★★★★	★★★	Automotive/Vehicles
146	Waste Management Inc.	58.9	▲ 1.3	★★★★	★★★	★★★	★★★★★	★★★	Business/Consumer Services
149	Sherwin-Williams Co.	58.8	▲ 1.6	★★★★	★★★	★★★★	★★★★	★★★★	Retail/Wholesale
150	Citrix Systems Inc.	58.7	▲ 0.6	★★★★	★★★★	★★★	★★★	★★★★	Technology
150	Humana Inc.	58.7	▲ 2.5	★★★★	★★★	★★★	★★★	★★★★	Financial Services
150	Marriott International Inc.	58.7	▼ 9.2	★★★★	★★★	★★★★	★★★★	★★★	Leisure/Arts/Hospitality
150	Teradyne Inc.	58.7	N/A	★★★★	★★★★★	★★★	★★★	★★★★★	Industrial Goods
150	Xylem Inc.	58.7	▲ 2.7	★★★★	★★★	★★★	★★★★★	★★★	Industrial Goods
155	Garmin Ltd	58.6	▲ 4.1	★★	★★★	★★★★★	★★★	★★★★	Technology
156	Bio-Rad Laboratories Inc.	58.4	N/A	★★★★★	★★🚩	★★★	★★★	★★★★★	Health Care/Life Sciences
156	Southern Co.	58.4	▲ 5.6	★★★	★★★★	★★★★	★★★★	★★★	Utilities
158	BlackRock Inc.	58.3	▲ 1.4	★★🚩	★★★★	★★★★	★★★★	★★★★	Financial Services
159	Church & Dwight Co.	58.2	▲ 6.5	★★★★	★★★	★★★	★★★★	★★★	Consumer Goods
159	Fortinet Inc.	58.2	▲ 2.8	★★★	★★★★★	★★★	★★★	★★★★	Technology
159	Mondelez International Inc.	58.2	▲ 2.1	★★★	★★★★	★★★	★★★★	★★★	Consumer Goods
162	Cognizant Tech Solutions Corp.	58.1	▲ 1.7	★★★★	★★	★★★★	★★★★	★★★	Business/Consumer Services
162	UnitedHealth Group Inc.	58.1	▼ 2.9	★★	★★★	★★★	★★★★	★★★★★	Financial Services



JOURNAL REPORT | C-SUITE STRATEGIES

Rank	Company	Score	Change From 2019	Customer Satisfaction	Employee Engagement & Development	Innovation	Social Responsibility	Financial Strength	Sector
162	Wells Fargo & Co.	58.1	▼ 1.0	★★	★★★	★★★★	★★★★	★★★	Financial Services
165	Ball Corp.	58.0	▲ 3.6	★★★★	★★★★	★★★	★★★★	★★★	Industrial Goods
165	Emerson Electric Co.	58.0	▲ 0.3	★★★★	★★★★	★★★★	★★★★	★★★★	Industrial Goods
165	Hologic Inc.	58.0	▲ 9.7	★★★★★	★★★★	★★★	★★★	★★★	Health Care/Life Sciences
165	Netflix Inc.	58.0	▼ 2.7	★★🚩	★★★★★	★★★★	★★	★★★★★	Media/Entertainment
169	Stryker Corp.	57.8	▲ 0.8	★★🚩	★★★★	★★★★★	★★★	★★★	Health Care/Life Sciences
170	Baxter International Inc.	57.7	▲ 2.7	★★★★	★★★★	★★★★	★★★★	★★★	Health Care/Life Sciences
170	Exelon Corp.	57.7	▼ 0.7	★★🚩	★★★★	★★★	★★★★	★★★	Utilities
170	Prologis Inc.	57.7	N/A	★★★★	★★★★★	★★🚩	★★★★	★★★	Real Estate/Construction
170	Thermo Fisher Scientific Inc.	57.7	▲ 5.2	★★★★	★★★	★★★★	★★★★	★★★★	Health Care/Life Sciences
170	Waters Corp.	57.7	▲ 4.7	★★★★★	★★★★	★★★	★★★	★★★★	Industrial Goods
175	Celanese Corp.	57.6	▲ 1.5	★★★★	★★★★	★★★	★★★★	★★★	Basic Materials/Resources
175	Western Digital Corp.	57.6	▲ 8.3	★★★★	★★★	★★★★	★★★★	★★🚩	Technology
177	Aecom	57.5	▲ 4.6	★★★★★	★★★	★★★	★★★★	★★★	Health Care/Life Sciences
177	Exxon Mobil Corp.	57.5	▼ 13.6	★🚩	★★★	★★★★★	★★★★	★★★	Energy
177	FedEx Corp.	57.5	▼ 6.1	★★★★	★★★★	★★★	★★★★	★★★	Transportation/Logistics
177	Polaris Inc.	57.5	▲ 5.9	★★★★	★★★★	★★★★	★★★	★★★	Automotive
177	Xerox Holdings Corp.	57.5	▲ 9.4	★★★★	★★🚩	★★★	★★★★★	★★★	Technology
182	Eastman Chemical Co.	57.2	▲ 1.0	★★★★	★★★	★★★★	★★★★	★★★	Basic Materials/Resources
182	Seagate Technology PLC	57.2	▼ 1.3	★★★★	★★★★	★★★	★★★★	★★★	Technology
182	Synopsys Inc.	57.2	▲ 3.9	★★★★	★★★★	★★★★	★★★	★★★★	Technology
185	ConocoPhillips	57.0	▼ 3.8	★★🚩	★★★★	★★★	★★★★★	★★★	Energy
185	DexCom Inc.	57.0	▲ 12.6	★★★★	★★★★	★★★★	★★★	★★★★★	Health Care/Life Sciences
185	Lowe's Cos.	57.0	▲ 3.1	★★★★	★★🚩	★★★	★★★★	★★★★★	Retail/Wholesale
185	Pitney Bowes Inc.	57.0	N/A	★★★★★	★★★★	★★★	★★★★	★★🚩	Business/Consumer Services
189	Ingersoll Rand Inc.	56.9	N/A	★★★★	★★★★	★★★	★★★	★★🚩	Industrial Goods
189	Leidos Holdings Inc.	56.9	▼ 0.3	★★★★	★★★★	★★★	★★★★★	★★★	Business/Consumer Services
189	Progressive Corp.	56.9	▼ 1.8	★★★★	★★★★	★★🚩	★★★	★★★★★	Financial Services
189	Zoom Video Communications Inc.	56.9	N/A	★★★★	★★★★★	★★★	★🚩	★★★★	Technology
193	Baker Hughes Co.	56.8	▲ 2.2	★★★★	★★★★	★★★★	★★★★	★★🚩	Energy
194	Delta Air Lines Inc.	56.6	▼ 5.2	★★★★	★★★★★	★★★	★★★★	★★🚩	Transportation/Logistics
194	Paycom Software Inc.	56.6	▼ 3.0	★★★★	★★★★	★★🚩	★★	★★★★★	Technology
194	Take-Two Interactive Software Inc.	56.6	▲ 0.4	★★★★	★★★★	★★★	★★	★★★★★	Consumer Goods
197	Goldman Sachs Group Inc.	56.5	▼ 0.7	★★★★	★★★★	★★★	★★★★	★★★	Financial Services
197	International Paper Co.	56.5	N/A	★★★	★★★★	★★★	★★★★	★★★	Basic Materials/Resources
197	PerkinElmer Inc.	56.5	▲ 8.6	★★★★★	★★★	★★★	★★★	★★★	Industrial Services
200	Fortune Brands Home & Security Inc.	56.4	▲ 6.4	★★★★	★★★★	★★★★	★★★	★★★	Real Estate/Construction
201	Anthem Inc.	56.3	▲ 4.7	★★🚩	★★★★	★★★	★★★★★	★★★★	Financial Services
201	CVS Health Corp.	56.3	▲ 2.3	★★★★	★★🚩	★★★	★★★★	★★★★	Health Care/Life Sciences
203	Activision Blizzard Inc.	56.2	▲ 2.7	★★★★★	★★★★	★★★	★★★	★★★	Consumer Goods
203	Huntsman Corp.	56.2	▲ 4.6	★★★★	★★★★	★★★★	★★★	★★🚩	Basic Materials/Resources
203	J.M. Smucker Co.	56.2	▲ 3.9	★★★★	★★★	★★★	★★★★	★★★	Consumer Goods
203	Verisk Analytics Inc.	56.2	▲ 3.1	★★★★	★★★★	★★★★	★★★	★★★★	Basic Materials/Resources
207	Aptiv PLC	56.1	▲ 2.6	★★★★	★★★★	★★★★	★★★★	★★★	Automotive/Vehicles
207	Darden Restaurants Inc.	56.1	▲ 0.1	★★★★	★★★★	★★★	★★★★	★★★	Leisure/Arts/Hospitality
207	NXP Semiconductor NV	56.1	N/A	★★★★	★★★	★★★	★★★★	★★	Technology
210	First Solar Inc.	56.0	N/A	★★★★	★★★★	★★🚩	★★★★	★★★	Industrial Goods
211	Ansys Inc.	55.9	▲ 0.8	★★★★	★★★★	★★★	★★★	★★★	Technology
211	Booz Allen Hamilton Holding Corp.	55.9	▲ 2.4	★★★★	★★★★	★★★	★★★	★★★★	Business/Consumer Services
211	Cigna Corp.	55.9	▲ 1.0	★★🚩	★★★★	★★★	★★★★★	★★★★	Financial Services
211	Dominion Energy Inc.	55.9	▲ 0.2	★★	★★★★★	★★★	★★★★	★★★	Utilities
211	Square Inc.	55.9	▼ 7.8	★★★★	★★★★	★★★	★★	★★★★	Technology
211	Sysco Corp.	55.9	▲ 0.9	★★★★	★★★★	★★★	★★★★	★★★	Retail/Wholesale
217	Freeport-McMoRan Inc.	55.8	▲ 0.1	★★★★	★★★★	★★★	★★★★	★★🚩	Basic Materials/Resources
217	PNC Financial Services Group Inc.	55.8	▲ 0.7	★★★★	★★★	★★🚩	★★★★	★★★	Financial Services
219	Amcor PLC	55.7	N/A	★★★★	★★★	★★★	★★★★	★★★	Industrial Goods
220	Hartford Financial Services Group Inc.	55.6	▼ 2.2	★★	★★★★	★★★	★★★★	★★★	Financial Services
221	Charles Schwab Corp.	55.5	▼ 1.3	★★★★	★★★★	★★★	★★★	★★★	Financial Services
221	Eversource Energy	55.5	▲ 5.5	★★🚩	★★★★★	★★★	★★★★	★★★	Utilities
221	Maxim Integrated Products Inc.	55.5	N/A	★★★★	★★★★	★★★	★★★★	★★★★	Technology
224	ON Semiconductor Corp.	55.4	N/A	★★★★	★★★★	★★★	★★★★	★★🚩	Technology
225	Keurig Dr Pepper Inc.	55.2	▲ 5.6	★★★★★	★★★	★★★	★★★	★★★	Consumer Goods
226	TJX Cos.	55.1	▼ 3.8	★★★★	★★★★	★★★	★★★★	★★★	Retail/Wholesale
227	Regency Centers Corp.	54.9	N/A	★★★★	★★★★	★★★	★★★★	★★🚩	Real Estate/Construction
228	BioMarin Pharmaceutical Inc.	54.8	▲ 7.6	★★★★	★★★★	★★★	★★★	★★★	Health Care/Life Sciences
228	Kroger Co.	54.8	▲ 2.7	★★★★	★★🚩	★★★	★★★★★	★★★★	Retail/Wholesale
228	T. Rowe Price Group Inc.	54.8	▼ 4.1	★★★★	★★★	★★🚩	★★★★	★★★★★	Financial Services
228	Taylor Morrison Home Corp.	54.8	N/A	★★★★	★★★★★	★★	★★★	★★★	Real Estate/Construction
232	Autoliv Inc.	54.7	N/A	★★★★	★★★★	★★★	★★★★	★★🚩	Automotive/Vehicles
232	FactSet Research Systems Inc.	54.7	▼ 5.1	★★★★	★★★★	★★★	★★★	★★★★	Media/Entertainment
232	Splunk Inc.	54.7	N/A	★★★★	★★★★★	★★★	★★★	★★🚩	Technology
235	Cardinal Health Inc.	54.6	▼ 1.6	★★★★	★★★	★★★	★★★★	★★★	Retail/Wholesale
236	Alcoa Corp.	54.5	▲ 0.5	★★★	★★★★	★★★	★★★★	★★🚩	Basic Materials/Resources
236	General Dynamics Corp.	54.5	▲ 6.5	★★★★	★★★	★★★★	★★★	★★★	Industrial Goods
236	Iron Mountain Inc.	54.5	▲ 5.9	★★★★	★★★	★★★	★★★★	★★★	Real Estate/Construction
236	Uber Technologies Inc.	54.5	N/A	★★★	★★★★	★★★★★	★★🚩	★🚩	Technology
240	Comcast Corp.	54.4	▼ 2.2	★🚩	★★★	★★★★	★★★★	★★★★★	Media/Entertainment
240	Robert Half International Inc.	54.4	▼ 1.1	★★★★	★★★	★★★	★★★★	★★★★	Business/Consumer Services
240	Tractor Supply Co.	54.4	▲ 2.9	★★★★★	★★🚩	★★🚩	★★★	★★★★	Retail/Wholesale
240	Trimble Inc.	54.4	N/A	★★★★	★★★	★★★	★★★	★★★	Industrial Goods
244	Gap Inc.	54.2	▼ 1.2	★★★★	★★★	★★★	★★★★★	★★🚩	Retail/Wholesale
245	BorgWarner Inc.	54.1	▲ 1.9	★★★★	★★★	★★★	★★★	★★★	Automotive/Vehicles
246	Consolidated Edison Inc.	54.0	▲ 0.3	★★★★	★★★★	★★★	★★★★	★★★	Energy
246	Hanesbrands Inc.	54.0	▲ 0.7	★★★★	★🚩	★★★★	★★★★	★★★	Consumer Goods
246	Micron Technology Inc.	54.0	▼ 10.1	★★★★	★★★	★★★★	★★★	★★★	Technology
246	Sonoco Products Co.	54.0	N/A	★★★★	★★★★	★★★	★★★	★★★	Industrial Goods
250	Ciena Corp.	53.9	▲ 7.1	★★★	★★★★	★★★	★★★	★★★★	Technology
250	Levi Strauss & Co.	53.9	N/A	★★★★	★★★★	★★★	★★★	★★🚩	Consumer Goods
250	Masco Corp.	53.9	▲ 6.2	★★★	★★★	★★★	★★★★	★★★	Real Estate/Construction



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# Where Workflow Meets Work Life

## Companies have embraced new operating models in the wake of COVID-19

The coronavirus pandemic has accelerated the digital transformation of business. Companies worldwide have embraced digital solutions to meet rapidly shifting employee needs and customer demands, as well as a host of other challenges. We sat down with Dave Wright, chief innovation officer at ServiceNow, to learn how digital workflows are helping organizations manage through the pandemic – including a very famous CEO with some uniquely seasonal needs.

**How does ServiceNow think about the concept of digital workflows?**

ServiceNow, at its heart, is a digital workflow platform. We take unstructured work – be that work done offline, on spreadsheets or in emails – and we build digital workflows around it. Using the power of the Now Platform, we can workflow any operational challenge, and we do that by connecting processes across the enterprise.

That could mean connecting the front to the middle to the back office for financial services. It could mean taking IoT data from sensors and linking it to customer service and field service. Or in our current environment, it could mean looking at how we improve the process for onboarding employees during the COVID-19 pandemic.

**What’s the relationship between workflows and digital transformation on a broader level?**

Workflows are key for digital transformation. They form the connective tissue across the modern digital enterprise – and for us, behind every great experience is a great workflow. They can break down silos to provide a single pane of glass that helps people see exactly how work is flowing across an organization. They can automate mundane tasks so people can focus on meaningful work. And they can help organizations surface insights and start to understand their data.

**From your perspective, what are some of the key ways the pandemic has impacted the future of work?**

The workplace was already leaning toward a more flexible, distributed environment. COVID-19 has simply accelerated the trend. We’ve seen

how companies with digital workflows in place were better suited to support remote work. In the past, location formed your hiring boundaries. That’s no longer true. With digital onboarding and management workflows, you can hire the right person regardless of location. Once you digitally connect the activities that run across the company, you get visibility into the status and progress of knowledge work. Managers can see what’s running efficiently and what’s causing pain points, and employees can feel confident their work is being acknowledged. So workflows end up forming the new boundary of trust.

**How has the culture of work shifted during the pandemic?**

Trust and flexibility are also integral components of a strong workplace culture. Employees want to choose when and where they work, which requires organizations to trust that work will still get done – and get done efficiently. That’s what ServiceNow’s workflow-driven solutions provide. We give organizations a formalized way to track and assign work, including visibility into the status of every process and who it must go through to be completed. As a result, we cease to rely on informal conversations to manage work, which provides organizations the assurances they need and employees the flexibility they want.

**You mentioned onboarding earlier. How are businesses balancing this expansion of the remote workforce with their approach to HR operations?**

HR works cross-functionally with nearly every department and team. And as we learned at the start of the pandemic, without physical proximity, working across teams becomes more

time-consuming and complex. Dropping in on a colleague next door to move a process forward is no longer an option. A sudden dependence on convoluted, cross-departmental email threads made moving to remote onboarding a major logistical challenge. With digital workflows, HR can connect to departments across the organization to coordinate the entire onboarding process with ease.

**What about the customer side? How are expectations changing around customer experience, particularly since the early stages of the pandemic?**

Customers expect a digital, connected experience that extends across contexts and industries – whether it’s curbside pickup in retail or fast, connected customer support in telecom. This was a trend before the pandemic, but now it’s simply a reality. Organizations must adapt by beefing up their digital capabilities. Workflows help by digitizing and connecting processes while creating a single system of action that hides back-end complexity and delivers a simple, seamless customer experience.

**Has the conversation around business resilience also changed? How has ServiceNow responded with regard to areas like risk management?**

Before the pandemic, resilience was often viewed as a box to be checked or an IT-focused conversation. It was more about data center failovers than true business resiliency. But the sheer scale and length of the pandemic has forced us to think more holistically about business resilience. It’s now a conversation that includes people, processes and technology, and

it’s centered around truly business-critical capabilities. With instability, uncertainty and risk increasing globally, it’s a necessary shift. ServiceNow has responded with new operational risk and resilience capabilities that connect risk management across domains and lines of business for a comprehensive look into an organization’s risk environment and posture.

**In all of these contexts, what is the role of AI and machine learning in helping people focus on more challenging, exciting work?**

We view AI and ML as tools to augment human capabilities, not replace them. For instance, rather than asking an employee to triage customer service tickets, we can now use AI to categorize and route those tickets to the appropriate individuals. That’s an important but repetitive job. With AI/ML, we can free employees to focus on higher-skill, more value-add activities, like actually solving the problems those tickets contain. At its core, this is what AI/ML is about: automating the mundane so employees can save their energy for innovative problem-solving.

**Lastly, can you tell us about any interesting clients you’ve worked with during the pandemic?**

When the City of Los Angeles needed to manage COVID-19 testing for 4 million people, they came to ServiceNow and said, “Is this something your workflow platform could support?” The answer was “yes.” In fact, we managed to stand up a solution that worked for them within 96 hours. Now they’ve got the capability to track the entire city’s test results on a single platform. Then there’s the NBA. In response to

the pandemic, they decided to complete the basketball season at a secure campus in Orlando, Florida. The league needed to create a safe environment for the 2,600 people – players, doctors, media and vendors – who needed to get in and out of their facility. We helped them workflow the entire process on the Now Platform. Everything from medical scans to insurance records were put into workflows and routed to the appropriate people. Using ServiceNow workflows, the league processed 13,000 documents and shared critical decision-making data with doctors. The end result? Zero COVID-19 cases.

*Learn more about ServiceNow’s partnership with the NBA in a special advertising feature in Thursday’s Business & Finance section of The Wall Street Journal.*

**Before we close, we heard you’re working with one other client that has some particularly unusual needs. They’re located pretty far north, correct?**

Yes – that’s been an interesting challenge as well. We partnered with a company that is incredibly seasonal. Every year, this company has to deal with huge growth in its contingent workforce, which happens over a very short period of time. They’re also managing the logistics of being able to deliver to over 2.2 billion customers in a really short timeframe, with the most critical service-level agreements in the world. And they’re in a very remote location, so we have to consider the fact they are always going to be mobile. I’ll also mention that this partnership gave us the opportunity to work with one of the world’s most famous CEOs. For now, though, I’m going to have to leave it at that.

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THE WALL STREET JOURNAL.



# JOURNAL REPORT CEO COUNCIL

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THE WALL STREET JOURNAL.

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## Wish List From CEOs

Among the requests for the new administration: re-engage with allies, less disruption, and go slow on reinstituting regulations

**T**he Wall Street Journal’s CEO Council met Dec. 8 during a tumultuous time in the U.S.—a pandemic and economic downturn, a divisive presidential election, trade relations upended, and the aftermath of broad public protest over racial and economic inequality.

What should be done? The CEOs had advice for the incoming administration of President-elect Joe Biden, a partial agenda for the nation through the lens of business.

Of the 282 global CEOs attending the virtual meeting, 116 broke into four task-force groups to address key issues the country faces. A Journal editor moderated each of the sessions with the understanding that comments wouldn’t be attributed so debate could be candid.

The CEOs weren’t shy about wanting a fresh approach.

**First,** they advised the incoming administration to find productive ways to re-engage with allies and international organizations. “Don’t pull up the drawbridges,” said one CEO. Other recommendations: Rejoin the Paris climate accord, revive America’s role in the Trans-Pacific Partnership trade pact, bolster the U.S. commitment to the North Atlantic Treaty Organization, and open the door wider to talented immigrants.

The reason? To boost the U.S. economy in the short run. And, in the longer run, to build alliances needed to stave off the commercial and security threat posed by China.

One executive said he hoped the nationalist impulse of the past four years was a “blip” in the history of U.S. engagement internationally in the aftermath of World War II. Big border-spanning companies like those in the CEO Council tend to be internationalist by nature. So, in more than one task force, CEOs underscored the need to explain to average Americans the benefits of engagement. Better marketing and having real benefits to sell—that’s one way to help blunt nationalism, they said.

**Second,** a little less disruption, please. Companies, just like stock markets, like consistency and predictability, not big swings in policy. How else can chief executives make long-term plans?

The CEOs advised President-elect Biden to go slow on raising corporate taxes (no surprise there) and on reinstituting regulations cut by the Trump administration. (Mr. Biden is looking at consumer finance and energy.) Business knows the policy landscape will be changing under a new president, but the CEOs asked for moderation and a long-range plan.

“We can’t afford regulatory uncertainty,” one executive said. “We need policy we can count on for a decade to come.” Similarly, a big shift in tax policy three years after the last big shift creates more uncertainty and could increase costs—something that companies can’t afford in the middle of a pandemic, the executives contended.

Add tariffs to that list of disruptions. The Trump administration used tariffs to try to force China to open its market, abide by global trade conventions and stop stealing U.S. technology. The strategy had limited effect. But the backwash for U.S. companies was notable.

“Tariffs create disruption,” one ex-

ecutive said. Another complained that the tariffs raised his costs, forcing him to revamp his supply chain and move manufacturing jobs out of the U.S.

Don’t just disrupt, the executives concurred. Find a less concussive approach to problems, like strategizing with allies to pressure China to conform.

**Third,** build consensus. Reach across party lines, the CEOs urged. Listen to others, walk in their shoes and then make your decision. In other words, don’t stoke polarization. The CEOs who examined how the pandemic is affecting economic growth shook their heads over the fact that wearing a face mask—the first line of defense against getting or spreading infection—had become

politicized. That struggle makes it harder to reopen their companies.

The executives encouraged Mr. Biden to resist promoting widespread lockdowns. Several said they were able to operate their businesses safely using social-distancing protocols and masks. The workplace isn’t the problem, they contended. It’s the home.

“We’ve had lines we’ve had to shut down because someone had a family gathering,” one chief executive said.

Build consensus and then pursue policy in moderation, the CEOs reiterated, whether that applies to rejoining the Paris climate accord or crushing the coronavirus.

**And fourth,** invest. Invest creatively in core needs of the na-

tion, the CEOs advised. Invest in STEM education for K through 12 schools to boost technical proficiency and reduce inequality in the workplace. Invest in programs that teach the workforce needed skills, and optimize opportunities for people of all races and educational backgrounds (in fact, create a federal Office of Reskilling). Invest in basic research to power the next generation of scientific and commercial innovation and enterprise.

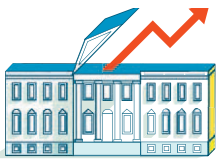
Which gets back to the CEOs’ admonition to build consensus—in this case, consensus on how to raise the money for all of that investing.

Did someone say corporate tax hike?

—John Bussey, Elena Cherney, Charles Forelle, Jamie Heller and Gerald F. Seib

## CEOs’ Advice to the Biden Administration

What do business leaders want from the incoming administration? Here’s a rundown of their wish list in four key areas: the economy; America’s role in the world; trade and China policy; and inequality and inclusion in the workplace and society.



### Managing the Economy

- ☐ **EDUCATION**  
Focus on reskilling workers, both white-collar and blue-collar. Expand Pell grants. Consider national curriculums with a business focus.
- ☐ **REGULATIONS**  
Don’t rush to re-regulate businesses, which can’t afford added costs right now, and they need certainty. A big change in the tax code, just three years after the last one, would be counterproductive.
- ☐ **CORONAVIRUS**  
Support targeted social-distancing measures, not broad lockdowns. Some businesses can operate safely. Let them.
- ☐ **DIVISIONS**  
The country is divided. Even mask-wearing has become politicized. Reach out to people of all political persuasions to talk to them, not criticize them.



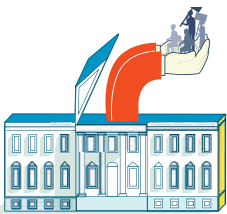
### America’s Role in the World

- ☐ **CHINA**  
Define an agenda for dealing with China that incorporates allies more effectively.
- ☐ **INTERNATIONAL ORGANIZATIONS**  
Re-engage with the world generally and with international organizations specifically.
- ☐ **INTERNATIONALISM**  
Restore Americans’ faith in internationalism by showing it can work for them.
- ☐ **R&D**  
Reinvest in research, development and people.



### Trade and China Policy

- ☐ **TARIFFS**  
Steer away from applying tariffs as a preferred tool, and instead use them highly selectively.
- ☐ **CHINA**  
Deploy an approach of ‘targeted reciprocity’ with China.
- ☐ **MULTILATERALISM**  
Ally with other like-minded nations rather than relying on a largely bilateral approach
- ☐ **WTO**  
The World Trade Organization needs to be reformed to help it address the disadvantage companies have competing against China’s subsidized state-owned enterprises.



### Inequality and Inclusion in the Workplace and Society

- ☐ **RESKILLING**  
Create incentives for companies to undertake reskilling programs.
- ☐ **DISABILITIES**  
Create incentives for companies to employ people with disabilities.
- ☐ **A NEW FEDERAL OFFICE**  
Create an Office of Reskilling in the federal government.
- ☐ **STEM**  
Invest in STEM education for grades K through 12



JOURNAL REPORT | CEO COUNCIL



A New Agenda for National Security

Jake Sullivan, adviser to President-elect Biden, says the U.S. has to rethink its approach

When it takes office in January, the Biden administration will confront both immediate challenges to national security and broader shifts in business and global affairs. Matt Murray, editor in chief of The Wall Street Journal, discussed those challenges and the incoming administration's approach with Jake Sullivan, national-security adviser to President-elect Joe Biden. Here are edited excerpts of their conversation.

**WSJ:** As you and your colleagues in national security undertake your new jobs, what are the realities shaping what you can do and how you should go about thinking about national security?

**MR. SULLIVAN:** There are significant changes that have been unfolding over the course of several

years. And this is not just about President Trump. This is about underlying currents in the international system.

Three changes in particular stand out. The first is a change in the distribution of power among states, with a number of rising actors in the world, including the rise of China. The second is the increasing salience of nonstate actors of all kinds, from the private sector to diverse transnational networks working on a wide range of different issues to terrorist and extremist organizations that span territory and cross borders.

The third is a crisis of governance within states in many parts of the world. And that crisis takes the form both of fragility of states but also crisis in democracy, where you see a hollowing out in the trust in institutions across many parts of the West.

And so if you think about those three big changes, what we confront is a world that very much requires a kind of new way of thinking about how we approach the partnerships we form, how we revitalize the alliances that have been weakened over the course of the last few years, and how we set our priorities as to what the true threats and challenges are facing the American people. And while all that's happening out in the world, the American people have increasingly come to expect that their governments show them how every-

thing that happens, both domestic and foreign, relates back to their welfare and well-being. That very much has to be at the center of U.S. foreign policy going forward.

**WSJ:** The Trump team has put China right at the center of national security. Relations have really chilled between the two countries. And I think it's fair to say that's broad-based and really bipartisan. What did they get right and what did they miss? And how are you thinking about the China relationship going forward?

**MR. SULLIVAN:** The current administration is certainly right that

izations in ways that are not in keeping with America's national interests. And then the final is our values. That we stand up and speak with a clarion voice on behalf of our view about human dignity, human rights, democracy.

**WSJ:** When you look at the international institutions in the world, how much reform do they need? Are they reformable? Are some of them beyond repair? Or do we need new institutions for the world that we're in now?

**MR. SULLIVAN:** Certainly the major

'We are stronger when we are working together with democratic allies.'

China represents a significant challenge that the United States is going to have to contend with in a clear-eyed and forceful way.

But the core thing they missed is what are the real sources of American strength in the competition with China as we move forward? And I really see four of them, which I don't think have been tended to as well as they should have.

The first is our domestic strength. It's investing in the talent of our people, in our innovation and industrial base, in our workforce and our education and our infrastructure.

The second is our alliances. We are stronger when we are working together with democratic allies in Asia, Europe and elsewhere to develop a common agenda when it comes to pushing back against China's abuses in the trade space, in the technology space and in other ways.

The third is America's participation and leadership in international institutions.

When we walk away from the table at the WHO or the Paris Climate Accord, or other agreements and institutions, China tends to fill the vacuum, and steer those organ-

institutions—particularly the ones that have been around awhile—are very much in need of reform. I think it's our view that that reform is best carried out with the United States at the table, as opposed to picking up our ball and going home.

**WSJ:** What about trade deals? Both candidates in 2016 ended up opposing the Trans-Pacific Partnership. In hindsight would it have been better for us to have joined even a flawed or imperfect TPP? Or is there a different multilateral trade pact that is possible ahead of us?

**MR. SULLIVAN:** What President-elect Biden has said is that the first order of business for us is actually to invest here at home—in our workers, in our strength. Then to step out and engage on setting the rules and standards going forward. I think part of that has to do with reforming the WTO.

Then part of it has to do with actually working with like-minded allies and partners on a strategy that is particularly focused on pushing back on China's abuses—on state-owned enterprise subsidies, on intellectual-property theft, on dumping and on other steps that they're taking.

Canada's Fiscal Approach to Covid-19

"[Our government spending] is not adding structural deficits to our economy. This is holding things together while this pandemic hits.

"There was a concern in the beginning that this might last three, four years. Yes, there will be impacts that will last three, four years. But with vaccines coming very rapidly on the horizon, we are hopeful that our economy is going to get back to nor-

mal, although it will take a few years to get back to pre-pandemic levels.

"We are confident that the growth we have protected for when we come through this pandemic is going to more than offset any debt financing costs associated with what we injected into the economy."

—Justin Trudeau, prime minister of Canada, edited excerpt from the WSJ CEO Council summit



'We are hopeful that our economy is going to get back to normal, although it will take a few years to get back to pre-pandemic levels.'

Carrie Lam: China and Hong Kong

Hong Kong's chief executive defends China's actions

**Carrie Lam**, chief executive of Hong Kong, on the territory's new national-security law:

**WSJ:** In just the past six months, we've seen Beijing impose a national-security law without debate or any prospect of judicial review. You yourself have suspended legislative elections when it appeared the government was going to lose those.

We've had news rooms raided, reporters arrested. There have been teachers who have been fired for not being patriotic enough. I believe your own

administration is still reviewing books written by opposition figures to see if it's suitable to keep them in libraries.

And just last week, we had four leading members of the opposition arrested. So I know there are specific circumstances around all of these. But taken as a totality, how can anyone not conclude that something fundamental has changed in Hong Kong?

**MS. LAM:** Well, taken as a totality, it's basically still the rule of law. I would take issue with you when you refer to a law being imposed by the central people's government on Hong Kong. If I may go back to One Country, Two Systems—One Country, Two Systems sits on one country.

We are part of the People's Republic of China. So I don't think any country will tolerate any secession, treason or at-

tempts to overrule the government.

After 23 years, successive governments, including my government, have not been able to enact local legislation to protect national security.

So I pose you this question: How long could a country tolerate that part of the territory

is not protected by national-security legislation? It's unbelievable. Especially after what we have seen since June last year, that there were a lot of riots, anti-government, anti-mainland, and various subversive acts, particularly on social media, radicalization and so on, that the central people's government has no option but to use its powers under One Country, Two Systems.

And to require or expect the National People's Congress Standing Committee, which is the highest state power, to enact a piece of national legislation on national security, and have it applied in Hong Kong.



'How long could a country tolerate that part of the territory is not protected by national-security legislation? It's unbelievable.'



JOURNAL REPORT | CEO COUNCIL

Biden’s Plan on Corporate Taxes

Cedric Richmond says the question is how high and what will they do with the money

**Rep. Cedric Richmond** (D., La.), former co-chairman of the Biden presidential campaign, spoke at the CEO Council summit last week about President-elect Joe Biden’s immediate plans for when he takes office in January.

Mr. Richmond, appointed director of the Office of Public Engagement in the Biden administration, spoke with Wall Street Journal Executive Washington Editor Gerald F. Seib about the new administration’s agenda and what his own role will be in making it successful, on issues from the pandemic and the economy to taxes and racial justice. Edited excerpts follow.

CEOs ‘deserve a seat at the table, and they will have a seat at the table.’

**WSJ:** Joe Biden ran as a moderate Democrat. But there are still concerns in the business community, worries about higher corporate taxes or capital-gains taxes, more regulation, maybe too much influence by your party’s left wing. What would you say to business leaders to

reassure them on those fronts?

**MR. RICHMOND:** Well, I’m not necessarily sure that I’m here to reassure them, but part of what I can do is just be as candid and frank as I can. If you’re asking me, do I think Joe Biden’s plan is to raise the corporate tax rates, the answer is yes, because I believe that’s what he said on the campaign trail.

The real question is how high and what the investment will do.

But I think that he has done a good job of staying in the middle as a moderate, and running a campaign that others said was a campaign you couldn’t win, saying that he would work with Republicans and Democrats, and that he would govern in a pragmatic way.

So I think for the business community, that should be reassuring.

The other thing I think is important for business, and you all know better than me, is stability and predictability and knowing the rules by which you’re going to play.

**WSJ:** I recognize there’s a lot of uncertainty still on the horizon, but what do you think the first 100 days of a Biden administration are going to look like?

**MR. RICHMOND:** You have Plan A if we win both seats in Georgia. You have Plan B if we don’t win both seats in Georgia.

But I think from Day One, you will see executive actions that are designed to bring us back to some sense of normalcy.

You’ll see executive orders in



Cedric Richmond will head the Office of Public Engagement.

the climate arena, rejoining the Paris climate accord.

You’ll see executive actions in racial equity, restoring diversity, inclusion pattern and practice investigations, consent decrees. You

will see it in terms of economic areas. But make no mistake about it, our No. 1 job is to get this country out of this pandemic and the crisis that has resulted from it—both the public-health crisis and

the economic crisis that has followed.

**WSJ:** Even if Congress passes, in this lame-duck session, a coronavirus stimulus/relief bill, you think there’s probably going to be a need to come back for more in 2021.

**MR. RICHMOND:** Absolutely. And whether it’s investing in the charging stations for electric vehicles, whether it’s roads and bridges, water systems, retrofitting schools for the pandemic, we believe that we’re going to have to come with a new package in January that jump starts and invests in the economy also.

**WSJ:** How do you anticipate hearing from CEOs and being heard by them?

**MR. RICHMOND:** For me, nobody’s going to persuade me that—somehow, someday—CEOs in this country are bad people. CEOs are creating jobs. They are supporting families. They deserve a seat at the table, and they will have a seat at the table.



Republicans After Trump?

Linda Chavez argues his views aren’t the future of the party

**“It remains to be seen** whether [President Trump] is going to have the kind of stranglehold that he’s had. First, with President Trump about to go out of office, you will have the Congressional leadership in the Republican Party somewhat unleashed.

“Many of them who worry about being primaried may try

to carry the Trumpist line on certain issues. But I’m hopeful that this country has always been basically a centrist country. We go center left, we go center right. But we have always been a centrist nation.

“And Trumpism really was not. Trumpism was a kind of weird populism that was also xenophobic, it was welcoming of racist points of view. I don’t think that is the future of the Republican Party, at least not as a majority party. Because I think demographics, for one

thing, are working against that notion. So I’m a little more hopeful. I haven’t given up my Republican registration yet.

“I’ll wait a while longer. Give them a chance to be able to right themselves.”

**—Linda Chavez**, former White House director of public liaison (1985), edited excerpt from the WSJ CEO Council summit

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Elon Musk says the government needs to ensure there is fertile ground for startups.

and the baby food. So it's like when's the last time there was some good candy? What's the forcing function for a new candy bar? I haven't seen one in ages.

**WSJ:** We had a couple of people last night at this event who are joining the Biden administration, a couple of the president-elect's senior advisers. And clearly, one of the things heavily on their mind is sort of a new national industrial policy, for want of a better term. They talked about spending a lot more on research and development, and fostering innovation; big government spending, basically. Is that kind of national industrial policy a good idea? Is that a good use of government right now, in your mind? And if it is, where would you focus that kind of effort?

**MR. MUSK:** It's government's responsibility to establish the rules of the game and then ensure that those rules are properly enforced, sort of like the referees on the field.

I think that's an important role for government; to ensure that the rules are correct and that the incentives are what we actually want them to be for the long-term maximum happiness of people into the future. Where I think government does not do a great job is when they want to not just be a referee on the field, they want to be a player on the field.

**WSJ:** In the corporate suite in America, are companies in general fostering and developing innovation? And are the leaders in corporate America prioritizing innovation as much as we might or need to right now?

**MR. MUSK:** No. Generally, my recommendation would really be spend less time on finance, spend less time in conference rooms, less time on PowerPoint, and more time just trying to make your product as amazing as possible. And the company might take their cue from that.

Elon Musk on Fostering Innovation

that there is a fertile ground for startups. If you've got a duopoly or oligopoly, they're generally go-

The entrepreneur's primary piece of advice: Get out of the conference room

'A lot of the time, the best thing that government can do is just get out of the way.'

**H**ow can the U.S. remain a global leader in innovation amid increasing competition? How can CEOs inspire innovation in their companies? Elon Musk, co-founder of Tesla and founder of SpaceX, discussed these issues with Matt Murray, editor in chief of The Wall Street Journal, at the Journal's CEO Council summit. Edited excerpts of their conversation follow.

**WSJ:** You've spoken often in your career about how important it was for you, as a young

entrepreneur and innovator, to come to America. And you've said there's no other country where you could have achieved what you've achieved today. Would that still apply in 2020? And are we, broadly as a society, doing everything we should be doing to foster that same environment that brought you here?

**MR. MUSK:** The U.S. is still great with respect to innovation and fostering entrepreneurship. We don't want to be complacent, and we want to say, "OK, how can we make it better over time?" And we want to be cautious about the

gradual creep of regulations and bureaucracy.

**WSJ:** When you think through an innovation lens in the broadest sense, what's the right role for government? Where should government be a player, and where should it be hands-off?

**MR. MUSK:** A lot of the time, the best thing that government can do is just get out of the way. Then after that would be ensuring that there are not artificial monopolies,

ing to have a weak response to their customer. And if they're a monopoly, they're going to have the weakest response to the customer.

**WSJ:** Is that what you see in Silicon Valley today?

**MR. MUSK:** This is not a Silicon Valley problem, it's just a general problem. If you look at, say, how many candy companies are there? Big candy has consolidated into three companies or something. And they also own all the dog food

Lessons in Leadership

Two CEOs on what they've learned

**Arne Sorenson**, chief executive officer of Marriott International Inc., and Julie Sweet, CEO of Accenture, talked about business leadership in a time of social upheaval and economic disruption at the CEO Council summit with The Wall Street Journal's Nikki Waller. Edited excerpts follow.

**WSJ:** This year has shown us how consequential leadership can be. The fragmented response during the pandemic has hurt businesses. Julie, what has been the biggest wake-up call for you this year?

**MS. SWEET:** A wake-up call for all of us is the interconnection globally. We all recognize how interconnected we are. Also the need for collaboration. If you solve the pandemic and the issues around it, it has taken government, nonprofits, education and the private sector coming together.

**WSJ:** As board members of

the Business Roundtable, you've advanced the idea of companies pursuing returns that extend beyond shareholder value. And certainly that idea has been tested this year.

If you're pursuing a stakeholder agenda and don't meet earnings expectations, do you still get in trouble?

**MR. SORENSON:** It is crystal clear to companies that have been around a long time that it is in our selfish and pecuniary interests to be good community citizens. Because it's good for our brand. It's good for motivating our people. It's good for creating economic opportunity, which also enhances our customers and causes them to be that much more loyal to us.

**WSJ:** What are employees demanding leadership on?

**MS. SWEET:** One out of every two workers roughly, according to our latest research, want to work at companies that are taking more of a role in helping solve social and environmental issues.

**WSJ:** Is there something you think CEOs shouldn't be weighing in on?

**MR. SORENSON:** There are limits. To some extent, it is maybe just asking yourself, "Does anybody care what I think about that issue?" Principally, the community that forces us to speak is our own community of people. We have about 750,000 people that wear our name badge every day around the world.

They have a loyalty to the company. They want to know what the company's point of view is about things.

So we will speak about inclusiveness. We will speak about immigration.

**WSJ:** How do you adopt a racial-equality agenda at a time when, in some cases, the business is fighting for survival?

**MR. SORENSON:** It has got to be embedded in your business. It is fundamentally about making sure that we are inclusive and that everybody gets a fair opportunity.

And obviously the explicit bias is relatively easy to prohibit and ban. The implicit bias is harder. But it is there.

And we've got to make sure that we are using the tools that we have to stamp it out.

And you do that in different ways at different layers of the organization.

**WSJ:** Accenture's growing. But you do regularly trim the ranks. How do you take all this into account?

**MS. SWEET:** We have a complete commitment to equality. But we also believe that diversity is why we're really successful.

What Voters Saw in Trump

**"It was obvious** to me in 2016 that Donald Trump had repudiated some of the conventional wisdom or orthodoxy in our party that had grown pretty stale—like an open-borders, amnesty, mass-migration approach to immigration.

"I don't see us going back to being a party that supports that kind of approach, opposed to controlling immigration the way we have for four years that has led to some of the fastest wage gains for working-class voters.

"When it comes to trade and specifically trade with China, too many leaders in both parties for too long had supported anything you might slap the name free trade on. They heard in Donald Trump someone who recognized that when you're talking about trade between nations, there is nothing that is natural about free trade. These are highly complex agreements, and oftentimes there are winners and losers. And low and behold, it seemed like for 25 or 30 years the people who were winning were always the ones who were negotiating, not the ones who were working in factories in places like Arkansas, or Michigan, or Ohio."

—Tom Cotton, U.S. Senator (R., Ark.), edited excerpt from the WSJ CEO Council summit



Accenture's Julie Sweet, left, and Marriott's Arne Sorenson



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◀ Anthony Fauci says ‘a substantial proportion’ of people still think that the pandemic is not real.

together as a nation uniformly with adhering to these public-health measures.

**WSJ:** Does Washington need to insist on masking, distancing and testing, and provide more resources?

**DR. FAUCI:** We definitely need to provide resources. We know now that in schools, the rate of infection is less than what we would have predicted. And the children seem to be doing well. But we’ve got to provide the resources to teachers and local communities to be able to address contingencies with regard to protecting the health and welfare of the children and the teachers.

**WSJ:** When can CEOs expect their employees to have been vaccinated?

**DR. FAUCI:** The only prioritization established and officially made public is priority 1A: health-care providers and those in nursing homes and extended-care facilities. After that, you will likely see people with critical jobs in society, teachers, elderly, people with underlying conditions. You get to the general population, people who are young, relatively young, healthy and have no underlying conditions, likely by the end of March, beginning of April.

If we’re efficient in that and, this is the critical issue, if we can convince the overwhelming majority of the U.S. population to take the vaccine, when we get through April, May, and June, we could likely get most everybody and anybody who can get vaccinated to be vaccinated.

Fauci on Vaccination Timing

The government’s top infectious-disease expert on the need for a ‘uniformity of purpose’

**A**nthony Fauci says he thinks everyone in the U.S. who is willing to be vaccinated could be by early summer. There are, of course, hurdles, the U.S. government’s top infectious-disease expert told Wall Street Journal reporter Jonathan D. Rockoff at the CEO Council summit. Edited excerpts follow.

**WSJ:** As we wait for vaccinations to begin, what do we need more of, or what should we do differently, to protect against Covid-19?  
**DR. FAUCI:** We have to have a uniformity of

purpose. We know clearly that uniform wearing of masks, physical distancing, avoiding of crowds—particularly indoors—washing hands frequently, all seem simple in the backdrop of the enormity of the problem we’re facing. But when you compare comparable situations in which one state, city, town, or even country implemented these measures, they were able to either prevent surges or turn around the dynamics. And yet, we don’t do that uniformly. It’s extraordinarily frustrating. We have not yet seen the full effect of the [Thanksgiving] traveling and

congregating. And then we’re going to enter the Christmas season with more traveling and congregating at family and social gatherings. So we’re in for a very challenging period. And the only way we’re going to counter that is by a

consistent, uniform implementation and an adherence to public-health measures. Trouble is, you go to different parts of the country and even when the outbreak is clear and hospitals are on the verge of being overrun, there are a substantial proportion of the people who still think that this is not real, that it’s fake news or that it’s a hoax. It’s extraordinary. I’ve never really seen anything like this. We’ve got to overcome that and pull

‘In schools, the rate of infection is less than what we would have predicted.’

What the U.S. Should Do About China

Secretary of State Pompeo says rules must apply equally

**What does the** increasingly strained relationship between the U.S. and China mean for American business leaders? Matt Murray, The Wall Street Journal’s editor in chief, asked U.S. Secretary of State Mike Pompeo about that at the CEO Council summit. Edited excerpts follow.  
**WSJ:** The U.S.-China relationship has grown a bit chillier in the last few years for many reasons. How do you assess the relationship now?  
**MR. POMPEO:** In the end, the deci-

**WSJ:** What should the role of U.S. multinational corporations be at this moment?  
**MR. POMPEO:** It can’t be the case that whether it’s at the World Trade Organization or elsewhere, that there is one set of rules for just about every nation and then another set for China. Business leaders ought to be actively engaged in making sure that the rules apply equally, whether that’s investment rules applying reciprocally between foreign direct investment here in the U.S. and American companies that want to invest in China, or whether it’s the massive human-rights violations taking place in China. I’ve watched our businesses. They care deeply about their employees. They care deeply about their customers. They want to make sure that they aren’t doing anything to harm them. I think every business leader who is operating internationally understands that it is important to make sure: a) that you aren’t con-

‘Business leaders ought to be actively engaged in making sure that the rules apply equally.’



sion about the relationship between our two countries is largely going to hinge on the direction of travel of General Secretary Xi Jinping and the leadership of the Chinese Communist Party. In these past years they have chosen a direction of travel that has been increasingly aggressive. Whether that’s at home with their own people and what’s happening in Xinjiang, or whether it’s abroad in the South China Sea, or issues of trade, economics, there is a different China than 10 or 15 or 20 years ago because of decisions the Chinese Communist Party has made. And that forced the U.S. to take real action, serious action.

tributing to massive human-rights violations; and b) that you are operating in a way that, even if it has a short-term cost to your own business, fundamentally works toward making sure that the opportunities for freedom-loving nations, for rules-abiding nations, continue to exist, and that you aren’t helping to underwrite authoritarian regimes that want to take away the very freedoms that have led you and your company to be successful. I can’t tell you how many CEOs have come into my office and quietly, because they do business there, told me that the Chinese Communist Party is stealing from them..

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Deborah Birx, right, says ‘Masks do not hurt you, they help you.’

Dr. Birx  
On the  
Surge

The White House coordinator says the asymptomatic spread means people must keep wearing masks

In the remaining months of the Trump administration, Deborah Birx, White House coronavirus-response coordinator, has crisscrossed the U.S. getting the message out that masks and social distancing do help prevent spread of coronavirus. Dr. Birx spoke last week at the CEO Council summit with The Wall Street Journal’s Stefanie Ilgenfritz.

Edited excerpts follow.

**WSJ:** What is the Trump administration planning to help curb the current surge in these crucial next weeks?

**DR. BIRX:** We know masks work, physical distancing works. But if we don’t change how we gather, we’ll continue to have this surge across the country. People really need to understand how much asymptomatic spread there is, and that the majority of spread is from people who don’t know they’re infected being with others in close quarters with their mask off. That’s where transmission is occurring.

**WSJ:** Are we trying to improve testing availability?

‘We have to be much more aggressive about addressing the myths.’

**DR. BIRX:** We’ve sent out, I think, 90 million antigen tests, asking state governors and mayors to use those tests in a new way. To create new scenarios for

testing so that people can get results immediately.

**WSJ:** You find the rapid antigen tests, which have that trade-off of speed versus accuracy, to be a legitimate way to increase access to testing?

**DR. BIRX:** Absolutely. It will be in the high 80s, high 90s for what we call sensitivity and specificity.

**WSJ:** Why do you wear a mask indoors when you are away from your home?

**DR. BIRX:** I wear a mask anytime I’m outside of my household. And I think this is critically important. Understanding that anytime you take that mask off, that you could be transmitting the virus to others, or you could be getting the virus, is very critical.

This asymptomatic spread is the majority of spread. Sick people by and large go to bed. So they may only spread for a couple of days.

When you’re asymptomatic, you’re spreading for at least seven, eight, nine, 10 days, in public, in private, not knowing.

**WSJ:** Some suggestions—masks, social distancing—that you’ve been sending out have not been echoed perfectly by other members of the current administration. How do you address the confusion that the public feels about this? Especially people who don’t believe that masks work.

**DR. BIRX:** Let’s be very clear. Vaccines are coming soon.

But it will take a while to vaccinate people in the U.S., and [meanwhile] we know that the only prevention we have is behavioral change.

So, messages need to be critically consistent. I think we have to be much more aggressive about addressing the myths that are out there.

Masks do not hurt you, they help you. We know that they protect us as well as protect others.

A K-Shaped Recovery

The IMF’s chief economist offers her forecast

**Gita Gopinath** is the International Monetary Fund’s chief economist. With the pandemic heating up, The Wall Street Journal’s Greg Ip asked her about the outlook for the world economy for the near term and further out. Here are edited excerpts:

the spring. Overall, I think the world economy is recovering.

**WSJ:** We hear about a K-shaped recovery, with people who are highly paid and well-skilled doing much better than those who aren’t. Is the same true of advanced vs. emerging markets?

**MS. GOPINATH:** Indeed. In terms of the challenge for 2021, I

‘On average, economies have a lot of momentum.’



**WSJ:** In the last IMF forecast, you projected 4.4% contraction in the global economy this year, then a bounce back of 5.2% next year. Has that changed?

**MS. GOPINATH:** Since our October projections, we’re seeing third-quarter GDP surprises on the upside for many countries. But we’ve also seen the very strong second wave [of infections], along with partial lockdowns. So we likely will have downgrades for some countries—we already have one for the U.K.—and the rest, including the U.S., are likely to have an upgrade for 2020.

So basically, the fourth quarter of this year and the first quarter of next year will come in somewhat weaker than many expected. But none of this is as bad as what it was in

think it’s precisely this K shape of the recovery. On average, economies have a lot of momentum, and you should see them coming back. But the distribution within and across countries will take longer to resolve.

We are seeing low-skilled workers, young workers, women being much harder hit. Similarly, if you look across countries, there’s a divergence in prospects. Per capita incomes in emerging and developing economies, excluding China, are being hit much harder than in advanced economies.

We also know that vaccination is going to happen at a much slower pace in many emerging and developing economies compared with advanced economies. So a K-shaped recovery is the big challenge of 2021.

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