

THE WALL STREET JOURNAL.

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DJIA 30173.88 ▲ 104.09 0.3% NASDAQ 12582.77 ▲ 0.5% STOXX 600 393.64 ▲ 0.2% 10-YR. TREAS. ▲ 5/32, yield 0.913% OIL \$45.60 ▼ \$0.16 GOLD \$1,870.80 ▲ \$9.00 EURO \$1.2106 YEN 104.17

What's News

Business & Finance

Tesla CEO Musk said he has moved to Texas, taking aim at Silicon Valley and becoming one of the highest-profile executives yet to leave California during the coronavirus pandemic. **A1**

◆ **FireEye was hacked** in what the company, one of the world's largest cybersecurity firms, said was a highly sophisticated foreign-government attack. **A2**

◆ **DoorDash priced** shares in its initial public offering at about \$102 apiece, a sign of strength both for the meal-delivery company and the overall IPO market. **B1**

◆ **The S&P 500** and Nasdaq hit records, closing up 0.3% and 0.5%, respectively. The Dow advanced 0.3%, falling short of a new milestone. **B3**

◆ **Nielsen said** it would replace its current TV ratings system by 2024 with a metric that incorporates digital viewing as well as the current traditional audiences. **B1**

◆ **Some McDonald's franchisees** said they would raise prices on Happy Meals after the company revokes a longstanding rebate. **B1**

◆ **Boeing delivered** a 737 MAX to United, the first carrier to receive a newly produced model of the jet after U.S. regulators ended a nearly two-year grounding. **B1**

◆ **Car sales in China** rose for a fifth straight month in November, continuing to cement a recovery. **B3**

◆ **Apple unveiled plans** to sell AirPods-branded over-the-ear headphones, a direct strike against companies such as Bose and Sony. **B4**

World-Wide

◆ **The U.K. became** the first Western country to start distributing a Covid-19 vaccine to its population, rolling out a mass inoculation program that could provide a template for other countries of the practicalities and potential pitfalls of vaccinating at speed and scale. **A1**

◆ **The FDA said** the first Covid-19 vaccine being considered for U.S. distribution met prescribed success criteria in a clinical study, paving the way for the agency to approve distribution as early as this weekend. **A1**

◆ **Democrats rejected** an effort by McConnell to narrow the scope of a coronavirus relief bill this year, setting up a clash over aid to hard-hit state and local governments. **A2**

◆ **Biden formally** introduced the public-health team that will help him navigate the pandemic and announced goals to curtail the virus during his first 100 days. **A4**

◆ **The Supreme Court** rejected a last-ditch Republican request to block Biden's victory in Pennsylvania. **A4**

◆ **The House passed** a defense-policy bill in a 335-78 vote, far exceeding the two-thirds majority that would be needed to override a veto threatened by Trump. **A4**

◆ **A judge officially** closed the criminal case against ex-national security adviser Michael Flynn, whom Trump had pardoned. **A3**

◆ **Brexit talks are** set to enter a last decisive phase as Johnson seeks to secure a deal over the EU's relations with the U.K. **A8**

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Maggie Keenan, 90 years old, was the first person to receive the initial dose of the two-shot Covid-19 vaccine developed by Pfizer and BioNTech as the U.K. began its inoculation program.

U.K. Rolls Out First Covid-19 Shots in West

By JOANNA SUGDEN AND WILL HORNER

CARDIFF, Wales—The U.K. became the first Western country to start distributing a Covid-19 vaccine to its population, rolling out a mass inoculation program that could provide a template for other countries, including the U.S., of the practicalities and potential pitfalls of vaccinating at speed and scale.

Less than a week after Britain granted emergency-use authorization for the two-dose vaccine developed by Pfizer Inc. and Germany's BioNTech SE, the first people began to receive it across the U.K. on Tuesday.

Those over 80 years old, nursing-home workers and other high-risk health-care staff were front of the line: a group estimated to number six million. The rollout is being paid for by the U.K.'s state-funded National Health Ser-

vice and modeled on its annual flu-vaccination campaign.

Ninety-year-old Maggie Keenan was the first to receive the initial dose as part of the program, the NHS said. "It's history and the best thing that's ever happened. If I can do it, so can you," she said at University Hospitals Coventry and Warwickshire, central England.

Coming just days ahead of the Pfizer vaccine's expected authorization in the U.S., the U.K. rollout could be an indicator of the challenges faced by U.S. doctors in getting it into the population.

Aversion to vaccines in the U.K. remains below such sentiment in the U.S. In an Ipsos poll in October, 79% of people asked in the U.K. said they would take a Covid-19 vaccine if one were available, compared with 64% in the U.S.

Among the first to be inoculated...

FDA Paves Way for Pfizer Vaccine's Release

By THOMAS M. BURTON AND JARED S. HOPKINS

The Food and Drug Administration said the first Covid-19 vaccine being considered for U.S. distribution "met the prescribed success criteria" in a clinical study, paving the way for the agency to green-light distribution as early as this weekend.

An outside panel of scientific advisers is scheduled to review the FDA report Thursday, along with a companion analysis from

the vaccine's manufacturers, Pfizer Inc. and German partner BioNTech SE. A favorable recommendation from the panel is expected to be followed within days by the FDA's granting emergency authorization for the vaccine.

In its report Tuesday, the FDA noted that the two-dose vaccine provided benefits even after just the first injection—cutting the risk of getting Covid-19 by about half. The vaccine was found to be 95% effective

after the second dose, three weeks later.

FDA scientists also found that the vaccine was effective in reducing the risk of confirmed severe disease after the first dose, an important finding, as some health experts were concerned Covid-19 vaccines would protect against only mild to moderate disease.

Side effects were common, however, especially in younger people, the analysis found. The most common complaint was

fatigue, followed by muscle pain and joint pain.

Severe "adverse reactions" were rare, most frequent after the second dose, and generally less frequent in older adults greater than 55 years of age.

The frequent side effects occurring soon after injections suggests that the vaccine is generating a strong immune response, said Angela Rasmussen, a virologist and affiliate at the Center for Global Health Science and Security at George-

town University.

"It doesn't mean the vaccine is making you sick, but you should be prepared for potentially not feeling great for a day or two after getting it," she said.

Vaccines are seen as key to stopping the spread of the coronavirus, and health officials have

Musk Jabs California With Move To Texas

By HEATHER SOMERVILLE

Tesla Inc. Chief Executive Elon Musk said he has moved to Texas, taking aim at Silicon Valley and becoming one of the highest-profile executives yet to leave California during the coronavirus pandemic.

He said relocating made sense with a new Tesla factory being built in Texas. He lamented that California, in his view, had become complacent with its innovators.

Mr. Musk's companies will continue to have large operations in California. Yet his decision to move underscores a growing discontent, particularly among wealthier tech professionals, with the cost of living in the state, a pre-pandemic real-estate crunch and clogged roads.

Taking up residence in Texas comes with personal benefits for Mr. Musk: The state doesn't collect income or capital-gains tax for individuals. Mr. Musk qualified this year for billions of dollars in stock-option compensation, making him the second-richest person in the world.

During the spring, when Mr. Musk was sparring over coronavirus shelter-in-place orders that shut his factory near San Francisco, California Gov. Gavin Newsom told CNBC he was "not worried about Elon leaving any time soon" and the state was committed to the car maker's success. "We may not be the cheapest place to do business but we are the best place to do business," Mr. Newsom, a Democrat, said.

Silicon Valley remains home to some of the hottest companies—Airbnb Inc. and food-delivery company DoorDash Inc. are poised for multibillion-dollar public listings this month. Both are San Francisco-based.

Mr. Newsom's office didn't

◆ **Heard on the Street: Tesla** watches its stock, too..... **B14**

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Supreme Court rejects Republican request to block Biden's Pennsylvania win. **A4**

A Startup's Plan to Disrupt Power Grid Gets Disrupted

Bloom Energy's fuel-cell vision is foiled by rapidly changing industry

By REBECCA DAVIS O'BRIEN AND KATHERINE BLUNT

Bloom Energy Corp. became a hot startup more than a decade ago by promising to upset the utility industry with devices that could power the nation's buildings. Today, it's a reminder of how a rapidly changing industry can foil even the most driven entrepreneurs.

Bloom's founder, KR Sridhar, helped develop fuel cells for NASA before forming the company in 2001. The next year, he packed his technology into three U-Hauls and headed to California.

Fuel cells use chemical reactions to generate electricity, and proponents hold they will go mainstream one day as a clean, reliable energy source. They have defied broad commercialization, but Mr. Sridhar told a powerful story: Bloom would sell the technology in "Bloom Boxes" running on natural gas and

providing power more cheaply than the utilities on the electric grid.

Silicon Valley bought in, and media attention followed. Bloom's first investor was venture capitalist John Doerr, known for early bets on Amazon.com Inc. and Alphabet Inc.'s Google. Its board includes Gen. Colin Powell and former General Electric Co. chief Jeff Immelt. Among early customers were Google, eBay Inc. and Walmart Inc.

As with many Silicon Valley startups, Bloom presented the kind of bold technological and revenue prospects that persuade investors to look beyond profitability. Mr. Sridhar's vision: a Bloom Box in every American home. "It's about seeing the world as what it can be," he told "60 Minutes" in 2010, "and not what it is."

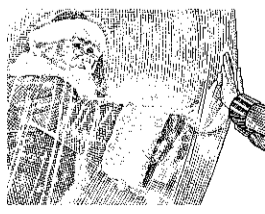
The world Mr. Sridhar foresaw hasn't arrived. His San Jose, Calif., startup hasn't put

Socially Distant Santa Claus Is Coming to Town (and the Mall)

St. Nick takes cover from virus behind plexiglass, or sealed into giant snow globes

By ANNE MARIE CHAKER

Carleigh Hansen's visit to Santa Claus at the Park Meadows Mall in Lone Tree, Colo., was a little different this year from Christmases past. The 8-year-old still wore a new dress for pictures and her mother treated her to cheesecake afterward. But this time, Santa wore a face shield and sat behind a sheet of plexiglass. Carleigh passed



Speak up, children

him her list underneath the barrier and talked to him through an intercom system.

"It was OK but I'd probably rather have it the way it was before," said Carleigh. This year has been tough on Santa. Children are worried

about his vulnerability to Covid. The Trump administration scrapped a plan to offer Santa performers (and Mrs. Claus and the elves) early access to a vaccine.

And now, the annual tradition of sitting on Santa's lap—kids whispering gift wishes to Santa while a photographer takes pictures—has undergone a Covid-era reinvention.

This year, the holiday rite often means making a reservation to stand in front of a plexiglass "Santa Guard." Shopping centers and photographers are putting Santa behind shields, inside snow globes or sealed high on a sled. Other venues are offering virtual Santa vis-

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U.S. NEWS

Democrats Reject State-Aid Exclusion

BY ANDREW DUEHREN
AND KRISTINA PETERSON

WASHINGTON—Democrats rejected an effort by Senate Majority Leader Mitch McConnell to narrow the scope of a coronavirus relief bill this year, setting up a clash over aid to hard-hit state and local governments as rank-and-file negotiators try to hammer out a deal.

As talks continued, the White House pushed Republicans to include a new round of direct payments of \$600 per person in the emerging package, according to people familiar with the discussions, reviving prospects for checks to households in this round of aid. Those direct checks were included in the White House's offer to House Speaker Nancy Pelosi (D., Calif.), House Minority Leader Kevin McCarthy (R., Calif.) told reporters Tuesday.

In comments Tuesday, Mr. McConnell (R., Ky.) said Congress should drop aid for state and local governments, a Democratic priority, and liability protections, a GOP goal, from the current set of relief negotiations, and instead address those issues in an additional package next year. The two issues have

bedeviled the lawmakers who have sought to revive a months-long quest to pass an aid package before the end of the year.

Mr. McConnell said that a package this year should focus on money for vaccine distribution, health-care providers and small businesses, calling President-elect Joe Biden's plans to work on another relief package during his administration another opportunity to deal with the outstanding issues.

"We know the new administration is going to be asking for another package," Mr. McConnell said. "What I recommend is we set aside liability and set aside state and local and pass those things that we can agree on."

Senate Minority Leader Chuck Schumer (D., N.Y.) accused Mr. McConnell of attempting to sabotage the bipartisan push for a new bill, which has centered on a \$908 billion proposal that includes both liability protections and \$160 billion for state and local governments whose revenues have been slammed.

Mrs. Pelosi echoed Mr. Schumer's comments. She said states' role in vaccine distribution makes state and local funding "central to our efforts

to crush the virus."

The current bipartisan framework for the aid bill doesn't include any direct payments to households, though members of both parties have embraced the idea previously.

Crafting a liability shield for businesses, schools and health-care providers facing coronavirus-related lawsuits has been a priority for Republicans, while Democrats have pushed to send more aid to state and local

Sen. McConnell proposed dropping government help and liability hurdles.

governments. The bipartisan group of lawmakers rebuffed a previous suggestion to drop the two topics from the talks.

The back-and-forth from party leaders threatens to complicate the rank-and-file effort. Meetings between the lawmakers continued Tuesday, with Republicans and Democrats broadcasting confidence that they would finalize a deal soon. But it is uncertain that

Democratic and Republican party leaders would embrace a compromise forged by the informal group of lawmakers.

Along with state and local aid, the \$908 billion framework at the center of the current negotiations would add \$300 to weekly unemployment benefits, provide \$82 billion for schools, \$16 billion for the distribution of Covid-19 vaccines and \$288 billion in relief for small businesses.

Both the White House and some lawmakers are making a late push to include the new round of direct payments in the next bill. One of the most popular parts of stimulus legislation Congress passed in March, the last round of direct payments sent \$1,200 per adult and \$500 per child to many American households, at a cost of nearly \$300 billion.

Sen. Bernie Sanders (I., Vt.) said Tuesday he was pulling together a letter showing support for adding in another round of checks. Mr. Sanders said he had spoken with Sen. Josh Hawley (R., Mo.), who has urged President Trump to veto a relief bill unless it includes direct payments.

"Trump supporters out there, like everybody else, are

hurting right now," Mr. Sanders told reporters. "They want that \$1,200, and I hope that the Republican leadership and members of the Republican caucus understand that."

Members of the bipartisan group have said their proposal is a limited one meant to tide the country over through the winter, while cases are surging.

"I know that there's considerable public support for it, but right now we're targeting struggling families, failing businesses, health-care workers, and we don't have a stimulus check that goes to every single person, regardless of need," said Sen. Susan Collins (R., Maine), who helped introduce the bipartisan proposal. On liability protections for businesses, health-care providers and schools, lawmakers continued to explore various options.

Sen. Angus King (I., Maine) and Sen. Lindsey Graham (R., S.C.), the chairman of the Senate Judiciary Committee, have discussed a new approach to the issue, with Mr. King proposing that Congress create an affirmative defense for Covid-related lawsuits, according to Sen. Mitt Romney (R., Utah), a leader of the current talks.

Cyber Firm FireEye Is Breached By Hackers

BY DUSTIN VOLZ
AND ROBERT McMILLAN

WASHINGTON—U.S.-based FireEye Inc., one of the world's largest cybersecurity firms, 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.

The company said the attacker also accessed some internal systems and primarily sought information about government clients. FireEye said it has seen no evidence so far that data belonging to its customers had been compromised from the primary systems used to store it.

FireEye declined to comment on who it believed was behind the breach of its hacking tools, which experts said could potentially be leveraged in future attacks against its customer base, including a diverse array of U.S. and western national-security agencies and businesses.

A person familiar with the matter said Russia is currently seen by investigators, including U.S. intelligence agencies, as the most likely culprit but stressed that the investigation was continuing. Moscow's foreign intelligence service, known as the SVR and one of two Russian groups that hacked the Democratic National Committee ahead of the 2016 presidential election, is believed to be responsible, the person said. The Russian embassy didn't respond to a request for comment.

"I've concluded we are witnessing an attack by a nation with top-tier offensive capabilities," Kevin Mandia, the chief executive at FireEye and a former Air Force officer, said in a blog post published Tuesday. "The attackers tailored their world-class capabilities specifically to target and attack FireEye."

FireEye, which in years past has helped businesses respond to some of the most serious hacks on record, like the 2014 hack of Sony Pictures by North Korea, said it was working with the Federal Bureau of Investigation and industry partners, including Microsoft Corp., in a continuing investigation into the incident.

FireEye shares dropped about 7% in after-hours trading.

"The FBI is investigating the incident and preliminary indications show an actor with a high level of sophistication consistent with a nation state," Matt Gorham, assistant director of the FBI cyber division, said in a statement.

People familiar with the investigation said the hackers were disciplined and used a rare combination of attack tools, some of which apparently hadn't been previously used in any known attacks on other victims—an unusual sign of sophistication and resolve—and were specifically dedicated to compromising FireEye.

U.S. WATCH

TELECOM REGULATION

Trump's Pick for FCC Confirmed by Senate

President Trump's nominee to join the Federal Communications Commission was confirmed by the Senate on Tuesday, setting up a possible partisan deadlock at the telecommunications regulator when Democrats take power next year.

The Republican-led Senate voted 49-46 along party lines to approve Nathan Simington for a five-year term on the FCC.

Mr. Simington, a 41-year-old Republican lawyer currently serving in the Trump administration, appears likely to clash with Democrats over issues from "net neutrality" rules to the agency's role in overseeing social-media content moderation under Section 230 of the Communications Decency Act.

FCC Chairman Ajit Pai, a Republican, has said he is leaving the agency on Jan. 20, President-elect Joe Biden's inauguration day.

That could leave the bipartisan commission with two Democratic and two Republican members, including Mr. Simington. Mr. Biden can immediately designate one of the sitting Democratic commissioners as chair. But the agency's new leader wouldn't hold a 3-2 majority until Mr. Biden names, and the Senate approves, a fifth FCC member—a process that could stretch months if Republicans control the Senate.

An FCC deadlocked along partisan lines could take longer than usual to approve telecommunications-related mergers or to make additional wireless frequencies available for next-generation networks, policy analysts at New Street Research wrote in a note to clients this week.

—Ryan Tracy



NEBRASKA EXPLOSION: An explosion that leveled a home in south-central Omaha, Neb., killed two people and left two others critically injured Tuesday morning, the AP reported, citing fire officials. The cause of the blast wasn't immediately released.

CAPITAL PUNISHMENT

Ohio Governor Rules Out Lethal Injection

Lethal injection is no longer an option for Ohio executions, and lawmakers must choose a different method of capital punishment before any inmates can be put to death in the future, Republican Gov. Mike DeWine said.

It's "pretty clear" there won't be any executions next year, Mr. DeWine said in an interview, adding he doesn't see support in the Legislature for making a switch in execution method a priority. Ohio has an "unofficial

moratorium" on capital punishment, he said.

"Lethal injection appears to us to be impossible from a practical point of view today," the governor said.

Mr. DeWine said he still supports capital punishment as Ohio law. But he has come to question its value since the days he helped write the state's current law—enacted in 1981—because of the long delays between crime and punishment.

The state's last execution was July 18, 2018, when Ohio put to death Robert Van Hook for killing David Self in 1985.

—Associated Press

GLOBAL ECONOMY

World Bank Chief Sees Long Recovery

It will take two to three years for global output to return to pre-pandemic levels as many developing nations slowly climb out of the coronavirus-induced slump with the help of vaccines, World Bank President David Malpass said.

While advanced economies are recovering more quickly than projected, many developing economies have lagged behind as tourism declined and remittances from their workers based in rich countries dried up, he

said in an interview at The Wall Street Journal's CEO Council summit.

And even in the developing world, the recovery has been uneven. "China is in recovery, and that helps its neighbors, so in Southeast Asia, there has been more of a recovery under way that extends to Japan," Mr. Malpass said. "For other developing countries, advanced economies are the most important variable because that's often where their markets are."

The pandemic has thrown nearly 100 million people into extreme poverty in poor countries.

—Yuka Hayashi

Musk Says He Moved To Texas

Continued from Page One

respond to a request for comment about Mr. Musk's move.

The pandemic has upended some of the most coveted traditions of working in Silicon Valley—the ease to network and collaborate with like-minded tech workers, startup founders and investors or the perks of free meals and fitness classes on lavish corporate campuses.

Since Covid-19 struck, startup executives and employees have fled the San Francisco Bay Area for cheaper locales since remote working conditions have become the norm for many people. Last week, Hewlett Packard Enterprise, whose origins trace back to the founding of Silicon Valley, said it would shift its headquarters to Texas. The departures have led many tech leaders and industry watchers to question whether the region is losing its position as the nation's leading technology hub.

Palantir Technologies Inc.,

founded in the Bay Area in 2003, moved its headquarters to Denver this year. Chief Executive Alex Karp, who co-founded the company, linked the departure to what he said is a view in Silicon Valley that is out of touch with American principles and societal needs.

Mr. Musk echoed that sentiment Tuesday, arguing the San Francisco Bay Area "has too much influence on the world." That power is shifting, he said.

Mr. Musk made the comments from Texas during The Wall Street Journal's CEO Council annual summit in an interview with Editor in Chief Matt Murray.

Palantir co-founder Joe Lonsdale, a venture capitalist, moved to Austin this year. He wrote in a Wall Street Journal op-ed last month that in California, "bad policies discourage business and innovation, stifle opportunity and make life in major cities ugly and unpleasant."

At the root of many of the complaints are California's high taxes. Its personal income tax tops out at 13.3% for amounts over \$1 million a year, the highest in the nation. Capital gains are taxed at a similar rate. Many who call the Bay Area home have expressed relief at the departure of tech profes-



Elon Musk at Tuesday's forum.

sionals who have been blamed for driving up the cost of living and congesting the freeways.

Tesla's new car plant, its first U.S. factory outside of Silicon Valley, is slated to open in Austin next year. Mr. Musk's rocket company, Space Exploration Technologies Corp., or SpaceX, has operations in Texas.

Mr. Musk likened California to a sports team with a winning streak, saying "they do tend to get a little complacent, a little entitled, and then they don't win the championship anymore."

Many are loath to declare an end to Silicon Valley. Prior predictions that the wealthy tech elite would flee en masse to low-tax states haven't come true. Large employers like Google parent Alphabet Inc. and Facebook Inc. have been leasing more office space in the region recently.

And the Bay Area's primacy as a headquarters for startups continues. During the pandemic—from April through early December—the region has been home to 26.6% of all U.S. early-stage startups receiving venture capital funding, according to data firm PitchBook. That is only slightly less than the 27.4% average since 2017.

Mr. Musk also criticized governments more broadly for regulations that he said stifled startup creation. Still, environmental regulations have buoyed his electric-car company. Tesla so far this year has earned \$1.18 billion by selling emissions cred-

its to other auto makers.

Mr. Musk threatened to move Tesla's operations out of Fremont, Calif., after local orders required him to shut down his lone U.S. car factory as part of measures to slow the spread of the coronavirus. He criticized officials at the time as "breaking people's freedoms."

Mr. Musk said last month that he had tested positive for Covid-19 and was experiencing mild symptoms, after contradicting public-health officials by repeatedly playing down risks of the illness.

—Eliot Brown
contributed to this article.

CORRECTIONS & AMPLIFICATIONS

Bob Dylan's song "Love Sick" was featured in a Victoria's Secret ad. A Business & Finance article Tuesday about the sale of Mr. Dylan's song-writing catalog to Universal Music Publishing Group incorrectly said the song was "Angels in Venice."

A map with a Mansion article Friday about Germany in-

correctly omitted Belgium's borders.

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U.S. NEWS

14 Punished Over Violence At Fort Hood

BY BEN KESLING

Army officials announced the firing or suspension of 14 commanders or other senior soldiers on Tuesday over failures to protect troops dealing with sexual assault and harassment.

Generals and sergeants major were among those disciplined following a monthslong investigation into lax monitoring procedures at Fort Hood in Texas.

Army Secretary Ryan McCarthy launched the independent Fort Hood review in response to a series of deaths and complaints about the base, especially the murder of Spc. Vanessa Guillen.

Her case attracted national attention, including from President Trump and President-elect Joe Biden.

"This report, without a doubt, will cause the Army to change our culture," Mr. McCarthy said.

After interviewing 2,500 uniformed personnel and civilians, the Fort Hood Independent Review Committee found that base officials didn't properly handle sexual assault and harassment on the base. It also determined that the Army's uniformed criminal investigators on base were undertrained and overworked, which prevented them from properly investigating sex crimes and soldier deaths. Investigators also found commanders on the base didn't act to curtail an environment that allowed for harassment and assault.

"No commanding general or subordinate echelon commander chose to intervene proactively and mitigate known risks of high crime, sexual assault and sexual harassment," the report found.

Spc. Guillen went missing in April and was later found dismembered, having allegedly been killed by a fellow soldier. Her parents complained about



A mural in memory of Spc. Vanessa Guillen, who was allegedly killed by a fellow soldier who later killed himself, in Houston.

the Army's procedures and what they said was a lack of transparency in the investigation into her death. Family members also said Spc. Guillen previously had been harassed by her killer. He died by suicide when approached by police.

Mr. McCarthy accepted all the committee's findings and said the report had identified issues the Army hadn't seen

previously, adding that some of the issues at the base could be systemic across the service.

Some of the changes at Fort Hood aren't slated to begin until the spring, Mr. McCarthy said, and the Army hasn't yet determined what systemwide changes will be made.

Lawmakers vowed to push the Army for even greater accountability.

"The fact of the matter is,

many of the problems stem back to egregious mistakes made by the chain of command that created an unacceptable environment for soldiers at Fort Hood, especially for female soldiers," said Sens. Jim Inhofe (R., Okla.) and Jack Reed (D., R.I.), the chair and ranking member of the Senate Armed Services Committee, in a joint statement.

The head of the Fort Hood

review committee, Christopher Swecker, said many female soldiers told investigators that they feared retaliation if they stepped forward to report assault and lacked confidence in the confidentiality of the process. The process was also found to be unnecessarily delayed, which further sapped confidence in stepping forward to report problems, according to Mr. Swecker.

Tensions in Portland Have Moved From the Streets to the Courts

BY ARUNA VISWANATHA AND SADIE GURMAN

The tensions that erupted in protests and violence for more than three months on the streets of Portland this summer are now moving into a quieter venue: the courts.

Federal prosecutors in the Oregon city have charged more than 90 people with crimes stemming from the skirmishes between law-enforcement officers wielding tear gas and demonstrators throwing fireworks, frozen water bottles and other objects outside the federal courthouse downtown and elsewhere.

The protests erupted following the May killing of George Floyd in Minneapolis police custody and led to strained relations between the federal government, which dispatched agents to quell the violence, and local officials who saw the intervention as inflaming the unrest.

The federal cases filed to date represent a fraction of at least 1,000 arrests made in Portland since May, but District Attorney Mike Schmidt said after taking office in August he wouldn't prosecute most of those arrests, citing limited resources. His office declined to pursue more than 700 cases.

Top Justice Department officials in Washington, meanwhile, urged federal prosecutors to be aggressive in bringing a full slate of federal charges, even suggesting they consider sedition, or plotting to overthrow the U.S. government, The Wall Street Journal previously reported. A review of protest-related cases show no such charges have been filed.

One senior department official, Richard Donoghue, flew to Portland this summer to urge prosecutors to do more, including considering charges of racketeering, according to people familiar with the visit. That statute targets organized crime and groups engaged in crimes including murder and kidnapping. It has also been used in nonviolent cases, including earlier this year against Chinese technology giant Huawei Technologies Co., which has denied



Federal prosecutors in Portland have charged more than 90 people with crimes stemming from skirmishes between law-enforcement officers and demonstrators. Above, a July protest.

Charges filed by Portland U.S. Attorney's office since May

Cases filed through October 2020



Source: United States Attorney's Office District of Oregon

allegations of engaging in a wide-ranging conspiracy including stealing trade secrets and violating U.S. sanctions on Iran. A spokeswoman for the Justice Department declined to comment on Mr. Donoghue's role.

"What we really wanted was to get people to stop lighting fires and to stop physically attacking our officers," said Kelly Zusman, head of the criminal division at the Oregon U.S. attorney's office, adding that prosecutors hadn't filed any racketeering cases.

Some federal prosecutors camped out for days in their courthouse offices to avoid the crowds outside, she said. When officers used tear gas to try to disperse the crowd, protesters returned some canisters into the building, sending gas to every floor.

The U.S. attorney's office in Portland turned to a series of charges, including a civil disorder statute adopted in response to riots during civil-rights demonstrations in the 1960s. It is a broadly worded statute that targets an array of activity that takes place during assemblies, such as behavior that obstructs commerce or law enforcement.

Defense lawyers say the number and type of federal charges amount to overreach by the Justice Department.

"In some cases, no crime was committed or the wrong person was arrested," said Lisa Hay, the federal public defender in the district whose office is defending most of the cases. "Charges for civil disorder...can be levied against people who were merely protesting and who were unintentionally in the way of law-enforcement officers" and risk infringing on protesters' First Amendment rights, she said.

The U.S. attorney's office had a different view. "We didn't want to overcharge," Ms. Zusman said. "Our goal was to stop the violence, no one wanted to stop the protests."

Ms. Zusman's office has in some cases applied federal statutes to alleged conduct that might typically be handled at the state level, defense attorneys say.

A handful of the federal cases in Portland have resulted in plea agreements. Prosecutors dropped a few others and offered deals to those charged with misdemeanors, under which they would dismiss the charges in exchange for community service and cooperating with law enforcement. Few have taken up those offers, defense lawyers say. Some are holding out hope that the incoming Biden administration might be more lenient and drop some of the charges, defense lawyers said. A spokesman for President-elect Joe Biden didn't respond to a request to comment.

The protests in Portland have subsided of late but dark-clad individuals continue to break windows and loot stores in the city's business districts at night. A number of businesses were vandalized just before Thanksgiving.

Jim Middaugh, a spokesman for Mayor Ted Wheeler, who joined protesters on the front lines in July, said that even with the heavy law-enforcement response, "we still haven't figured out how to address small groups of organized people who are hellbent on criminal destruction."

Criminal Case Against Michael Flynn Ends

BY BYRON TAU

WASHINGTON—A federal judge officially closed the criminal case against former national security adviser Michael Flynn, who was pardoned by President Trump, but suggested that the Justice Department's handling of the matter was highly irregular and potentially improper.

In a 43-page opinion, U.S. District Judge Emmet Sullivan wrote that he was "troubled by the apparently pretextual nature of certain aspects of

the government's ever-evolving justifications" during the three-year legal saga.

In the wake of Mr. Trump's Nov. 26 pardon of Mr. Flynn, Judge Sullivan issued an order that brought the case to an end. But he also took aim at the way the Justice Department had tried to dismiss the case in May, suggesting that but for the pardon, he may have denied their bid and either forced Mr. Flynn to go to trial or to jail.

Justice Department spokeswoman Kerri Kupec said, "Dis-

missal is, of course, the correct result."

Sidney Powell, a lawyer who represents Mr. Flynn, accused Judge Sullivan of bias. "It reflects the abject political bias he has exuded for months," she said.

Prosecutors had offered a theory that Mr. Flynn may have made the statements due to a faulty memory; said that his statements didn't meet the legal standard; and raised concerns with the FBI's handling of the investigation that cast doubt on the credibility of of-

ficials and witnesses involved in the case.

In his latest opinion, Judge Sullivan wrote: "With regard to Mr. Flynn's alleged 'faulty memory,' Mr. Flynn is not just anyone; he was the National Security Advisor to the President, clearly in a position of trust, who claimed that he forgot, within less than a month, that he personally asked for a favor from the Russian Ambassador that undermined the policy of the sitting President prior to the President-Elect taking office."

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U.S. NEWS

Justices Reject Bid to Toss Pennsylvania Result

Republicans were pressing a challenge to the state's system of vote-by-mail

By BRENT KENDALL

The U.S. Supreme Court rejected a last-ditch Republican request to block President-elect Joe Biden's victory in Pennsylvania on Tuesday, dealing another blow to supporters of President Trump who have contested the Nov. 3 election across the country.

The court, in a routine one-sentence order, denied a bid

by a Pennsylvania congressman and other Republicans who were pressing an emergency challenge to the state's vote-by-mail system, enacted by its legislature in 2019.

"The application for injunctive relief presented to Justice Alito and by him referred to the Court is denied," the order said.

The lawsuit asked that either all the 2.5 million mail-in ballots cast be thrown out, or that the courts erase Mr. Biden's victory and direct the state's GOP-controlled legislature to choose the winner of the state's 20 electoral votes.

As is its custom in emergency orders, the court offered no reasoning in rejecting the challenge.

No justice noted a dissent to the Supreme Court's order.

Mr. Trump has said he believed the Supreme Court would eventually decide the election, and his campaign has pledged to take a case before the justices—three of whom were appointed by Mr. Trump—but it hasn't done so. The case on Tuesday before the high court didn't involve the Trump campaign as a litigant.

In the five weeks since Election Day, Mr. Trump and

his allies have brought dozens of cases in Pennsylvania and five other pivotal states in a long-shot effort to nullify Mr. Biden's victory. They have lost almost all of them.

The Pennsylvania challengers in Tuesday's case previously lost at the Pennsylvania Supreme Court, which in a Nov. 28 order dismissed the case, citing plaintiffs' "complete failure to act with due diligence" by filing a lawsuit after the election—and more than a year after the state adopted universal vote-by-mail.

The state's high court said the Republicans' claims

"would result in the disenfranchisement of millions of Pennsylvania voters."

Mr. Biden won Pennsylvania by more than 81,000 votes.

The U.S. Supreme Court's order came shortly after it finished receiving written legal arguments from the parties on Tuesday afternoon.

The order also came on the day by which states have to set their electors to ensure they will be counted when the Electoral College—a body of delegates that meets after the election to select the president based on state vote results—casts votes on Dec. 14.

While much of the postelection litigation has been resolved, a few cases remain pending in lower courts. And Republican Texas Attorney General Ken Paxton on Tuesday filed his own long-shot case directly in the Supreme Court, suing Georgia, Michigan, Pennsylvania and Wisconsin for allegedly conducting their elections without following rules set by their own state legislatures.

Dana Nessel, the Democratic attorney general of Michigan, called Mr. Paxton's lawsuit a "publicity stunt" that would fail.



Joe Biden, center, has nominated California Attorney General Xavier Becerra, left, as secretary of Health and Human Services.

House Easily Passes Defense Bill Over Trump's Objections

By LINDSAY WISE

WASHINGTON—The House approved final passage of a \$740.5 billion annual defense-policy bill by a vote of 335-78, far exceeding the two-thirds majority that would be needed to override a veto threatened by President Trump.

Dozens of Republican lawmakers had earlier in the day lined up behind Mr. Trump to vote against the National Defense Authorization Act, which secures hazard-pay raises for troops and other crucial military spending items. But their opposition wasn't enough to thwart the passage of an annual bill that Congress has approved on a bipartisan basis for 59 years in a row.

The bill passed Tuesday by an even larger margin than an earlier House version passed in July. This week's vote was a rebuke to an embattled president who sought to force major changes in the legislation after the two parties in both chambers of Congress had agreed on compromise language.

The president has said he would veto the bill unless Congress jettisons a provision that would create a commission to rename military installations, monuments and paraphernalia honoring Confederate commanders. He also reiterated that he wanted language included in the bill to terminate Section 230 of the 1996 Communications Decency Act, which granted social-media companies broad immunity for the content they publish from users on their site.

Mr. Trump also added two demands he hadn't made earlier, saying the bill must "allow for 5G & troupe reductions in foreign lands!"

While Republicans and Democrats in Congress indicated in recent days that they intended to pass the bill over Mr. Trump's objections, the House Freedom Caucus, a group of the chamber's most conservative lawmakers, said Tuesday they would oppose the NDAA and support Mr. Trump's veto.

"This is real simple, we need to go back and rework this bill," said Rep. Jim Jordan (R., Ohio), a member of the group.

Freedom Caucus members also cited a provision that limits how much money can be used on emergency military construction—an authority Mr. Trump used to repurpose funds for the border wall. The White House's formal veto threat issued Tuesday also pointed to this measure.

In July, a Senate version of

the bill passed 86-14 and a House version passed 295-125. This week, the Senate is expected to approve the same compromise bill passed by the House on Tuesday and send it to the president's desk.

On a House GOP conference call on Tuesday, the top-ranking Republican on the House Armed Services Committee, retiring Rep. Mac Thornberry (R., Texas), said his goal was to get as many votes as possible for the NDAA in the hopes the president would sign it. On the same call, House Minority Leader Kevin McCarthy (R., Calif.) said if Mr. Trump vetoes the bill, he would vote to sustain the veto.

Other Republicans have been more willing to buck the president on the annual defense bill.

"Failure to pass this act would force hundreds of thousands of our men and women in uniform and their families to endure cuts to their pay right before the holidays," warned Rep. Liz Cheney (R., Wyo.), a member of House GOP leadership, in a

The bill passed by an even wider margin than a House version that passed in July.

floor speech Tuesday.

Senate Majority Leader Mitch McConnell (R., Ky.) said Tuesday at a news conference that if the bill "comes over from the House, obviously I'm going to put it on the floor."

At a news conference on Tuesday, House Democratic Caucus Chair Hakeem Jeffries (D., N.Y.) said: "The bill will pass with robust support amongst Democrats and Republicans, likely sufficient to indicate to the president that if he chooses to veto the bill, he will be overridden."

Asked for comment after the House vote, a White House official referred to an administration statement released earlier in the day on the NDAA, saying it "contradicts efforts by this administration to put America first in our national security and foreign policy actions."

The bill becomes law if the president signs it or without his signature after 10 days. If he vetoes it, funding authorizations for some defense programs expire on Jan. 1, including \$8.5 billion for military construction and \$70 million for local schools educating military children.

Biden Introduces Health Team

President-elect Joe Biden formally introduced the public-health team that will help him navigate the coronavirus pandemic and announced goals to curtail the virus during his first 100 days, as lawmakers raised questions about some of his intended nomi-

By Ken Thomas in Washington and Alex Leary in Wilmington, Del.

needs.

Mr. Biden said during televised remarks Tuesday that he will nominate California Attorney General Xavier Becerra to serve as secretary of Health and Human Services, highlighting his defense of the Affordable Care Act. Mr. Biden also rolled out a Covid-19 task force led by transition co-chairman Jeffrey Zients, a veteran of the Obama administration, and said Dr. Vivek Murthy will reprise his Obama-era role as U.S. surgeon general and become the public face of the virus response.

"Covid-19 is a mass casualty," Mr. Biden said in Wilmington, Del., where he was flanked by Vice President-elect Kamala Harris and some of his top advisers. "As a country, we've been living with this pandemic for so long we're at risk at becoming numb to its toll on all of us."

But, he said, "out of our collective pain, we're going to

Nominees Expected For HUD, Agriculture

President-elect Joe Biden is expected to nominate Rep. Marcia Fudge of Ohio to lead the Department of Housing and Urban Development and former Iowa Gov. Tom Vilsack as Agriculture secretary, according to people familiar with the plans.

If confirmed, Ms. Fudge, a Democrat, would lead an agency that could play a role in helping Americans struggling with rent and mortgage payments during the coronavirus pandemic. Mr. Vilsack would

return to a department that he led for nearly the entirety of the Obama administration as farmers grapple with the fallout from a faltering economy and President Trump's trade war with China.

Mr. Biden's transition team declined to comment. Mr. Vilsack, 69 years old, didn't answer his phone Tuesday evening or respond to a text message.

Ms. Fudge, 68, speaking to reporters on Capitol Hill on Tuesday, didn't confirm she would be nominated. But she said: "It's an honor and a privilege to be asked to be in a president's cabinet."

—Ken Thomas

find collective purpose to control the pandemic, to save lives and to heal as a nation."

Mr. Biden outlined a three-step plan for the first 100 days of his administration: urging everyone to wear masks in public and requiring them on federal property and interstate transportation; delivering 100 million vaccine shots; and getting children back in school.

"We'll still have much to do in the year ahead," Mr. Biden said. "And sadly, much difficulty as well. We'll be far, far from done." But he said he was "absolutely convinced" that his incoming administration could change the course of the disease during the first

100 days of his tenure.

The number of people hospitalized in the U.S. has hit another high, and newly reported coronavirus infections surpassed a seven-day moving average of more than 200,000 for the first time.

Nearly 284,000 people have died.

Mr. Biden's choices for senior health-policy positions included people with connections to the Obama administration who he has said will focus on both confronting the pandemic and driving regulatory changes aimed at expanding health coverage.

The new team is expected to work closely with Anthony Fauci, director of the National

Institute of Allergy and Infectious Diseases, who is on the current White House task force but has had an uneven relationship with President Trump.

Mr. Biden said Dr. Fauci would remain in his role, calling him a "truth-teller" who would tell him "what I need to know."

Some Republican lawmakers have questioned Mr. Biden's choice of Mr. Becerra, who isn't a public-health official, to lead the Health and Human Services Department.

"When you have that kind of knowledge from both training and experience, then you're able to more clearly prioritize that which is related most essentially to advancing public health," said GOP Sen. Bill Cassidy, a physician from Louisiana. Mr. Cassidy has declined to say how he will vote on Mr. Becerra's nomination.

Mr. Biden was scheduled on Tuesday to meet with civil-rights organizations, including the NAACP and the National Urban League, which have pressed him to create a diverse cabinet. Congressional Latinos have also pressed for diversity.

Mr. Biden has said his team will be the most diverse in U.S. history once it has been fully assembled. His transition team has promised a busy period before the Christmas holidays, with formal announcements expected on attorney general and picks for several domestic policy agencies.

Defense Chief Pick Rekindles Debate Over Civilian Post

By MICHAEL R. GORDON AND GORDON LUBOLD

President-elect Joe Biden's pick of retired Army Gen. Lloyd Austin as his defense secretary has renewed debate about civil-military relations, putting congressional Demo-

crats in the awkward position of defending a move they criticized four years ago.

Many lawmakers have praised Gen. Austin's military record. However, his selection surprised some Republicans and Democrats who questioned why Mr. Biden would pick a retired commander with long experience in the Middle East instead of a qualified civilian.

Rep. Elissa Slotkin, a Michigan Democrat and former Pentagon official, said Tuesday she respected Gen. Austin, who retired from the military in 2016. However, she added, "Choosing another recently retired general to serve in a role that is designed for a civilian just feels off."

"Gen. Austin has had an incredible career," she added,

"but I'll need to understand what he and the Biden administration plan to do to address these concerns before I can vote for his waiver."

Mr. Biden formally named Gen. Austin as his choice for the job Tuesday and praised him as a "true and tested soldier and leader." The president-elect defended his choice, as criticism began building following reports Monday of Gen. Austin's impending selection.

"I respect and believe in the importance of civilian control of our military and in the importance of a strong civil-military working relationship at DoD—as does Austin," Mr. Biden wrote in *The Atlantic*.

Gen. Austin's nomination received an endorsement from Michèle Flournoy, who served

as the Pentagon's chief policy official during the Obama administration and was considered the likely nominee for the job. Ms. Flournoy called Gen. Austin a "colleague and



Gen. Austin, who has long experience in the Mideast, retired from the military in 2016.

friend" and pledged her support.

For decades, it has been a bedrock principle of civil-military relations that the defense secretary should be somebody who hasn't spent a career in the military to ensure that the

U.S. armed forces are under firm civilian control.

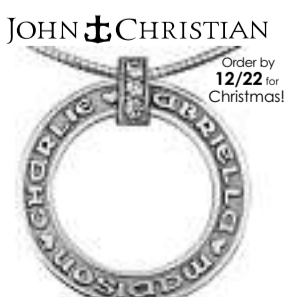
U.S. law, which has been amended over the years, states that a person may not be appointed as secretary of defense within seven years after leaving active duty without a waiver. Officers who have retired more recently than that may be appointed to the post if both houses of Congress approve a waiver, but there have only been two such instances since the Pentagon was established.

George Marshall, a retired five-star general, was granted a waiver to serve as secretary of defense at the start of the Korean War. Jim Mattis, a retired Marine four-star general, became secretary of defense with the support of many Democrats who expressed that

he would balance President Trump's inexperience on national security issues.

Mr. Biden's pick of Gen. Austin has been seen by some leading Democrats as a step that would transform an occasional departure from the norms of civilian-military relations into the new normal.

Mr. Biden "is putting Democratic members of Congress in a very difficult situation because many previously said they would not support a waiver," said Rosa Brooks, a former Pentagon official. "They either are saying no to Biden—who they want to support—and the first Black secretary of defense—who they also want to support. Or they become hypocrites by seeming to reverse their stance on waivers," Ms. Brooks added.



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U.S. NEWS

Fauci Calls Vaccines Big Step in Virus Fight

Nation's top expert says hurdles remain; he and Birx call for more state measures

By Stephanie Armour

Anthony Fauci said a vaccine could diminish coronavirus as successfully as the polio vaccine did for polio, enabling workers to return to offices and restaurants in the second half of 2021.

But hurdles exist, the U.S. government's top infectious-disease expert said. They include people's hesitancy to get vaccinated, a successful and swift vaccination program, and getting through a rise in Covid-19 cases that is now being fueled in part by misinformation about the virus, Dr. Fauci said at The Wall Street Journal's CEO Council Summit on Tuesday.

"There are a substantial proportion of people who do think this is not real, that it's fake news, or it's a hoax. This is extraordinary. I've never seen this before," he said. Dr.

Fauci added that he will convey the following to President-elect Joe Biden's administration: "We have all got to be on the same page telling the American public we have to pull together. That, to me, is the most important thing."

Dr. Fauci and Deborah Birx, the White House coronavirus-response coordinator, who also spoke Tuesday at the summit, both reiterated their calls for people to adopt public-health measures to combat the spread of the virus.

The U.S. Centers for Disease Control and Prevention recently said the virus infected people in the U.S. in mid-December 2019, a few weeks before it was officially identified in China and about a month earlier than public-health authorities found the first U.S. case. It has since caused almost 15 million diagnosed cases and more than 283,000 deaths. Cases have surged since the fall, with more than 2,000 daily deaths being reported. It is too early to know whether the Thanksgiving holiday will add an additional spurt of cases.

The death toll could surpass 430,000 by March 1, according to the Institute for Health Metrics and Evaluation. The Trump administration is aiming to have enough coronavirus vaccine for everyone in the U.S. who wants to take it by the second quarter of 2021.

"We have to go head-to-head with the misunderstandings people have with this virus," said Dr. Birx, who added that she doesn't know what role she will have in the president-elect's administration but will remain in federal government.

Dr. Fauci, director of the National Institute of Allergy and Infectious Diseases, was upbeat about the promise of a vaccine.

Health-care workers and people in nursing homes and extended-care facilities will get the vaccine first, he said, followed by various prioritization levels that are likely to include seniors, people with underlying health conditions and workers with critical jobs, such as teachers.

Dr. Birx also said vaccines need to be prioritized for communities of color that have



Anthony Fauci, left, and Deborah Birx, the White House coronavirus-response coordinator, were remotely interviewed during The Wall Street Journal's CEO Council Summit on Tuesday.

been hit hard by Covid-19.

Younger people and people with no underlying conditions will likely be able to get the vaccine by the end of March or beginning of April if the vaccination program runs efficiently and the majority of people take the vaccine, Dr. Fauci said. With about 75% of the public inoculated, there should be low levels of circulating virus and a return to workplaces.

The stringency of public-health measures will gradually diminish, he said, and chief executives should use surveillance testing once workers return to quickly identify any potential outbreaks.

"I don't think we're going to eradicate [Covid-19] the way we did with smallpox, but

I think we can do what we did with polio," Dr. Fauci said.

Meanwhile, with the U.S. facing worsening spread, the Trump administration is pressing governors to step up rapid testing systems to help curb transmission.

"We sent out, I think, 90 million antigen tests, really asking state mayors and governors to use those tests in a new way," Dr. Birx said. She said new scenarios for testing would let people come and get their results immediately. "These tests could be enormously helpful," she said.

Restaurants and bars that closed need resources to help offset their losses, Dr. Fauci said. Congress has been working to craft a coronavirus-relief bill, with Democratic lead-

ers backing a \$908 billion bipartisan proposal.

"There has to be resources to help enterprises like restaurants and bars to participate in the public-health endeavor. We seem to sometimes forget that," Dr. Fauci said.

Addressing the effect of Covid-19 on the Black community, Dr. Birx said the virus preys on people with certain comorbidities such as obesity and diabetes and people who had to work when others stay at home, and has laid bare inequities in health care.

The impact of Thanksgiving will start to be seen next week and the week after.

"If we don't change how we gather, we'll continue to have this surge across the country," said Dr. Birx.

Nation's Seven-Day Death Average Nears High Mark

By Alejandro Lazo

Coronavirus deaths in the U.S. are nearing highs set early in the pandemic, when less was known about the virus and testing was much more limited.

The seven-day average of daily U.S. deaths—which helps smooth out irregularities in data reporting—hit 2,237 on Monday, according to a Wall Street Journal analysis of data compiled by Johns Hopkins University. That is near the record 2,241 average deaths set on April 24, when New York and New Jersey were bearing the brunt of a springtime surge.

Deaths are a lagging indicator, with fatalities coming weeks or months after a new case is reported. It is one of three key statistics—along with infections and hospitalizations—that public-health experts use to understand the virus's spread.

The climbing daily death toll comes as an expected surge of new cases linked to the Thanksgiving holidays is beginning to affect some hospital systems and as health officials and state leaders fear more potential spread during the holiday season.

"We've got Thanksgiving—which we really haven't felt the full impact of yet by any means—we've got the religious holidays, and then that's



Testers helped each other with their protective gowns Tuesday at a mobile testing location for Covid-19 in Auburn, Maine.

followed up a week later by New Year's," said Thomas Russo, head of infectious disease at Jacobs School of Medicine and Biomedical Sciences at the University of Buffalo.

"I'm quite concerned that we're in the midst of this surge, and it's likely to get worse before it gets better."

One metric that connects newly reported Covid-19 cases

and fatalities suggests the U.S. average daily death toll could top 3,000 by mid-December.

Public-health experts note that the mortality rate for the virus is lower than during the

early days of the virus because younger populations now make up a larger proportion of confirmed cases, while treatments for the disease caused by Covid-19 have also improved.

The drawback is that these treatments and steps to protect older and more vulnerable populations are being canceled out by the widespread nature of the virus in the U.S., Dr. Russo said. Unlike in the spring, deaths are now piling up in a variety of different states across the country.

"We're in a nationwide mess," Dr. Russo said.

In Illinois, the seven-day average of Covid-related deaths was 175.6, according to the Journal analysis, as officials in the state said Monday they were still keeping an eye on any rise in the state's positivity rate following the Thanksgiving holiday.

In Michigan, where Democratic Gov. Gretchen Whitmer has extended new restrictions on business and activity through Dec. 20, the seven-day death average hit 122.6. Pennsylvania rose to an average of 140.6 deaths per day, and the two most populous states, Texas and California, hit 184.3 and 120.3 average deaths per day, respectively.

California has witnessed an exponential rise in newly reported Covid-19 cases, prompting Democratic Gov. Gavin Newsom to institute regional stay-at-home orders for most of the state's residents as the availability of hospital intensive-care units fell below 15% in vast swaths of the state.

FDA Says Pfizer Shot Is Effective

Continued from Page One stressed the importance that they be effective in high-risk populations such as minority groups and the elderly that have been hit hardest by the pandemic.

Anthony Fauci, the government's top infectious-disease expert, said Tuesday that people's hesitancy to get vaccinated could be a big hurdle.

"There are a substantial proportion of people who do think this is not real, that it's fake news, or it's a hoax. This is extraordinary. I've never seen this before," Dr. Fauci said at The Wall Street Journal's CEO Council Summit on Tuesday.

Anna Durbin, a vaccine researcher at Johns Hopkins University, who is helping test a Covid-19 vaccine being developed by AstraZeneca PLC, said it would be important to see more participation of Black people in future Covid-19 vaccine studies.

"There's a lot of distrust in the [Black] community around research in general," she said.

At the same time, Dr. Durbin said it was encouraging that the vaccine appeared to provide some protection 10 days after the first dose.

The information released Tuesday is likely to build confi-

Here are key findings of the Food and Drug Administration's analysis of the Covid-19 vaccine developed by Pfizer and German partner BioNTech, as well as findings from the manufacturers. Both reports were released Tuesday.

THE VACCINE IS EFFECTIVE

◆ The vaccine is 95% effective at protecting against symptomatic Covid-19.

◆ After the first dose, the vaccine showed to be more than 52% effective, protection that rose to 95% a week after the second dose was administered.

EFFECTIVENESS VARIES LITTLE BY AGE, ETHNICITY, RACE

- ◆ White people: 95% effective
- ◆ Black people: 100% effective
- ◆ All others, including American Indian, Asians and Pacific Islanders: 89% effective
- ◆ People over 55 years old:

94% effective

◆ People with underlying conditions: 95% effective

SIDE EFFECTS ARE COMMON BUT MOSTLY MINOR

◆ Eighty-four percent of trial subjects reported reactions at the injection site. After getting the vaccine, 63% of trial subjects reported fatigue, 55% headaches, 32% chills, 24% joint pain and 14% fever.

◆ Bell's palsy, which is temporary muscle paralysis in the face, was found in four patients who received the vaccine, and none on the placebo. Three of the cases hadn't been resolved by Pfizer's regulatory submission in November. Sixty-four subjects

who received the vaccine reported swelling of lymph nodes, compared with six on the placebo.

NEXT STEPS

◆ Pfizer plans to monitor patients for two years to learn more about duration, since it isn't clear how long protection might last.

◆ The FDA report goes to an outside advisory panel Thursday, which will recommend on whether the vaccine can be distributed on an emergency basis.

◆ FDA authorization of the vaccine could come within days after Thursday's meeting.

dence among health authorities and physicians preparing for a mass vaccination campaign. States, hospitals and other sites that will receive shots early on are building vaccination teams as Pfizer nears potential distribution.

Pfizer and BioNTech previously said the vaccine was shown to be 95% effective at protecting against symptomatic Covid-19.

Albert Bourla, Pfizer chief executive, said during an industry group panel on Tuesday that while the vaccine was developed quickly, it went through rigorous testing and followed strict standards, even more so than normal given the

scrutiny during the pandemic. "We didn't cut any corners," he said.

The analyses released Tuesday offer new insight into how effective the two-dose shot might be, as well as how safe it could be should regulators clear it for use in the U.S.

Tuesday's data also gave new details on the two months of safety data on about 19,000 vaccinated study subjects requested by the FDA. The agency said trial participants who were given the vaccine were more likely to get certain side effects than patients who received the placebo.

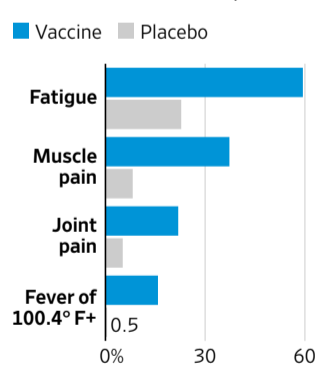
Still, much remains unknown about the vaccine because it has been studied only for sev-

eral months. Typically, vaccines take years to develop and test before getting a green light by governments.

The FDA found more testing will be needed to confirm that the vaccine effectively prevents death. And its analysis concluded that the data were limited in showing whether it can curb transmission of Covid-19 from individuals who are infected despite vaccination.

The agency said the vaccine was found to be effective across race, age and ethnicity, and that its analyses found no safety concerns in subgroups by race, age, ethnicity or people with comorbidities such as pre-existing conditions.

Frequency of selected side effects after second injection



Note: For ages 18-55 Source: FDA

On Thursday, however, the outside panel might scrutinize the demographic breakdown of the trial, as health authorities have sought for Covid-19 vaccine trials to include diverse populations. More than 80% of the approximately 38,000 trial subjects for whom Pfizer submitted data were white.

Pfizer's late-stage trial began in July, enrolling some 44,000 people at more than 100 sites around the world.

The efficacy was determined after 170 subjects became sick, triggering a review by an outside panel that found most of those subjects had received a placebo rather than the vaccine. Researchers looked at how well the shots worked seven days after a study volunteer got a second dose.

The sick participants included 10 whose cases of Covid-19 were severe. Nine had received the placebo and one the vaccine.

Data disclosed Tuesday

showed the vaccine was effective across ages, weights and races, although most of the sick subjects were white and many were 55 years old and younger.

Of the sick subjects, 162 received a placebo and eight received the vaccine. The sick subjects who were white totaled 153, with 146 receiving a placebo and the rest getting a vaccine, resulting in about 95% efficacy within that subgroup.

The vaccine was found to be 100% effective in Black people, with seven Black subjects becoming sick, all of whom were in the placebo group.

Six subjects died, with two receiving the vaccine and four in the placebo group. None of the deaths were concluded to be related to the vaccine, according to Pfizer. The FDA said the deaths "represent events that occur in the general population of the age groups where they occurred, at a similar rate."

The vaccine uses an innovative gene-based technology known as messenger RNA that has never been approved to prevent any infectious diseases. The FDA has sped up its approval processes by considering Pfizer's vaccine for emergency-use authorization. These authorizations, in essence, involve balancing risks and benefits.

But because vaccines, unlike most drugs, are given to healthy people, the FDA has still insisted on rigorous standards—including convening Thursday's public meeting and making public the companies' and agency's analyses.

—Rolf Winkler contributed to this article.

U.S. NEWS

AstraZeneca Trials Reaffirm Safety, Efficacy of Shot

By JENNY STRASBURG
AND JOSEPH WALKER

LONDON—Peer-reviewed data from late-stage human trials of a Covid-19 vaccine developed by the University of Oxford and AstraZeneca PLC reaffirmed the shot's strong safety results and provided some additional evidence that halving the first of two doses of the shot boosts its effectiveness.

AstraZeneca and Oxford said the data gave them confidence to ask the U.K. and other countries for emergency-use authorization of the vaccine, but they said regulators will have to decide which dosing regimen to approve. Last month, AstraZeneca and Oxford said trial data showed the vaccine was between 62% and 90% effective, but that the higher results were observed in a small subset of the wider trial.

This subset received a half-sized initial dose followed by a full second dose. The group was also all under 55 years old, raising questions about whether the lower dosing would also be effective in older subjects.

AstraZeneca and Oxford on Tuesday declined to say whether they would ask regulators to approve the lower-dose regimen, leaving unclear whether an initial vaccine approval and rollout would be limited to the less-effective regimen. The 62% effectiveness shown in the majority of the trial participants is still better than what health experts deem necessary to protect people against severe Covid-19.

The publication of the data in the *Lancet*—the first full peer-reviewed results from any of the late-stage human trials disclosed so far by the West's three leading vaccine makers—comes on the day that a vaccine developed by Pfizer Inc. and Germany's BioNTech SE

was being administered for the first time outside trials, in the U.K.

It also coincided with a preliminary assessment by the U.S. Food and Drug Administration on Tuesday showing the agency was satisfied with the Pfizer shot's effectiveness and safety, paving the way for a potential emergency-use authorization in the U.S. in coming days.

The FDA is also reviewing Moderna Inc.'s vaccine, with a verdict expected shortly.

Results from an ongoing U.S. study will likely be needed before a potential approval in the U.S., said Menelas Pangalos, AstraZeneca's head of biopharmaceutical research, citing conversations with regulators at the FDA.

The U.K. government already has asked its medicines regulator to review AstraZeneca's shot for emergency-use authorization. The published results push the vaccine closer to a potential rollout in Britain, while late-stage trials of the shot continue in the U.S.

"We hope to see regulatory approval in the coming weeks," Sarah Gilbert, an Oxford vaccinology professor and a lead scientist on the vaccine, said on a call with reporters.

The researchers continue to collect data from the studies and expect to have more answers in the future about differences in the effectiveness of the two regimens and between age groups, said Prof. Gilbert.

AstraZeneca has described the half-dose results as the product of a lucky error in calibrating dosage in the early stages of human trials, but that it is still trying to understand the surprising result. An Oxford scientist said Tuesday that the half-dose was unplanned but that the study design was amended to include the half-dose group in its analysis. Both said the half-dose regimen will be tested further.



A syringe with a dose of the Pfizer/BioNTech Covid-19 vaccine was prepared to be administered Tuesday in south London.

DAN CHARITY/PRESS POOL

Caution Urged on Vaccine Passports

By JASON DOUGLAS

As the West's first authorized Covid-19 shots were administered in the U.K., an old ethical question in public health is gaining new relevance: Is there a case for issuing proof of immunity to people who have been inoculated?

The idea is that individuals could stop wearing masks and following social-distancing rules if they can prove they have been inoculated and so aren't a risk to others. Restaurants, theaters and offices could reopen with confidence by admitting those certified as vaccinated, and international travel could resume. As the vaccinated population increases, normal life could gradually resume.

Scientists and public-health experts caution, though, that it is too soon to know whether the vaccines being raced into production will confer true and lasting immunity to infection. Nor is it clear if they will be as effective at preventing transmission as they were at reducing the severity of illness in trials. Such proposals raise ethical and political considerations, too, about whether it is wise or just to divide citizens into new categories based on their vaccination status.

Nadhim Zahawi, the British government's vaccines minister, said two days before the regulator's authorization of the Pfizer vaccine that bars, restaurants and entertainment venues might eventually start asking customers if they have been vaccinated as a condition of service.

He said the government was looking at possible technological fixes to make it easy for people to declare their vaccination status, perhaps by adding a feature to a coronavirus contact-tracing app that

has been downloaded 19 million times.

But he said the U.K. government has no plans to formally issue immunity passports to vaccinated individuals, or to make getting the shot mandatory. His message was reiterated more forcefully by more senior figures in government and Prime Minister Boris Johnson's official spokesman.

"People have to be allowed to decide for themselves

whether they want to be vaccinated or otherwise," Mr. Zahawi said in a broadcast interview.

The idea of an immunity passport for certain activities isn't new, especially for international travel. Would-be travelers to more than a dozen countries including Ghana and Nigeria, for example, are required to show proof of vaccination against yellow fever before they are issued a visa. Health-care workers, espe-

cially those who handle blood, are in some countries required to be vaccinated against hepatitis B to reduce the risk of infection.

Alan Joyce, chief executive of Australian airline Qantas Airways Ltd., has said he anticipates his airline will require passengers to show proof of vaccination when making international flights. The Australian government has said it may require visitors and returning travelers to show proof of vaccination as a condition of entry, adding that it expects some other governments could follow suit.

An essay in the *Lancet*, a medical journal, in October made the case in favor of immunity passports, suggesting governments consider special wristbands, apps or certificates so individuals can show they have been immunized.

"The only grounds for the use of coercion, of the limitation of people's freedom by the state, is when they represent a risk of harm to other people," said Julian Savulescu, director of the University of Oxford's Uehiro Center for Practical Ethics and one of the essay's authors. "When somebody is not at risk of harming other people, their freedom shouldn't be restricted."

A requirement to prove immunity would raise practical and ethical issues.

U.K. Starts Inoculating Populace

Continued from Page One
vited to receive one of the initial 800,000 doses of the shot that arrived from Belgium were people over 80 who had existing appointments for other procedures—and whose age puts them at greater risk from the coronavirus.

The U.K. has ordered 40 million doses of the vaccine, enough to inoculate 20 million people with two doses each. But the complex delivery process of the new shot—which requires a precisely timed deployment through an elaborate, temperature-controlled supply chain—has restricted the first stage of the rollout to 50 hospital hubs in England and a small number of other sites in the rest of the U.K. The government estimates it will receive seven million shots by the end of the year, depending on the production process, down from 10 million it forecast in November.

More than 60,000 people have died from the virus in the U.K., with at least 17,000 of them among nursing-home residents in England and Wales, according to the Office for National Statistics.

Plans to get the vaccine immediately to the most vulnerable in nursing homes are complicated by the need to keep it in sub-Arctic temperatures.

The shots use a new technology called mRNA, which carries genetic instructions to cells, and must be stored at minus 70 degrees Celsius, or minus 94 degrees Fahrenheit, to maintain their integrity. Once thawed, the vaccine can be used within five days if it is kept at 2 to 8 degrees Celsius, Pfizer said. At room temperature, that window shrinks to two hours, according to the drugmaker's data.

The NHS has said it plans to start administering shots in nursing homes before Christmas once it has overcome logistical hurdles. Local doctors said they haven't received instructions on how to get doses to nursing-home sites safely.

Still, despite the obstacles, starting next week the British government wants to distribute the doses via a network of

local physicians. When more doses become available, it plans to open mass-vaccination centers in conference venues and gymnasiums. The government changed the law to allow student doctors, physiotherapists and dental workers to administer the vaccine.

Some of those administering it at a Covid-19 testing-turned-vaccine center in Cardiff on Tuesday said it was trickier to use than the flu vaccine because it doesn't come in ready-to-go shots. "This one comes in big vials

that have to be brought from the freezer to our specialist fridge, that needs to be monitored by a pharmacist. Vials need to be dated, temperatures measured," said Lynne Cronin, a 60-year-old nurse.

The NHS has also appealed for retired doctors and nurses to help out and for thousands of volunteers to train as vaccinators and support staff.

Kate Bingham, head of the U.K. government's vaccine task force, said delivering the vaccine was a "monumental challenge." But the U.K. is probably the most well-prepared country in the world to actually receive these vaccines and deploy them, she told the British Broadcasting Corp. on Tuesday.

Some of the U.K.'s experts in vaccinology warn about the need for caution, space and trained specialists to prepare the vaccine. "That space certainly isn't in a nursing home," said Beate Kampmann, director of the London School of Hygiene and Tropical Medicine's vaccine center.

Patients need two doses of the vaccine, so the first receiving it on Tuesday will be called back in three weeks, just as others are coming in to get their first shot. "This all needs to be recorded very, very carefully," Dr. Kampmann said, so any adverse effects can be monitored.

Some doctors said they don't have enough patients aged over 80 on their books to use all the doses in time, and others worry about delivering so many vaccines and handling the accompanying paperwork on top of their usual case load.

Linda Roach, 61, arrived early for her vaccination on Tuesday morning at the center in Cardiff. She works in reception at the emergency room of the University Hospital of Wales and said she had "been really looking forward to it."

"I just wanted to get the vaccine and know that I will be safer in my work environment," she said.

Health Secretary Matt Hancock said Tuesday was "an emotional day, tinged with worry."

"This is an incredibly important moment on the march out of this pandemic," he told the BBC. "But we've still got a long march to go this winter, and people need to keep respecting the rules and try to live in a way that if you have the virus, it infects as few people as possible."

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A BRIGHT FUTURE NORMAN ROCKWELL



Famed artist. Inspiring subject. Classic Americana. This original oil by the incomparable Norman Rockwell is quintessential Rockwell in both its story and its execution. Enjoyed by millions of Americans in the June 18, 1955, edition of the *Saturday Evening Post*, the work captures the hopeful expressions of these new graduates beginning on their bright future. Signed (bottom center). Canvas: 18 3/4" h x 22 1/4" w; Frame: 23 3/4" h x 27 1/4" w. #31-2362

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Betty James, an NHS worker at Llandough Hospital, receives a Covid-19 vaccine at a health facility in Cardiff, South Wales.

GARETH PHILLIPS FOR THE WALL STREET JOURNAL

WORLD NEWS

Boris Johnson Faces Crunch Brexit Talks

British prime minister will try to resolve differences with EU as deadline approaches

Brexit negotiations are set to enter a last decisive phase as British Prime Minister Boris Johnson prepares to travel to Brussels on Wednesday in a bid to secure a deal over the European Union's relations with the U.K.

By Laurence Norman
in Brussels
and Jason Douglas
in London

Failure to reach a deal would mean from the start of next year tariffs would be applied for the first time in almost a half-century on some trade between the U.K. and the trade bloc to which it sends 43% of its exports. It would also end many types of cooperation between the U.K. and the EU over crime, security and travel, and corrode relations between close U.S. allies in Europe as a new administration comes to power in Washington.

Even with a deal, obstacles to trade will increase, adding costs and delays for importers and exporters on both sides of the border. The climax of the talks comes as the U.K. and EU are battling the pandemic and the economic cost of government efforts to contain it.

After a telephone conversation with European Commission President Ursula von der Leyen on Monday, Mr. Johnson said he would travel to Brussels in



British Prime Minister Johnson will hold talks Wednesday with European Commission President Ursula von der Leyen in Brussels.

the coming days. The two sides said Tuesday that Mr. Johnson would hold talks with the EU leader over dinner Wednesday.

On Thursday and Friday, EU leaders will meet in Brussels for a summit and get a state of play on Brexit. There are no plans for direct discussions between Mr. Johnson and EU leaders at the summit, officials say, but if enough progress were made, leaders could in theory be available to discuss and potentially sign off a deal.

"Our friends have just got to understand that the U.K. has left the European Union in order to be able to exercise democratic control over the way we do things," Mr. Johnson told the British Broadcasting Corp.

However, in a signal the two sides were still prepared to compromise, the U.K. government said Tuesday it won't implement prospective legislation that would override parts of last year's divorce agreement related to Northern Ireland.

The concession, which some EU officials said was a positive move, came after the EU and U.K. had also announced they had reached a deal on how to implement last year's exit agreement, which included steps to avoid a physical border on the island of Ireland.

Negotiators are trying to close gaps on issues that have bedeviled the talks from the start—how to secure fair competition, EU access to British fishing waters and how a deal

would be enforced.

The agreement will help decide the central issue that was thrown up by Britain's 2016 vote to leave the bloc: How much can Britain regain control of its rules and standards if it still wants some special access to EU markets.

Britain formally left the bloc on Jan. 31 but it is following EU rules and gaining full access to the bloc's single market until Dec. 31, when the transition period officially ends.

EU officials on Tuesday played down the prospect of an immediate breakthrough in the talks between Mr. Johnson and Mrs. von der Leyen, saying any progress would likely trigger further talks among senior negotiators.

The officials said that there was no immediate deadline for negotiations to end and that they are prepared to resume talks after Jan. 1 if there is no deal. However, they said their negotiating stance wouldn't change. Mr. Johnson's spokesman on Tuesday ruled out talks after Dec. 31.

Any deal must be signed off by the U.K. and European parliaments, leaving little time for an accord to be brushed up, translated into EU languages, ratified and signed by lawmakers by Dec. 31.

The EU and U.K. team have filled most of the text of what would be an accord, but no significant progress has been made in recent days, U.K. and EU officials said.

The major sticking points are the principles that would govern future state-aid decisions on both sides of the Channel, including an EU demand that the U.K. set up an independent agency to block unfair state subsidies. The U.K. is demanding the EU also agree to limits on subsidies coming from the EU budget. Britain is resisting EU demands to agree on a legal framework locking in a pledge that Britain won't set its labor, environmental and social standards below its current EU-mandated levels and that common minimal standards can be upgraded over time.

WORLD WATCH

NEW ZEALAND

Warnings Missed in Mosque Shootings

Months before Brenton Tarrant murdered 51 worshippers at two mosques in Christchurch, he sought help from hospital staff for wounds to his right eye and thigh from a firearm incident.

A jammed cartridge had exploded while Tarrant was cleaning a rifle in July 2018 at his rented home. Medical staff who treated the now 30-year-old Australian considered the accident to be unusual, but didn't report it to police because Tarrant wasn't behaving aggressively and didn't appear suicidal.

It was one of several missed opportunities to intercept Tarrant before he gunned down the worshippers in 2019 that were outlined in an official inquiry.

—Stephen Wright

JAPAN

Government Limits Short-Term Stimulus

Japan is forswearing nationwide cash handouts or other big spending that would give its economy a lift, taking a more long-term approach than the U.S.

Japanese Prime Minister Yoshihide Suga, releasing on Tuesday his first major economic plan since taking office in September, came down on the side of limiting short-term stimulus.

His plan didn't include: a repeat of a nearly \$1,000 cash handout for every resident of Japan that took place in late spring. The new plan includes nearly \$500 in cash for households headed by a single parent, with extra for those with more than one child.

—Megumi Fujikawa

ETHIOPIA

Soldiers Fire On, Detain U.N. Staffers

Ethiopia's security forces shot at and detained United Nations staffers as they tried to reach part of the embattled Tigray region, a senior official said, and he blamed the U.N. staffers for trying to reach areas where "they were not supposed to go."

The shooting occurred amid soaring frustration among humanitarian officials as desperately needed aid is still not freely reaching the Tigray region more than a week after the U.N. and Ethiopia's government signed a deal for access.

The senior government official, Redwan Hussein, said the staffers have been released.

A U.N. spokesman said the four staffers had been trying to assess roads, a key step before larger aid convoys can go in.

—Associated Press

China Digs In Despite New U.S. Sanctions

By DAN STRUMPF

The Trump administration's imposition of sanctions on 14 senior Chinese leaders is the heaviest blow aimed at Beijing in response to its crackdown on Hong Kong. If earlier measures are a guide, the effect will be mostly symbolic.

The U.S. announced sanctions on Monday against more than half of China's 25-member top legislative body, the National People's Congress Standing Committee, that officials in Washington said was central to China's efforts to rein in freedoms in Hong Kong. The body has imposed a national security law and barred opposition legislators in recent months.

Hours after the U.S. move, Hong Kong police arrested eight activists, including opposition legislators and protest

organizers, the latest in a series of arrests of prominent figures accused of crimes over their roles in last year's antigovernment uprising. Pro-democracy groups say efforts to crush opposition in the city are increasing, despite the rising international condemnation of China.

"The Chinese will view the designations of 14 NPC officials as an irritant, but not consequential," said Bonnie Glaser, director of the China Power Project at the Center for Strategic and International Studies in Washington. "Beijing has already made the decision to impose its rule over Hong Kong. Such symbolic steps are unlikely to affect its actions."

China expressed anger over the sanctions, with its foreign ministry on Tuesday summoning Robert W. Ford, the U.S. chargé d'affaires in Beijing, to

condemn the measures. A ministry spokeswoman told a regular briefing that it firmly opposed U.S. interference and said it wouldn't affect China's Hong Kong policies.

Recent weeks have seen activist Joshua Wong jailed for

Pro-democracy groups say efforts to crush opposition in Hong Kong are rising.

more than 13 months for protest-related offenses, outspoken media mogul Jimmy Lai denied bail on fraud charges, and the mass resignation of opposition members of the Legislative Council, who quit after the NPC's standing committee

disqualified four colleagues considered disloyal to China.

The sanctions bar the 14 Chinese officials from traveling to the U.S. and prohibits U.S. persons from dealings with them.

The measures risk retaliation, though they fell short of crossing a red line set by senior Chinese diplomats in talks with their U.S. counterparts, people familiar with the matter said. The diplomats have made it clear that should the U.S. target the Politburo's elite Standing Committee, it would be seen as a serious escalation of tensions, the people said.

Economists say the Covid-19 pandemic, rather than U.S. actions, is the main culprit for Hong Kong's economy being forecast to shrink by a record amount this year. The pace of decline slowed in the third quarter, according to official

data. One metric of Hong Kong's economy, the volume of container-ship traffic flowing through the city, rose in September and October, suggesting that China's recovery from its virus-related slump is bolstering part of the city's economy.

Many banks are bracing for a forthcoming blacklist from the Treasury Department of financial institutions found to have relationships with sanctioned individuals. That list, required under a bipartisan sanctions law signed by President Trump in July, is due to be released in mid-December.

President-elect Joe Biden has steered clear of articulating a clear policy on Hong Kong, though few observers expect the forthcoming administration to spend the political capital necessary to walk back the Trump administration's Hong Kong sanctions.

Mount Everest Adds a Few Feet to Its Peak Performance

By ERIC BELLMAN
AND KRISHNA POKHAREL

KATHMANDU, Nepal—Mount Everest just got a little taller.

China and Nepal, the two countries Everest straddles, said the world's tallest mountain is now officially the equivalent of 29,032 feet.

The new height of 8,848.86 meters (29,031.69 feet) was determined following what geologists said was the most thorough survey of the summit ever. More important, it was the first time a single height was calculated and certified by both Nepal and China. Previously, they had different official heights. China said it was 29,017 feet. Nepal said it was a little taller, at 29,028 feet.

"The respect and pride of all Nepalis has risen along with this increase in the height" of Mount Everest, Padma Kumari Aryal, Nepal's minister for Land Management, Cooperatives and Poverty Alleviation, said at an event in Kathmandu to celebrate the announcement.

Nepali scientists wouldn't speculate on the reason for the higher measurement this time, saying it may have more to do with improvements in technology and calculations.

"In this latest measurement, we used the best technologies available now at this time, and arrived at this slightly higher number," said Damodar Dhakal, director and spokesman for Nepal's Survey Department.

Geologists said the new height was in line with most

others in recent years. Measuring mountains isn't an exact science as it has to take into account everything from theoretical sea levels to how gravity would affect that sea level near the mountains being measured.

Everest does grow, very slowly—less than a fifth of an inch a year—some geologists say, from the movement of tectonic plates below it. But that growth can be erased or reversed by earthquakes or other effects.

People have been measur-



A Chinese surveyor setting up equipment on the summit of Mount Everest in May.

official height.

The story of why the two countries couldn't agree on the height and resolve the world's highest border dispute is part geopolitics and part geodesy. It is a matter of pride for both that they have done it on their own.

From the Yellow Sea to the peak of Chomolungma, China's Tibetan name for Everest, Chinese teams measured the distance from sea level and gravity, while teams in Nepal,

where the mountain is called Sagarmatha, did the same going south to its border with India. Both sides used the latest technology along the more than 2,000-mile journey.

The teams from China and Nepal used everything from old-fashioned trigonometry and surveying equipment, to satellite positioning and gravity meters.

Nepal had planned to do this all on its own, but figured it was better to work with China so there would be a single number.

Nepal has been growing

closer to China in recent years and has massive infrastructure projects planned under Beijing's Belt and Road initiative, including a railroad through the Himalayas and a tunnel under them connecting the two countries.

"China-Nepal friendship will rise across the Himalayas and reach new heights," Wu Wenzhong, head of China's surveying and mapping department, said through a video link to Kathmandu. "An even brighter future lies ahead for scientific cooperation between China and Nepal."

WORLD NEWS

Emirati Buys Into Israeli Soccer Team

An Emirati investor acquired a 50% stake in a popular Israeli soccer club that is known for a group of racist, anti-Arab fans, one of the first high-profile deals since Israel and the United Arab Emirates normalized relations in September.

By **Dov Lieber** in Tel Aviv and **Rory Jones** in Dubai

Sheikh Hamad bin Khalifa al Nahyan, who describes himself on his website as a member of the Abu Dhabi royal family, is investing at least \$90 million over the next decade for the stake in Beitar Jerusalem, according to the two sides in the deal. “We want to set an example to both nations that Jews and Muslims can work together,” Sheikh Hamad said in a news conference with the team’s co-owner Moshe Hoge, a cryptocurrency entrepreneur.

Sheikh Hamad said the purchase was a personal investment and that the U.A.E. government wasn’t involved.

The acquisition represents the first significant private investment by an Emirati into Israel after the two countries established diplomatic relations that marked a broader realignment in the turbulent Middle East. It also suggests Emirati investors won’t shy away from potentially controversial moves with Israeli business partners.

In a soccer league filled with Jewish and Arab players, Beitar Jerusalem has never had an Arab player and some of its extremist fans often sing racist chants at games, such as “death to the Arabs.” Mr. Hoge and fans say such racists make up a tiny part of the team’s fan base, and the club has worked hard to root out such behavior.

Mexico Cartels Set Up Shop in Europe

Dutch raids uncover meth labs utilizing chemicals from China; ‘like global corporations’

By VALENTINA POP

MOERDIJK, Netherlands—When police raided a barge moored here last year, they found more than just a sophisticated crystal-meth lab that started sinking as they inspected it.

The setup—Mexican cooks using Dutch equipment to process chemicals from China—offered a window into the new global drug economy. A number of recent Dutch narcotics raids have snagged Mexican nationals, including ones linked to the violent Jalisco New Generation Cartel, according to the U.S. Drug Enforcement Administration.

Mexican cartels, which dominate drug trafficking in North America, are drawn to the Netherlands because it is a global trade nexus with sea and rail links to Asia that has long been Europe’s top manufacturer of synthetic drugs.

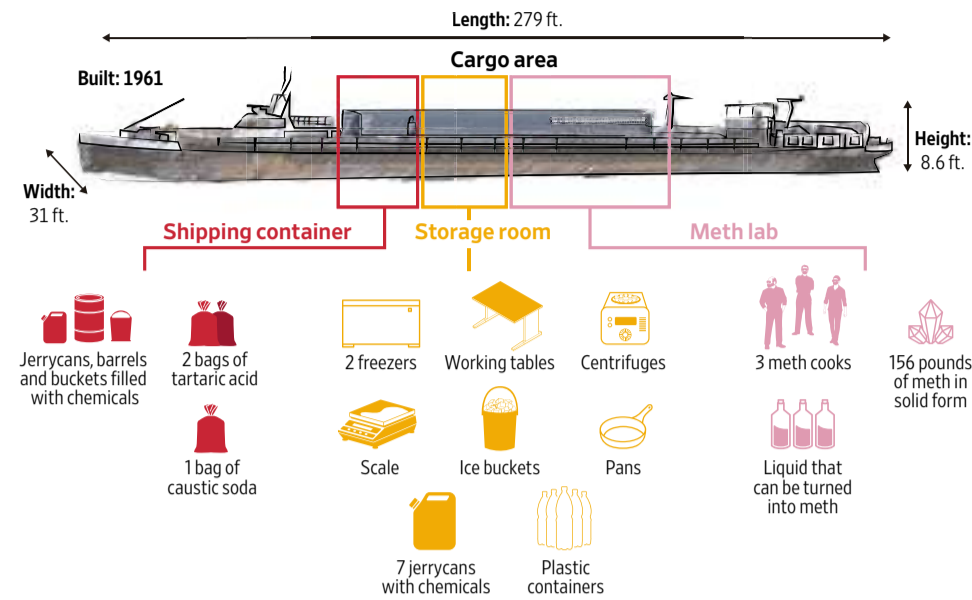
Piggybacking legitimate commercial channels, Mexican cartels are combining sophistication with ruthlessness to expand their reach world-wide. Their multinational drive is enabled by the advent over recent decades of highly potent synthetic drugs that don’t rely on crops or farmers and can be manufactured in compact facilities almost anywhere. Production experts instant-message instructions to overseas workers and hop the globe like factory troubleshooters in any industry.

With the U.S. drug market saturated and methamphetamine labs in Mexico already supersize, cartels that murder for market share see Europe as a new hub. The cartels are “like global corporations,” said DEA Regional Director for Europe Daniel Dodds. “If they can expand and broaden their customer base, they will.”

Mexican cartels first connected with Dutch drug smug-

Floating Lab

Dutch police found three cooks from Mexico handling meth-yielding chemicals when they raided this ship in May 2019.



glers in the 1990s, bringing cocaine through Rotterdam, Europe’s largest port. Cocaine remains Europe’s top illicit stimulant, but Dutch police say over the past two years surging quantities of Mexican meth have hit the Netherlands, Mexican “cooks” have arrived to teach local chemists, and Dutch technicians are honing production methods.

“The crystal-meth academy is open in the Netherlands,” said Jan Struijs, head of the Dutch Police Union and a veteran organized-crime investigator.

The Netherlands offers Mexican cartels an ideal production base because of its experienced chemists, unrivaled cargo networks and liberal attitude to drugs. Connections to labs in China supply chemicals that constantly adapt to remain legal. Dutch traffickers cultivated those links over decades as they perfected ecstasy manufacturing for party scenes in London, Berlin and New York.

In the late 1990s, Dutch ecstasy pills swamped the U.S., prompting the Clinton administration to publicly denounce the Netherlands as a narco-state and threaten economic sanc-



Police seized 2½ tons of Mexican meth sent in shipping containers.

tions. Dutch authorities cracked down on U.S. links, but producers soon regrouped and shipped elsewhere, including Japan and Australia.

The recent shift to meth production in the Netherlands—with Mexican involvement—worryes officials who see it sparking a crime wave and positioning Europe to follow the U.S. shift from party drugs to far more addictive and destructive drugs such as meth and potentially fentanyl, replicating the opioid epidemic. Re-

cent sewage analysis found increasing meth residue in Amsterdam, London, Barcelona and Brussels. German customs officials report a recent uptick in seizures of meth in vehicles coming from the Netherlands.

“We’re at the forefront of a trend here,” said Andy Kraag, head of the Dutch National Criminal Investigations Division. “Meth is a devastating drug, so it’s top priority for us to take down all those labs.”

A wake-up call came in June 2019, when Dutch police seized

2½ tons of Mexican meth sent in shipping containers, said Scott B. Rowan, the DEA’s European field intelligence manager.

The meth had been smuggled inside concrete blocks, in boxes police found behind a false wall of a Rotterdam warehouse. A separate raid in Utrecht, 40 miles east, uncovered 60 pallets of shattered concrete that had hidden the shipment. Police also found 4,623 gallons of chemicals used for manufacturing synthetic drugs.

A day after the Utrecht raid, fire swept the warehouse. Police suspect an attempt to destroy evidence.

Container ships to Rotterdam aren’t cartels’ only smuggling method. On Sept. 7, police at Mexico City airport intercepted 25 gallons of liquid meth bound for Holland, hidden inside lava lamps. The liquid, known as base oil, is meth in its purest form, later diluted and processed to yield crystals.

The main chemical in meth—benzyl methyl ketone, or BMK—can also be used to manufacture amphetamine, which makes it easy for Dutch chemists to deliver a market’s most-wanted product at the lowest production costs.

“Three years ago, police were wondering why Dutch chemists hadn’t already started cooking meth, since they have all the ingredients, knowledge of the methods and hardware,” said Judith van Valkenhoef, a criminologist with the Dutch Police Academy, a research center, which in 2018 estimated that Dutch synthetic-drug production was worth at least \$18.9 billion.

While the relationship between Dutch and Mexican drugmakers now appears symbiotic, DEA officials predict the cartels will eventually take control, as they did with Colombian heroin production.

Dutch officials are awakening to the impact of tolerating drug use for a long time and “allowing for too long a parallel economy to grow and become more influential,” Mr. Struijs said. “We have the characteristics of a narco-state.”



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FROM PAGE ONE

A Startup's Plan Gets Disrupted

Continued from Page One
fuel cells in homes and instead has a niche clientele among companies willing to pay a premium for a continuous on-site energy source. In 2009, it projected profits by 2010, according to board materials reviewed by The Wall Street Journal; but it has never reported a profit, losing over \$3 billion since inception.

Mr. Sridhar's proposition to disrupt the energy market came as the world was trying to figure out how to wean off fossil fuels. Instead, the energy industry has disrupted Mr. Sridhar's strategy, turning to wind and solar power, which have lower costs and deliver cleaner energy than Bloom's cells, which emit carbon dioxide. Grid power is still less expensive than Bloom's in most places.

Along the way, Bloom ran into supply issues, its cells remained expensive and it fell short of its projections for how many customers it would win, according to former executives and employees, board materials and public filings.

After Bloom's auditor raised concerns about how it had reported revenue, it restated results in March for the two years since its \$270 million initial public offering, cutting its reported revenue by 15%. Bloom's growth is sometimes difficult to assess because of its accounting practices.

Last year, Hindenburg Research—the short seller that in September claimed electric-truck startup Nikola Corp. misled investors, which Nikola has denied—released a report saying Bloom's technology wasn't "clean, green, or remotely profitable" and citing an estimated \$2.2 billion in undisclosed liabilities. A Bloom spokesman, Justin Saia, said the company stands by its response at the time that Hindenburg "drew erroneous conclusions."

Mr. Sridhar, who declined to be interviewed, said in an emailed statement: "I know that a small group of detractors wants to write a spurious version of our history," adding: "Innovations in the energy sector have always been controversial. The light bulb, the first power plants, wind turbines, solar power, electric cars—they all had their naysayers."

Mr. Sridhar's challenge has been to balance his vision with the real world, said Bill Kurtz, Bloom's chief commercial officer from 2008 through 2018 and also chief financial officer through 2015, who remains a shareholder and supporter.

"It is a long journey," Mr. Kurtz said. "How do you sell the dream but still give them a sense of reality?" He and other former executives praised Bloom's technology and Mr. Sridhar's charismatic leadership, expressing confidence in the CEO's aim to revolutionize the energy industry but saying obstacles to profitability remain significant.

Bloom doesn't disclose how many of its boxes are in operation. Its fleet supplies about 526 megawatts of electricity globally, it said in Securities and Exchange Commission filings last month—roughly what a small natural-gas power plant generates—up from about 328 megawatts at its 2018 IPO.

Happy customers include Staples Center in Los Angeles, which installed two 250-kilowatt boxes in 2015. They provide about 25% of the arena's power, said Bill Pottorff, the arena's senior vice president for operations and building engineering. Citing Bloom calculations estimating the installation has reduced the facility's carbon emissions by four million pounds, he said: "It's been the best sustainability project we've done."

Mr. Immelt, who joined Bloom's board last year, said in a statement when he bought 70,000 Bloom shares this August that it had the potential to expand into marine and other growing markets. "I've watched these markets for decades, and I know that new technologies take time to develop," he said. Mr. Immelt declined to comment.

Mr. Doerr's firm, Kleiner Perkins, last month sold its remaining Bloom shares, SEC filings show. Mr. Doerr, who remains a Bloom director, and Kleiner didn't respond to requests for comment.

Fuel-cell companies' shares



It's about seeing the world as what it can be and not what it is,' Bloom Energy CEO KR Sridhar said in 2010. His vision: a Bloom Box in every American home. Mr. Sridhar in March, above, and holding a fuel cell in 2010, below.



have broadly been up this year, as part of an alternative-energy-stock boom. Bloom's stock closed at \$30.59 Tuesday, down nearly 15% from its post-IPO peak in 2018 and up from \$2.70 at its low point in October 2019.

Fuel cells, versions of which appeared in the 1800s, have supported space missions including Apollo moon flights. They power some industrial equipment. Hydrogen fuel cells, which don't emit carbon, have emerged as a technology that could help companies achieve climate goals.

Bloom's boxes—rebranded as Bloom Energy Servers around 2011—look like large refrigerators and contain stacks of fuel cells, each the size of a floppy disk. They typically go next to buildings they power.

NASA roots

Mr. Sridhar helped design a fuel-cell module for a Mars-exploration project for the National Aeronautics and Space Administration, which canceled the Mars project in 2001.

He founded Bloom to seek terrestrial uses. If his boxes generated power on-site, his argument went, they could bypass the grid while providing cleaner power.

In 2002, Mr. Doerr's firm bet on Bloom and he joined the board. Mr. Powell joined the board in 2009 and remains a director; a spokeswoman for Mr. Powell didn't respond to requests for comment.

In July 2008, Bloom delivered to its first major customer, Google, without a public announcement. Bloom told investors the boxes produced about 783 pounds of carbon dioxide a megawatt hour, substantially less than coal-fired plants. Google declined to comment.

The boxes it sold Google cost more than \$16,000 a kilowatt to build—about \$1.6 million a box—according to a March 2009 presentation to the board. Bloom sold them for far less, according to the presentation, which acknowledged the need to cut manufacturing costs for profitability. The presentation stated a goal of \$2,500 a kilowatt by the end of 2011.

Supply-chain issues dogged Bloom, former executives said. It had trouble procuring parts called "hotboxes" that encased the fuel cells, and the hot-

boxes kept failing internally in their first few months of operation, costing the company money to fix or replace, according to the former executives and the 2009 board document. In 2008, Russian suppliers of scandium, a rare-earth metal and crucial ingredient, raised their price.

Still, Bloom painted a rosy picture as it sought a \$150 million financing in January 2009. In the pitch to investors that month, it said it had proven the boxes' viability and had a "ready supply chain" and a "path to profitability," with plans to be in the black by 2010.

Walmart installed a Bloom server at a Lancaster, Calif., store in 2009 and now has more than 30 installations at other California locations, a Walmart spokeswoman said.

In 2010, Bloom first publicly showed its product, at eBay headquarters, where it installed servers. A video shows Mr. Sridhar on stage scooping sand from a container to show the cells were made from everyday materials. "I think we've just witnessed some kind of wonderful new combination of Martha Stewart and Steve Jobs," Mr. Doerr told the crowd.

The next year, Bloom shipped only 194 boxes and lost \$225 million, according to a February 2012 board presentation. That fell far short of its projections in its January 2009 investor presentation, where it had posited a "Potential IPO Valuation in 2011" and said it would ship as many as 1,000 boxes and forecast net income of \$88.8 million to

\$183.2 million for 2011.

Bloom's Mr. Saia said the company has always made projections and disclosures based on information available. Bloom declined to comment on its board and investor materials.

By 2011, Bloom had cut the costs of building its boxes to \$6,300 a kilowatt on average, according to the February 2012 board documents—nowhere near the \$2,500 goal.

The company was spending millions of dollars to maintain them as part of its customer-service programs, in part because of unexpected problems

The energy industry has foiled Bloom's strategy, turning to wind and solar power.

with the technology, board documents show. To break even, Bloom needed its fuel-cell stacks to last for at least five years, but early ones often didn't last longer than a year and a half, it said in 2018 SEC filings. Bloom has never turned a profit on its service business because the cost of maintenance has exceeded service-contract revenue.

When Bloom went public in July 2018, its shares soared. Revenue for 2018 was \$632.6 million, up from \$365.6 million in 2017, driven in part by the reinstatement of federal tax credits for Bloom's technology.

Gas to Power

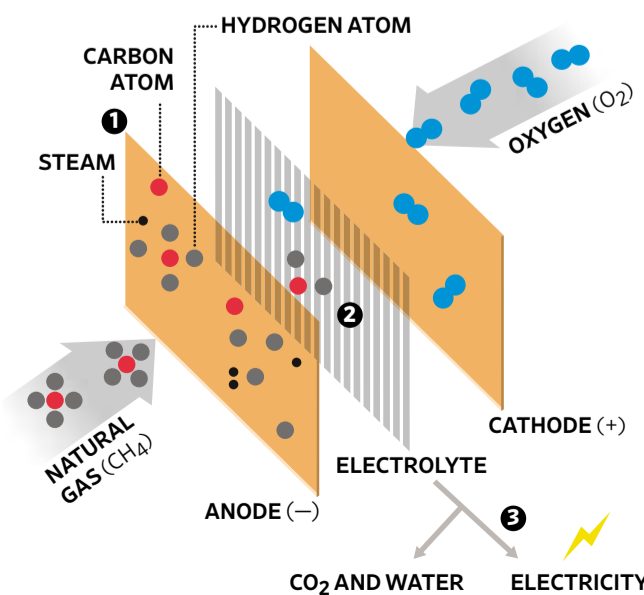
Within Bloom's fuel cells, oxygen ions mix with the hydrogen and carbon atoms that form natural gas, producing electricity, water and carbon dioxide.

1 Natural gas mixes with steam (●) at the anode to produce hydrogen (●) and carbon (●) atoms.

2 Hydrogen and carbon atoms combine with oxygen ions (●) that enter through the cathode.

3 The reaction produces electricity, as well as water and carbon dioxide.

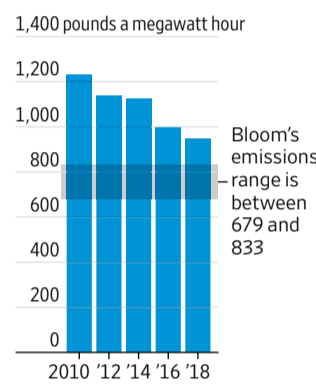
Source: the company



Greener Grid

A Bloom Energy Server emits less carbon dioxide than the U.S. power grid, but the margin is narrowing.

Rate of CO₂ emissions from U.S. power grid, yearly



It posted a \$273.5 million loss.

But by then, Mr. Sridhar's green pitch was losing appeal. Utilities had made the grid cleaner by closing many coal-fired plants, and the cost of wind and solar power had dropped. Companies that might have paid a premium for fuel cells could buy carbon-free power for less money.

In 2019, Silicon Valley Power, the municipal utility serving Santa Clara, Calif., tried to require all new grid-connected generators to be emissions-free. That meant Bloom wouldn't be able to hook up new boxes within city limits.

Bloom sued the utility to block the regulation, arguing it wouldn't reduce emissions. It won a reprieve in January 2020, when a judge told the utility to first complete an environmental study to demonstrate the benefits of its proposed measures, per state law. Silicon Valley Power is completing the study.

"We just want to be as renewable and greenhouse-gas-free as possible," said Manuel Pineda, chief electric-utility officer of Silicon Valley Power and Santa Clara assistant city manager. Bloom's Mr. Saia said the ruling affirmed the company's argument.

Ebay last year switched its headquarters to carbon-free power. Bloom said Ebay is no longer a customer. Ebay didn't respond to requests for comment.

By 2019, Bloom faced challenges in expanding into new U.S. markets, where the cost of power from its servers was still higher than the power supplied by the grid, two former employees said. And its U.S. sales depend heavily on a federal tax credit that benefits its customers and financing partners, increasing its serv-

ers' appeal. The credit expires at the end of 2021.

Bloom's Mr. Saia said the company disagreed with the notion that its technology is having difficulty competing in clean energy, citing analyses showing its servers can reduce grid emissions by helping to displace natural-gas power.

In February, Bloom announced it would restate some results for most of 2018 and 2019 to correct how it had accounted for its "managed services agreements," in which Bloom sold fuel cells to a financing partner, leased them back and subleased them to customers.

Bloom had treated the agreements as upfront revenue. Its auditor, PricewaterhouseCoopers LLP, told Bloom it should record the revenues over time as customers made lease payments. In March, Bloom disclosed it had overstated \$192.1 million in revenue cumulatively through September 30, 2019. Revenues for 2019—including fourth-quarter estimates—dropped to \$786.2 million from \$929.1 million.

In filings related to the restatement, Bloom said PwC hadn't raised the matter previously and didn't allege misconduct. On Sept. 4, Bloom announced it was replacing PwC with Deloitte & Touche LLP. PwC and Deloitte declined to comment. Mr. Saia said the restatement would affect only the timing of when the company recognized certain revenue.

Financing deal

The restatement didn't address a financing deal that let Bloom record significant revenues but produced little net cash, SEC filings show. In June 2019, a subsidiary of Southern Co., an Atlanta-based power company, bought a \$166.4 million stake in a Bloom subsidiary named Diamond State Generation Partners LLC that owned a 30-megawatt installation of Bloom fuel cells in Delaware. The deal earmarked those funds for Diamond to upgrade aging fuel cells by buying new ones from Bloom.

Upon striking the deal, Bloom "deconsolidated" Diamond because it determined it no longer had a controlling interest in the subsidiary, according to SEC filings. That let Bloom book the \$166.4 million as revenue. If Diamond had remained consolidated, accounting rules would have prevented Bloom from booking the revenue because it would essentially have been paying itself.

The deal appeared to provide a revenue boost, with Mr. Sridhar telling investors Bloom's second-quarter number was an "all-time record." In fact, the Southern deal was a loss to Bloom of about \$8.2 million after costs, the Journal calculated from public disclosures. And the deal required Bloom to set aside millions of dollars in cash to minimize Southern's investment risk. Southern declined to comment.

Bloom disputed the Journal's analysis, saying it netted about \$15 million in cash on the Southern deal because of how it deconsolidated Diamond. It said there was no way to arrive at this number based on publicly available information.

In December, Bloom completed the upgrade of the Delaware servers with a new financing partner. The upgrades contributed \$223.9 million to 2019 revenue, which was up 24% from the prior year. Without those upgrades, revenues would have declined 11%.

Bloom's Mr. Saia said the upgrades, in their entirety, provided greater financial benefits for the company than the portion done with Southern.

In the past several years, Bloom has found new growth opportunities in South Korea, where fuel-cell development is supported by government mandates, and has been working since last year to develop fuel cells for marine vessels in partnership with Korean shipbuilder Samsung Heavy Industries Co. Samsung declined to comment. In recent months, Bloom has outlined plans to pivot to hydrogen fuel cells.

Though Bloom's internal metrics have changed somewhat over time, this year it achieved the sort of cost reduction it had aimed for a decade ago. In October it told investors the average cost of building a server had fallen from about \$18,000 a kilowatt in 2008 to \$2,420 a kilowatt this fall—roughly hitting the sub-\$2,500 goal it had set for 2011. Mr. Sridhar in an earnings call in October said: "We have overcome formidable challenges and forged ahead stronger."

GREATER NEW YORK

Democrats See Hope in Suffolk County

Trump's slim margin shows urban electoral coalition is putting down deeper roots

By JIMMY VIELKIND

Huntington, N.Y.—Suffolk County was the most populous county in the U.S. that President Trump won in 2020, winning the New York City suburb by just 232 votes, according to election results certified in recent days.

Mr. Trump beat President-elect Joe Biden in the Long Island county by 0.03% of the more than 775,000 votes cast. He bested Hillary Clinton in the county by nearly 7 percentage points in 2016.

Republicans say Mr. Trump won Suffolk last month because of law-and-order messaging, which was amplified by law-enforcement unions. They targeted Democratic incumbents in the New York state Senate over recent changes to laws on policing, but the campaign had limited success in down-ballot elections.

The razor-thin margin, though, gave hope to Democrats that an electoral coalition based in urban areas is putting down deeper roots in New York's suburbs, which have traditionally tipped the scales in statewide political contests.

Suffolk has 1.5 million residents and a western border



At an Oct. 4 'Back the Blue' rally, law-enforcement officials urged support for President Trump.

roughly 30 miles from Manhattan, but its history and terrain make it an outlier from other urban suburbs in the U.S. Its towns are home to police officers, commuters and families who left New York City for school districts that consistently score well on state tests. It also includes the tony enclaves of the Hamptons.

Mr. Trump received 381,253 votes in Suffolk County this year, up from 350,570 in 2016, according to the Suffolk County Board of Elections. There was more growth for his Democratic opponent: Mr. Bi-

den received 381,021 votes in the county this year, while Mrs. Clinton won 303,951.

Long Island candidates in down-ballot races this year debated policing issues, with mixed results. Republican candidates won two contested races for the U.S. House of Representatives, but five of the six Democratic incumbent state senators won re-election.

Suburbs close to big cities, which tend to be wealthy and racially diverse, have long leaned Democratic, and Mr. Biden won them by an average of about 3 points more than

Democrats drew in 2016, a Wall Street Journal analysis shows. This was the case in Nassau County, which lies between New York City and Suffolk County, where Mr. Trump lost by 6.1 points in 2016 and 9.5 points in 2020.

Exurbs, which are farther out from cities, swung toward Democrats by nearly 6 points.

Lawrence Levy, executive dean of the National Center for Suburban Studies at Hofstra University on Long Island, said Suffolk includes areas that are both urban suburbs and exurbs.

"Suffolk County has a his-

tory. Prior to the evolution of suburbs from reliably red to purple and blue, Suffolk County was one of the most reliable of Republican counties in the state," he said.

Republicans said the significant presence and influence of law-enforcement families on Long Island made it fertile ground for Mr. Trump's warning that a Biden presidency would bring violence to the suburbs. Local law-enforcement unions seized on that messaging and pushed back against recent policy changes to state policing, blaming them for surges in crime in New York City and other urban areas around the state over the summer.

Richard Wells, a retired officer from Nassau County and president of the Police Conference of New York, a statewide coalition of police unions, said officers met commuters at train stations along Suffolk's south shore in the final days of voting. "People on Long Island were concerned about what was happening in New York City and cities around the country," he said.

The unions opposed a 2019 law, enacted by Democrats who control the state Assembly and Senate, that eliminated cash bail for most misdemeanor and nonviolent felony offenses. Supporters of the law said it makes the criminal-justice system fairer, particularly for poor people of color. Opponents said it has

decreased public safety.

Police unions and Ronald Lauder, a cosmetics heir, spent more than \$6 million on ads attacking Democrats over the law. New York City Police Benevolent Association President Patrick J. Lynch urged more than 1,000 people to show support for Mr. Trump at an Oct. 4 "Back the Blue" rally in Suffolk County.

Suffolk County Democratic Chairman Rich Schaffer said the presidential election gave him confidence for elections next year. "At times, it felt like we were in a major Trump county—they had car parades, flags, and banners," he said. "We did what we do best: focus on our ground game."

Mr. Schaffer and Democratic State Chairman Jay Jacobs said the party reached out to low-propensity voters, including new home buyers and people from New York City who registered to vote at second homes in Suffolk before the election.

Leigh-Ann Barde, a mother of four who led Suffolk for Biden, said her group worked with Democrats running for local offices calling and texting potential voters.

"I would just ask: 'Since the bail bill, what has changed from your backyard?' There wasn't any answer," Mrs. Barde said of her calls. "It really came down to, let's take a deep breath and put the swords down."

NYC Council Eyes Bill to End Solitary Confinement in Jail

By RICH CALDER

Nearly six months after Mayor Bill de Blasio pledged to end solitary confinement as a means of punishment in New York City's jail system, the city council this week is set to begin fast-tracking the process by reviewing new legislation to halt the controversial practice.

Councilman Daniel Dromm, a Queens Democrat, is set to introduce a bill at Thursday's council meeting that would prohibit inmates from being locked in an isolated cell for violent offenses—except for up to four hours whenever it is necessary to "de-escalate immediate conflict," according to a review of the legislation.

Under current city law, solitary confinement, also known as punitive segregation, allows inmates to be locked in cells up to 20 hours a day for serious offenses.

"Depriving people of human contact for long periods of time is un-American, and we shouldn't be engaging in it," Mr. Dromm said.

The city's Department of Correction referred requests for comment to the mayor's office.

Mr. De Blasio in June pledged to have New York become the first major city in the country to halt solitary confinement. He set up a panel to come up with a plan, but it has yet to announce recommendations.

Since he took office in 2014, the city's jail system has significantly reduced its use of solitary confinement and the overall inmate population. As of Monday, there were 65 people in punitive segregation, compared with a daily average of 567 in 2014, according to the Department of Correction.

Mayoral spokeswoman Avery Cohen said the mayor's office is committed to ending punitive segregation.

Punitive segregation has come under fire from criminal-justice advocates who say it is inhumane. But law-enforcement advocates, including the Correction Officers' Benevolent Association, the union representing city correction staff, say it is a necessary deterrent to keep violent inmates in line and jails safe.

On Friday, the council's committee on criminal justice is slated to hold a hearing on the measure, which Mr. Dromm believes has enough support to become law.

The prompt scheduling of the hearing by Council Speaker Corey Johnson only a day after the bill's scheduled introduction has raised concerns among some council members and the correction officers union. They say the legislation is being rushed into law for political reasons at the risk of endangering jail staff.

Historically, bills usually sit for weeks or months—and sometimes more than a year—before the council speaker's office schedules a hearing to field testimony from city agencies and other affected parties.

Both Mr. Johnson and Councilman Keith Powers, a Manhattan Democrat who chairs the criminal-justice committee, said they support ending solitary confinement.

"This bill is being heard because it is ready and will continue to go through the legislative process," a spokeswoman for Mr. Johnson said. "There's nothing unusual about that."

The legislation would still allow the city to keep detainees in other types of restrictive housing separated from a prison's general population. Under the proposal, inmates in restrictive housing could leave their cells at least 10 hours a day, compared with 14 hours for a jail's general population.

Fans in Central Park Mark 40 Years Since John Lennon's Death



LET IT BE: Fans remembered the former Beatle on Tuesday in the park's Strawberry Fields section on the anniversary of his death. Mr. Lennon was shot outside his nearby Manhattan apartment building by Mark David Chapman, who remains in prison.

N.J. Starts \$190 Million Penn Station Makeover

By PAUL BERGER

NJ Transit has begun a \$190 million renovation and modernization of its transportation hub in New Jersey's largest city, Newark.

About 50,000 riders on rail, buses, PATH and light-rail systems passed each weekday through the gloomy spaces of Newark Penn Station before the pandemic, making it among the region's busiest stations.

Gov. Phil Murphy, at a news conference Tuesday outside the station, said the renovation would restore the almost 90-year-old building to its former grandeur.

The state has committed \$30 million toward the first

phase of improvements, which are mostly cosmetic and include restoring wooden benches in the waiting area, updating bathrooms and lighting, as well as deep cleaning the station's limestone exterior.

An additional \$160 million of upgrades, which are expected to be completed during the next five years, include adding and refurbishing stairs and elevators and improving signs.

Newark is the westernmost starting point for the \$30 billion Gateway Program to double rail capacity between New Jersey and New York City.

The centerpiece of the program, a \$13 billion project to dig a rail tunnel under the

Hudson River, has stalled under the Trump administration pending federal approval.

Mr. Murphy, a Democrat, said President-elect Joe Biden indicated his support for the

The renovation would restore the nearly 90-year-old building's grandeur.

program during a phone call Saturday night between the two men. "He's been a big believer in it from day one," Mr. Murphy said.

Gateway's leaders intend to build the tunnel before they close the existing two-tube tunnel for extensive repairs.

The tunnel, which was inundated with water during superstorm Sandy in 2012, carries about 200,000 weekday riders, most of them NJ Transit customers, on the nation's busiest rail line linking Washington, D.C., and Boston.

Meanwhile, NJ Transit is preparing to receive final agreement from the federal government for an \$800 million grant toward a \$1.9 billion project to build a new rail bridge over the Hackensack River. That project would mark the beginning of the first major Gateway construction.

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GREATER NEW YORK

METRO MONEY | By Anne Kadet

Yes, Virginia, Shopping Local Spreads Cheer



This year, I vowed, I wouldn't do any holiday shopping online, or at the big chains. Instead, I'd buy my gifts from New York City's struggling mom-and-pops. And yes, Virginia, I discovered it's possible to do. But it isn't easy or cheap.

My odyssey started on a recent Monday that brought rain and 28-mile-per-hour winds. "It's never raining on Amazon," I grumbled.

Still, I was happy to be out of the apartment and venturing to Seigo Neckwear on Manhattan's Upper East Side in hopes of finding the gold ascot tie on my little brother's wish list.

Score! When she heard my request, sales clerk Mamiko Nakamura opened a drawer to reveal a display of silk ascots in every color and pattern.

It was fun to browse this tiny shop, which feels like a neckwear gallery. The wall of bow ties includes 3,000 designs, said Ms. Nakamura.

I next popped into Blue Tree, a gift store up the block. I found a number of fun items I'd never think to look for online, including a terrific pair of shark gloves with metallic gold teeth.

Manager Ivana Callahan told me business has been brisk, with some, including a customer in her 80s, getting private appointments for safety reasons.

Next stop—the Strand bookstore downtown, where a clerk escorted me through the vast stacks, helping me find all the titles I wanted. Then I hit him up with another request from my little brother: "Beautiful coffee table books of your favorite artists, artisans, designers and engineers."

"I'm not sure if he meant you or me," I told the clerk.

He revealed his favorite, art nouveau designer Alphonse Mucha, and did a



Google-image search on his computer so we could admire the paintings together.

I was feeling great about my afternoon until I got home and did a price comparison. Nearly every item I bought was 20% to 50% cheaper online. Could I even afford to shop local?

The next day's challenge: Supplies for the ornaments I'm planning to hand paint for my dad with his pet expressions such as "My God!" and "High Class!"

There aren't many independent craft shops left in New York City, but I found good reviews for Norma's Arts and Crafts Supplies in Brooklyn's Bay Ridge. The folks at

Norma's were helpful, suggesting numerous options. Alas, they were out of some standard items such as red ribbon.

Co-owner Norma Visconti

said that a big chain recently bought out her two main distributors, and it's increasingly difficult to find wholesalers willing to work with small shops. Her wholesale costs sometimes exceed the retail prices charged by her largest competitors, she said.

But Ms. Visconti is hanging in there. She loves her customers, especially the children who are excited to come in because she lets them use the price gun. "You won't get that at a big store," she said.

I did find some Bay Ridge bargains. At Tops Restaurant & Bar Supplies, for example, I found sushi plates for my niece at half the price I'd have paid online. Plus, I met owner Dennis Monier, who has run the store for 52 years. "Can't you tell by how great I wrap?" he asked, swaddling the plates in yesterday's Daily News.

And as soon as I walked into the local cigar shop, I burst out laughing. The small space was packed with men—some dressed in actual track suits—puffing on stogies and arguing about car loans.

I headed home feeling exhilarated, as if I'd toured the solar system and visited several new planets.

I devoted the final afternoon to shopping strips close to home—Atlantic Avenue and Court Street in Brooklyn—packed with stores I've been visiting, in some cases, for more than two decades. Stopping by Sahadi's, Whisk, Duman Home, KC Arts and D'Amico Coffee, I managed to find the remaining items on my list including, on nearby Smith Street, a giant spiky plant for my nephew.

The only problem—getting

it all home. After walking a mile loaded with bags, I called a Lyft, which cost me \$10.91.

That night I did a calculation. I'd spent three afternoons walking 8 miles and visiting 22 shops. I spent \$24.66 on subway and car fares, and \$11.75 on cappuccino. And I blew \$428.53 on the 26 gifts I bought—40% more than the \$298.90 that same set of gifts would have cost online.

Was it worth it?

Upon reflecting for a spell, I realized that this was a deeply stupid question. I moved to New York City because I enjoy spending time and money doing things like exploring interesting little stores and meeting the shopkeepers. If my aim in life was to save time and money, well, there's the whole rest of the country just for that!

anne.kadet @wsj.com

GREATER NEW YORK WATCH

NEW YORK CITY

Ex-Housing Secretary Is Running for Mayor

Former U.S. Housing Secretary Shaun Donovan announced his candidacy for mayor of New York City on Tuesday, joining a crowded June 2021 Democratic primary for mayor of the nation's largest city.

"I am honored today to say that I am running for mayor of New York City to repair the civic fabric of the city, pull New Yorkers together to rebuild from the damage brought by Covid-19, and reimagine an innovative city that truly works for everyone," he said.

Mr. Donovan, 54 years old, was appointed to various roles during former President Obama's administration, first heading the Department of Housing and Urban Development and then the Office of Management and Budget. He was commissioner of the city's Department of Housing Preservation and Development under then-Mayor Mike Bloomberg. He has never run for elective office before.

—Associated Press

CONNECTICUT

Police Officer Hurt, Suspects In Custody

A police officer was wounded after being shot Tuesday while investigating a stolen motor vehicle, leading to a car chase that ended with four suspects in custody, authorities said.

The Waterbury officer was shot in the chest but was wearing a bulletproof vest that likely saved his life, said Police Chief Fernando Spagnolo. The officer, whose name wasn't released, suffered minor injuries and was reported in stable condition at a hospital. "That officer is doing fine...and getting ready to be released from the hospital," Mr. Spagnolo said.

Authorities didn't release many details on what led to the shooting. Four suspects were taken into custody near Waterbury-Oxford Airport after leading police on a chase. Their names and the charges weren't disclosed.

—Associated Press



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FAMILY & RELATIONSHIPS PERSONAL JOURNAL.

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THE WALL STREET JOURNAL.

Wednesday, December 9, 2020 | A11



ILLUSTRATIONS BY MARK MATCHO



BONDS
ELIZABETH BERNSTEIN

Reignite the Spark, Even Amid a Pandemic

How's your sex life? If it leaves something to be desired, you're not alone.

People have been having less sex—with a partner or solo—since the pandemic began, according to a longitudinal study called "Sex and Relationships in the Time of Covid-19" conducted by researchers at the Kinsey Institute at Indiana University. And the more stressed, disconnected or lonely a person has felt, the greater the negative impact on his or her sex life has been.

It's no surprise no one's feeling sexy. We don't like how we look, sitting around in our schlubby clothes, packing on pandemic pounds, getting hairier and smellier. (How long has it been since you bathed?) We're not out in the world, doing the things that give us confidence, such as hobbies or travel. We've been deprived of so many daily moments of connection—the conversations, smiles or glances—that make us feel energized and alive.

And even if we're not fighting with our partner—because, let's face it, we're in constant fight or flight mode—we're still a little sick of the person we've been cooped up with 24/7. There's nothing like familiarity to dampen desire.

But we should be careful about letting our sex lives slide. Sex connects us to our partner. It relieves stress (for those in a satisfying relationship) and it makes us happier. It can even make us more productive.

How can we get our mojo back?

In reporting this story, I found people spicing things up with new toys, having sex everywhere but in the bedroom (kitchen islands are popular!) and practicing "a whole lot of self-love." A stay-at-home dad in New England sneaks off to his wife's home office for "matinees" while the kids are in online classes. A counselor in Northern California keeps a stripper pole in her guest room to seduce her husband. An academic in Indiana has a drawer full of "special" underwear—some sexy, some silly. (His current favorite: a unicorn brief.) A writer in Southern California keeps a tambourine in



his nightstand, which he pulls out to celebrate especially great moments. "It must sound like I am re-enacting 'The Music Man' in here," he says.

I also talked to sex therapists and researchers. Here is their advice.

Dress for success. Get out of your sweatpants! Get a haircut! Take a shower! Put on some clothes that make you feel good. This will cre-

ate a feedback loop with your partner, says Justin Lehmillier, a research fellow at the Kinsey Institute and author of the book "Tell Me What You Want." "Feeling more attractive opens you up to feel more desire," he says. "And because you are showing that you are putting in the effort to attract your partner, it can lead to your partner responding."

Interact with the world. We're starved for connection. We're used to interacting with people all day long—strangers, co-workers, friends and family. Those interactions fed our need for bonding and kept our moods from flatlining. That has all gone away.

Try to reconnect. Schedule times in the week to talk to friends. Chat with store clerks or customer service representatives. Give compliments. Try to make someone smile (even if you can't see it). Social interactions can make you feel energized and confident, says Kristen Mark, an associate professor of sexual health promotion at the University of Kentucky, sex and relationship researcher, and affiliate at the Kinsey Institute. "And when you spread joy, you glow a little."

Build space in your relationship. Independence is sexy. Mystery breeds desire. Being enmeshed with a partner 24/7 is a buzzkill.

Find ways to do things without your partner. Go for a walk. Read a book. Take a class. Find a hobby

you can enjoy safely. These things create breathing room in your relationship. They make you feel refreshed and fulfilled. And they give you something new to talk about. "Having time apart can make the time together more special," says Dr. Lehmillier.

Set the scene.

The Kinsey study found that our sexual fantasies have changed during the pandemic—most people are dreaming more of romance and passion. We're craving intimacy, both physical and emotional. We want to be sexually desired. Yet romance is in short supply. "We aren't even getting the little daily hits anymore, where our partner comes home from work and gives us a kiss and we have a little reunion," Dr. Lehmillier says.

Make romance happen. Plan a nice dinner—and eat it by candlelight. Dance in the moonlight to a favorite song. Turn off your phones and make eye contact.

Rethink how you initiate sex. A kiss or shoulder rub or dinner out used to do it. (At one time in your relationship a simple look would do it.) But now that we're exhausted and stressed all the time, we need to build up to sex, to give

ourselves time to relax and get in the mood.

Put sex on your calendar. (Remember scheduled date nights?) Aim for a time when you're both likely to be in the mood. Flirt more often. Play music more often. Do nice things for your partner more often.

Try something new. The Kinsey study found that one in five people tried something sexually novel during the pandemic—and those who did were three times as likely to report improvement in their sex life. This makes sense because research

has long shown that novelty boosts arousal and desire. Get creative. Take a bubble bath together. Read erotica out loud. Share your latest fantasy. "Erotic narrative is especially important right now because it takes us somewhere other than where we are," says Amanda Luterman, a licensed psychotherapist in Montreal who specializes in helping people with relationships and sexual issues.

Practice erotic empathy. Stop focusing on the things you hate about your body. Your partner doesn't notice them nearly as much as you do. (I promise.) If you want to feel sexy, you need to focus on the things that turn you on.

Stop rejecting your partner when you're rejecting yourself. "You need to allow your partner to find you attractive, even when you don't feel you are," Ms. Luterman says. "You don't have to believe you are sexy to be aroused by someone else—or for someone else to find you sexy."



Mall Santa Is Keeping His Distance

Continued from Page One

its. Some are taking the whole experience outdoors, with masks and 6-foot-distancing.

In Arlington, Texas, Bella Exhibits and Retail manufactures a protective snowglobe, and has designed five other models of "Santa Guards." Ranging from \$987 to \$2,802, they are clear acrylic sets that allow children to sit or stand close to Santa while remaining behind a barrier that disappears in photographs.

"Among the Santa community, it spread like wildfire," says co-owner Mark Lieberenz. The company says it has sold 250 Santa Guards since September.

All the barriers are creating some communication challenges for Santas. Kennison Kyle, a 51-year-old Santa performer in Memphis, heads to the city's Pink Palace museum on most Wednesdays in December and sits behind a six-foot-diameter plexiglass snowglobe.

"I'm on the younger side of the professional Santa crowd and I've

got good hearing, but it's tough," says Mr. Kyle. "More than once or twice mommy or daddy have had to step in and translate."

"With the plexiglass, you have got to get creative," said Raymond Lightfoot Jr., a Birmingham, Ala.-based chef who recently worked as Santa at Prince George's Mall in Hyattsville, Md. He sometimes tries to find a way to speak around it. "You can't hear," he says.

Some retailers are eliminating in-person store Santas this year. Nordstrom is offering 15-minute video calls with Santa. Macy's is offering a "festive online holiday experience" this year that includes interactive games and a computer-generated selfie with Santa.

In New Jersey, the Reeds at Shelter Haven hotel provided Zoom calls with Santa recently. Chris Heacock, an EMS chief, brought his children Max, 6, and Violet, 4, for a virtual visit. When Santa appeared on the screen, he says, the children thought it was a YouTube video, or that they were Zooming into school. Violet quickly regained her footing to explain that she wanted some LOL dolls for Christmas. Violet says she misses in-person visits with Santa. "It was a little weird seeing him on the computer," she says.

Santa visits have long been a critical piece of the holiday retail machine, though malls and their Santas



This year, Santa is taking some covid-related precautions.

were struggling pre-Covid.

"It was a way of bringing people into the store at the holidays," says Susan Tercero, vice president of branded entertainment for Macy's.

Retail analysts say store Santas help drive foot traffic, resulting in more consumer impulse purchases, which drive 25% of holiday sales, says Marshal Cohen, NPD retail analyst.

Robert Blaney, director of the youth commission for Dedham, Mass., drives Santa in a white municipal van into neighborhoods around town, providing visits to chil-

dren in their own front yards. Chuck Dello Iacono, a commissioner in the town's Parks and Recreation department, dresses as Santa Claus and rides shotgun.

"I grew a Covid beard—I haven't shaved since March 12," says Mr. Dello Iacono, 53, who has typically worn a fake version in past Santa gigs. "This year I have the real deal."

Ali Barton, a 38-year-old stay-at-home mom, says her 7-year-old son, Ethan, was confused about why Santa came out of a white van with "Town of Dedham" emblazoned on the side.

"We explained Santa was staying in a hotel," she says.

Mr. Dello Iacono stood 6 feet from Ethan. Both wore masks. Ethan, a first-grader, says that he wasn't sure why Santa's beard was gray and not snowy white. "I think Covid made him go gray," he said.

In Atlanta, photographer William Twitty recently staged a socially distant Santa shoot at a local tree farm. Utilizing fields of evergreens to set the scene, he took photos of his father-in-law, Chuck Day, dressed in a red suit as Santa Claus, while generally staying 6 feet away from the children. Mr.

Twitty says he had to get creative: In some photos, Santa strolled behind the child; in others he peeked from behind a tree, waving at children. "We called it 'social-distant Santa,'" says Mr. Twitty, who charged between \$25 and \$100 per session.

Karson Young, a 28-year-old stay-at-home mom in Gillsville, Ga., brought her 8-month-old, Joey, for pictures. One of her favorites from the session shows baby Joey on a blanket while Santa looks on at a distance. "It was definitely different," she said.

DAVID RYDER/GETTY IMAGES

PERSONAL JOURNAL. | FAMILY & RELATIONSHIPS

How to Help Your Teen Stay Focused

Older kids also struggle with remote learning—and need encouragement



FAMILY & TECH
JULIE JARGON

We're nine months into the pandemic and remote school is wearing on students. Boys, who are at greater risk of falling behind academically than girls, are having an especially tough time with all the hours spent behind screens. The challenges of staying focused and motivated in remote school carry even higher stakes for adolescent and teenage boys, who face more academic pressure than younger ones.

I reached out to child psychologists and education experts to find out how parents can help their sons—and daughters—remain focused and motivated in virtual school. They all said the first step is for parents to examine their own expectations and reactions to their children's struggles. Here are some key pieces of advice:

Enlist your child in finding solutions

"What you need to do as a parent is try to stay away from your own catastrophic thinking and use your foremost consultant, which is your child himself," said Michael Thompson, a child psychologist and author



Parents should praise the effort that an assignment required, not just the result.

of "Raising Cain: Protecting the Emotional Life of Boys." He added, "No one knows more about what he likes and what he hates about school than he does."

How do you elicit meaningful feedback from an adolescent or

teenager who responds with one-word answers? It's all about how you ask the question. Dr. Thompson suggests saying something like, "I see you're struggling with math and English. How can I help you with that?"

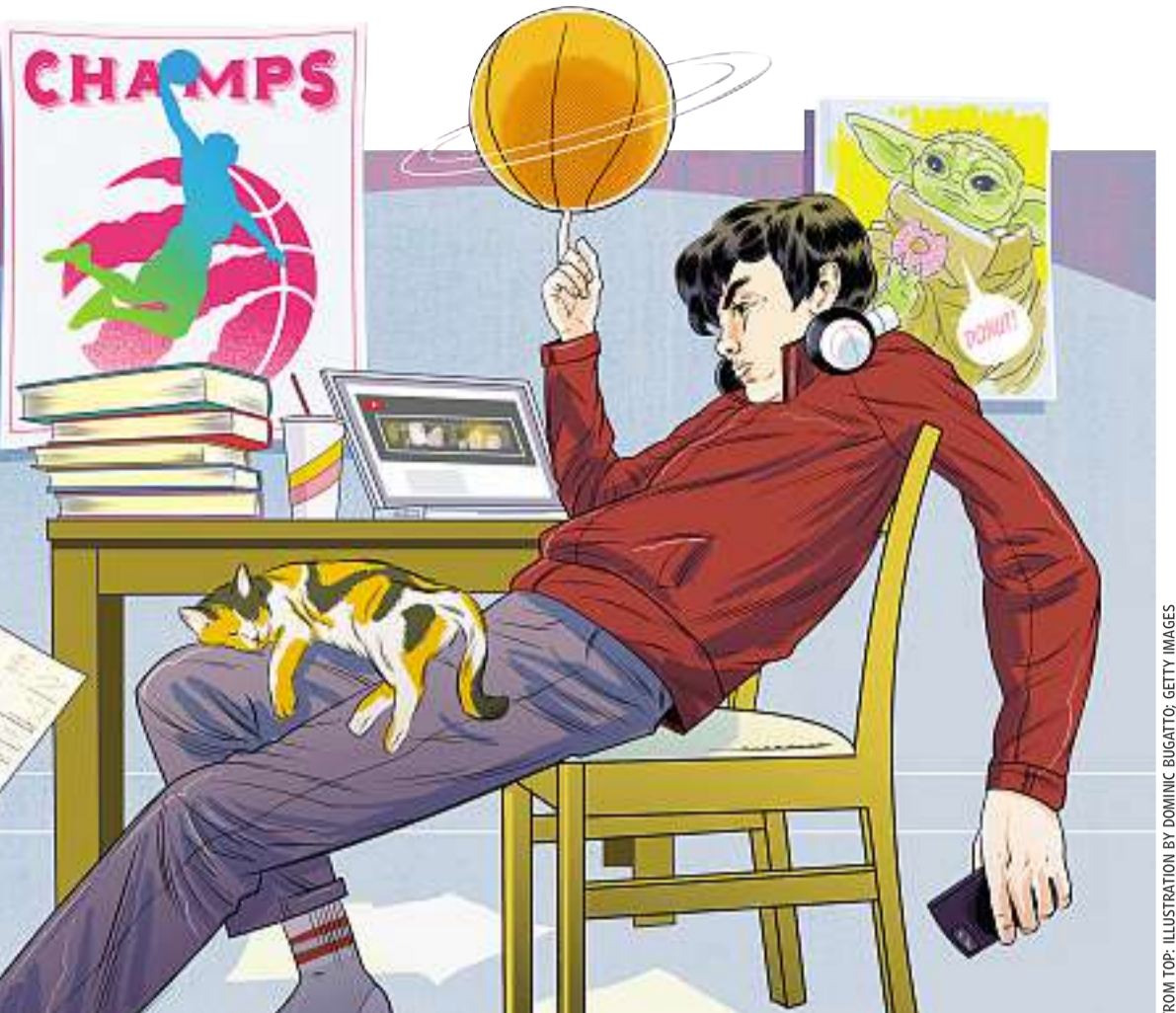
Experts caution parents against being accusatory. If a teacher has alerted you to missing assignments, you can say to your child, "I heard you're having a hard time turning things in. What's happening?" suggests Jeffrey Selman, vice president of clinical services at First Children Services, a provider of behavioral health services for children in New Jersey and Pennsylvania.

Motivation is often tied to success: The harder something is, the less a child wants to do it. But parents sometimes mistake children's struggle for indifference, said Matthew Cruger, a clinical neuropsychologist and senior director of the Learning and Development Center at the Child Mind Institute.

By offering to go over homework or helping kids study for a test, parents can get a better understanding of what the stumbling blocks are. When I noticed that my 10-year-old son didn't do well on a grammar test, I sat down with him one night and went over sentence structure. Once I explained predicates and conjunctions, he got it.

I asked him why it was hard to understand this during class, and he said the teacher went over everything too quickly. I thought he just wasn't paying attention, but I discovered that he was getting lost in the cacophony of group Zoom sessions and needed some one-on-one attention.

There might be other ways to improve their remote-school experience. Some kids might prefer to work from the couch for part of the day instead of at a desk. And if



FROM TOP: ILLUSTRATION BY DOMINIC BUGATTO; GETTY IMAGES

teens function better in the afternoon or evening, that might be better than morning for work on independent assignments.

In his book "Drive: The Surprising Truth About What Motivates Us," Daniel Pink wrote that autonomy over how and when we work is one of the greatest motivating forces for children and adults alike.

Don't underestimate the power of praise

Praise isn't just for little kids—it's an important motivating factor for adolescents and teenagers, too.

Many experts said it is best to separate performance from effort when giving praise. Many kids with ADHD and general distractibility spend a lot of time completing their work and then forget to turn it in. Parents should praise the effort that went into the work instead of only focusing on the grade, said Megan Narad, an assistant professor and clinical psychologist at Cincinnati Children's Hospital.

Tangible rewards can be helpful, too, if handled carefully. They also can be a slippery slope if children come to expect something for everything they do, thus chipping away at their intrinsic motivation.

Experts say rewards can come in the form of giving kids more choices—something that's especially important when children have lost so much control over their daily lives. Even something as simple as letting kids choose

what to have for dinner or what movie to watch can help boost motivation.

The experts I spoke to were all in agreement that positive reinforcement is far more effective than punishment in fostering motivation. "If you take something away because your child didn't turn in an assignment or got a bad grade, it's discouraging and it doesn't make it more likely for

exactly what to do and when to do it. "If you don't know what to do, you're more likely to avoid it, and that looks like disengagement," Dr. Selman said.

I've offered tips for making remote school easier in a previous column, but there are structural things parents can do to help with the executive-functioning skills adolescents and teens haven't fully developed.

Dr. Narad suggests writing down a list of tasks that need to be completed each day for kids to cross off. Make another list for longer-term projects and break those down into smaller tasks that can be completed each day, so that your child is seeing progress and not scrambling to complete a big assignment right before it's due.

Depending on children's age and maturity, you might need to check for a while to make sure they really have completed their work.

Don't lose sight of the bigger picture

Kids often don't see how what they're doing now matters. It's important to discuss the purpose of sitting through long video classes and doing the work.

And all of the experts said it's important that parents show their children—and themselves—some grace. "We need to be realistic about our expectations of adolescents and teens right now," Dr. Selman said.

An overwhelmed teen who is struggling can appear indifferent, experts say.

positive behavior to result," Dr. Cruger said. "If you just keep taking things away, you eventually run out of things to take away."

Dr. Cruger advises parents to reserve negative consequences, such as restricting videogames or phones, for more serious behaviors that they want to put an immediate stop to, such as fighting, cheating, lying or stealing.

Create to-do lists and break down tasks

A big part of motivation comes from a sense of achievement. Being successful without the structure of the classroom requires kids to know

MY RIDE | A.J. BAIME

A Ferrari 458 Spider Called 'Coco' Inspires Its Owner

Chanterria McGilbra, a San Francisco-based biotech consultant, on her 2015 Ferrari 458 Spider, as told to A.J. Baime.

I'M ONE OF THOSE people who believes in messages and signs. One day in 2015, I was in the shower and the word Ferrari came to me. I thought, "That's weird." Day after day for a week, I would get in the shower and the word Ferrari would come to me. Finally, I went to the dealership in Mill Valley, Calif. I went through all the cars and when I saw the 458, I said, "I want to test-drive that one." They said, "OK, come back tomorrow and we'll have one you can drive."

The next day one of the guys there pulled this car out and we went up a hill. He hit the gas. In the passenger seat, I felt the G-force and it was one of the most thrilling things I ever felt in my life. When I

got behind the wheel, I punched the gas, and it was even more thrilling. That was it: I had to have this car.

Ordering a new Ferrari is not like ordering other cars. I spent two weeks going back and forth, designing it. At first I wanted it all chocolate color, exterior and interior. They talked me out of it. I ended up selecting titanium paint, a chocolate-colored suede interior, and a black dashboard that would not distract from the driving experience. I put carbon fiber everywhere I could. I chose yellow brake calipers, which matched the yellow in the Ferrari logo. (It is the traditional color of founder Enzo Ferrari's hometown—Modena, Italy.) All these decisions and more made my car unique—one of one, built that year.

A few months later, I was at the Ferrari factory in Italy taking a tour. I asked the guide if my car was there somewhere, being built. He



Chanterria McGilbra started an all-female Ferrari rally and a foundation to help women.

asked when it was scheduled to be delivered. I said January or February 2016. He said, "Your car is here right now!" As we were doing the tour, we were on the lookout. We found four titanium-colored 458s being built, but three had British specs with the steering wheel on the right. So the fourth had to be

my car. Only the chassis was built; the interior did not yet exist.

We got to the part of the tour where they do the stitching of the fabric for the interiors. All over this table, I saw chocolate-colored suede. I asked about the fabric but the women working there did not speak much English. They went to

the container with all this suede in it, and it had a name on it: McGilbra, San Francisco. I yelled, "That's me! This is my car!"

Since the Ferrari arrived at my home, it has changed my life. I have taken it on every rally I could. I shipped it to Daytona Beach, Fla., and drove on the Daytona International Speedway. I drove it on California race tracks—Laguna Seca and Sonoma Raceway. I started a foundation called Prancing Ponies (named for the Ferrari logo), where we help young women grow in leadership. With

my friends from that foundation, we launched the first-ever all-women car show at the annual Monterey Car Week in California, and the first all-female Ferrari rally.

I named the car Coco. I cannot believe how much we have accomplished together in just five short years.

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ARTS IN REVIEW



Scenes from 'Wolfwalkers,' directed by Tomm Moore and Ross Stewart and streaming on Apple TV+

he can't control it. Cromwell's policies in Ireland were genocidal, so the villainy is not misplaced.

The intentions of the Will Collins screenplay, and the direction (and art direction) of directors Tomm Moore and Ross Stewart, aren't anti-Christian, per se: As we are told early on, St. Patrick made a deal "with the pagans" to keep the locals close to home and leave the wolves and Wolfwalkers alone; it is the Puritans who are big-footing it around the woods. And the byproducts of worship are certainly celebrated: The visual elements of the animation include the Celtic spirals, interlacing patterns and stained-glass-evoking geometry that are found in the illuminated manuscripts of Dark Ages Ireland. (Mr. Moore also directed 2009's "The Secret of Kells," about the Book of Kells, with Nora Twomey, who is a producer here.) The style elsewhere ranges from Monet-like depictions of the wildest Ireland to naive depictions of the village of Kilkenny that suggest perspective-free medieval painting.

The Wolfwalkers are awash in color and motion; the townsfolk are flat and more cartoonish. But even they seem inspired by the often simple representations of humans rendered by those anonymous illustrators of the monasteries.

Among the many clever and understated virtues of "Wolfwalkers" (politics, for instance, are never mentioned) is the way the animals are characterized. The Lord Protector calls the wolves "foul" and "wicked." In one fulminating moment he says, "By God's clarity and judgment He vanquishes thee," though nothing of the sort happens. But there's no anthropomorphizing by the movie itself: Wolves are wolves, even though the ones here do hang out with very enchanted people.

Wolfwalkers
Friday, Apple TV+

TELEVISION REVIEW | JOHN ANDERSON

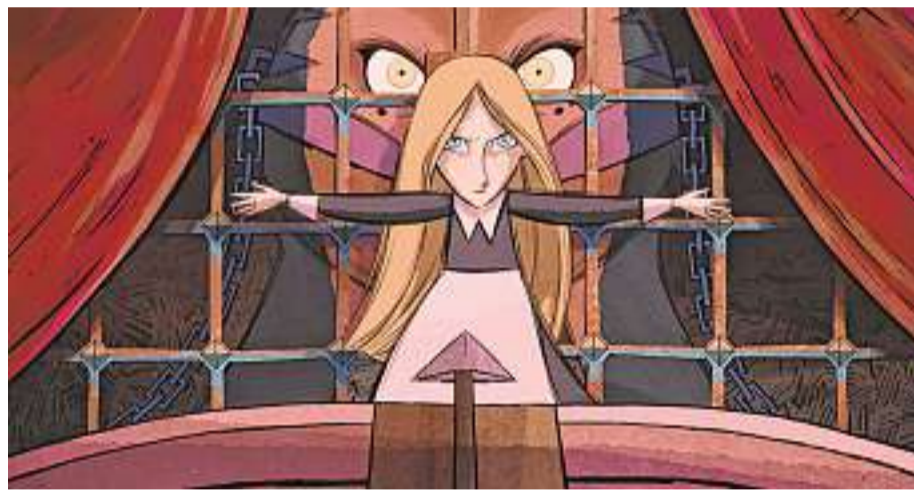
An Irish Enchantment

'Wolfwalkers' roots its fantastical story in the island's tortured history

Family entertainment often means something parents can sit through without clawing the armrest off the couch. But the animated "Wolfwalkers" is a different sort of beast. With its enchanted forests, shape-shifting wood sprites and a plucky heroine named Robyn Goodfellowe, the film is terrific fare for kids. But the underpinnings of its fantastical story lie in tortured Irish history, English imperialism, and the use of religion to rationalize oppression; there's a hum of yearning for

a pre-Christian Hibernia of pagans, Druids and nature worship. Adults will be eager to see where it's all going to go.

Where Robyn goes, early on, is the scullery. "Work is prayer," she is told by the crone-in-chief—and it's one of the more frightening moments in a film full of formidable action, near-calamity and wolf-imperilment. The setting is Kilkenny, Ireland, in 1650—the very year that capital of the Irish Catholic Confederacy fell to Oliver Cromwell. His name is never mentioned, but he is embodied in the evil Lord Protector



(voice of Simon McBurney), who is on hand to enforce order and quell political dissent. The chief source of that dissent are the wolves who inhabit the surrounding forest, along with the Wolfwalkers—young Mebh, who sounds like a 2020 Dublin tween, and her mother, Moll (voices of Eva Whittaker and Maria Doyle Kennedy). They are human-like but possess wolf avatars that leave their sleeping bodies and

roam the troubled countryside.

Robyn (voice of Honor Kneafsey) is a recent arrival from England, having come with her Roundhead father, who is the Lord Protector's chief wolf exterminator. Robyn wants to be a wolf hunter, too, until she comes to understand the injustices being done to the wolves and the land. "What cannot be tamed must be destroyed," says the Lord Protector, who is prepared to burn down the forest if

Lord Protector calls the wolves "foul" and "wicked." In one fulminating moment he says, "By God's clarity and judgment He vanquishes thee," though nothing of the sort happens. But there's no anthropomorphizing by the movie itself: Wolves are wolves, even though the ones here do hang out with very enchanted people.

Why go to an art museum? Yes, you can usually get a good lunch there, but this isn't a trick question: You go there to look at great art, delight in it and learn more about it. Very few of us will ever own a Manet or a Mark Rothko, but you can see examples of their work hanging in American museums from coast to coast, an experience that is nothing like looking at a reproduction in a coffee-table book. Or, at least, you *could* see them: The Covid-19 pandemic has forced many major art museums to close or sharply limit their viewing capacity, and many art lovers are now understandably reluctant to visit those museums that remain open.

How, then, can people who love art continue to enrich their aesthetic lives in something like the manner to which they're accustomed? New York's Museum of Modern Art has a very good answer. "Virtual Views: Van Gogh's 'Starry Night'" is an online "exhibition" devoted to one of MoMA's most familiar and best-loved paintings. It includes an introductory video and a Q&A session with Ann Temkin, the museum's chief curator of painting and sculpture, followed by a "performative reading" by the actor-playwright Anna Deavere Smith of the correspondence between Vincent van Gogh and his brother Theo. The package also includes several other choice items, including "a cosmologist's take on the painting's famous sky."

Most art museums have only just started to think about using their websites in so invitingly elaborate a way, but "Virtual Views: Van Gogh's 'Starry Night'" is a model of how to reach out to locked-down patrons in a way that is both entertaining and illuminating. Short of actually standing in front of "Starry Night" and marveling at its beauty, I can't think of a better way to heighten your understanding of what is widely thought of as Van Gogh's greatest canvas.

That's the good news. The bad news is "Immersive Van Gogh," a 500,000-cubic-foot high-tech video installation that opens in Toronto on Dec. 21, in Chicago on Feb. 11 and in San Francisco on March 18. It makes use of 50 digital projectors to show animated versions of the "Starry Night" and several of the painter's other masterworks, accompanied by New Age-style music. The press release mauls on

SIGHTINGS | TERRY TEACHOUT

Glitch in the Museum Matrix



A view from inside 'Immersive Van Gogh,' a 500,000-cubic-foot high-tech video installation

at length about how the visitor (masked and socially distanced, of course) will "wander through entrancing, moving images...truly illuminating the mind of the genius." I haven't seen the show in person, but the extensive video clips I've viewed online suggest that attending "Immersive Van Gogh" is not even remotely like the intensely involving experience of encountering a painting up close. Instead, the work of one of the greatest of all visual artists has been turned into something more like a giant video game. The only thing that a gimmicky light show like "Immersive Van Gogh" "illuminates" is the difference between experiencing art and monetizing it.

Alas, such commercial undertakings are growing increasingly popular of late. Another one, the Noil-

and Collective's "NHKS4220 Bar Illusion," which was recently installed in New York's Chelsea Market, is based on "Nighthawks," Edward Hopper's deeply mysterious 1942 painting that shows a group of people drinking coffee in an otherwise empty all-night diner on a deserted big-city corner. The Texas-based Noiland Collective has turned "Nighthawks" into a life-size hologram-style three-dimensional image, one in which the viewer plays a part. Says the press release: "NHKS4220 Bar Illusion" plays out the scene in 'Nighthawks' as a living moment, both in the past and present. Visitors can stand at the central point of the installation and see their silhouette integrated into the artwork." Once again, though, I've looked at video clips of this techno-cheesy

installation, and my answer is: Why not just turn "Nighthawks" into a Lifetime TV movie and be done with it?

I'm not at all averse to using reproductions of major works of art to make them more familiar to those who live nowhere near the museums in which the originals are housed ("Nighthawks" hangs in the Art Institute of Chicago). Two years ago, I wrote favorably in this space about a "pop-up show" of high-quality life-size copies of nine celebrated Van Gogh paintings that toured shopping malls in six American cities. As I explained in my column, "Not only do they give you a surprisingly clear impression of what the real paintings look like, but their presentation is simple, straightforward and ballyhoo-free—and, as a sign says, you can

'come inside to get up close' to the canvases instead of being pushed aside by guards."

That, however, was a serious attempt to bring to new audiences an experience resembling that of seeing great art in person. "Immersive Van Gogh" and "NHKS4220 Bar Illusion" are something else altogether. I cannot imagine anyone seeing these electrified exercises in pure, gussied-up ballyhoo and saying, "Wow! Now I want to see some real art!" Unlike the pop-up mall shows, which are designed to foster an appetite for museum-going, they promote only themselves.

Mr. Teachout, the Journal's drama critic, is the author of "Satchmo at the Waldorf." Write to him at teachout@wsj.com.

SPORTS

The Real Queen's Gambit: Catching Chess Cheaters

Online chess has boomed during the pandemic. So has cheating—making chess narcs the game's most crucial players.

By JOSHUA ROBINSON AND ANDREW BEATON

In the year when everyone went online to play chess, and even went online to watch a TV show about chess, players developed a nasty new habit. They started cheating at chess online.

As newbies and grandmasters alike flocked to platforms like Chess.com and Lichess in 2020, administrators noticed a surge in suspicious activity unlike anything they had ever seen. So they turned to a group of nerds with expertise so obscure that there are only a handful of them on the planet: the chess narcs.

They are international masters, legal experts, and computer scientists—sometimes all three. Their job is to root out patterns that reveal the player across your virtual board might be reaching for outside assistance. They're the reason chess has been able to make the once unthinkable leap from an over-the-board game with waning popularity to wildly popular e-sport in a matter of months.

"It's a constant fight," said Emil Sutovsky, the director general of FIDE, the chess's world governing body. Without the chess police, "it would be impossible to host any serious events."

The moment countries across the world began locking down because of the pandemic, online chess exploded. And while the world's top players had to flee a tournament in Siberia back in March, the most popular chess websites suddenly had to grapple with regulating online contests in which anyone with a smartphone can beat Garry Kasparov.

The chess narcs did more than just ensure online games were fair. They made sure that chess could make the biggest transition in its 1,000-year history. They beefed up complex algorithms to detect suspicious moves. They installed intricate video monitoring systems in players' homes. They reviewed literally hundreds of millions of games—and caught tens of thousands of chess cheats, including grandmasters.

In November alone, Chess.com closed 18,511 accounts for violating the site's fair-play rules. That's thousands more than any month in the company's history—and it happened to come in the same month that a Netflix show about chess, "The Queen's Gambit," proliferated as the most popular streaming show in the U.S.

The data showed something curious. More people were playing chess. Yet the fair-play violations were surging even faster than the number of overall games. "Which makes us think that there's been an uptick in the rate of cheating," said



World chess champion Magnus Carlsen (top-left) plays an online match against Hikaru Nakamura. 'I don't go out looking for trouble,' says chess cop Ken Regan (below).



Gerard Le-Marechal, head of cheat detection for chess.com.

That this is even an issue in chess today is a testament to the progress chess engines have made over the past 30 years. Powerful programs that were once deployed only for high-level exhibitions of man vs. machine are now accessible to any glorified checkers player with Wi-Fi.

"What happened with the computer programs becoming better than humans and chess not adapting definitely stunted the potential of chess online for at least a decade," said Hikaru Nakamura, the world's top-rated blitz chess player.

That's also why chess insisted on primarily staging in-person events until the pandemic. Using technology to cheat in over-the-board tournaments usually required a small-scale conspiracy. Famous cases have involved hidden devices, audience members with secret phones, and even spectators communicating moves based on where they're standing.

But on the internet, no one knows you're a fraud. "That's where the algorithm and secret sauce does its heavy lifting," Danny Rensch, chess.com's chief chess officer, said.

Chess.com has a team of two dozen people constantly tinkering

with complex codes that review more than 5 million games a day on the platform to root out this behavior from middling pawn pushers to the game's elite. Its most basic systems search for how often a player matches the moves from popular computer engines. Its advanced ones are so intricate that they essentially decode a player's chess DNA by understanding their abilities and tendencies so well that it can flag when moves stray too far afield.

Rensch concedes there may still be players cheating and getting away with it. They close an account only when they have irrefutable, statistical proof they're right. The systems were proven when they flagged several of the world's top-100 players for cheating—and those players subsequently confessed.

"There's no way seven years ago I would've closed a player in the top 100," Rensch said.

The algorithms are buttressed by requirements that players turn on a minimum of two cameras—one showing their face, another from behind them—and share their screens while playing to prevent them from consulting other sources.

There are now online tournaments featuring the likes of world champion Magnus Carlsen with hundreds of thousands of dollars on the line enabled by this fast-growing cheat-detection infrastructure. But the modern genesis of this cottage industry dates back more than a decade to a scandal known simply as Toiletgate.

The controversy erupted at the 2006 world championships when Vladimir Kramnik, of Russia, was accused of taking a suspicious number of bathroom trips. Though no wrongdoing was proven and Kramnik went on to win the title, the incident caught the attention of a computer scientist—and an international chess master—in upstate New York. His name is Ken Regan and he became obsessed with flushing out cheaters.

"I saw the game I love potentially cracking apart," said Regan, an associate professor of Computer Science and Engineering at the University at Buffalo. "I'm not a vigilante by any means. I don't go out looking for trouble."

Trouble comes looking for him. Before the pandemic, Regan would personally investigate a handful of tournaments a year. Now, he says, the volume of online play he's asked to sift through is "more than I can bear." In 2020, Regan alone has processed more than 80,000 performances.

The underlying principle is based on evaluating a player's chances of finding the best possible move over the course of a game. Sometimes that move will be obvious. But in key situations, finding the optimal move can require a level of forethought that is beyond the capacity of most humans working with a time constraint. Finding those marginally better moves over and over is what raises the alarm.

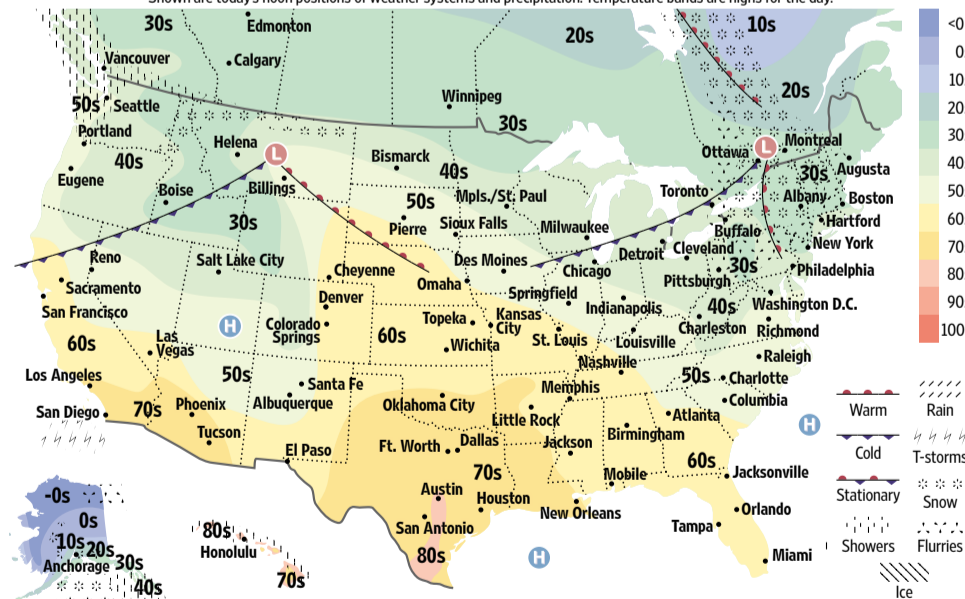
In one infamous September incident, Armenian grandmaster Tigran Petrosian—not to be confused with Armenia's greatest player ever, also named Tigran Petrosian—was pinched for cheating in the semifinals and finals of an event. (He denies wrongdoing.) Petrosian received a lifetime ban from chess.com and the Pro Chess League, a team competition.

TIMMY HUYNH/WSJ (TOP); DOUGLAS LEVERE/UNIVERSITY AT BUFFALO (BOTTOM RIGHT)

Weather

AccuWeather Plan your week | Get the NEW app

Shown are today's noon positions of weather systems and precipitation. Temperature bands are highs for the day.



U.S. Forecasts

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

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

International

Today (Hi, Lo, W) Tomorrow (Hi, Lo, W)

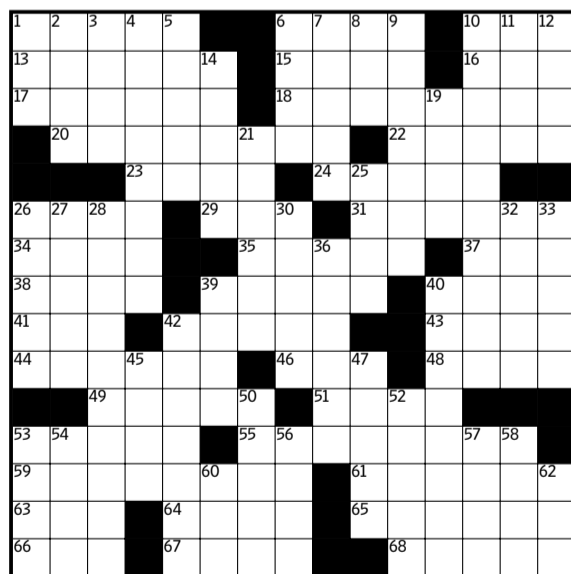
Table with 3 columns: City, Today (Hi, Lo, W), Tomorrow (Hi, Lo, W). Lists international cities and their weather forecasts.

Today

Today (Hi, Lo, W) Tomorrow (Hi, Lo, W)

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

The WSJ Daily Crossword | Edited by Mike Shenk



SPY VS. SPY | By Kathy Bloomer & Jeff Chen

- Across: 1 Chutney ingredient, 6 Letters that encapsulate the Tesla/Edison conflict, 10 Tanning tub, 13 Poirot or Holmes, 15 Ancient Chinese dynasty, 16 Windows program file extension, 17 Explain at length, 18 Angry sprees, 20 *South Sudan became the 193rd in 2011, 22 Zeros, essentially, 23 Syndicated columnist, Bombeck, 24 Mustard-making center of Burgundy, 26 Basic boat, or boatload, 29 Official lang. of Liberia, 31 *Scam artists, 34 Atmosphere, 35 Cut from the same cloth, 37 Water, in 24-Across, 38 "Dancing With Myself" singer Billy, 39 Adversary, and a phonetic hint to trigrams within the starred answers, 40 Sci. school, 41 Tina's "30 Rock" role, 42 Scheming, 43 Snooker sticks, 44 Waxy compound, 46 Denial from Degas, 48 "Put a tiger in your tank!" advertiser, 49 Org. that tracks Santa's progress, 51 Poland's Walesa, 53 *Not fully achieved, 55 Kids' brand that offered Batman briefs, 59 Plays some tunes, 61 With 52-Down, betrayal, and what's formed by each pair of the trigrams, 63 ___ pro nobis

- 64 Boatloads, 65 At the same time, 66 Zero, 67 Superior sort, 68 Oozes, 21 Yogurt choice, 25 Distasteful, 26 Limited support?, 27 Tax cheat's worry, 28 *TV dinner, perhaps, 30 Occupant of Friendship 7, 32 Facilitates, 33 Loony, 36 "You've convinced me" Dürer, 39 Noted first name in jazz, 40 Miller lager brand, 42 Gateways, 45 Eurasian deer, 47 P. Diddy's "I ___ Girl", 50 On account of, 52 See 61-Across, 53 Japanese wheat pasta, 54 Japanese seaweed, 56 Agcy. that analyzes black boxes, 57 Conical wind, 58 Unappealing chow, 60 Family boy, 62 Low USN rank

Previous Puzzle's Solution



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

OPINION

A Nasdaq Chief's Diversity Stunt



BUSINESS WORLD
By Holman W. Jenkins, Jr.

It was always possible that Donald Trump's relentlessly meretricious self-promotion would have the opposite of the effect on "norms" that the hand-wringers fretted about. But there is also evidence, we must admit, for the counter theory.

In corporate America at least, CEOs are still expected to present themselves as humble servants, not as main chancers. Then there's the Nasdaq stock exchange's decision to branch into social policy with its proposed requirement that listed companies meet Nasdaq CEO Adena Friedman's goals for diversity on their boards.

Let's count the absurdities. Shareholders of listed companies elect their boards and are already free if they choose (and some do) to promote diversity goals. Voters elect legislators at the state and federal level who, if they think the public favors it, can pass affirmative-action mandates.

Nobody elected Nasdaq, as even Ms. Friedman seems mutely to concede. Though noncompliant companies in theory could be kicked off the exchange, they won't be, she says. They will be required to explain publicly why they aren't complying. (Here's hoping many will say it's because

their self-respecting board members refuse to honor Ms. Friedman's demand that they "self-identify" by race, gender and sexual orientation.)

Only two years ago, on being named to the job, Ms. Friedman literally pounded a table to insist her overriding goal would be to reduce the bureaucratic disincentives that make a public listing so unattractive to young companies. One wonders which prospect of an open Senate seat changed her priorities. (Leaping to mind is 77-year-old Ben Cardin's in Maryland, where Ms. Friedman lives and her family has long been socially prominent.)

Because your cynicism is not yet complete, did I mention that she wants the Securities and Exchange Commission not only to approve her rule but apply it to other exchanges and even private companies so Nasdaq won't be uniquely inconvenienced by its boss's foray into identity-politics brand-building?

Or that, even as Nasdaq has failed to reverse a decline in listings, she has been promoting a partnership with the diversity consulting firm Equilar and her own Nasdaq Center for Board Excellence to peddle the kind of diversity services companies might need under her new rule?

Maybe the public will end up buying Nasdaq's diversity stunt but voters sometimes get their fill of cynicism. Witness the abortive rise of Richard Cordray, the Ohio

politician whose meteoric career stopped soaring after he authored a series of unseemingly racial shakedown as the first head of the Obama Consumer Financial Protection Bureau. Or recall the equally sad fate of Hubert Humphrey III after he associated the most illustrious name in Minnesota politics with the skeezy 1998 national tobacco settlement.

Americans tire of seeing institutions misused for personal aggrandizement.

Nasdaq perhaps hasn't joined the media in starting to notice that last month's election can be read as a rejection of the Trumpism of the Democrats as much as it was the Trumpism of Mr. Trump.

Honor is the word we're reaching for. After Mr. Trump, after Adam Schiff, after Mazie Hirono's insane insistence that rape charges against any Republican are always true, after James Comey, the public is perhaps ready for something different.

There's absolutely nothing wrong with diversity. That's why so many con men, fraudsters and cynical self-promoters are attracted to it. No sensible person doesn't think America has been missing out on the untapped gifts of large

sections of its population, in some cases because of bigotry and in some cases because of what somebody once called the soft bigotry of low expectations.

Other Wall Streeters, though, have funded charter schools and scholarships to help disadvantaged youngsters make their own way, in line with their own gifts and dreams, rather than as future candidates for tokenism and cronyism. Loading everyday life with even more identity-politics paranoia is the last thing America needs. Or turning its most accomplished business leaders into beneficiaries of social promotion. Or metastasizing more examples of elite favoritism for the public to be repulsed by. Never mind papering America with yet more rules of the sort that require a 271-page Nasdaq proposal to explain. Even California's liberal electorate signaled last month that crude and invidious affirmative action should remain a thing of the past.

Nasdaq already has an important role in American life, providing liquidity for businesses and their shareholders. If Ms. Friedman can be persuaded to attend to her day job, perhaps it can even win back for small investors some of the opportunities that now go to superwealthy private-equity types. If the diversity rule was her play for the personal spotlight, though, she may not be as ready for prime time as she thinks she is.

States and Cities Deserve Taxpayer Support



POLITICS & IDEAS
By William A. Galston

As Congress presses to complete an emergency Covid-19 relief bill, aid to states and localities continues to be a point of contention. But the novel coronavirus respects neither geographical boundaries nor partisan affiliations. Heartland states that thought they were safe turned rapidly into hot spots. As the costs of caring for the sick and trying to protect the healthy have surged, tax revenue has declined sharply. Most states and cities have responded by cutting their budgets while hoping for some assistance from the federal government. Without it, they will be forced to make even deeper cuts.

These cuts matter because governors and mayors are mostly in the business of delivering services their constituents need. No federal relief means less funding for education, roads, courts and police, firefighters and motor-vehicle departments. Libraries and public parks will be on the chopping block, as will the fight against opioid addiction. State and local payrolls, which have shrunk by 1.3 million, will be cut further, reducing consumer purchasing power and

putting jobs in the private economy at risk.

This is a humanitarian challenge but also a macroeconomic problem. Reduced state and local revenue slowed the recovery from the 2007-09 recession, and the Federal Reserve chairman isn't alone in fearing that it could happen again. Job creation has slowed for five consecutive months, and the economic recovery from the pandemic shock threatens to stall with employment almost 10 million jobs below its peak in February. The official unemployment rate is still high, and it would be higher if not for the distressing decline in labor-force participation. Millions of discouraged Americans have left the labor force, and a slow recovery will make it even harder to get them back into it.

Despite what some politicians are saying, federal assistance wouldn't be a "blue-state bailout." Some of the reddest states are among the hardest hit, not because they spend profligately but because their economies are especially vulnerable to disruption by the pandemic. Revenue in states that depend on energy taxes—Alaska, Wyoming and North Dakota, among others—have been hit hard by declining oil prices, as have revenues in states such as Florida that rely heavily on tourism.

Not surprisingly, governors

have joined forces to advocate for continued federal assistance. The National Governors Association represents all 50 governors, 26 Republicans and 24 Democrats. On Dec. 4, the NGA's leaders—New York Democrat Andrew Cuomo and Arkansas Republican Asa Hutchinson—issued a statement on behalf of its entire membership. It reads in part:

Covid relief is no 'blue state bailout.' The virus doesn't respect political boundaries.

"Governors have been on the front lines since the beginning of the pandemic, procuring lifesaving medical and personal protective equipment, establishing field hospitals, and providing economic relief to small businesses and workers. But this is a national crisis, cutting across geographic, economic and demographic lines, and it demands a national, bipartisan solution. Congress should not leave Washington for the holiday recess without enacting a much-needed COVID relief package."

The nation's governors had a specific suggestion: Congress should come together around the \$908 billion bill produced by a bipartisan coalition in the

House and Senate. The package omits items that many Democrats support, and includes measures that many Republicans oppose. It is smaller than House Speaker Nancy Pelosi would like, and larger than Senate Majority Leader Mitch McConnell wants. It is, in short, a compromise. It has been so long since one has been seen that many elected officials can't recognize it.

Govs. Cuomo and Hutchinson made it clear that they regard this bill as a down payment on a larger effort. "We look forward to working with Congress and the new Administration in the new year on a more comprehensive COVID relief package," they wrote. No doubt some born-again deficit hawks will resist.

But this is a battle for another day. Right now, without emergency relief, millions of Americans face the termination of their unemployment benefits. Small businesses that have exhausted the loans they received through the Paycheck Protection Program will be forced to close. Renters and homeowners who can't make their monthly payments face eviction. And state and local officials will be compelled to slash support for the public services on which their constituents depend. In these circumstances, assistance to states and localities should not be controversial.

No More Bishop Nice Guy

By Matthew Hennessey

The Bronx, N.Y.

The Supreme Court smacked down Gov. Andrew Cuomo's arbitrary limits on church attendance in certain Covid hot spots late last month. The decision was a welcome reprieve for religious leaders, who have for the most part bent over backward to accommodate pandemic restrictions imposed by civil authorities. But enough is enough. America's churches should reopen fully, and they should do it now.

Anyone who thought the high court's 5-4 ruling would end government attempts to squeeze the right to free exercise of religion was wrong. Mr. Cuomo dismissed the decision as "irrelevant" and "political." California Gov. Gavin Newsom has imposed a 10 p.m. curfew, which would seem to place midnight Mass in the category of a criminal conspiracy.

They canceled Easter. Is Christmas next?

At my Catholic parish in the North Bronx, the requisite masking is in effect, hand sanitizer is everywhere, and the old regulars are social dis-

tancing in the pews. What's missing are the children. Our parish is healthy. We have a dynamic pastor, several faithful priests, and a vibrant neighborhood loaded with kids and families. During normal times, the 10:30 a.m. Sunday Mass would feature a children's choir and a corps of young altar servers. It would be held in the auditorium of

Religious leaders have been too deferential to unreasonable Covid restrictions.

the parish high school next door, to accommodate a bulging congregation of mothers with strollers and fidgety tweens in soccer uniforms.

They're all gone. The choir is on ice, and a lone adult serves the priest at the altar. Few in the pews are under 50. Perhaps young families have adjusted their schedules and are attending Mass in smaller groups, at different times, or watching online from home. I fear, however, that Catholics who are only marginally at-

tached to the church are slipping away.

It's an unfortunate reality that some Christians only attend services twice a year even when there's no pandemic on. This year that minimal connection is in danger of being severed.

America's religious leaders should hear alarm bells. In our aggressively secular world, it doesn't take much to break the habit of regular worship. Communities of faith can't survive without children.

The shuttering of churches in the spring caused untold pastoral damage. Thousands suffered and died alone, without the comfort of a bedside spiritual adviser or a priest to administer the sacraments. The departed went to eternal rest without the funeral masses and family gatherings that are so important to mark the passage of a life. When restrictions were lifted, sign-up sheets and parking-lot services did little to bring the faithful back.

We are lost lives have been saved by keeping the churches half-empty. Do we know how many souls have been lost?

As a Catholic raising five children in the faith, I'm par-

ticularly concerned with the future of my church. Restaurateurs and small-business owners are fighting like hell every day to preserve their livelihoods. It's inspiring to see ordinary people stand up to bullies like Messrs. Cuomo and Newsom. But what are America's bishops doing to inspire their flocks? What will they do? We are tired of watching our leaders kneel before junior-varsity Caesars.

There is no evidence that the virus is spreading in the churches, so my message to these bishops is this: Show some backbone. Open the churches. Get rid of the sign-up sheets. No more roped-off pews. No more 25% capacity. Call the faithful, young and old, to communion. Let the civil authorities try to shut it down. Chain yourselves to the altars if necessary. Be the heroes we need you to be.

The alternative is subservience. The alternative is empty pews forever. The pandemic generation may never come back.

Mr. Hennessey is the Journal's deputy editorial features editor.

BOOKSHELF | By Moira Hodgson

Making Her Own Black List

Friends and Enemies

By Barbara Amiel
(Pegasus, 592 pages, \$29.95)

Barbara Amiel is the wife of Conrad Black, the newspaper tycoon who was convicted of fraud and went to prison in 2008. Now, a year and a half after his pardon from President Donald Trump, comes her memoir, a tome nearly 600 pages long. When it comes to those who have crossed her, the word "pardon" is not in her lexicon.

Ms. Amiel leaves no score unsettled in this waspish, often scandalous, gossipy, vengeful, intimate chronicle of her tumultuous life (there's even a "friends and enemies" list at the end). It's also disarmingly frank, funny and very well written.

Lord Black of Crossharbour (his full title when he was made a life peer in 2001) was chairman of Hollinger International, the media company that owned, among other publications, the Daily Telegraph and the Chicago Sun-Times. After their marriage in 1992, the Blacks led a life of extraordinary opulence: Lincoln Center galas, A-list parties, two private jets, mansions in Kensington and Palm Beach, an apartment on Park Avenue and a house in Toronto.

Then, in 2003, things started to unravel as investigations began into Lord Black's financial dealings.

Ms. Amiel, who is now 80, was no stranger to adversity. She had a difficult childhood, growing up during the Blitz in Hendon, a suburb of London, and encountering anti-Semitism at an early age. Her parents divorced when she was 8. Three years later, her stepfather moved the family to Hamilton, a steel town in Ontario. Her mother made frequent attempts to kill herself. When Ms. Amiel was 14

she left home, continuing high school while living in rented rooms. Her natural father committed suicide. She started using codeine, a morphine derivative. "After taking the tablets my spirits got a hit of euphoria . . . All I needed then were an occasional couple of pills. All I need now are a couple or at max three or four a day." She swallows them with a cocktail of Carnation evaporated milk and Ribena, the blackcurrant drink given to British children. Where on earth did she come up with that concoction? She doesn't say.

Before she became Lady Black, Ms. Amiel had a hugely successful career in journalism. In 1983 she became the first woman editor of a daily Canadian newspaper, the Toronto Sun. She married three times and moved to London, where, in 1986, she became an outspoken conservative columnist for the Times. After 9 years, she went to the Daily Telegraph. She was beautiful, addicted to "raiment," and had a succession of lovers, including a toy boy "so physically perfect a specimen that you really wanted to put him nude on the mantelpiece." She declares: "The perception of me was that of a cool seductress, rippling and swirling through life. And perhaps when you so describe yourself in spite of yourself, some of the cheaper characteristics do rub off on you."

They do indeed. Modesty is not one of the attributes of this latter-day Becky Sharp. She writes unblushingly of an encounter with a Doberman who licks whipped cream, "probably horrid artificial stuff," off her naked body in a stranger's apartment. She relates how in London she meets the well-connected party-giver, 68-year-old book publisher George Weidenfeld. She finds him physically repulsive. However, "being with him, I thought rather calculatingly, gave me access and some status." So she dutifully gets down to business.

A gimlet-eyed chronicle of a glamorous and tumultuous life in journalism that spares no one, least of all the author herself.

The affair with Weidenfeld brought her third marriage to an end, after which she was clinically depressed for two-and-a-half years. Then she met Conrad Black. He made the decision to marry her, she writes, when they drove in a Bentley back from a Wiltshire weekend and she requested that he arrange her place at a dinner he was planning. She wanted to sit next to publishing mogul Robert Maxwell (now deceased) so she could ask him for a job. When Lord Black proposed a few weeks later, they hadn't even exchanged a kiss. The marriage took place in Chelsea, followed by a lunch given by Ambassador Walter Annenberg at Claridge's in honor (seriously) of the Queen Mother.

After the wedding, Ms. Amiel is thrown into "a maelstrom of entertaining and being entertained" by celebrities and billionaires. "Just bring patio jewellery," Texan philanthropist Lynn Wyatt says as she proffers an invitation to her villa near Monte Carlo. Ms. Amiel writes: "Patio jewellery, it turned out, meant huge, perfectly spherical and polished turquoise beads alternating with full-cut diamonds." When banker Jacob Rothschild inquires whether the heavy tiara she's wearing as a necklace is uncomfortable, she replies, "Diamonds, Jacob, are always comfortable." She tells an interviewer at Vogue that as a girl she was forced to wear hand-me-downs. So now, she confesses, "I have an extravagance that knows no bounds." This comment, inevitably, she lives to regret.

One day, walking along the sand in Palm Beach with Ghislaine Maxwell (currently awaiting trial on charges of sex trafficking for the late Jeffrey Epstein), the two women discuss how many bathrooms they have. Ms. Amiel reports, "Mine came to an astonishing thirty-nine."

It comes as no surprise to read that she runs into flagrant anti-Semitism in that WASP haven. At a party she hears it proclaimed outright: "'You understand,' said the tall red-trousered man with harmonizing bright reddish face who was the very first guest I encountered, 'we simply can't let the Jews into Palm Beach.'"

When Ms. Amiel recounts how quickly her society friends and money melted away after her husband's indictment, it's hard not to feel some sympathy for her. Yet the second half of her book, which is devoted to a nonstop detailed account of the trials, betrayals and legal proceedings, is a slog.

Lord Black spent around three years in jail. After the pardon, Ms. Amiel writes, "for Conrad, the best revenge really was to enjoy life." But that's not her style. "For me, the only revenge would be to see our persecutors guillotined."

Ms. Hodgson is the author of "It Seemed Like a Good Idea at the Time: My Adventures in Life and Food."

OPINION

REVIEW & OUTLOOK

The Fannie and Freddie Conundrum

Politics sometimes requires choosing the least bad option. That may be the best way to assess the Federal Housing Finance Agency's (FHFA) eleventh-hour push to release government-sponsored enterprises Fannie Mae and Freddie Mac from their 12-year captivity.

In a better political world, the housing godzillas would have been unwound after the financial crisis. Recall Congress created the GSEs to guarantee mortgages with the purpose of increasing liquidity to the housing market. Their implicit government backstop allowed them to expand their footprints and leverage, which yielded enormous profits.

When the housing bubble burst, Fannie and Freddie were stuck with enormous losses on toxic mortgages. At that point they should have been placed in receivership. But the Bush Treasury opted for conservatorship under regulatory control by the FHFA.

With a \$190 billion injection from Treasury, they gained a new lease on life. In return, Treasury received preferred senior stock, which the giants were supposed to pay a 10% dividend on liquidation preference, and warrants to acquire 79.9% of common shares. The GSEs were also supposed to pay a fee for the government's open-ended credit.

Because they were unable to pay the required dividend or fee, Treasury in 2012 began sweeping their net earnings. Fan and Fred shareholders on Wall Street argue that the government has unfairly appropriated hundreds of billions of dollars in profits. But Treasury still hasn't come close to being repaid what it was originally owed under the 2008 agreement for rescuing the giants.

The GSEs also owe their profits to their taxpayer backstop, which allows them to underprice competitors. Their business model is essentially to privatize profits and socialize risk. In good times, shareholders and executives make out like bandits while taxpayers pay for losses in the bad times. Idaho Sen. Mike Crapo and former Texas Rep. Jeb Hensarling have tried to roll reform up Capitol Hill only to have it crash back down as soon as Fannie and Freddie mobilize their friends in the housing lobby.

* * *

All of this is context for negotiations now taking place between Treasury Secretary Steven Mnuchin and FHFA Director Mark Calabria to release the GSEs before they are sufficiently reformed or recapitalized. Mr. Calabria's term ends in 2024, but the Supreme Court is hearing a case Wednesday about limits on the President's ability to remove the FHFA head at will.

Joe Biden would likely replace Mr. Calabria with a more permissive overseer like Obama-appointed director Mel Watt, who lowered GSE

underwriting standards while blessing a Fan and Fred end-run around statutory limits on executive compensation.

Hence, Treasury and FHFA are considering a consent order between the GSEs and FHFA that could end government conservatorship of Fannie and Freddie while binding both the Biden Administration and

GSEs. Financial regulators often use such orders to compel reforms at undercapitalized or non-compliant banks. Fan and Fred are both.

Mr. Calabria recently finalized a capital rule that would require the GSEs to hold a combined \$283 billion cushion against losses. They now have a paltry \$35 billion. The GSEs and housing lobby complain the rule is too onerous and will no doubt push the Biden team to weaken it.

A consent decree could hard-wire strict capital requirements so Biden appointees couldn't water them down. It also could and should include limits on the GSE investment portfolios, guarantee activities (e.g., no cash-out refinances and vacation homes) and dividends. If the GSEs are to be released, they need to be kept on a tight leash.

* * *

Predictably, the GSEs, Wall Street investors and housing lobby are mobilizing their friends in Washington. The housing lobby would prefer to keep the GSEs enslaved to a Biden Administration so they can be used to juice housing. To increase their capital, Fannie and Freddie would have to raise the fees they charge for their loan guarantee, which could crimp profits for mortgage originators. Higher fees and restrictions could also take some wind out of the refinance boom. None of this will do much harm in a roaring housing market.

Meanwhile, Wall Street investors want the Trump Administration to release the godzillas without chains. It could take the GSEs a decade to retain enough capital to meet Mr. Calabria's rule. Selling new shares could help them raise capital faster and pay dividends sooner, but restrictions on activities will limit the return on equity. Given their implicit government guarantee, this is hardly too much to ask.

Some Members of Congress argue that GSEs haven't fully repaid taxpayers. Fair enough, and a consent order should require the GSEs to pay for their implicit government backstop and Treasury's senior preferred shares over time. They shouldn't be allowed to pay dividends until they do.

But the risk to taxpayers now of keeping Fannie and Freddie in government captivity probably outweighs that of releasing them with a ball and chain. A consent order, unfortunately, won't last forever. But if Congress can't muster the political will to end their guarantee, then Mr. Calabria's plan is the least bad policy.

Chuck Yeager

There aren't many giants in American life, and on Monday we lost another. Chuck Yeager, the first man to travel faster than the speed of sound, died in his home at the age of 97.

In 1947, Yeager, a young Air Force pilot from the little town of Hamlin, W.Va., was chosen to fly a rocket-propelled plane, the Bell XS-1, on a supersonic flight over the Mojave Desert. On October 14 he flew the plane, which he named Glamorous Glennis after his wife, at a speed of Mach 1.06—700 miles per hour. The night before he had broken two ribs by falling off a horse, and he could barely reach up to seal the hatch, but only his wife and a close friend knew about it.

In a 1985 memoir, Yeager famously expressed his sense of disappointment at crossing the threshold of sound and creating the world's

first sonic boom. "And that was it," he wrote. "After all the anticipation to achieve this moment, it really was a let-down."

But by then he had defied death more often than anybody knew. As a pilot in World War II, Yeager shot down at least 13 enemy fighters. He once downed five German aircraft in a single day. Yeager was shot down himself over France, but made it across the Pyrenees and into Spain, sometimes disguised as a peasant and carrying a wounded companion. When the war ended, Captain Yeager was 22.

He led missions in the Korean and Vietnam Wars, too, and spent a well-earned retirement giving speeches and conducting himself with decency and honor. Chuck Yeager was an American of an older, rarer kind: ready to take a risk for his country, courageous beyond measure, utterly without pretense.

Trump's Defense Bill Kamikaze Run

President Trump deserves credit for rebuilding America's armed forces, so it's a pity his parting shot is a veto spectacle over a defense policy bill. Mr. Trump won't extract what he wants but he might harm some of his own priorities with friendly fire.

Congress this week is voting on the 2021 National Defense Authorization Act, which sets policy outlines for the military and national security. This year's iteration includes several good provisions toughening U.S. China policy. One establishes a Pacific Deterrence Initiative that authorizes \$2.2 billion for, among other things, putting more military assets in China's backyard and conducting exercises with allies.

The bill also authorizes programs for overhauling an aging nuclear deterrent, a Trump priority. "We cannot overemphasize the immediate need to modernize our nuclear delivery systems and stockpile," civilian and uniformed defense officials told the Senate in testimony in September. They warned that "decades of deferred investments in nuclear warheads" and surrounding infrastructure has stretched systems "well beyond their original service lives."

Not all of the bill is worth passing, and a veto threat from President Trump wouldn't have been a kamikaze run if it were over more investment in hypersonic missiles or more ships. But Mr. Trump has taken the defense bill hostage in his crusade against social-media companies, saying that he won't sign it unless it includes a repeal of Section 230 of the Com-

munications Decency Act of 1996.

Section 230 might deserve some limits given how broadly courts have interpreted its liability protections, as Justice Clarence Thomas recently argued. But eliminating it could have major economic consequences that Congress might later regret, and this shouldn't be rushed through with only token debate.

The authorization looked poised to pass the House at our deadline and is expected to pass the Senate. But an open question is whether the House and Senate can muster the two-thirds majority required to override a veto. Some Republicans will be reluctant to buck President Trump even now, and some Democrats may think they can extract more of their priorities by reopening negotiations in January with a new Congress and President.

A particular headache is that hazard pay and certain other types of special pay for service members expires at the end of the year. According to estimates provided to us by the House Armed Services Committee, a lapse in January would put at risk the hazard pay received by nearly 250,000 service members. The media will inevitably blame Republicans.

Making the Pentagon wait on politics to get going on projects also inevitably results in the delays and inefficiencies that Mr. Trump has rightly criticized. The larger risk of failure now is that come January Joe Biden and Nancy Pelosi will remake the outline in ways that weaken the nation's defenses.

LETTERS TO THE EDITOR

Nasdaq Defends Its New Diversity Mandate

The opinions expressed in the editorials "The Woke Nasdaq" (Dec. 2) and "Nasdaq vs. Warren Buffett" (Dec. 3) distort Nasdaq's proposed new listing requirements. Nasdaq is not asking the SEC to "impose a quota system," nor are we "mandating" the composition of boards.

Our duty is, as your editorial says, and our proposal to the SEC outlines, to provide "transparency for shareholders."

Our proposal does precisely that: Nasdaq listed companies should disclose the diversity of their boards.

We propose that companies have at least two diverse directors: one who self-identifies as female, and one who self-identifies as either an underrepresented minority or LGBTQ+. Companies would be given time to meet this objective. Those who can't, or don't believe it's appropriate, have the option to explain why. Our proposal preserves each company's decision-making authority over its board while advancing an important dialogue among its shareholders.

Investors increasingly care about diversity and governance, as evidenced by the surge in net asset flows into ESG-focused strategies from \$4 billion in 2016 to \$40 billion in 2020. Our disclosure-based proposal provides investors with greater transparency about board composition. This only serves to enhance investor confidence in the director selection process.

Nasdaq is required by the SEC to protect investors and promote the public interest. While capitalism has shown that it can improve the lives of billions, trust and support for the markets will only be maintained if its workings and results are shared by all of society. We hope our proposal, which aims to increase transparency about diversity in corporate America, can be part of the solution.

NELSON GRIGGS
President, Nasdaq Stock Exchange
New York

With regard to Nasdaq's opening bid on board diversity, why pick just gender, race or sexual orientation as the basis for proper board diversity? What about economic class, age, work status, religion, marital status, political affiliation, union membership, area of residence, disability status, etc.? Yet even if Nasdaq sticks with its trendy, narrow policy for diversity, gender, race and sexual-orientation definitions are in flux. More than 10% of babies born in America now have one white and one non-white parent. When does one have enough nonwhite blood or dark enough shade of skin color to qualify as a racial minority? LGBTQ+ classifi-

cations touch on biological sex, gender identity, expression, presentation and sexual orientation—New York City officially recognizes 30, with some being fluid. Wall Street wants to get ahead of and capitalize on the woke curve, but should defer to social-justice political professionals who are descending on Washington and are determined to weave the perfect tapestry of diversity and inclusion for all American institutions.

R. RILEY WILLIAMS
Sarasota, Fla.

A good director may join a board when he or she knows little about the business, and then learn on the job, so to speak. But to do that a candidate must know something about how businesses work in general. A candidate who has experience in another business, brings an open mind and can read a financial statement may become a solid director. But an activist who has an ax to grind and no experience in making major business decisions or in understanding the financial structure of the enterprise is unlikely to serve the shareholders' interests well.

TIM KELLY
Naples, Fla.

You note that in its SEC filing the Nasdaq cites that "multiple studies" show that increasing the number of women on corporate boards improves financial performance. These claims tend not to be based on rigorous analyses.

These findings have recently been codified in three major meta-analyses of hundreds of rigorous academic studies. The most recent meta-analysis examined the results of 40 academic studies, and "no significant correlation [was] found." Another integration of 140 scholarly articles concluded that female representation on boards is "neither wholly detrimental nor wholly beneficial to firm financial performance." A 2015 study analyzed 20 rigorously selected peer-reviewed articles, and found that "a higher representation of females on corporate boards is neither related to an increase, nor to a decrease in firm financial performance . . . these results do not support the business case for diversity." (Notably, seven of the nine academic researchers cited in this paragraph are female.)

Advocates of quotas for women on boards—not only from Nasdaq, but also those from the state of California—should be called upon to demonstrate the financial associations that they assert. None appear to be based on rigorous academic study.

PROF. LORI VERSTEGEN RYAN
San Diego State University

The Human Cost of Massive Plant Closures

"Closed GM Factory Spawns Wave of Industrial Migrants" (Page One, Nov. 30) left me in tears, as it reminded me of my father's sacrifice for his family. In the early 1980s, my dad lost a good factory job with Clark Equipment Co. in Jackson, Mich. After two years of unemployment, he finally found another good-paying job 200 miles away with BorgWarner. During my freshman year in high school, my dad moved into an apartment in Muncie, Ind.

For much of the last five years of his life, he felt the pain and endured the challenges of being separated from his family. So much in the stories of these GM workers who left their families behind when the factory in Lordstown, Ohio, shut down—such as rooming with a workmate, taking a lot of overtime and coming home only on weekends—my dad experienced as

well. His sacrifice kept an awkward and shy 13-year-old boy from being uprooted from his friends and the only home he had ever known.

At the time, I realized the benefit to myself. However, it was only in retrospect that I appreciated the high cost that my dad paid to provide for his family with the least disruption to our lives. I thank my dad, John Mullaly, for his sacrifice. I would also like to tell the GM workers that though Lordstown no longer makes cars, from what I read, it still makes great fathers and husbands.

TIMOTHY MULLALY
Memphis, Tenn.

Louis Pasteur Had Good Advice About Luck and Life

Bob Brody's "It's Thanksgiving, as Luck Would Have It" (op-ed, Nov. 25) rightly suggests we should appreciate our good luck when good things come our way. He notes that attitudes and behavior can influence our luck, possibly steering us away from bad luck. His piece reminded me of one of my favorite ironic quotes, attributed to Louis Pasteur: "Chance only favors the mind which is prepared."

CHARLES PIPER
Lake Oswego, Ore.

Pepper ... And Salt

THE WALL STREET JOURNAL



"I think we're nearing Montana—
I'm getting an urge to
wear plaid flannel."

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OPINION

Profit Keeps Corporate Leaders Honest

By Alexander William Salter

The World Economic Forum knows never to let a good crisis go to waste. The organization behind the famous conference of politicians, executives, celebrities and “thought leaders” at Davos is now promoting an initiative called “The Great Reset.” The idea is to repack shibboleths of the technocratic center-left for the marketing opportunity presented by Covid-19.

Quite a few of these policies are dangerous, but one deserves special attention: stakeholder capitalism. Apple, Facebook, IBM and Walmart, all listed as corporate partners on the World Economic Forum website, are evidently on board with a vague and open-ended mandate for corporations to do good in the world. Yet beneath the lofty rhetoric, stakeholder capitalism is mostly a front for irresponsible corporatism. It is an attempt to siphon off cash flow from productive uses to advance the mission of “global governance” and create corporate and government sinecures for cronies along the way.

‘Stakeholder capitalism’ allows the Davos crowd to obfuscate what counts as success for a business.

Milton Friedman famously fixed the modern paradigm of *shareholder* capitalism in a 1970 article. Writing against the dangers he perceived in popular notions of corporate social responsibility, Friedman argued that the chief duty of business was “to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception fraud.” Friedman noted correctly that, in a market economy, profits represent value created for customers. In their capacity as corporate officers, businessmen could do the most good by focusing on



their bottom lines.

The self-perceived aristoi of Western liberal democracies hated this argument and have fought it ever since. Business leaders, eager to avoid the moral taint of greed, have often led the anti-Friedman coalition. In 2019 the CEOs of the Business Roundtable released a statement affirming that they “endeavor every day to create value for all our stakeholders, whose long-term interests are inseparable.” By stakeholders they mean “customers, employees, suppliers, communities and shareholders.”

As National Review’s Andrew Stuttaford notes, this vision of wide-ranging corporate beneficence introduces a host of principal-agent problems in ordinary business decision-making. Profit is a concrete and clarifying metric that allows shareholders—owners—to hold executives accountable for their performance. Adding multiple goals not related to profit introduces needless confusion.

This is no accident. Stakeholder capitalism is used as a way to obfuscate what counts as success in business. By focusing less on profits and more on vague social values, “enlightened” executives will find it easier to avoid accountability even as they squander business resources. While trying to make business about “social justice” is always concerning, the contemporary conjunction of

stakeholder theory and woke capitalism makes for an especially dangerous and accountability-thwarting combination.

Better to avoid it. Since profits result from increasing revenue and cutting costs, businesses that put profits first have to work hard to give customers more while using less. In short, profits are an elegant and parsimonious way of promoting efficiency within a business as well as society at large.

Stakeholder capitalism ruptures this process. When other goals compete with the mandate to maximize returns, the feedback loop created by profits gets weaker. Lower revenues and higher costs no longer give owners and corporate officers the information they need to make hard choices. The result is increased internal conflict: Owners will jockey among themselves for the power to determine the corporation’s priorities. Corporate officers will be harder to discipline, because poor performance can always be justified by pointing to broader social goals. And the more these broader goals take precedence, the more businesses will use up scarce resources to deliver diminishing benefits to customers.

Given these problems, why would prominent corporations sign on to the Great Reset? Some people within the organizations may simply prefer that firms take politically correct

stances and don’t consider the cost. Others may think it looks good in a press release and will never go anywhere. A third group may aspire to jobs in government and see championing corporate social responsibility as a bridge.

Finally, there are those who think they can benefit personally from the reduced corporate efficiency. As businesses redirect cash flow from profit-directed uses to social priorities, lucrative positions of management, consulting, oversight and more will have to be created. They’ll fill them. This is rent-seeking, enabled by the growing confluence of business and government, and enhanced by contemporary social pieties.

The World Economic Forum loves to discuss the need for “global governance,” but the Davos crowd knows this type of social engineering can’t be achieved by governments alone. Multinational corporations are increasingly independent authorities. Their cooperation is essential.

Endorsements of stakeholder capitalism should be viewed against this backdrop. If it is widely adopted, the predictable result will be atrophied corporate responsibility as business leaders behave increasingly like global bureaucrats. Stakeholder capitalism is today a means of acquiring corporate buy-in to the Davos political agenda.

Friedman knew well the kind of corporate officer who protests too much against profit-seeking: “Businessmen who talk this way are unwitting puppets of the intellectual forces that have been undermining the basis of a free society these past decades.” He was right then, and he is right now. We should reject stakeholder capitalism as a misconception of the vocation of business. If we don’t defend shareholder capitalism vigorously, we’ll see firsthand that there are many more insidious things businesses can pursue than profit.

Mr. Salter is an associate professor of economics in the Rawls College of Business at Texas Tech University, a fellow at Texas Tech’s Free Market Institute, and a senior fellow with the American Institute for Economic Research’s Sound Money Project.

The Economy Needs a Little More PPP

By Glenn Hubbard And Michael R. Strain

With the coronavirus surging and colder weather limiting outdoor activities, the economy needs another round of fiscal policy support. Aid to small businesses should be part of any federal package, but it should be structured somewhat differently than the original Paycheck Protection Program.

Yes, the economy added 245,000 jobs in November, and the unemployment rate fell to 6.7%. But the pace of job gains is notably slower than the 2.7 million net new jobs added in May and the 4.8 million added in June. Consumer spending is slowing, and consumer confidence is weakening. The household savings rate has plummeted since April, as consumers burn through savings. After a remarkable recovery this spring, a double-dip recession is in the cards.

The next version of the Paycheck Protection Program should focus on helping smaller firms.

That recovery was aided by PPP, created as part of the Cares Act to provide forgivable loans—essentially grants to finance operating costs—to businesses with fewer than 500 employees. Our research shows that PPP supported employment and increased financial health in the small-business sector. In addition, PPP supported labor demand and is reducing the length of the recovery by helping small businesses—the potential employers of any unemployed workers—to survive over the spring, summer and fall.

At this point, though, many small businesses are running on fumes. The next round of PPP should make four changes from its original structure:

- **Focus on smaller firms.** Our research suggests they are the most responsive and likely most in need. A 300-employee cap seems reasonable.
- **Offer stronger assurances to banks that they will be held harmless—including from ex post enforcement actions—if borrowers misrepresent themselves.** Congress should include language to this effect in the statute, but the Treasury Department should find a way to encourage banks to extend PPP loans to businesses that aren’t existing customers and help those funds get to the most vulnerable small businesses, including minority-owned ones.
- **Make publicly traded small businesses ineligible for PPP loans.** These firms have access to capital markets. They should borrow—and their shareholders should take losses—before they receive any taxpayer funds.
- **Impose a time limit.** The U.S. economy can’t lose the productive capacity of many small businesses because they couldn’t weather a once-in-a-century pandemic. But once a vaccine has been widely distributed, small businesses will need to sink or swim on their own. Those that can’t adapt to the postvirus economy shouldn’t be propped up by the government. An expiration date pegged to the wide distribution of vaccines would be reasonable.

Two ideas that have found support on the Hill should be rejected. PPP shouldn’t include revenue-decline tests, offering larger grants to businesses with bigger revenue drops. If revenue tests are forward looking, they operate as a straightforward success tax, incentivizing businesses to earn less revenue. If they are backward-looking, they offer larger grants to the businesses that are less likely to survive in the postvirus economy. Either way, the suggestions we offer are a better way to target PPP funds.

And Congress shouldn’t attempt to target particular industries. It would be a mistake to offer PPP to the restaurant industry but not to the, say, personal-care industry. Industrial policy of this sort would misallocate capital in a way that would slow the economy’s transition to a post-virus new normal. Congress doesn’t know better than markets which industries to support. PPP eligibility should be broad based, and shouldn’t favor particular industries or firms.

Congress has done a remarkable job ensuring that catastrophic losses in the small-business sector don’t cripple the economy for years to come. But the job isn’t finished. The economy needs two more quarters of PPP. And then we can put that program—and the virus that made it necessary—behind us.

Mr. Hubbard, a professor of economics and finance at Columbia, was chairman of the Council of Economic Advisers under President George W. Bush. Mr. Strain is director of economic policy studies at the American Enterprise Institute.

The Best Herd Immunity Money Can Buy

UPWARD MOBILITY
By Jason L. Riley

How much would the government have to pay you to take the Covid-19 vaccine?

For most of us, it’s a silly question. Recent polls show that around 60% of Americans plan to get vaccinated as soon as possible and need no monetary incentive to do so. The problem is that a 60% vaccination rate may not do the trick. Dr. Anthony Fauci said this week that to keep the virus from finding new hosts, social distancing should continue until 75% to 80% of the population is vaccinated.

With several vaccines on the verge of being approved, talk has understandably turned to distribution. Who should be at the head of the line, health-care workers or elderly residents of long-term-care facilities? Do we give it first to the people most likely to die from Covid or to the people most likely to spread it? At some point, these questions will have to be addressed, but they are all secondary to whether we can get enough people vaccinated.

At this point, we still don’t even know how well the vaccines will work. We know how they fared in clinical trials, but previous vaccines have proven to be less effective outside clinical settings. People who enroll in clinical trials tend, among other things, to be healthier than the public at large and easier for doctors to observe. But assuming that the vaccines are effective, how do you convince enough people to get inoculated at a time when public trust in government institutions is at historic lows?

One way to go is using carrots instead of sticks. Telling people they can’t fly or send their kids to school may work in some cases, but there’s evidence that paying people to get vaccinated might be more effective. In a typical year, less than half of American adults bother to get flu shots. But a 2015 study conducted by economists at Swarthmore College found that offering people a \$30 reward was enough to increase vaccination rates by 12 percentage points.

Paying people to get the Covid-19 shot may be the way to overcome skepticism about the vaccine.

A growing number of high-profile economists have called for using such a model to address Covid. They include Paul Romer, a Nobel Prize winner; N. Greg Mankiw, chairman of the Council of Economic Advisers under George W. Bush; and Steven Levitt of “Freakonomics” fame. A proposal floated in August by Robert Litan of the Brookings Institution would offer \$1,000 to 275 million Americans, or roughly 80% of the population, to take the vaccine. The cost would be about \$275 billion—a large number, but not in comparison to the trillions we’ve already spent battling Covid. Congress is currently contemplating yet another pandemic relief package with a price tag of at least \$900 billion.

Mr. Litan acknowledges that under such a scheme, we would be paying hundreds of millions of Americans to do something they were already planning to do. Even

so, he argues, the downside of not reaching the necessary immunity threshold is worth the risk of overcompensating people. “If the nation doesn’t get to herd immunity once the vaccine becomes widely available and has been independently validated, we’re all out of luck: the economy will continue to struggle with a weight on its chest, and American society won’t get back to normal,” Mr. Litan writes. “Any overpayment is simply part of the price Americans would have to pay, given our deep political divisions,” to “get all of our lives back.”

With mixed results over the decades, people have been paid to lose weight, stop smoking and show up on time. And while obesity, lung cancer and tardiness aren’t communicable diseases, these experiments show that with the right incentives human behavior is malleable at the margins. In an earlier era, perhaps the public could be persuaded to take the politicians and health experts at their word. Those days are long gone. When pollsters began

asking people about trust in government in 1958, about 75% of respondents said they “trusted government to do the right thing almost always or most of the time.” By 2019 that number had fallen to 17%.

Some of the resistance to taking the vaccine is driven by anti-vaxxer quackery that predates Covid. Much of it also stems from the hypocrisy on display this year by politicians who ignore their own lockdown orders, and by health officials whose social-distancing guidelines somehow exempted people who wanted to attend certain street protests but not people who wanted to attend church services.

Covid checks won’t repair this damage, but they could still help us beat back the pandemic, especially among lower-income Americans, who have expressed more skepticism about getting vaccinated. Immunologists like to say that it isn’t the vaccine that saves lives, it’s the vaccination program. The first-order problem is making sure enough people get with the program.

Paralyzed by Polio in 1951, My Mother Didn’t Give Up

By Randall Thacker

My mother, Myrna Nielson Thacker, got polio just after Thanksgiving 1951, when she was 14. She had spent the long weekend with family in Salt Lake City. On returning home 50 miles south in Spanish Fork, she experienced a fever, numbness and stiffness in her feet and legs, and excruciating pain in her back. Within a few days, she was paralyzed from the waist down.

Polio was the pandemic of the early 1950s. As with the coronavirus, many of those infected had little or no symptoms. But for about 1% of infections it entered the central nervous system, and in 1 of 1,000 cases it progressed to paralysis. Flulike symptoms created fear that you had a potentially deadly virus. Then as now, everyone was learning in real time. Doctors, nurses, therapists and scientists worked to find treatments while waiting for a vaccine.

After my mother was diagnosed by a Spanish Fork doctor, her parents took her to Salt Lake City. When a policeman pulled them over for speeding, my grandfather explained the situation. The officer escorted them the rest of the way to the hospital.

Temporary polio isolation units, like those we’ve seen erected in some coronavirus hot spots, were common. She was admitted to the

Salt Lake County Hospital’s polio isolation ward, where she had to dispose of all her belongings and any visits were severely restricted.

For a young teenager, the isolation and paralysis were overwhelming. She wrote that she could hardly sleep at night. But she noticed a light bulb in the hallway, which became a comfort to her and “taught me how important light is in lifting our spirits. It gave me something to focus on instead of the pain.”

Like Covid-19, polio greatly affected the lungs. Outside her door sat an iron lung, a 6-foot-long tank on legs, open at one end. The nurse would slide a patient in feet first, on a stretcher, and the whole body would be enclosed, except for the head. The iron lung helped the polio patient to breathe. My mother never needed it, but dozens of other patients did. Some never fully regained the ability to breathe on their own.

Polio was around for centuries but didn’t reach pandemic proportions until the early 20th century. A vaccine was finally developed in 1955. We can learn a lot from the stories of polio survivors, like my mother, who lived through that earlier pandemic and became strong and resilient human beings.

Mr. Thacker recently published his mother’s memoir, “Never Give Up: Triumphant Over Polio.”

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DoorDash Prices IPO Above Range

Delivery company raises \$3.37 billion in offering in latest sign of market euphoria

By MAUREEN FARRELL

DoorDash Inc. priced shares in its initial public offering at about \$102 apiece, according to people familiar with the matter, a sign of strength both for the meal-delivery company and the overall IPO market.

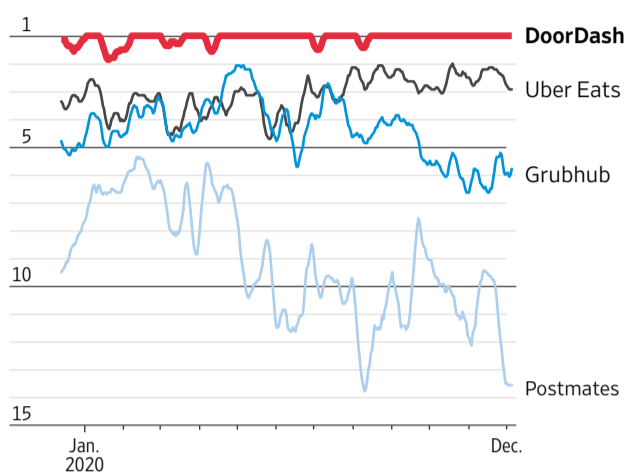
The price equates to roughly \$39 billion using a fully diluted share count and including proceeds from the offering, which raised \$3.37 billion. It is above the \$90 to \$95 a share range the San Francisco company had been targeting after boosting initial expectations it established last week.

The \$102 IPO price caps a stunning run-up in the company's valuation and marks the latest sign of euphoria in the IPO market. Earlier this year, DoorDash was privately valued at more than \$15 billion, up from \$1.4 billion in 2018.

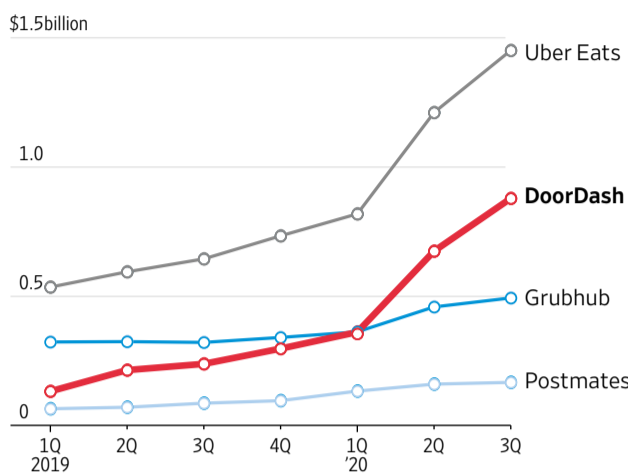
Fueled by a surging stock market and the stellar performance of recent technology listings, the IPO market has already set a record. So far in 2020, more than \$140 billion has been raised on U.S. exchanges, far exceeding the previous full-year record set at the height of the dot-com boom in 1999, according to Dealogic data that date to 1995.

Since DoorDash's roadshow began last week, investors have shown strong interest in the offering, prompting the company to boost the price range from an initial \$75 to \$85 a share.

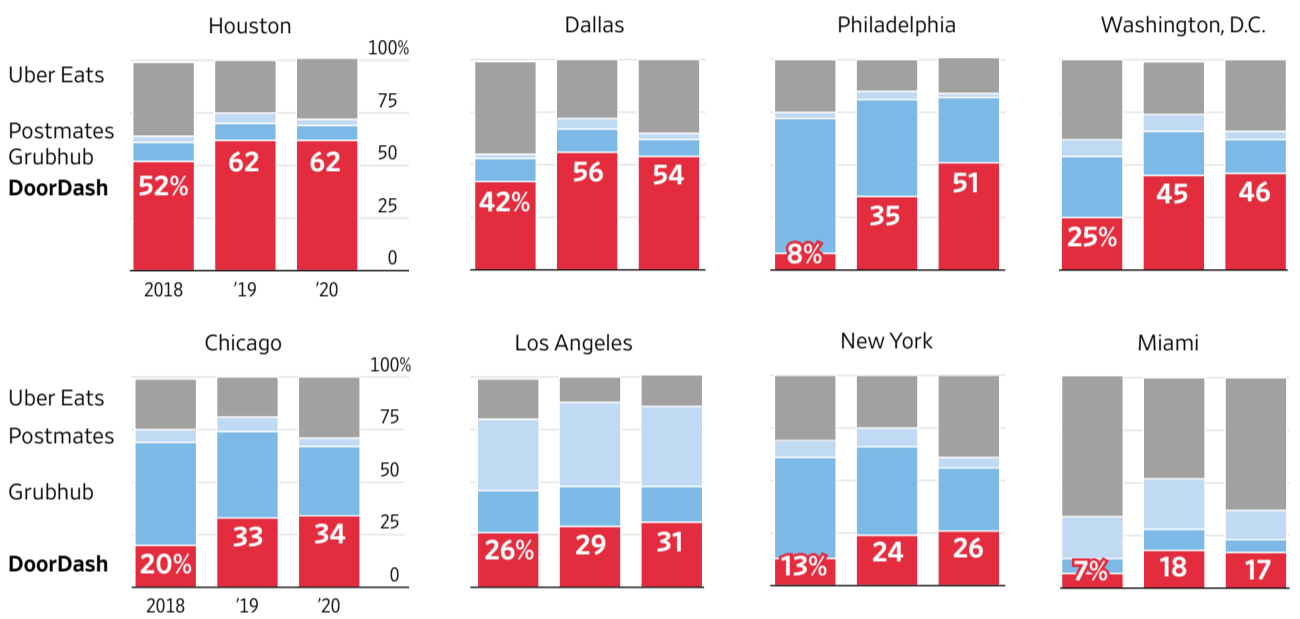
U.S. rankings of app downloads in the food and drink category, seven-day moving average*



Quarterly revenue



U.S. market share among top food-delivery companies by metro area, in the third quarter of each year



*For iPhone and Google Play Note: Uber Eats acquired Postmates in July 2020 Sources: App Annie (app rankings); the companies, S&P Capital IQ (revenue); Second Measure (market share)

Investors have been excited by the company's strong growth as consumers move away from dining in restaurants during the Covid-19 pandemic

and by its ability to conquer local markets quickly and show profits. In the quarter ended in June, DoorDash posted a profit of \$23 million

on \$675 million in revenue, though it reverted to a net loss the next quarter even as revenue jumped to \$879 million.

This week is shaping up to be one of the biggest of the year for the new-issue market. A day after DoorDash's debut, Please turn to page B4

McDonald's to End Rebate on Happy Meal

By HEATHER HADDON

Some McDonald's Corp. franchisees said they would raise prices on Happy Meals after the company revokes a longstanding rebate, escalating tensions between the fast-food giant and U.S. restaurant operators.

McDonald's said that in January it will end a roughly \$300-a-month subsidy it has paid each of its 14,000 U.S. restaurants for years to subsidize the cost of toys included in children's Happy Meals. McDonald's said it would use the money to fund other investments, including benefits for restaurant crew.

Some McDonald's franchisees said they would raise prices on Happy Meals as a result.

The children's meals sell for an average of \$3.76 nationally, McDonald's said. Franchisees could raise prices 20 cents or more to offset the cost. McDonald's executives said in a meeting with U.S. franchisees about the fees on Monday that owners are free to raise prices.

"The family business is absolutely a priority. We just believe the dollars are better invested elsewhere," said Charlie Strong, chief field officer for McDonald's U.S.A., during the call listened to by The Wall Street Journal.

Franchisees at hotels, restaurants and other consumer companies have fought with corporate offices recently over fees, promotions and supply costs. Added costs and operational changes during the pandemic have heightened those tensions.

McDonald's relations with franchisees had improved recently from the start of the pandemic as sales have grown thanks to rising demand particularly at the chain's drive-throughs. But the end of the rebate on Happy Meal toys and additional fees that McDonald's will charge franchisees related to technology have raised tensions between executives and operators again.

McDonald's and other restaurant chains are increasingly looking to technology investments to try to boost sales. McDonald's has spent on suggestive selling software in its drive-throughs, saying it is helping to boost sales. The chain plans more investments

next year, including in a loyalty program.

Franchisees said they have grown increasingly skeptical of fees McDonald's charges them for technology, including to drive-through operating systems. Technology investments cost around \$10,000 a restaurant this year, according to company data. McDonald's said that it will begin billing \$423 monthly for 12 months starting in March to recover what the company said amounted to \$70 million in uncollected technology fees dating back to 2017.

Franchisees said McDonald's hasn't sufficiently explained why the fees need to be charged now. The National Owners Association, an independent group of McDonald's U.S. franchisees, said the com-

pany hadn't properly accounted for the costs of the upgrades or proved that they are worthwhile.

"McDonald's deserves the best-in-class technology. This is not," the association said in an email to members on Tuesday.

The company said that it has been working with McDonald's franchisees for more than a year on the technology fees.

McDonald's said the fees are being added as franchisees book record cash flow and strong sales from initiatives that the company has funded, including \$100 million spent on marketing during the pandemic.

McDonald's executives acknowledged on the Monday call that they hadn't properly explained to franchisees why the fees are necessary. Please turn to page B2

Boeing Makes First Delivery of a 737 MAX Since End of FAA Ban

By ANDREW TANGEL

Boeing Co. delivered a 737 MAX to United Airlines Holdings Inc., the first carrier to receive a newly produced model of the jet after U.S. regulators ended a nearly two-year grounding last month.

A United crew took possession of a MAX on Tuesday, according to a spokesman for the carrier. It was the first of eight finished MAX planes expected to be delivered to United by end of the year.

The United spokesman said the airline would inspect and test-fly each MAX before reintroducing the aircraft back into passenger service in the first quarter of next year.

Pilots also would have to undergo new training approved by the Federal Aviation Administration.

The resumption of MAX deliveries is crucial to Boeing's effort to stop bleeding cash by the end of next year or early 2022.

The world-wide grounding since March 2019 has left Boeing unable to hand over finished MAX aircraft to customers who pay much of the sales price upon receipt.

The manufacturer had sought to resume deliveries late last year before regulators approved fixes to the aircraft's flight-control system and related pilot training. The push ultimately faltered.

The FAA lifted its MAX flight ban on Nov. 18 after it approved safety fixes, including new software changes affecting the flight-control system at the center of the two crashes that claimed the lives of 346 people. Brazilian regulators have followed suit, and other countries are expected to do the same in coming months. Please turn to page B2

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MEDIA Howard Stern signs five-year extension of contract with SiriusXM. B4

AT&T Chief Defends Move To Stream Its Newest Films

By DREW FITZGERALD AND JOE FLINT

AT&T Inc. Chief Executive John Stankey defended the decision to release all Warner Bros. movies online the same day they hit theaters next year, arguing that the film producer had to tweak a 2020 playbook that wasn't working during the coronavirus pandemic.

The telecom company's Warner Bros. unit said last week that it will release its entire 2021 film slate on HBO Max, a new film and television library designed to compete with online services such as Netflix and Disney+. The plan covers 17 movies from the science-fiction epic "Dune" to another installment of the "Matrix" franchise.

The choice shocked a film industry accustomed to releasing big-budget films in stages, with cinema owners getting the first bite. But U.S. box-office ticket sales have cratered

since coronavirus-related restrictions shut down many venues. Those that reopened are struggling to attract large audiences.

"We know we probably needed to try something different," Mr. Stankey said Tuesday during a virtual investor conference hosted by investment bank UBS Group AG. "Our feeling was, in the theatrical business, based on our best discussion with experts, we were going to be in a situation where the psyche of the population and people's willingness to go back into large venues—that's going to be a little bit of a prolonged recovery."

Hollywood and much of the creative community has reacted angrily both to Warner Bros.' strategy and to the short notice its executives gave their business partners. Theater owners fear that releasing the movies simultaneously on HBO Max and the big

Nielsen Plans Ratings Overhaul

By SAHIL PATEL

Nielsen Holdings PLC said it would replace its current TV ratings system by 2024 with a metric that incorporates digital viewing including streaming TV as well as the current traditional audiences, a shift that could transform how TV and digital video ads are bought and sold in the future.

But as the TV industry's top measurement firm tries to catch up with the way audiences watch now, it will require the approval of TV networks, walled-off tech giants and advertisers. Nielsen will also have to integrate its technology across different platforms and data sources to ensure that the information it reports is comparable across different screens, platforms and content types, industry executives said.

At stake is more than \$60 billion that is spent on TV ads in the U.S. every year, as well as tens of billions of additional dollars for digital video and streaming ads.

Nielsen plans to introduce the new measurement product in the fourth quarter of 2022 and secure its adoption by ad sellers and buyers by the start of the fall 2024 TV season. In 2021, the firm plans to start previewing the new data alongside the existing ratings product.

"2024 is when we take away the old stuff and just do it in this new way," said David Kenny, chief executive of Nielsen.

Nielsen hopes ad buyers and sellers transition to the new system earlier, but they will need to review the new data and incorporate it into their buying and selling processes before that happens, Mr. Kenny said. "I don't think we can make a change of this magnitude that affects over a \$100 billion of trading without giving the market notice and the chance to compare data and workflows," he said.

Nielsen said last month that it would soon shift from averaging viewers for all commercials within a TV program to measuring each ad individually.

It also intends to begin measuring targeted commercials—when different households see different ads based on audience data—on a national basis. Marketers and TV networks have blamed the lack of national metrics on targeted TV ads for holding back the industry. Please turn to page B2

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Nielsen to Overhaul Its Ratings

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growth of such ads. "It's measuring TV more in the way digital is measured," Mr. Kenny said of the new metric.

Nielsen has secured deals with owners of set-top boxes and smart TVs to bring in viewership data to help make the changes possible, the company said.

It will need to secure more such partnerships, said Adam Gerber, global chief media officer for ad agency Essence, a part of WPP PLC-owned GroupM.

Nielsen said it would also change its audience panels, a key tool in Nielsen's traditional TV ratings over the decades, to track viewership across devices including internet-connected TVs, mobile devices and computers.

The ability to merge the differences between the way TV and digital media ads are bought and sold has long been seen as critical among ad buyers and sellers, and Nielsen has been under pressure to improve its capabilities to address changing video viewing habits.

"This was a move that had to be made because the industry is at a breaking point in terms of its ability to function in this new environment that we live in," said Mr. Gerber. "For upwards of a decade now we have been trying to cobble together two different measurement approaches, and it doesn't work."

Ultimately, Nielsen's goal is to provide the media and ad industries with the ability to compare, for example, the metrics on the same ad that ran inside an hour-long TV episode and before a shorter video on YouTube.

But it is also going to need ad sellers and platform owners, including TV networks with major streaming services, social video tech companies and streaming-TV distributors, to play ball and be willing to share their data.

As one ad-buyer who oversees more than \$100 million in TV ad spending every year said, "Are the walled gardens OK with this?"

Representatives for TV-network groups and major ad-buying firms including Comcast Corp.'s NBCUniversal, ViacomCBS Inc., and Omnicom Group Inc.'s OMG declined to comment on Nielsen's announcement.

Roku Inc. and Amazon.com Inc., two big streaming platform operators, and Facebook Inc., also declined to comment.

Some executives said they plan to meet with Nielsen to get more details on the measurement firm's timeline and how the technology and methodology underpinning the changes would work.

Any big change in the TV advertising system will take some time as ad sellers and buyers try to update their systems, workflows and tools and get more comfortable with new processes, said Jane Clarke, chief executive of the Coalition for Innovative Media Measurement, an industry trade group that advocates for better audience measurement.

They will also want to get preview data from Nielsen to see how adopting the new system would affect their businesses.

"When you change the currency, it's a business decision," Ms. Clarke said. "It's not just a simple measurement thing; it changes all the rates you pay for everything."

"The TV industry is gradually bringing in digital concepts like data, addressability and ad measurement, but they are doing it very slowly, so they don't lose the emphasis on process, the emphasis on high-quality content, and so they can understand the business implications with every step they take," she added.

Nielsen executives said the firm is working with the Association of National Advertisers, TV ad sellers and other groups to support the transition it is planning.

Earlier this fall, Nielsen announced deals with YouTube, part of Alphabet Inc.'s Google, and Vizio Inc. to measure ad campaigns on their streaming TV platforms.

Nielsen said it would seek direct integrations with other digital platforms, including social media operators and streaming-TV providers.

Such companies have often held their user data close, and it is unclear whether they would be willing to provide enough information to cleanly compare viewership across different devices and platforms.

Nielsen said its new system will require sellers to produce a certain set of metrics, which will be audited and accredited by industry watchdog Media Rating Council, to ensure that everyone is on an equal playing field.

These companies also have an incentive to be measured with the same yardstick as television, according to Mr. Kenny.

"They are looking for third-party measurement because there is credibility in third-party measurement," he said.

BUSINESS & FINANCE

Chicken Processor Reopens Plant

By MICAH MAIDENBERG

Foster Farms, a California chicken processor, said it reopened a facility in the state after Covid-19 testing demonstrated that about 14% of its workforce there had recently contracted the virus but wasn't showing symptoms.

Over the previous two weeks, Foster Farms had found 193 employees at one of its facilities in Fresno had asymptomatic cases of Covid-19, the company said.

About 1,400 people work at the plant, and the company said it closed the plant Saturday and Sunday for deep cleaning.

It resumed operations Monday morning, according to Ira Brill, vice president of communications for Foster Farms.

For weeks before the resurgence at that facility, 1% of employees there and at another location in Fresno tested positive for the coronavirus, Mr. Brill said.

Meat producers have grappled with how to keep employees free from the coronavirus and plants operational during the pandemic.

The industry has been spending on safety initiatives at factories where workers typically work closely with



Meat producers have grappled with how to keep plants operational during the pandemic.

each other, while Covid-19 cases surge throughout the U.S.

Tyson Foods Inc. said last month it was adding more space for employees at existing plants and testing workers to guard against outbreaks, among other measures.

Meatpacker JBS USA Holdings Inc. this month said it had removed hundreds of at-risk workers from a beef plant in Colorado. Tyson, JBS, Smithfield Foods Inc. and Cargill Inc. have also temporarily

closed plants this year due to infections among workers.

Among other efforts, Foster Farms has added plexiglass dividers to work areas and is screening workers for Covid-19 symptoms, staggering break times and conducting regular tests of employees, according to Mr. Brill.

"The strategy is to identify people who are asymptomatic" to protect the rest of the workforce, he said of the company's testing efforts.

In September, Foster Farms

temporarily closed a poultry plant in Livingston, Calif.

More than 390 employees from that location had tested positive for the coronavirus, and eight workers died due to complications related to Covid-19 over several months, the company said in August.

California Gov. Gavin Newsom last Thursday issued a stay-at-home order that is triggered when capacity at hospitals' intensive-care units falls below 15% in five regions in the state.

Boeing Has First MAX Delivery

Continued from page B1

months. Before the FAA's ungrounding, Boeing had planned to deliver about two dozen MAX planes by the end of the year, people briefed on the matter said. Two other airlines, American Airlines Group Inc. and Southwest Airlines Co., are expected to take delivery of new aircraft this month. People familiar with Boeing's delivery schedule have said plans are fluid.

Boeing said it has built around 450 jets that it has been unable to deliver during the grounding. It halted production for a while earlier this year to limit the buildup and has restarted assembly.

Output has since resumed, but the manufacturer's ability to move existing inventory will determine its production rates. The coronavirus pandemic has for now sapped airline demand for the jets, complicating Boeing's ability to deliver the planes as customers cancel or defer their orders.

Analysts forecast Boeing will deliver around 180 MAX jets in 2021.

Last week, Boeing notched its first big MAX order of the year. European discount airline Ryanair Holdings PLC said it would buy an additional 75 jets and accelerate its delivery schedule.

Analysts forecast Boeing will deliver around 180 MAX jets in 2021, including 50 for Ryanair.

The plane maker has been striking deals with MAX customers that include compensation as well as reducing and deferring MAX deliveries, including the follow-on order announced last week by Ryanair.

Boeing, in its monthly update Tuesday, said it delivered only seven jets of all types in November, with no MAX or 787 Dreamliners handed over, taking its year-to-date total to 118. It announced cancellations for another 63 MAX jets, including a near-halving of the order from Virgin Australia Holdings Ltd. to 25 from 48.

Brazil's GOL Linhas Aereas Inteligentes SA said it plans to become the first airline to return the MAX to passenger service with flights starting Dec. 9. The carrier aims to have its seven-strong MAX fleet flying this month, and has 95 more on order after restructuring its deal with Boeing.

—Doug Cameron contributed to this article.



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BUSINESS NEWS

China Car Sales Rise, Cementing Pandemic Recovery

By YOKO KUBOTA

Car sales in China, the world's largest auto market, rose for a fifth straight month in November, as strong demand and policy stimulus continued to cement the recovery from the coronavirus pandemic.

Passenger car sales grew 8% to 2.1 million vehicles last month from a year earlier, the China Passenger Car Association said Tuesday. In October, sales rose by 8%.

In China, where the coronavirus outbreak has been brought under control for

New-energy vehicles, which include electric cars, surged by 128%.

months, the economy has rebounded and auto spending is a major driver of that. To boost sales, China's cabinet and local governments have been easing purchase quotas and giving subsidies to car buyers.

Meanwhile, global auto makers, grappling with weak sales in other major markets where the coronavirus infections are surging again, have come to rely on China.

Honda Motor Co. said last week that its China sales increased 22% in November from a year earlier, while sales at **Nissan Motor Co.** rose 5.2%.

For the full-year, the industry group expects car sales to drop by 7%, due to the coronavirus-induced slump earlier in the year. But it is forecasting a growth of 7% in 2021—in line with many auto analysts' forecasts of a high-single-digit annual growth. In the first half

of the year, sales could jump around 30% because of a low basis a year ago, said Cui Dongshu, secretary-general of the CPCA.

Strong sales of electric cars also contributed to the overall market's rebound. Wholesale sales of so-called new-energy vehicles, a category that includes electric cars, surged by 128% last month to 180,000 vehicles, the industry group said. Retail sales figures weren't available.

The rebound follows a year-long slump in EV sales that lasted until the summer. The types of electric car buyers in China—for years led by ride-hailing fleets and government purchases—have shifted recently to consumers, including those in big cities buying high-end EVs as well as those in rural areas purchasing cheaper, mini-EVs, said Jing Yang, director of corporate research at Fitch Ratings.

The bestselling EV in China was the \$4,300 mini-EV, produced by General Motors Co.'s China joint venture Wuling, having sold 36,070 vehicles. **Tesla Inc.**'s Model 3 sedans came second at 21,604 vehicles—a 78% increase from October, according to CPCA data.

Last month, China's auto industry regulator gave approval to Tesla to sell its made-in-Shanghai Model Y sport-utility vehicles. Tesla plans to start delivering its Model Ys in China next year.

Since July, the Chinese government has been subsidizing purchases of dozens of selected electric cars, mostly domestic brands, in rural regions. It has also been building more charging facilities. Analysts expect such policies, as well as the launch of new models, to continue buoying EV sales growth into next year.

—Raffaele Huang contributed to this article.



The company bought a 49.9% stake in Big River in October 2019 for \$700 million with an option to acquire the rest within four years.

U.S. Steel to Buy Remaining Stake in Low-Cost Steel Mill

By BOB TITTA

United States Steel Corp. has agreed to acquire the remaining 50.1% stake in **Big River Steel LLC** for \$774 million, giving the steelmaker ownership of one of the newest, most advanced steel mills in the country.

Ownership of Big River's Osceola, Ark., mill will give U.S. Steel access to the same production process used by competitors **Nucor Corp.** and **Steel Dynamics Inc.**, two of the most profitable companies in the domestic steel industry. The company has said the acquisition is the centerpiece of its drive to raise profit by investing in electric furnaces that melt scrap, which are known in the steel industry as minimills.

U.S. Steel bought a 49.9% stake in Big River in October 2019 for \$700 million with an option to acquire the rest of the company within four years.

Higher steel prices in recent months have helped U.S. Steel raise enough cash to complete the purchase sooner than expected, a person familiar with the matter said.

The spot-market price for coiled sheet steel in the U.S. has rallied to \$856 a ton on Monday from below \$500 a ton this summer, as a rebounding manufacturing sector ramps up orders. "The timing is just right for us," U.S. Steel Chief Executive David Burritt said during a conference call Tuesday.

Shares rose 13.3% to \$19.47 Tuesday.

More than two-thirds of the steel produced in the U.S. is now made in electric furnaces. But U.S. Steel still mostly makes its steel from iron ore melted in giant blast furnaces fueled by coal. It is a more expensive, labor-intensive process that is difficult to throttle back when demand for steel wanes as it did this spring when the coro-

navirus pandemic caused the company to idle about half its blast furnaces and lay off hundreds of workers. U.S. Steel has restarted most of those furnaces.

Electric furnaces are easier to turn up or down and require fewer workers to operate them. As a result, they are able to operate profitably even when steel prices are low.

"When bad things happen, like the pandemic this year, minimills are able to manage through that better," Mr. Burritt said in an interview.

U.S. Steel expects to close on the purchase early next year.

Big River, which opened in 2017, is capable of producing 3.3 million tons of steel annually. That is more than the raw steel capacity of U.S. Steel's huge Mon Valley Works near Pittsburgh. Big River was started by steel-industry entrepreneur David Stickler, who assembled investors—including a unit of

Koch Industries, the Arkansas schoolteachers' pension fund and private-equity firms—about seven years ago to build the first phase of the mill for about \$1.3 billion. The mill employs 650 workers. Automation and less labor-intensive production processes allow Big River to produce about 5,000 tons of steel annually per employee, compared with an average of 650 tons annually per employee at U.S. Steel's mills.

Big River's location in northeast Arkansas along the Mississippi River will give U.S. Steel an improved geographic reach for customers in the southern U.S. and northern Mexico, which is shaping up as a key battleground market for U.S. steel producers.

U.S. Steel said it expects to be able to deploy its research in specialized steel varieties, particularly for the automotive industry, at Big River's lower-cost production facilities.



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noun

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TECHNOLOGY

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Carriers Bid on Airwaves for 5G Networks

Wireless companies including Verizon are expected to spend billions in FCC auction

By DREW FITZGERALD

Verizon Communications Inc. and other cellphone providers are expected to spend billions of dollars to secure prized spectrum for their 5G networks in a U.S. government sale that kicked off Tuesday.

The Federal Communications Commission is launching a new auction for C-band airwaves, a stretch of wireless frequencies especially valued by companies trying to offer the fifth-generation service.

Typical bidders like Verizon, AT&T Inc. and T-Mobile US Inc. registered to participate. Cable, technology and investment companies also entered the contest, which could last several weeks.

"They all need to have a foot in the door," said Davis Hebert, an analyst at debt research firm CreditSights. "C-band is going to be the cornerstone of 5G networks for the next decade."

Wall Street analysts expect the auction to raise tens of billions of dollars over the coming weeks, a reflection of high demand. The frequencies sit in what telecom executives consider a "sweet spot" for 5G transmissions because they can move plenty of data quickly while still traveling long distances from a cellular tower.

CreditSights expects bidders to spend about \$38 billion to secure the assets. Mr. Hebert expects cellphone carriers to "play it safe from a credit perspective" to avoid dragging down their bond ratings, which could limit their ability to outbid other participants.

New Street Research told its clients the licenses could fetch



Verizon tapped the debt markets to build up cash before the auction. A worker prepares a cellular tower for the company's 5G service.

\$52 billion if bidders use all the resources at their disposal, though the total could be much less if federal officials make a concerted effort to privatize nearby Defense Department spectrum, adding more potential supply to the mix.

Either way, New Street predicted the bake-off "will be hard fought with carriers winning spectrum based on their balance sheet capacity."

The wide-ranging projections reflect the uncertainty surrounding an auction that took years to prepare. Satellite companies already use C-band

airwaves to beam TV feeds and other content to receivers in the U.S.

The satellite operators agreed to clear some space for cellphone companies after a drawn-out lobbying fight that delayed the sale of new licenses.

Verizon tapped the debt markets earlier this year to build up cash before the auction. T-Mobile, which absorbed rival Sprint Corp. earlier this year, also has cash on hand for bidding.

Investors expect Verizon, the country's largest carrier in

terms of subscribers, to bid aggressively to bolster its relatively low share of midrange spectrum.

Spokespeople for AT&T and Verizon declined to comment. T-Mobile didn't immediately respond to requests to comment. FCC rules barring coordinated bids often constrain companies' ability to discuss the auction.

The FCC is kick-starting the auction as President-elect Joe Biden prepares to nominate a new chairman to steer the commission. Current Chairman Ajit Pai, a Republican, has an-

nounced plans to leave in January.

The transition won't affect the continuing auction, which commission staff members oversee.

The FCC once doled out permission for radio and TV stations to use certain frequencies free of charge. The telecom regulator started selling new spectrum rights as demand for the resource grew.

Auction spending surged as the smartphone explosion fueled demand for more data on the go.

The public ultimately bene-

fits from the government's sale of new licenses, with proceeds from the winning bids steered to the U.S. Treasury. But the companies that win the licenses must pay for the assets through new borrowing, which is ultimately secured by the fees they charge their customers.

The commission's most expensive auction closed in 2015 with nearly \$45 billion in bids. The winners quickly used the licenses to bolster their 4G service, allowing their customers to stream more music and videos.

AT&T Defends Movie Plan

Continued from page B1

The strategy yielded some box-office revenue abroad but underperformed in the U.S.

Over the summer, Universal Studios and AMC Entertainment Holdings Inc. agreed to shorten the theatrical window before movies appear online. The deal ended a dispute after Comcast Corp.'s Universal made "Trolls World Tour" available as a \$20 online rental on April 10, the day it had been scheduled to open in theaters.

Walt Disney Co. offered "Mulan" on Disney+ in September for an extra \$30 fee and later made the film available free on its streaming service.

There are also financial



The plan to release films online at the same time as in theaters includes the science-fiction epic 'Dune.'

concerns for talent who have deals that tie their compensation to a film's theatrical performance.

Warner Bros. has said talent with such agreements will be compensated from the license fees HBO Max will pay to carry the films during their first month of release. However, talent agents are concerned that actors and producers could be hurt by self-dealing

between the studio and HBO Max.

Mr. Stankey, who ran WarnerMedia for nearly two years and took the top AT&T job in July, brushed aside those complaints as chatter that often follows a market-disruptive innovation.

"Any time you're going to change a model, I know it creates a degree of noise," he said Tuesday. "Ultimately, rational

parties will step back and look at this and say, giving theater owners a predictable release of content over the next several months that they can plan around and start to work their business around is a good thing for them."

The investment community has reacted less dramatically to a decision that threatened theatrical revenues that were already at risk because of the

pandemic.

AT&T shares have climbed about 6% since the company announced the new strategy. Many Wall Street analysts are focused on the success of HBO Max, which was launched in late May.

Mr. Stankey said Tuesday that HBO Max will count about 12.6 million activated accounts by Wednesday, after ending September with 8.6 million. It had previously set plans to debut "Wonder Woman 1984" on the service when it hits theaters on Christmas Day. The service has also benefited from a deal with Amazon.com Inc. giving customers direct HBO Max access through the e-commerce company's platforms.

"The market has shown a clear preference for go-big-or-go-home digital strategies," media-research firm Moffett-Nathanson wrote in a recent note to clients called "AT&T & U.S. Theaters: Suicide Squad?" a reference to another Warner Bros. title. "AT&T is, come hell or high water, going to drive traffic to HBO Max."

DoorDash Prices IPO Over Range

Continued from page B1

Airbnb Inc. is set to begin trading. The San Francisco home-sharing company would be valued at \$42 billion at the high end of its also-boasted price range.

December is typically a quiet time in the IPO market. This year there will instead be a flurry of offerings as the pandemic turns the calendar on its head. In addition to Airbnb and DoorDash, video-game company Roblox Corp. and the parent of online retailer Wish, ContextLogic Inc., are expected to make their debuts before the year is through.

Both DoorDash and Airbnb are using novel models for pricing their IPOs following virtual roadshows occasioned by the coronavirus pandemic.

The companies each asked investors to input stock orders through a computerized system in which they outline the number of shares they are seeking and at what price. Investors have the option to indicate how much they are willing to buy at various price points.

This approach differs from a traditional IPO, in which un-

Growth has been fueled by a surge in food delivery during the pandemic.

derwriters typically confer directly with potential investors and play a greater role in setting the price.

Under the new auction system, DoorDash and Airbnb executives will see the same information as their respective bankers and are expected to play a more significant role in choosing investors and setting the price.

Goldman Sachs Group Inc. and JPMorgan Chase & Co. are leading DoorDash's IPO, while Morgan Stanley and Goldman are leading Airbnb's. DoorDash shares are set to begin trading on the New York Stock Exchange under the ticker DASH.

Stern Signs Five-Year SiriusXM Extension

By DAVE SEBASTIAN

Howard Stern is staying with SiriusXM for another five years.

The radio personality has extended his contract with Sirius XM Holdings Inc. and will continue producing and hosting "The Howard Stern Show" exclusively for the satellite-radio company during the time frame, SiriusXM said Tuesday.

Mr. Stern earlier in the day announced the contract extension on his show.

"Now that I can work from

home, I simply don't have an excuse to quit," Mr. Stern said.

Mr. Stern's archive of audio and video will continue to be licensed to SiriusXM for seven years after the contract ends through 2032, the company said.

A company spokesman declined to comment on other terms of deal, including the dollar amount.

Mr. Stern, who is now 66 years old, made the leap to satellite from terrestrial radio, a move seen as a boon for the then-nascent medium, in 2006.

Mr. Stern and SiriusXM struck a deal for the move in 2004, when SiriusXM had about 600,000 subscribers. SiriusXM had about 34.4 million as of Sept. 30, according to the company's latest quarterly securities filing.

Mr. Stern's production company, One Twelve Inc., and his agent sued SiriusXM in 2011 over \$330 million in stock awards they claimed they were owed for helping boost the satellite radio company's subscriber levels.

A New York state judge threw out the lawsuit in 2012.

Apple, Under AirPods Brand, Launches Larger Headphones

By SARAH E. NEEDLEMAN

Apple Inc. on Tuesday revealed plans to sell AirPods-branded over-the-ear headphones, an expansion of its product lineup in a direct strike against companies such as Bose Corp. and Sony Corp.

Apple's new AirPods Max will cost \$549 and promise noise canceling, advanced acoustics and up to 20 hours of battery life, the company said. The headphones, which begin shipping next week, are coming a little more than a year after Apple introduced a high-end version of its AirPods wireless earbuds. AirPods are now one of Apple's most successful new products.

The company also said it plans next week to begin selling a subscription fitness service around its Apple Watch costing \$10 a month or \$80 a year. The announcement puts Apple in steeper competition with Peloton Interactive Inc., which in addition to its fitness equipment has invested in its digital platform that offers subscriptions to workout classes and more.

In recent years, Apple has



The AirPods Max cost \$549 and will begin shipping next week

been looking to broaden its offering of wearable products and services through them amid slowing iPhone sales, though the company has recently benefited from an uptick in demand for its laptops, iPads and digital services due to the coronavirus pandemic.

Apple's over-the-ear headphone offerings for years had been centered on its Beats products. Apple bought Beats for nearly \$3 billion in 2014 as part of a broader deal to bol-

ster its music business.

But since that time, Apple has built up its wearables business. The company introduced AirPods in 2016, and they pair seamlessly with all of Apple's devices. AirPods have helped Apple to be less dependent on iPhones, which make up about 50% of company sales.

—Tim Higgins contributed to this article.

◆ Heard on the Street: Apple replays wrong track..... B14



Howard Stern

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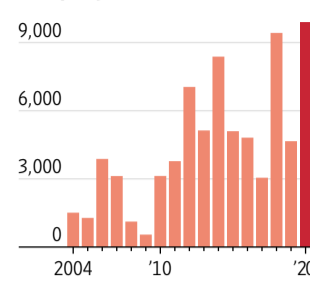
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THE PROPERTY REPORT



Smaller cities appeal to younger crowds who enjoy an urban lifestyle but find New York and larger metro areas too dense or expensive.

Jobs created as a result of company relocations to Austin



Population inflows per outflow, April-October, by metro area¹

Metro Area	Ratio
Austin	1.53
Phoenix	1.48
Nashville	1.48
Tampa Bay	1.47
Jacksonville	1.46
Cleveland	0.90
Chicago	0.89
San Francisco Bay	0.87
New York City	0.85
Hartford	0.83

¹The figure for 2020 is as of November.
²A ratio below 1 means more people are leaving than moving to the metro area.
Sources: Austin Chamber of Commerce (jobs); LinkedIn (inflows)

U.S. Looks To Limit Expansion Of CoStar

By Peter Grant

The U.S. government is trying for a second time to limit the steady expansion of real-estate data giant **CoStar Group Inc.**, by moving to block its latest proposed acquisition in the rental apartment listing business.

The Federal Trade Commission last week authorized a federal lawsuit against CoStar's plan to acquire RentPath Holdings Inc. for \$587.5 million, which the company announced in February. CoStar already owns Apartments.com, which, like RentPath, is a big participant in the online market for apartment listings.

"The proposed acquisition is likely to lead to anticompetitive effects," states the commission's complaint.

In a written statement responding to the FTC, CoStar Chief Executive Andrew Florance questioned whether RentPath was still a major market force, given that it is operating under chapter 11 bankruptcy protection. RentPath's owners, private-equity firms TPG Capital and Providence Equity, took the company into bankruptcy at the same time the proposed sale to CoStar was announced.

"We strongly disagree that a RentPath in bankruptcy has any competitive significance," Mr. Florance said. "We will continue to evaluate the case."

CoStar started in 1986 primarily as a firm that provided data on office buildings. It has since expanded into industrial, retail, lodging and other real-estate types.

The action against the RentPath deal marks the second major action by the FTC

The FTC last week authorized a federal suit against the plan to acquire RentPath.

involving a CoStar acquisition. In 2011, it put limits on CoStar's efforts to acquire LoopNet, a rival in the office business. CoStar was allowed to proceed after it signed a consent decree and LoopNet shed a stake in a company that competed directly with CoStar.

The FTC's action also comes as Washington, D.C.-based CoStar is making its first move in the massive residential sales market, aiming to take on the bigger players like **Zillow Group** and **Realtor.com**.

In November, CoStar announced plans for its first major acquisition in the sector, Homesnap Inc., for \$250 million. The residential data company provides real-estate brokers with apps and other technology for managing and analyzing their listings and the housing market.

CoStar also is one of the bidders vying for residential real-estate firm **CoreLogic Inc.**, which has a valuation of about \$6 billion, CoreLogic has said.

Legal experts say the FTC's RentPath case is unlikely to impede CoStar's push into the sales market, even if the government is successful. The FTC complaint "defines the market to include only rentals," said Amanda Wait, a partner with the law firm Norton Rose Fulbright, who worked at the FTC.

"That seems to suggest they're distinguishing home sales as something different from the rental market," she said.

CoStar got into the rental apartment business in 2014 by acquiring Apartments.com for \$585 million. Since then, it has grown the business by buying ForRent.com and other internet sites. Last year, the multi-family business made up \$490.6 million of CoStar's \$1.4 billion in revenues.

This year's growth in the apartments business made up for a pandemic-related slump in the office business. "The moves that CoStar made to get into multifamily is a very big reason why their [financial] results have held up as well as they have through the pandemic," said Sterling Auty, an analyst with JPMorgan Chase & Co.

Austin Gets Boost From Covid-19

Texas' capital is attracting jobs and remote workers, lured by lower costs

By Konrad Putzier

The pandemic and the prospect of working remotely have spawned an exodus from New York and San Francisco to sunnier, more-affordable cities. Few have benefited more than Austin.

Texas' capital is attracting more corporate jobs and remote workers than ever before, lured by lower costs and lower taxes. Business relocations to Austin announced this year are expected to create nearly 10,000 jobs. That is the city's highest figure on record for a single year, according to the Austin Chamber of Commerce, and is helping offset the hit from Covid-19 to the city's tourist-dependent restaurants, bars and music venues.

It helps that Texas has no state income tax, that Austin winters are relatively short and mild, and that social distancing is easier in a city where homes tend to be roomy and many have backyards. Austin has also managed to remain cheaper than San Francisco, Brooklyn and Manhattan by building tens of thousands of apartments over the past decade.

Tech investor Joe Lonsdale said he and his venture-capital firm 8VC were moving to Austin, and Royal Dutch Shell recently opened a studio to develop energy-exploration ideas in the city, among others who have made or plan the move.

"It's just a whole lot easier to hire. It's a lot easier to get housing. It's a lot easier to get business licenses than it is in other places," said Greg Schwartz, chief executive of real-estate startup **Tomo Networks**. His company, based in Stamford, Conn., is preparing to open a co-headquarters in

Austin. The migration out of large cities isn't new, but it has accelerated during the pandemic. While some are fleeing for the comforts of the suburbs, moving trucks are also rolling into cities such as Austin, Sacramento, Calif., Charlotte, N.C., Phoenix and Salt Lake City. These spots feature lively culinary, cultural and social scenes that appeal to younger crowds who enjoy an urban lifestyle but find New York, the Bay Area and other large metro areas too dense or expensive.

The recent growth of these midsize cities, with populations ranging from about 200,000 to more than one million, shows that the pandemic and work-from-home policies aren't undermining all of urban America. But it also illustrates a reshaping of what many companies, families and individuals look for in a hometown: more affordability, more space and new job opportunities in tech and other hot industries, rather than a location near one of the country's traditional economic centers.

Some companies planted flags in Austin after receiving local tax incentives, such as Palo Alto, Calif.-based Tesla Inc. The electric-car maker said in



The city features lively culinary, cultural and social scenes. A musician performs in the cultural area.

Austin.

July it plans to build a factory outside Austin that could eventually employ more than 5,000 people.

Others, such as Tomo Networks, point to the high level of skilled workers in a town that is home to the University of Texas. In a sign that this city of about one million residents is trending wealthier, French luxury retailer **Hermès** is set to open its first store in the city, according to the property's developer, Andrew Joblon.

For every person who moved to the Bay Area from Austin between April and October, 2.9 people moved in the other direction, according to an analysis from LinkedIn. That is a 39% increase from a year earlier. For New York, the ratio was 2.2, up 45% from a year earlier. Austin's overall population inflow-to-outflow ratio was the highest among 47 metropolitan areas analyzed by LinkedIn.

Long-term stays through websites such as Airbnb are also on the rise. The number of 28-day-plus Airbnb reservations for entire homes in Austin increased 57% in the third quarter compared with a year earlier, according to data company AirDNA.

Asset manager **Pacific In-**

vestment Management Co., known as Pimco, opened an Austin office in 2018. The city is somewhat centrally located and has a large number of skilled college graduates, said Patrick Feigley, head of U.S. global wealth-management sales and head of the Austin office. The company is expanding the Austin office and moving some jobs in areas such as marketing and

human resources from New York, Mr. Feigley said.

New construction is booming: Austin added more new apartments—relative to the size of its housing market—than any other major U.S. city between 2014 and 2018, according to the National Apartment Association. Austin's annual building of rental apartments accounted for an average of roughly 1.4% of the city's housing stock during that period, the group said.

For young professionals

Ms. Peterson kept her job as an account executive at public-relations firm **Derris** but is working remotely. She stayed at an apartment run by the short-term rental company Sonder, which said Austin is one of its top-performing markets in terms of occupancy, and now pays about the same monthly amount for a furnished apartment as she did for a smaller apartment in Brooklyn. Food and groceries are cheaper.

"It's definitely been great to come and have more space and get more bang for your buck," she said.

Investors Pursue Hollywood Dreams At British Studios

By Ruth Bloomfield

U.S. and other global property investors are putting billions of dollars into a significant expansion of new production studios in the U.K., where tax breaks are attracting business from movie makers and television companies.

While the pandemic upended many major commercial real-estate sectors—from hotels and retail to office towers—investing in properties related to content creation has emerged as a rare bright spot. People stuck at home are consuming more content than ever.

Real-estate investors like **Blackstone Group Inc.** have stepped up their commitment to studio production facilities with two partnerships near Hollywood.

Now, some investors are

making a similar bet in London. In a November deal, the Los Angeles-based firm **Hackman Capital Partners** agreed to invest around £300 million, equivalent to about \$401 million, in a facility to be known as Eastbrook Studios, located about 14 miles east of central London.

Work on the project is slated to begin in the first quarter of 2021 and be completed 18 to 24 months later.

"Content is a growth business, people are consuming more programming than ever before," said Chief Executive Michael Hackman.

HCP recently led a group of investors in a deal to acquire the New York studios where "The Sopranos," "30 Rock" and "Sex and the City" were filmed. Mr. Hackman said he is bullish on London.

"The U.K. has got a very attractive tax incentive pro-



A rendering of a planned project known as Eastbrook Studios, 14 miles east of central London.

gram, and there is a huge shortage of sound stages in the U.K. right now," he said.

The British government has offered tax breaks of up to 25% for feature films since 2007. It extended those tax incentives to high-end television, animation and videogames in 2013 and 2014. The tax breaks and a weaker currency have made the U.K. an attractive alternative to Hollywood, said Adrian Wootton, chief executive of Film Lon-

don and the British Film Commission.

"There is a difference in cost between our two regions because of the U.K.'s well-publicized tax credits and also the extremely beneficial U.K. exchange rate," he said.

The production-facility business has its challenges. Contracts with production companies can be as short as one month, offering a lot less security than long-term office leases.

But spending on movies and high-end television was £3.62 billion during 2019, up about 50% from 2015, according to the British Film Institute.

Broadcaster Sky U.K. is working on a 14-stage, 32-acre studio in Elstree, just north of London, due to open by 2022. The project is backed by Sky's parent company, Philadelphia-based **Comcast Corp.** and will be delivered in partnership with **NBCUniversal**.

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PLEASE TAKE NOTICE that on January 28, 2021 commencing at 11:00 a.m. Eastern Prevailing Time (the "Sale Date"), via audio/video teleconference the details of which will be provided to interested parties in advance of the Sale Date pursuant to the Terms of Public Sale (described below), based upon the occurrence of one or more Events of Default under certain documents (the "Loan Documents") copies of which are available for inspection as hereinafter described, pursuant to such Loan Documents and Article 9 of the Uniform Commercial Code as enacted in the State of New York ("UCC"), DB Brookview LLC ("Secured Party") shall dispose of, by public sale, the right, title, and interest of Atlas Brookview Mezzanine LLC as guarantor ("Debtor") in and to the following assets (collectively, the "Collateral"): (i) one hundred percent (100%) of the limited liability company interests in Atlas Brookview LLC, a Delaware limited liability company ("Pledged Entity"); and (ii) all other assets pledged by Debtor under the Loan Documents. The public sale shall be conducted by Mannion Auctions, LLC, by William Mannion, Auctioneer, NYC DCA License No. 796322, and/or Matthew D. Mannion, Auctioneer, NYC DCA License No. 1434494, or such other auctioneer licensed in the State of New York as is selected by Secured Party in its sole and absolute discretion.

Based upon information provided by Debtor, Pledged Entity, and certain other persons and entities affiliated therewith, it is the understanding of Secured Party (but without any representation or warranty by Secured Party as to the accuracy or completeness of the following matters) that: (i) Debtor owns one hundred percent (100%) of the limited liability company membership interests in Pledged Entity (the "Membership Interests"); (ii) Debtor indirectly owns a total of one hundred percent (100%) of the fee interest in the real property known as 4200, 4250, 4300, and 4400 W Lake Avenue, Glenview, Illinois 60026 (the "Premises"), as more particularly described in that certain Mortgage, Assignment of Leases and Rents and Security Agreement dated as of September 20, 2017 delivered by Pledged Entity to Secured Party, as successor in interest to TPG RE Finance 2 Ltd. (the "Mortgage"); and (iii) the Premises are encumbered by and subject to, among other things, a first mortgage (the Mortgage) held by Secured Party securing indebtedness under the Loan Agreement in the original principal amount of \$64,900,000.

The Sale was originally scheduled to take place on August 11, 2020 at 11:00 a.m. Eastern Prevailing Time, and was subsequently adjourned to August 25, 2020 at 11:00 a.m. Eastern Prevailing Time and then temporarily restrained by order of the New York State Supreme Court, New York County entered on August 24, 2020. By order dated October 15, 2020, the said court lifted said temporary restraining order, which permits the Sale to be rescheduled.

The Collateral is offered "AS IS, WHERE IS", with all faults, and Secured Party makes no guarantee, representation, or warranty (including, without limitation, any representation or warranty of merchantability or fitness), express or implied, of any kind or nature whatsoever.

Secured Party will be permitted to bid at the sale, and notwithstanding any requirement herein that the sale of the Collateral be for cash, Secured Party may credit bid all or any portion of the outstanding balance of the amounts due under the Loan Documents. Secured Party reserves the right, in its sole and absolute discretion, to (a) reject all bids and terminate the sale or adjourn the sale to such other date and time as Secured Party may deem proper, by announcement at the place and on the date of sale, and any subsequent adjournment thereof, without further publication, and (b) impose any other commercially reasonable conditions upon the sale of the Collateral as Secured Party may deem proper in its sole and absolute discretion.

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The public sale of the Collateral shall be subject to the further terms and conditions set forth in the "Amended and Restated Terms of Public Sale" dated October 23, 2020 (including without limitation terms and conditions with respect to the availability of additional information, bidding requirements, deposit amounts, bidding procedures, and the consummation of the public sale), which are available online at www.brookviewuccforeclosure.com and by contacting: Jones Lang LaSalle, Inc., 330 Madison Avenue, New York, New York 10017, Attn: Brett Rosenberg, tel. (212) 812-5926, email Brett.Rosenberg@amjll.com.

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COMMODITIES

wsj.com/market-data/commodities

Futures Contracts

Table with columns: Metal & Petroleum Futures, Open, High, Low, Settle, Chg, Open interest. Includes Copper-High, Gold, Palladium, Platinum, Silver, Crude Oil, Natural Gas, NY Harbor ULS, Gasoline, and NY Harbor ULS.

Table with columns: Agricultural Futures, Open, High, Low, Settle, Chg, Open interest. Includes Corn, Oats, Soybeans, Soybean Meal, Rough Rice, Wheat, Cattle-Feeder, Cattle-Live, Hogs-Lean, Lumber, Milk, and Cocoa.

Table with columns: Interest Rate Futures, Open, High, Low, Settle, Chg, Open interest. Includes Ultra Treasury Bonds, Treasury Bonds, Treasury Notes, and 5 Yr. Treasury Notes.

Table with columns: Currency Futures, Japanese Yen, Euro, and U.S. Dollar Index.

Table with columns: Index Futures, Open, High, Low, Settle, Chg, Open interest. Includes Mini DJ Industrial Average, S&P 500 Index, and Mini S&P 500.

Table with columns: Index Futures, Open, High, Low, Settle, Chg, Open interest. Includes Mini S&P Midcap 400, Mini Nasdaq 100, and Mini Russell 2000.

Cash Prices

wsj.com/market-data/commodities Tuesday, December 08, 2020

These prices reflect buying and selling of a variety of actual or "physical" commodities in the marketplace—separate from the futures price on an exchange, which reflects what the commodity might be worth in future months.

Table with columns: Commodity, Price, Change. Includes Energy (Coal, Oil), Metals (Gold, Silver), Fibers and Textiles, Grains and Feeds, and Fats and Oils.

KEY TO CODES: A=ask; B=bid; BP=country elevator bids to producers; C=corrected; E=Manfra, Tordella & Brooks; H=American Commodities Brokerage Co; M=monthly; N=nominal; n.a.=not quoted or not available; R=S&L Energy; S=Platts-TS; T=Cotlook Limited; U=USDA; W=weekly; Z=not quoted. *Data as of 12/7 Source: Dow Jones Market Data

Exchange-Traded Portfolios | wsj.com/market-data/mutualfunds-etfs

Table showing largest 100 exchange-traded funds, latest session. Columns: ETF, Symbol, Closing Price, Chg, YTD (%).

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Bonds | wsj.com/market-data/bonds/benchmarks

Tracking Bond Benchmarks

Return on investment and spreads over Treasuries and/or yields paid to investors compared with 52-week highs and lows for different types of bonds

Table showing bond benchmarks with columns: Total return, YTD total return, Index, Yield (%), Latest, Low, High. Includes Broad Market, U.S. Corporate, High Yield, and Global Government.

Global Government Bonds: Mapping Yields

Yields and spreads over or under U.S. Treasuries on benchmark two-year and 10-year government bonds in selected other countries; arrows indicate whether the yield rose (▲) or fell (▼) in the latest session

Table showing global government bond yields and spreads with columns: Coupon (%), Maturity, Country, Latest, Yield (%), Spread Under/Over U.S. Treasuries.

Corporate Debt

Prices of firms' bonds reflect factors including investors' economic, sectoral and company-specific expectations

Investment-grade spreads that tightened the most...

Table showing investment-grade bond spreads that tightened the most with columns: Issuer, Symbol, Coupon (%), Yield (%), Maturity, Spread.

...And spreads that widened the most

Table showing investment-grade bond spreads that widened the most with columns: Issuer, Symbol, Coupon (%), Yield (%), Maturity, Spread.

High-yield issues with the biggest price increases...

Table showing high-yield bond issues with the biggest price increases with columns: Issuer, Symbol, Coupon (%), Yield (%), Maturity, Bond Price.

...And with the biggest price decreases

Table showing high-yield bond issues with the biggest price decreases with columns: Issuer, Symbol, Coupon (%), Yield (%), Maturity, Bond Price.

*Estimated spread over 2-year, 3-year, 5-year, 10-year or 30-year hot-run Treasury, 100 basis points=one percentage pt.; change in spread shown is for 2-spread. Note: Data are for the most active issue of bonds with maturities of two years or more

Source: MarketAxess

MARKETS DIGEST

EQUITIES

Dow Jones Industrial Average

30173.88 ▲104.09, or 0.35%
 High, low, open and close for each trading day of the past three months.

Last Year ago
 Trailing P/E ratio 29.70 20.75
 P/E estimate * 24.61 18.65
 Dividend yield 2.01 2.25
 All-time high 30046.24, 11/24/20



S&P 500 Index

3702.25 ▲10.29, or 0.28%
 High, low, open and close for each trading day of the past three months.

Last Year ago
 Trailing P/E ratio * 41.65 24.36
 P/E estimate * 25.97 19.18
 Dividend yield * 1.65 1.85
 All-time high 3702.25, 12/08/20



Nasdaq Composite Index

12582.77 ▲62.83, or 0.50%
 High, low, open and close for each trading day of the past three months.

Last Year ago
 Trailing P/E ratio ** 38.45 26.15
 P/E estimate ** 31.99 23.15
 Dividend yield ** 0.74 0.99
 All-time high: 12582.77, 12/08/20



Major U.S. Stock-Market Indexes

	High	Low	Latest Close	Net chg	% chg	High	52-Week Low	% chg	YTD	% chg 3-yr. ann.
Dow Jones										
Industrial Average	30246.22	29972.07	30173.88	104.09	0.35	30218.26	18591.93	8.2	5.7	7.4
Transportation Avg	12821.65	12671.31	12777.05	51.84	0.41	12777.05	6703.63	20.2	17.2	7.1
Utility Average	863.63	851.75	858.36	-1.49	-0.17	960.89	610.89	0.7	-2.4	4.2
Total Stock Market	38634.74	38285.24	38576.35	156.73	0.41	38576.35	22462.76	20.3	16.8	12.0
Barron's 400	828.76	819.97	828.38	4.64	0.56	828.38	455.11	15.9	13.1	5.6
Nasdaq Stock Market										
Nasdaq Composite	12594.54	12453.21	12582.77	62.83	0.50	12582.77	6860.67	46.0	40.2	22.5
Nasdaq 100	12651.35	12504.97	12635.72	39.25	0.31	12635.72	6994.29	51.2	44.7	25.8
S&P										
500 Index	3708.45	3678.83	3702.25	10.29	0.28	3702.25	2237.40	18.2	14.6	11.8
MidCap 400	2251.92	2224.18	2249.57	13.11	0.59	2249.57	1218.55	11.8	9.0	6.0
SmallCap 600	1091.18	1074.03	1090.78	9.74	0.90	1090.78	595.67	9.2	6.8	5.5
Other Indexes										
Russell 2000	1918.01	1881.70	1917.78	26.53	1.40	1917.78	991.16	17.5	14.9	8.0
NYSE Composite	14424.98	14304.14	14402.17	47.20	0.33	14417.33	8777.38	6.3	3.5	4.4
Value Line	563.00	556.55	562.64	3.48	0.62	562.64	305.71	4.8	1.9	0.4
NYSE Arca Biotech	5571.67	5505.31	5570.28	19.18	0.35	6142.96	3855.67	9.4	9.9	9.6
NYSE Arca Pharma	691.36	680.70	689.03	6.64	0.97	689.03	494.36	8.9	5.4	8.5
KBW Bank	95.20	93.95	94.86	-0.15	-0.16	114.12	56.19	-14.6	-16.3	-3.8
PHLX ^S Gold/Silver	144.24	142.89	143.30	-0.29	-0.20	161.14	70.12	48.1	34.0	23.0
PHLX ^S Oil Service	45.51	43.50	45.47	1.26	2.85	80.99	21.47	-36.4	-41.9	-30.3
PHLX ^S Semiconductor	2825.94	2790.33	2816.27	9.66	0.34	2816.27	1286.84	63.7	52.3	31.5
Cboe Volatility	22.25	20.52	20.68	-0.62	-2.91	82.69	12.10	31.9	50.1	29.2

Source: FactSet; Dow Jones Market Data

Late Trading

Most-active and biggest movers among NYSE, NYSE Arca, NYSE Amer. and Nasdaq issues from 4 p.m. to 6 p.m. ET as reported by electronic trading services, securities dealers and regional exchanges. Minimum share price of \$2 and minimum after-hours volume of 50,000 shares.

Most-active issues in late trading

Company	Symbol	Volume (000)	Last	Net chg	After Hours % chg	High	Low
Curis	CRIS	13,561.1	6.60	0.05	0.76	8.48	6.38
Zynga	ZNGA	7,786.2	8.81	-0.03	-0.34	8.89	8.80
Boston Scientific	BSX	7,606.6	33.98	0.01	0.03	33.98	33.90
Kinross Gold	KGC	5,998.4	7.56	0.010	0.13	7.56	7.53
SPDR S&P 500	SPY	5,841.0	370.45	0.28	0.08	370.50	362.06
Apple	AAPL	5,702.8	124.27	-0.110	-0.09	124.43	124.21
GameStop CIA	GME	5,387.2	14.82	-2.12	-12.51	18.30	14.71
Tencent Music Ent ADR	TME	4,439.6	18.00	...	unch.	18.00	17.61

Percentage gainers...

Company	Symbol	Volume (000)	Last	Net chg	After Hours % chg	High	Low
Rocket Pharmaceuticals	RCKT	258.0	43.00	10.97	34.25	45.00	32.03
QuantumScape	QS	1,632.7	66.20	8.30	14.34	66.44	57.04
Pivotal Inv II CIA	PIC	1,275.0	17.95	2.23	14.19	18.30	15.59
dMY Tech Grp II CIA	DMYD	141.2	12.50	0.90	7.76	12.80	11.48
HC2 Holdings	HCHC	99.4	3.74	0.22	6.25	3.91	3.52

...And losers

Company	Symbol	Volume (000)	Last	Net chg	After Hours % chg	High	Low
GameStop CIA	GME	5,387.2	14.82	-2.12	-12.51	18.30	14.71
Tricida	TCDA	1,300.9	7.16	-0.96	-11.82	10.50	7.00
Talos Energy	TALO	120.3	9.42	-1.09	-10.37	10.53	9.31
Ichor Holdings	ICHR	95.2	33.00	-3.44	-9.44	36.44	33.00
Phreesia	PHR	127.9	48.00	-3.90	-7.51	52.00	45.75

Trading Diary

Volume, Advancers, Decliners

	NYSE	NYSE Amer.
Total volume*	908,967,437	25,618,278
Adv. volume*	574,561,925	12,270,639
Decl. volume*	324,331,032	13,211,803
Issues traded	3,233	279
Advancers	1,974	168
Declines	1,145	103
Unchanged	114	8
New highs	249	18
New lows	3	0
Closing Arms*	0.94	1.41
Block trades*	5,174	213
	Nasdaq	NYSE Arca
Total volume*	4,793,127,781	159,954,745
Adv. volume*	3,141,132,537	95,587,448
Decl. volume*	1,593,825,900	57,514,921
Issues traded	3,755	1,430
Advancers	2,353	1,055
Declines	1,302	333
Unchanged	100	42
New highs	396	315
New lows	13	37
Closing Arms*	0.92	1.96
Block trades*	27,780	729

*Primary market; NYSE, NYSE American, NYSE Arca only. (TRIN) A comparison of the number of advancing and declining issues with the volume of shares rising and falling. An Arms of less than 1 indicates buying demand; above 1 indicates selling pressure.

International Stock Indexes

Region/Country	Index	Close	Net chg	Latest % chg	YTD % chg
World	The Global Dow	3470.34	-3.70	-0.11	6.7
	DJ Global Index	485.09	0.96	0.20	11.8
	DJ Global ex U.S.	280.50	0.06	0.02	6.4
Americas	DJ Americas	875.53	3.07	0.35	15.1
Brazil	Sao Paulo Bovespa	113793.06	203.29	0.18	-1.6
Canada	S&P/TSX Comp	17639.00	56.65	0.32	3.4
Mexico	S&P/BMV IPC	43098.64	-156.61	-0.36	-1.0
Chile	Santiago IPSA	2833.29	...	Closed	-15.1
EMEA	Stoxx Europe 600	393.64	0.80	0.20	-5.3
Eurozone	Euro Stoxx	393.00	-0.11	-0.03	-2.7
Belgium	Bel-20	3692.34	-5.22	-0.14	-6.7
Denmark	OMX Copenhagen 20	1393.51	13.08	0.95	22.7
France	CAC 40	5560.67	-12.71	-0.23	-7.0
Germany	DAX	13278.49	7.49	0.06	0.2
Israel	Tel Aviv	1462.93	-4.19	-0.29	-13.1
Italy	FTSE MIB	22053.42	-53.76	-0.24	-6.2
Netherlands	AEX	616.59	0.39	0.06	2.0
Russia	RTS Index	1364.66	-4.20	-0.31	-11.9
South Africa	FTSE/JSE All-Share	59159.36	-368.34	-0.62	3.6
Spain	IBEX 35	8227.60	-48.00	-0.58	-13.8
Sweden	OMX Stockholm	764.42	7.67	1.01	12.3
Switzerland	Swiss Market	10394.10	18.72	0.18	-2.1
Turkey	BIST 100	1339.89	9.99	0.75	17.1
U.K.	FTSE 100	6588.82	3.42	0.05	-13.0
U.K.	FTSE 250	19870.49	-59.24	-0.30	-9.2
Asia-Pacific					
Australia	S&P/ASX 200	6687.70	12.68	0.19	0.1
China	Shanghai Composite	3410.18	-6.43	-0.19	11.8
Hong Kong	Hang Seng	26304.56	-202.29	-0.76	-6.7
India	S&P BSE Sensex	45608.51	181.54	0.40	10.6
Japan	Nikkei Stock Avg	26467.08	-80.36	-0.30	11.9
Singapore	Straits Times	2825.63	0.12	0.004	-12.3
South Korea	Kospi	2700.93	-44.51	-1.62	22.9
Taiwan	TAIEX	14360.40	103.80	0.73	19.7
Thailand	SET	1478.92	29.09	2.01	-6.4

Sources: FactSet; Dow Jones Market Data

Percentage Gainers...

Company	Symbol	Latest Session Close	Net chg	% chg	52-Week High	52-Week Low	% chg
IGM Biosciences	IGMS	115.03	42.11	57.75	119.00	25.05	320.4
Mammoth Energy Services	TUSK	3.19	1.16	57.14	3.84	0.56	87.6
Liquidity Services	LQDT	14.90	4.37	41.50	15.20	3.01	130.7
Stitch Fix CIA	SFIX	49.89	14.06	39.24	54.94	10.90	90.2
NeuroMetrix	NURO	2.99	0.84	39.07	6.20	0.81	-37.8
HighPeak Energy	HPK	9.50	2.52	36.10	9.97	4.20	...
QuantumScape	QS	57.90	13.73	31.08	59.99	9.74	...
Infinity Pharmaceuticals	INFI	2.77	0.63	29.44	2.84	0.60	130.8
Nkarta	NKTX	62.20	13.89	28.75	62.50	22.46	...
Lenstar	LNSR	9.24	2.02	27.98	12.71	3.16	...
Oncternal Therapeutics	ONCT	5.08	1.10	27.64	6.28	1.49	-1.9
Collect Biotechnology ADR	APOP	2.61	0.55	26.70	6.89	0.40	7.2
Renren ADR	RENN	6.90	1.44	26.37	8.20	0.45	167.4
Perion Network	PERI	11.29	2.27	25.17	11.51	3.43	104.5
17 Educ Tech ADR	YQ	15.06	2.95	24.36	15.60	10.00	...

Most Active Stocks

Company	Symbol	Volume (000)	% chg from 65-day avg	Latest Session Close	% chg	52-Week High	52-Week Low
Sundial Growers	SNL	349,638	9				

NEW HIGHS AND LOWS

WSJ.com/newhighs

The following explanations apply to the New York Stock Exchange, NYSE Arca, NYSE American and Nasdaq Stock Market stocks that hit a new 52-week intraday high or low in the latest session. % CHG-Daily percentage change from the previous trading session.

Tuesday, December 8, 2020

Table with columns: Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg. Includes sections for 'Highs' and 'Lows'.

BANKRATE.COM® MMA, Savings and CDs

Average Yields of Major Banks

Table showing average yields for various bank products: Savings, Jumbos, Weekly change, Savings, Jumbos. Columns include Type, MMA, 1-MO, 2-MO, 3-MO, 6-MO, 1-YR, 2-YR, 2.5YR, 5YR.

Consumer Savings Rates

Below are the top federally insured offers available nationwide according to Bankrate.com's weekly survey of highest yields. For latest offers and reviews of these financial institutions, please visit bankrate.com/banking/reviews. Information is believed to be reliable, but not guaranteed.

High yield savings

Table listing high yield savings accounts from various banks like Bank of America, Chase, Wells Fargo, etc., with columns for Bank, Phone number, Minimum, Yield (%).

Money market and savings account

Table listing money market and savings accounts from various banks, including Lone Star Bank, State Bank of India, Washington Savings Bank, etc.

One-month CD

Table listing one-month certificates of deposit from various banks like Lone Star Bank, State Bank of India, Washington Savings Bank, etc.

Two-month CD

Table listing two-month certificates of deposit from various banks like Lone Star Bank, State Bank of India, Washington Savings Bank, etc.

Three-month CD

Table listing three-month certificates of deposit from various banks like Briodirect, Goldwater Bank, Lone Star Bank, etc.

High yield jumbos - Minimum is \$100,000

Table listing high yield jumbo certificates of deposit from various banks like CFG Community Bank, Luana Savings Bank, BankDirect, etc.

Money market and savings account

Table listing money market and savings accounts from various banks like CFG Community Bank, Luana Savings Bank, BankDirect, etc.

One-month CD

Table listing one-month certificates of deposit from various banks like Lone Star Bank, State Bank of India, Washington Savings Bank, etc.

Two-month CD

Table listing two-month certificates of deposit from various banks like Lone Star Bank, State Bank of India, Washington Savings Bank, etc.

Three-month CD

Table listing three-month certificates of deposit from various banks like Briodirect, Goldwater Bank, Lone Star Bank, etc.

Notes: Accounts are federally insured up to \$250,000 per person. Yields are based on method of compounding and rate stated for the lowest required opening deposit to earn interest. CD figures are for fixed rates only. MMA: Allows six (6) third-party transfers per month, three (3) of which may be checks. Rates are subject to change.

Source: Bankrate.com, a publication of Bankrate, Inc., Palm Beach Gardens, FL 33410

Internet: www.bankrate.com

Mutual Funds

Data provided by LIPPER

Top 250 mutual-funds listings for Nasdaq-published share classes by net assets.

e-Ex-distribution, f-Previous day's quotation, g-Footnotes x and s apply, f-Footnotes e and s apply, k-Redemption charge may apply, s-Stock split or dividend, t-Footnotes p and r apply, v-Footnotes x and e apply, x-Ex-dividend, z-Footnote x, e and s apply, NA-Not available due to incomplete price, performance or cost data, NE-Not released by Lipper, data under review, NS-Fund not tracked, NS-Fund didn't exist at start of period.

Large table of mutual fund listings with columns: Fund, NAV, Chg %Ret, Net YTD %Ret, Fund, NAV, Chg %Ret, Net YTD %Ret, Fund, NAV, Chg %Ret, Net YTD %Ret.

Table of stock market data with columns: Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg.

Borrowing Benchmarks

wsj.com/market-data/bonds/benchmarks

Money Rates

December 8, 2020

Key annual interest rates paid to borrow or lend money in U.S. and international markets. Rates below are a guide to general levels but don't always represent actual transactions.

Table of money rates including Inflation, U.S. consumer price index, International rates, Prime rates, Policy Rates, Overnight repurchase, U.S. government rates, Discount, Federal funds, Treasury bill auction, Fannie Mae.

Secured Overnight Financing Rate

DTCC GCF Repo Index

Table showing DTCC GCF Repo Index for Treasury and MBS.

Table of stock market data with columns: Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg, Stock, Sym, 52-Wk % High/Low, Chg.

CEO Council

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BANKING & FINANCE

Greece's Banks Rapidly Unload Bad Loans

By MARGOT PATRICK

Greek banks, among Europe's weakest, are getting rid of their bad loans at a healthy clip.

In spring, the pandemic interrupted plans among the country's banks to shed loans still festering from the eurozone crisis a decade ago. But stimulus from central banks and governments globally has sent fresh cash into funds that buy nonperforming loans, reinvigorating the efforts.

"Many of the investors are in the process of fundraising or have raised additional funds for what they see as a wave of opportunity," said Alok Gahotra, a partner in the portfolio lead advisory team at Deloitte that advises NPL buyers and sellers. "There's a lot of dry powder to deploy."

In late November, **Alpha Bank**, one of Greece's four dominant lenders, said it was in the final stages of selling a €10.8 billion gross loan portfolio—the equivalent of \$12 billion—along with its loan-servicing unit. The preferred bidder is U.S. investment firm **Davidson Kempner Capital Management LP**, which beat out Pacific Investment Management Co. and others for what would be the largest-ever NPL sale in the country. Two more big banks, **National Bank of Greece** and **Piraeus Bank**, each aim to sell around €7 billion in loans next year.

The three transactions will tap a new state-supported securitization program called **Hercules**, which was first used by Eurobank SA in June to dispose of €7.5 billion gross loans, "paving the way for its peers," said Eurobank chief executive **Fokion Karavias**.

The eurozone crisis a decade ago attracted U.S. investing giants such as Pimco, Cerberus Capital Management and Apollo Global Management to buy bad loans from banks for as little as a few cents on the euro. Some investors also scoop up banks' servicing units to build larger businesses managing bad loans from multiple



One of the country's top lenders, Alpha Bank, is tapping a state-supported program to sell a \$12 billion nonperforming-loan portfolio.

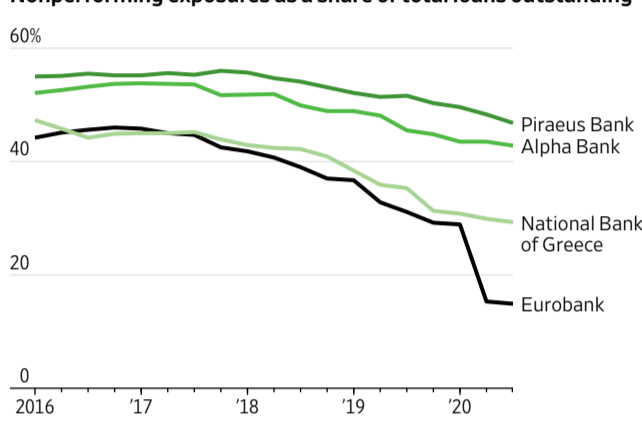
lenders, a fast-growing sector in Europe. Returns depend on recoveries from selling collateral such as homes and office buildings backing the debt, and fees collected by the servicing units.

The investments flow into NPL funds and other credit-focused funds that are mainly marketed to institutional investors and the rich.

Ireland, Spain and Italy all whittled down their NPLs this way. Greece's banks made only limited progress because the country's recovery took longer and the government and banks were working on measures to attract investors. The key plank, finalized only last year, is the Hercules program. Modeled after a similar program in Italy, the banks sell NPLs to securitization vehicles that issue notes to investors. The banks then buy the safest tranche of notes with a government guarantee for repayment, allowing for larger transactions.

"Because banks are allowed to provide senior funding that is guaranteed by the state for a reasonable fee, considerations are much better than outright sales without generating capital

Nonperforming exposures as a share of total loans outstanding



Note: Loans that are past due by more than 90 days, or on which the debtor is assessed as unlikely to pay without full realization of collateral
Source: the banks

burdens," said Christos Megalou, the chief executive of Piraeus Bank.

The uptick in deals is crucial for Greece to bring down the highest NPL level in the European Union. At almost half of loans in 2016, the ratio was around 35% at the start of 2020 and could fall closer to 20% if transactions go ahead as planned. The EU-wide ratio is under 3%. The pandemic caused a few months' delay, but bank executives, advisers and ratings

firms said most deals should be completed in the first quarter of next year.

"Market conditions are normalizing now and there is clearly investor appetite from international investors," said Lito Chousiada, an analyst in DBRS Morningstar's global financial institutions group.

The disposals mark a turning point for an economy that was still emerging from one of the longest and deepest depressions of modern times when

coronavirus hit. Greece's tourism-heavy economy slumped along with EU peers, though the country has managed better than many in containing infections and deaths. The big Greek banks forecast around €5 billion in total new NPLs from the pandemic—not much against the €61.3 billion in NPLs in the country as of June 30, according to ECB data. The banks say years of experience managing delinquent customers should help.

Nikos Koutsogiannis, chief financial officer at small lender Attica Bank SA, said its NPL ratio fell to around 45% from a 62% peak through two securitizations predating the Hercules program. Attica aims to get the ratio to single digits by securitizing more loans next year. Mr. Koutsogiannis said Attica wants to free up capital for lending to companies in sectors such as the environment, energy and infrastructure that Greece is targeting for foreign and government investment.

"We have been working as firemen putting out fires, but at the end of the day banks need to get back to banking," Mr. Koutsogiannis said.

Portugal's Benchmark Bond Yield Drops to Below Zero

By ANNA HIRTEINSTEIN

Portugal's benchmark bond traded with a negative yield, signaling investors' increasingly relaxed attitudes toward a country that was once among the worst-hit by the European debt crisis.

The yield on the southern European country's 10-year government bond on Tuesday fell to a low of minus 0.009%, according to Tradeweb.

Portugal joins countries including Germany, France and the Netherlands whose debt has subzero yields. It reflects that demand for the bonds is so high, investors who hold the bonds to maturity would get back less than they initially paid. It is another sign of a turnaround in the market's expectations for a more cohesive European Union.

A deep financial crisis in the early 2010s hit Portugal along with a number of other southern European countries, which resulted in government intervention in its banking sector. Divides emerged between northern and southern European nations, and concerns about the trade bloc fragmenting arose—resulting in significantly higher borrowing costs for countries seen as riskier and in dubious financial shape, including Portugal.

Country joins Germany, France and the Netherlands with subzero debt yields.

The pandemic had the opposite effect and is perceived to have brought Europe closer together, according to Rohan Khanna, a rates strategist at UBS. Policy makers have been actively supporting member states, both at the central bank and the European Commission, the trade bloc's executive arm, which agreed on a €750 billion spending package, equivalent to \$908 billion, known as the recovery fund in July.

"When we talk about the increased synchronization in European financial markets, at the center of it is the recovery fund and how quickly European politicians came together and agreed on this," Mr. Khanna said. "The politics have become a lot more cohesive than in the past."

This is increasingly reflected in how European government bonds are priced, with the differences between countries' borrowing costs narrowing as investors expect the EU to backstop its weaker members.

While the recovery fund has run into some opposition from Hungary and Poland, which vetoed it due to a mechanism that links EU funding with rule of law, investors are comfortable that it will move forward.

"It is not unusual for Europe to witness these kinds of delays," said Konstantin Veit, a bond portfolio manager at Pimco. "We are convinced that the EU will find a way to remain broadly on track with regards to the recovery fund and avoid material execution issues."

The European Central Bank has been actively supporting the region's economy with a €1.35 trillion bond-buying program, which has significantly boosted demand for government debt and weighed on yields. Its governing council will meet on Thursday and is widely expected to extend its monetary stimulus programs, which would likely mean more asset purchases like government bonds.

"We've had another lockdown in Europe, which is likely a double dip in economic output. The ECB will have to be even more accommodative," said David Zahn, head of European fixed income at Franklin Templeton. The funds he manages own Portuguese bonds, but at a 15-year maturity, which still have a positive yield. "We would probably not buy them at a negative yield," Mr. Zahn said.

—Pat Minczeski contributed to this article.

Fund Manager Pays \$170 Million in SEC Settlement

By DAVE MICHAELS

BlueCrest Capital Management Ltd. will pay \$170 million to settle claims that it misled clients about an internal fund that invested its traders' own money, while its flagship fund was managed by an underperforming algorithm, the Securities and Exchange Commission said Tuesday.

Once one of Europe's biggest hedge-fund managers, BlueCrest stopped managing money for outside clients in 2015 after a sharp drop in assets and a run of poor returns from its flagship macro fund. It continued trading its employees' own money.

The SEC said BlueCrest created the proprietary fund, BSMA Limited, in 2011 and moved a majority of its best traders to work on it. Their work picking assets for BlueCrest's flagship fund was replaced by an algorithm that

was supposed to replicate their decisions but wound up performing worse, the SEC said.

"BlueCrest repeatedly failed to act in the best interests of its investors, including by not disclosing that it was transferring its highest-performing traders to a fund that benefited its own personnel to the detriment of its fund investors," said SEC enforcement director Stephanie Avakian.

BlueCrest settled the SEC's civil investigation without admitting to or denying the claims. In a statement, the firm said it was pleased to have resolved the matter, "which primarily involved disclosures that were made more than five years ago."

"Today's order does not relate in any way to our current business operations," BlueCrest said.

British billionaire Michael Platt co-founded the firm in

London and later moved its headquarters to the tax haven of Jersey in the Channel Islands. The firm is no longer registered as an investment adviser in the U.S.

BlueCrest's flagship fund, BlueCrest Capital Interna-

BlueCrest is accused of not telling clients that its traders used a proprietary fund.

tional, generated about \$4.5 billion in profit for investors since it was started and achieved annualized performance over its life of 9.85%. BCI returned 45% in 2009, but like other macro funds struggled during a long period of ultralow interest rates.

The firm considered dis-

closing the proprietary fund, BSMA, in 2011 but failed to sufficiently do so, SEC regulators said in a settlement order Tuesday. BlueCrest's executive committee owned 93% of BSMA, and instructed the firm's investor relations department to not "proactively discuss BSMA with investors," the order said.

From October 2011 through June 2015, BlueCrest reasigned 21 interest-rate and relative-value traders from BCI to BSMA, the order said. It initially deployed the algorithm only to make trading decisions for BCI, but in 2012 allocated one-third to one-half of its trading risk to the proprietary fund, the order said.

The algorithm failed to perfectly replicate the human traders' decisions because it followed their moves one day later, the SEC said. That delay caused "slippage," particularly during volatile markets, be-

cause the algorithm waited too long to respond to sudden market moves, the order said.

The algorithm, known as Rates Management Trading, failed to hit its target profits by \$25 million a month on average, according to the settlement order.

BlueCrest's investors began asking questions about the proprietary fund after a due-diligence consultant published an alert to clients about it in 2014, the SEC said. The flagship fund, BCI, suffered significant redemptions as investors asked questions about the unknown fund and how BlueCrest managed the conflicts of interest created by running a separate pot of money, the SEC said.

The fines to be paid by BlueCrest include \$132 million that must be returned to investors, including U.S. pension funds. The firm also agreed to pay a \$37 million civil penalty.

Betterment Founder Resigns From CEO Post

By ANNE TERGESEN

Betterment LLC founder Jon Stein has stepped down as chief executive, the investment-advice company said Tuesday. He was succeeded by Sarah Kirshbaum Levy, a former executive of ViacomCBS Inc.

Ms. Levy will be charged with steering the company to a possible initial public offering over the next few years, said Mr. Stein, who will stay on day-to-day through the end of the month and remain chairman of the board.

Mr. Stein, 41, founded the digital investment advisory company in 2010. The New York-based firm manages \$25 billion with more than 550,000 customers.

"We have record revenues and despite Covid are seeing growth in all three of our business lines," which consist of retail investment advice, 401(k)s for small and midsize firms, and a platform for independent investment advisers, Mr. Stein said in an interview. "It feels like a good point to



Sarah Kirshbaum Levy took over Tuesday from Jon Stein leading the digital investment platform.

pass the torch."

His replacement, Ms. Levy, was chief operating officer of ViacomCBS's media networks from January 2018 to January 2020. The 49-year-old executive served in a variety of roles, including COO at the

company's Nickelodeon unit from 1998 to 2017.

Ms. Levy, who has been a consultant at Betterment since Oct. 1, said her emphasis will be on "evolution, versus revolution" including expanding opportunities for clients to

further customize investment portfolios and interact with human advisers.

Regarding the prospect of an IPO, Ms. Levy said, "I wouldn't say it's too far in the distance," but before it can happen, "we want a clear path

to strong growth and a line of sight into profitability."

Spokesman Joe Ziemer said Betterment isn't profitable currently but could be if that was the priority rather than growth.

The company's value was most recently estimated at \$800 million at its last funding round in 2017.

In its digital portfolio advisory service, Betterment charges 0.25% of assets annually. It charges an additional 0.15% for customers who want access to human advisers.

Mr. Stein said he was looking for someone from outside the financial services industry to take Betterment to the next level. Industry insiders often lack the perspective needed "to disrupt services in a more customer-focused direction," he said.

Mr. Stein said he may play a role in tasks including recruiting and customer events, but wants "to make sure I am not in Sarah's way."

"I may have another business in me but it won't be in financial services."

MARKETS

S&P, Nasdaq Set Records

Use of Pfizer/BioNTech vaccine in U.K., progress on U.S. aid package boost indexes

BY ANNA HIRNSTEIN AND MICHAEL WURSTHORN

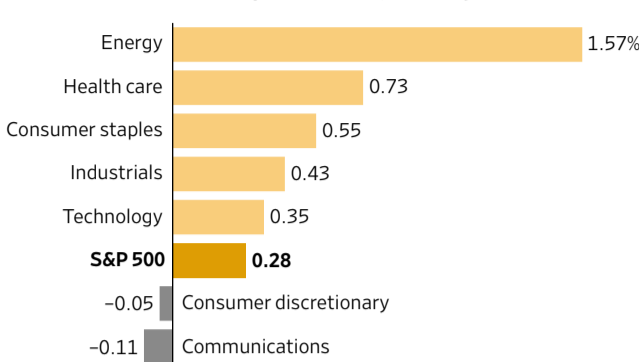
Stocks propelled the S&P 500 and Nasdaq Composite to records following a pair of positive steps toward combating the Covid-19 pandemic.

Health-care stocks rallied on news that the U.K. began administering doses of the vaccine developed by Pfizer and Germany's BioNTech. Shares of Pfizer, which hit a trailing-year high, led the health-care sector.

Signs that lawmakers remain committed to completing a new Covid-19 relief package also gave the stock market a boost. Bloomberg reported that Republican congressional leaders planned to talk with White House officials to advance the talks around a roughly \$900 billion Covid-19 aid deal. Technology stocks had been in the red before the report and steadily gained ground in the second half of the session.

Investors have been following the talks in hopes that Republicans and Democrats reach a deal on further stimulus. Without some sort of agreement, many worry that the nascent economic recovery is at risk as coronavirus infections, hospitalizations and deaths rise across the country, leaving a

Select sectors and index performance, Tuesday



Source: FactSet

highflying stock market exposed to a pullback.

The emergency-relief package is "necessary to help the businesses that are suffering right now," said Gero Jung, chief economist at Mirabaud Asset Management. "There's been a significant slowdown in labor-market improvement, so there is still some help needed. It is important; it affects market sentiment."

The S&P 500 added 10.29 points, or 0.3%, to 3702.25, while the Nasdaq rose 62.83 points, or 0.5%, to 12582.77, both closing at their highest levels ever. The Dow Jones Industrial Average also traded higher, gaining 104.09 points, or 0.3%, to 30173.88, falling short of a new milestone.

Lawmakers had struggled Monday to resolve one of two stumbling blocks remaining in their efforts to strike a deal on the emergency-spending program. Congressional leaders said they plan to pass a one-week extension of the govern-

ment's current funding to buy more time for negotiations.

Despite the rise in coronavirus cases, the U.S. stock market has managed to rally thanks to advances on the vaccine front, as well as brief signs of progress toward completing another economic aid package. The S&P

3.2%

How much Pfizer stock gained on Tuesday

500 is up 15% this year, with the most recent spurt of gains following news of Pfizer's vaccine.

Investors remain bullish about next year, pinning their hopes on a rebound in corporate earnings, analysts have said. If Covid-19 cases reach a tipping point, analysts say they will have to revise their fore-

casts.

"There is this push and pull between how we're so nearly there in terms of good news on the vaccine and seeing the end of this, versus another hit to economic output if the vaccine hasn't happened yet when we get another rise in cases," said Georgina Taylor, a multiasset manager at Invesco. "It is still a real concern for markets."

On Tuesday, shares of energy companies led the S&P 500 on a percentage basis, adding 1.6%. Health-care stocks rose 0.7%, as shares of Pfizer gained \$1.31, or 3.2%, to \$42.56. Consumer staples and industrial stocks traded higher as well, advancing 0.5% and 0.4%, respectively. Shares of technology companies added 0.3% after recouping its earlier loss.

Tesla shares advanced \$8.12, or 1.3%, to \$649.88 after Chief Executive Elon Musk said at The Wall Street Journal's CEO Council annual summit that he had moved to Texas after long sparring with authorities in California. Shares were down before that after the car maker said it would sell as much as \$5 billion of shares.

Uber declined 79 cents, or 1.5%, to \$53.01 after the ride-hailing service sold its self-driving car business to a rival.

Overseas, the pan-continental Stoxx Europe 600 rose 0.2%. Across Asia, most major benchmarks closed down.

At midday Wednesday in Asia, Japan's Nikkei 225 was up 1.1%, Hong Kong's Hang Seng Index was up 1.3% and South Korea's KOSPI was up 1.4%. U.S. stock futures were up 0.2%.

Brexit Worries Sink Bond Yields

BY SEBASTIAN PELLEJERO

U.S. government-bond yields fell Tuesday, driven lower by investors' concerns about the prospects for Brexit trade negotiations and a U.S. emergency economic relief package.

The yield on the benchmark 10-year Treasury note finished trading Tuesday at 0.913%, according to Tradeweb. That is the second straight session decline and down from 0.928% at Monday's close. The 30-year yield fell to 1.659% from 1.687% Monday.

Yields, which fall when bond prices rise, retreated as investors waited for developments on Brexit trade negotiations. U.K. Prime Minister Boris Johnson has warned that securing a trade deal at a coming summit with the European Union will be difficult before the Dec. 31 deadline. That uncertainty is driving some investors to havens such as Treasuries.

In the U.S., delays on bills covering economic relief and government spending are also pressuring yields, some analysts said. Lawmakers on Monday struggled to resolve stumbling blocks while seeking a deal on the emergency pandemic relief program. Congressional leaders plan to pass a one-week extension of government-funding legislation to buy more time for negotia-

tions.

Those strains have helped reverse a recent rise in Treasury yields, which tend to climb when investors expect economic growth and inflation. The prospect of a vaccine-fueled economic rebound recently helped push 10-year yields to their highest close in nearly a month near 1%, a level not surpassed since before the pandemic.

Investors already anticipate a stimulus package of more than \$1 trillion, which should cap the climb in yields even if Congress reaches an agreement in coming weeks, said Larry Milstein, head of Treasury and agency trading at R.W. Pressprich & Co.

"Investors have been waiting for stimulus for several months. I don't think a \$1 trillion aid package will move the 10-year yield past 1% at this point," he said.

One factor that investors expect to help keep yields trading within a relatively narrow range: the Federal Reserve.

AUCTION RESULTS

Here are the results of Tuesday's Treasury auction. All bids are awarded at a single price at the market-clearing yield. Rates are determined by the difference between that price and the face value.

THREE-YEAR NOTES

Applications	\$129,796,089,100
Accepted bids	\$58,385,320,100
* noncompetitively	\$51,213,700
* foreign noncompetitively	\$0
Auction price (rate)	99.742950 (0.211%)
Interest rate	0.125%
Bids at clearing yield accepted	45.86%
Cusip number	91282CBA8

The notes, dated Dec. 15, 2020, mature on Dec. 15, 2023.

Risky Chinese Firms Pay Up To Issue Debt

BY XIE YU

Investors are cooling on debt from riskier Chinese companies after missed payments by state-backed firms have cast doubt on the reliability of government support.

The wariness has helped push new borrowing costs for these businesses to their highest levels in nearly two years, marring what has been a banner year for debt issuance.

In November, corporations with below triple-A credit ratings paid an average 5.89% coupon for stock-exchange listed debt, according to Wind, the highest since January 2019. In contrast, triple-A coupon rates fell to 4.09%.

Some Chinese bonds trade on exchanges while others trade in the interbank market.

Overall, Chinese companies, including financial ones, issued the equivalent of \$2.3 trillion in yuan-denominated bonds in the year through Dec. 8, already 33% more than 2019's total, according to Wind.

More than a third of the total was made up of commercial paper, short-term debt that comes due in less than a year.

Chang Li, a Beijing-based director at S&P Global Ratings, said borrowing costs have risen in particular for companies in northeastern and western provinces where local governments have limited financial resources.

Costs have also risen in industries burdened by overcapacity, he said. That would

likely include companies specializing in areas such as mining, chemical production and heavy industry.

Most corporate debt in China is issued by state-owned enterprises, which made up about nine-tenths of issuance both this and last year, according to Rhodium Group.

After the recent upsets, investors are trying to work out which of these firms are truly creditworthy or strategically important enough to count on continued state support.

Credit grades in China are an imperfect gauge of risk. The three state-backed companies—a coal-mining company, chip maker and automotive firm—that recently ran into trouble all boasted triple-A ratings. But in the absence of better tools, investors are using ratings as one way to pick winners.

They are also concerned that China could resume its deleveraging campaign, a yearslong project to rein in debt and financial risk that was put on hold by the trade war and the coronavirus.

If it returns, ailing companies will be a prime target, potentially saddling bondholders with losses in the process. In 2018, a group of top Chinese authorities, including the central bank, told local governments to identify zombie companies—unprofitable businesses propped up by state support and bank loans—and restructure or shut them quickly. But no such companies were ever named. Nor did



A state-backed coal-mining company was among those that recently ran into trouble repaying its debt, despite high ratings.

the central government ever provide an update on the project's progress.

"The campaign of resolving those highly indebted companies...stalled in 2019, with the economic slowdown and heightened U.S.-China trade tensions and has been delayed further due to the pandemic," said Mr. Li at S&P.

He expects authorities to resume their campaign now that the economy is back on a firmer footing.

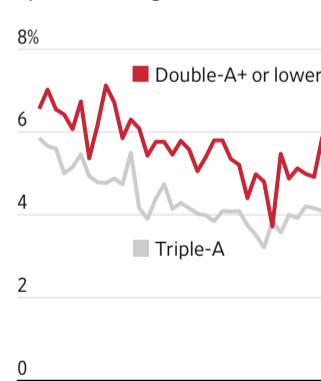
However, determining what companies will endure could be challenging. There is no clear definition of zombie companies, giving extra leeway to local governments, which are eager to preserve jobs and social stability.

"It's a guessing game or more of a political game, said Leland Miller, chief executive of research firm China Beige Book. "It would be very tough for investors in general to peer through the haze and pick the corporates that might survive."

Logan Wright, director of China market research at Rhodium, said localities kept some struggling firms in business after commodity prices rose in 2017-2018, effectively arguing that they had suffered problems during an economic downturn but weren't "structural zombies."

Yongcheng Coal & Electricity Holding Group Co., one recent defaulter, has been profitable since 2017.

Funding costs for new Chinese corporate bonds* Average bond-coupon rate, by credit rating

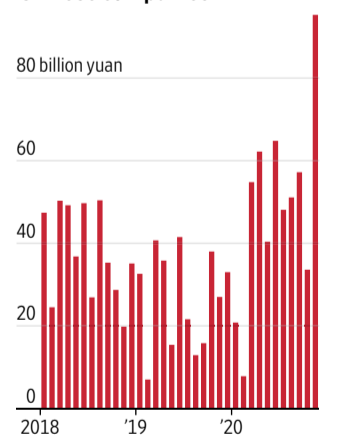


*Stock-exchange listed bonds

†Excludes bonds issued by policy banks, insurers and securities firms; 1 billion yuan=\$153.1 million

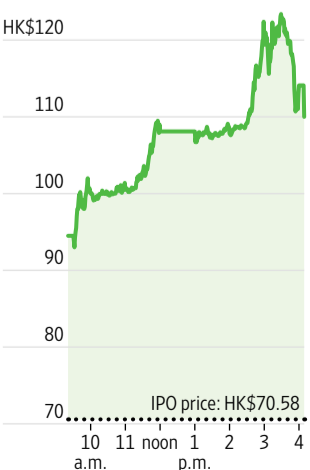
Source: Wind

Canceled or delayed corporate-bond sales by Chinese companies!



Telemedicine Firm JD Health Has Strong Debut in Hong Kong

JD Health's share price, Tuesday



Note: Local time; HK\$100=US\$12.9
Source: FactSet

BY JOANNE CHIU

Shares in one of China's top telemedicine providers surged in their Hong Kong debut Tuesday, reflecting how Chinese technology companies have reinvented the city's stock market.

The \$3.5 billion initial public offering by JD Health International Inc. is Hong Kong's largest this year. It has come as the city closes out its best year for listing activity in a decade—thanks both to IPOs and secondary listings of companies whose stock already trades on other exchanges, such as JD Health's parent, the e-commerce group JD.com Inc.

JD Health stock closed 56% higher at 110 Hong Kong dol-

lars a share, the equivalent of \$14.19, giving the company a market value of \$44 billion, after earlier rising as much as 76%. Rival Alibaba Health Information Technology Ltd., which is controlled by internet giant Alibaba Group Holding Ltd., has a market value of about \$41 billion.

Individual investors placed orders for more than 420 times the stock offered to them, while institutional buyers sought more than 31 times the shares they were offered, JD Health said. The company operates China's largest online retail pharmacy as well as providing other health-care services.

Including JD Health, more than 130 companies have

raised nearly \$47 billion through IPOs and secondary listings in Hong Kong this year, according to Refinitiv. That is the highest total since 2010, even though Ant Group Co.'s blockbuster IPO was derailed in November. Parent company JD.com's own secondary listing in June raised nearly \$4.5 billion, making it the city's biggest listing this year.

The city's exchange has been the top destination for both unlisted Chinese companies and those already traded on New York's exchanges, as U.S. policy makers threaten a trading ban on shares of Chinese companies whose audit papers aren't inspected by U.S. regulators.

Since 2018, listings by Chinese technology and e-commerce companies including Alibaba, Meituan and Xiaomi Corp. have strengthened the city's high-tech credentials. This year, these companies have surged in value alongside U.S. technology giants.

Meituan's stock has nearly tripled this year while Xiaomi's shares have gained nearly 150%. In July, the city's main index provider introduced the Hang Seng Tech Index, which tracks 30 locally listed technology companies, including Alibaba and Tencent Holdings Ltd. Had the index existed for all of 2020, it would be up about 69% this year.

JD Health Chief Executive

Lijun Xin said the company picked Hong Kong over New York to be closer to investors who are more familiar with China's health-care industry. "Hong Kong also has a robust capital market with strong liquidity, making it suitable for us to list here," he said.

Mr. Xin said the global pandemic has accelerated JD Health's listing plan, as coronavirus-induced demand has sped up the development of the whole sector. He said the money raised would be used to expand and to serve clients better.

JD Health's ultimate fundraising size could total \$4 billion if underwriting banks exercise a green-shoe option to buy additional stock.

HEARD ON THE STREET

FINANCIAL ANALYSIS & COMMENTARY

Uber Pays Up To Take Back Seat On Driverless Cars

Ride-hailing giant won't have to consolidate the business's costs, but will remain invested

In a sign of investors' meager appetite for driverless-car ventures, **Uber Technologies Inc.** isn't so much selling its ill-fated project as paying a rival to take it on.

The ride-hailing giant said late Monday that its autonomous-driving unit ATG would be acquired by **Aurora Innovation Inc.**, a startup with about half the staff. But this is no usual acquisition: Aurora isn't handing over cash; in fact, it gets \$400 million of extra capital from Uber as part of the deal.

For the ride-hailing giant, the appeal of the transaction is that it takes driverless cars off its balance sheet. It owned roughly 86% of ATG at the end of September, having sold small stakes to **Toyota**, its parts supplier **Denso** and to Japanese tech investor SoftBank last year at a valuation of \$7.25 billion. After the deal with Aurora, it will own about 26% of the venture, while the ATG minorities will own a further 14%.

Crucially, that means Uber, which is under pressure to trim losses, won't have to consolidate the significant expense of developing driverless cars in its accounts. The deal draws a line under an endeavor that gave the company endless grief: In 2017, Alphabet's Waymo sued Uber for stealing trade secrets, and a year

later one of Uber's test vehicles killed a pedestrian.

Still, Aurora is the more obvious winner. The company has the credibility of being founded in 2017 by three driverless-car veterans, but was looking isolated after most big car makers found other startups to work with. Now it has Uber, Toyota and Denso as minority investors, all three among the largest players in their different fields.

Having big partners matters because driverless cars aren't just about getting a specialist computer to make driving decisions—the area Aurora has focused on. The technology needs to be integrated seamlessly with parts and vehicles, while the business case relies on clear routes to market. A so-called robotaxi service, which Uber would be well-qualified to run, is one of these.

The deal gives the merged company a roughly \$10 billion valuation, behind only Waymo and General Motors' Cruise. This and the postdeal shareholdings imply a valuation of \$4 billion for ATG—markedly down from its previous valuation—and \$6 billion for the original Aurora business, which was valued at \$2.5 billion early last year.

To live up to the \$10 billion tag, Aurora, like its peers, will now need to come up with both a safe driverless vehicle and a credible plan for rolling it out at scale.

A complex merger-integration process may not make the challenge easier. Aurora has roughly 600 staff, compared with ATG's 1,200, but Aurora boss Chris Urmson will lead the combined company.

Questions remain about Aurora's strategic priorities. Having received a small investment from Amazon last year, the company has talked more about applying its technology to the freight business. Its deal with Uber seems likely to bring it back to robotaxis.

To maintain its current momentum in the driverless-car industry, Aurora will need a lot of steering.

—Stephen Wilmot



The stock has rallied more than 50% in the three weeks since the auto maker's index inclusion was announced

Tesla Watches Its Stock Too

Musk is smart to turn paper gains into cash; speculators should take his lead

Tesla is wisely ringing the cash register amid a stunning stock rally. Speculators should take notice.

The car maker said on Tuesday morning that it plans to sell up to \$5 billion in stock just two weeks before it is set to join the S&P 500. It would be Tesla's second such share issue since September.

The sale is a no-brainer for Tesla's long-term health. After all, the stock more than doubled since August, when Tesla announced a share split, and it has rallied more than 50% in the three weeks since its index inclusion was announced.

The timing is no longer one of immediate need for liquidity: Tesla ended the third quarter with \$14.5 billion in cash on its books. Still, opportunities to turn bubble stock gains into real cash shouldn't be squandered. With this coming infusion, Tesla has likely assured its long-term corporate survival barring some extreme scenario.

But the long-term fate of its stock is far less certain. Tesla's market value, which touched \$600 billion on Monday, is nearly 10 times that of General Motors, which dwarfs Tesla in terms of market share, profitability and financial might. Tesla trades at more than 1,200 times trailing earnings, while established auto industry peers go for eight times or less.

Of course, such comparisons hold little weight with those who view the likes of Ford Motor or

Tesla share price, past six months



Source: FactSet

Volkswagen as analogous to a buggy-whip maker circa 1905. It doesn't take much these days for Tesla to appreciate the equivalent of an established auto maker's market value in a single trading session. But stocks like Tesla that can rally so hard on relatively thin gruel can sell off sharply without an obvious catalyst.

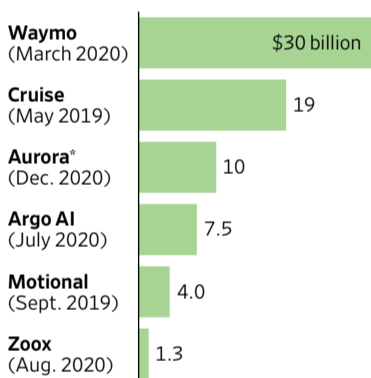
Tesla's largest shareholder knows it, too: "Tesla stock price is too high imo," Chief Executive Officer Elon Musk said in a May Twitter post. The stock has more than quadrupled since that proclamation. Stock prices for other electric-vehicle makers around the world have surged in defiance of

any fundamental analysis.

Those unfortunate enough to have bet that fundamentals will reassert themselves have been run over repeatedly. True believers suffered some jolts too, though: Tesla's stock price has been cut in half twice since December 2018. Joining the S&P 500 offers no special protection against a similar selloff.

Given that backdrop, turning those paper gains into real cash is a perfectly wise and logical thing for Mr. Musk to do. Shareholders sitting on huge, ephemeral gains who don't take that logic to its natural conclusion are risking a date with gravity. —Charley Grant

Valuation of driverless-car businesses



*After the Uber deal
Sources: the companies; WSJ (Aurora/Uber); Financial Times (Waymo)

Stitch Fix Shoppers Start to See the Light

As traditional bricks-and-mortar retailers continue to endure sales declines, **Stitch Fix's** quarterly results released Monday afternoon show how the experience of shopping for clothes could be changing for good.

Stitch Fix said that, in addition to double-digit year-over-year revenue growth for the quarter ended Oct. 31, it saw the highest sequential net client additions in its history. Investors sent its shares surging 39% on Tuesday following the report.

That reaction is likely less a reflection of the quarter itself—revenue growth of 10% was a far cry from the 21% pace Stitch Fix posted for the comparable period last year—and more the expectation that record client growth will pay off later. It likely also was exaggerated by very high short interest in the stock heading into earnings. The company still has to show that it can improve margins.

Stitch Fix, which offers algorithmically personalized clothing with the help of a stylist, for years has been asking new clients to ditch the habit of trying clothing on in a store before paying for it. For the first several months of the pandemic, it seemed this was too big of an ask for many shoppers. Stitch Fix's sales in the quarter ended Aug. 1 grew 3% from a year earlier after falling by more than 9% in the prior period.

But the company's latest results suggest many more consumers are coming around, and it is happening just as a window of opportunity is about to close: When more shoppers feel comfortable visiting shopping malls, Stitch Fix might have hooked customers for good.

The more engagement Stitch Fix's algorithms see, the better they seem to get at predicting what consumers will buy. For a styling fee, Stitch Fix sells clients



Stitch Fix recently saw double-digit revenue gains. Founder Katrina Lake.

a "Fix" of a handful of pieces they can try on at home and then buy or return. Stitch Fix said over the past two quarters that nearly 80% of its first time "Fix" clients purchased at least one item and said they were looking forward to their next order. That is the highest

Stitch Fix sells clients a 'Fix' of a handful of pieces they can try on at home and buy or return.

level of successful first Fixes the company has seen over the past five years.

It also said clients purchasing a Fix for the first time grew 25% year-over-year in the most recent period, its fiscal first quarter. Once hooked, clients tend to spend more on subsequent Fixes.

Stitch Fix's guidance suggests it

can continue to build on its late-pandemic momentum.

The company said it expects recent customer additions to help yield at or above pre-pandemic revenue growth in the back half of the year.

It made money on the basis of adjusted earnings before interest, tax, depreciation and amortization in its fiscal first quarter. But the company said it expects to swing to a loss on the same basis in the current quarter because of increased marketing spending. The company said lower priced products have been popular amid the pandemic. While Stitch Fix might deem a one-item purchase a success, it is unclear how many pieces on average are needed for Stitch Fix to turn a profit.

With its shares having nearly doubled over the past three months, the burden is on Stitch Fix to prove that it can tailor a consistently profitable business from its increasing ranks of satisfied customers. —Laura Forman

Apple Is Replaying The Wrong Audio Track

Apple Inc.'s new headphones are at least aptly named.

The company announced the AirPods Max on Tuesday morning. Its first Apple-branded entry into the wireless, over-ear headphone market carries an eye-popping price tag of \$549—57% higher than the most expensive line of comparable headphones from its own Beats lineup. The new earphones begin shipping next week.

Apple has never been one for bargain hunters and its success so far with its AirPods lineup has likely emboldened its approach to the audio market. The company launched the first version in late 2016 for \$159—a fair premium to other wireless buds at the time. But the AirPods sound quality and ease-of-use relative to the competition were enough to overcome ridicule about their design. The buds sold strong out of the gate and paved the way for a more expensive Pro version that launched late last year. Apple credited AirPods as the top driver of growth for its wearables segment, which saw revenue surge 25% to \$30.6 billion for the company's fiscal year that ended in September.

But Apple's premium pricing strategy doesn't always work out so well. The company's first HomePod smart speaker launched in early 2018 at \$350—more than twice the price of Amazon's Echo that ruled the smart speaker category at the time. The HomePod sold poorly: Futuresource Consulting estimates it garnered about 4% of smart speaker sales that year. Apple has since cut the HomePod's price by \$50 and launched a much more price-competitive version last month called the HomePod Mini for \$99.

The new AirPods Max seems more likely to follow the latter's track. The over-ear headphone market is fragmented, with prices ranging from well under \$100 to audiophile offerings costing well over \$1,000. But the current average selling price for over-ear, wireless headphones with noise canceling is around \$230, according to Ben Arnold of NPD Group. And sales in this category have been falling, with revenue down 45% in the first 10 months of this year compared with the same period last year as consumers have been showing a preference for wireless buds, according to NPD data.

Even Apple will be hard-pressed to reverse that trend—especially with a product priced so far above the pack. The pandemic has certainly boosted demand for home-based electronics, and working from home will continue to be a reality for many well into the new year. But even among Apple's many fans, few will be able to stomach the company's high price for shutting out the family noise. —Dan Gallagher



The new AirPods Max ship next week.

JOURNAL REPORT

CYBERSECURITY

THE WALL STREET JOURNAL.

Stop Scaring Employees!

Companies typically use fear to get employees to follow cybersecurity rules. It doesn't work. But fortunately, alternatives do.



RIKI BLANCO

By KAREN RENAUD

Companies often turn to a powerful emotion to get employees to be vigilant about cybersecurity. They scare them.

If you do *this*, or don't do *that*, something awful will happen. Click on phishing messages, and the company's network will be exposed to hackers. Use simple passwords, and your personal files will get stolen.

The problem: Fear doesn't work. Sure, it may get people to act in that moment. But scare tactics don't get people invested in security over the long term, as Marc Dupuis of the University of Washington and I discovered in research last year.

In fact, it can do the opposite. That is because fear can leave employees in a constant state of

anxiety, which makes them unable to think clearly about threats. Alternatively, such heavy-handed, scare messaging can make employees disgruntled and uninterested in security, thinking that the threats are exaggerated—and that bosses don't trust them to do the right thing.

But fear not. Although scaring employees may not be an effective way to keep them vigilant, there are other tools that *do* work. First, let's dig deeper into why fear doesn't work.

WHY FEAR FAILS

Fear is a short-term emotion.

There is no question that fear can work to get people to perform a one-off action, like installing antivirus software. But long-term behaviors are where

the problems come in—and long-term vigilance is the real point of cybersecurity. After the initial surge, fear will wear off and convert to an underlying state of anxiety, which makes people unlikely to get people to commit to frequent actions such as choosing strong passwords.

For example, consider that Jane is told during cyber-awareness training that any email could be a phishing message. If she clicks on an embedded link or opens an attachment, she learns, malware could be installed, and she will lose all the files on her machine and precipitate a major cyber incident at her place of work.

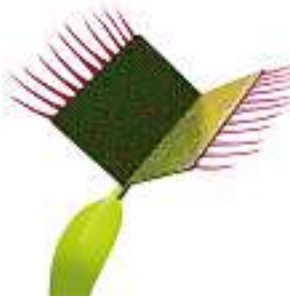
All of this will leave her in a permanent state of *Please turn to page R4*

Dr. Renaud is professor of cybersecurity at Abertay University's Division of Cybersecurity in Dundee, Scotland. She can be reached at reports@wsj.com.

Inside

• Company Jewels

Businesses try a new approach to thwart hackers: Deceive the deceivers by tricking them into thinking they are getting close to critical data. **R2**



Give Me Space

How remote workers can keep work life private from family, and family life private from fellow workers. **R5**

• Student Security

Parents need to know who has access to their children's data, and how that information is used. **R6**



• Buyer Beware

Privacy advocates have long promoted labels for connected devices. What that might look like. **R7**



JOURNAL REPORT | CYBERSECURITY



Inside Jobs

“As for insider threats: There are two kinds that we really look at. One is theft of intellectual property. People tend to do that as they’re leaving the company. That didn’t change a whole lot.

But the other one is cyber-sabotage. This is typically disgruntled employees. Something happened at work and it made them upset. And they get worse and worse over time until they decide, ‘I want to get back at these people.’

Think about people being disgruntled right now. They suddenly are working at home. A lot of companies

WSJ PRO

CYBERSECURITY
EXECUTIVE FORUM

have had pay cuts, reductions in force, furloughs.

A big part of that is staying in touch with your employees, and talking to them, and noticing when someone is having a hard time. They not only have stress at work, they have a lot of stress at home.

One thing we’ve done across the board, not because of insider risk but because it’s the right thing to do, is push managers, ‘Stay in touch with your employees. Connect with them frequently. Just talk about how they’re doing. Don’t jump right into, ‘How’s the project coming?’

We have weekly webinars for all managers, reinforcing the people aspect of being a manager. That goes a long way to helping you to detect when someone may be a potential insider risk.”

—Dawn Cappelli, vice president, global security, and chief information security officer, Rockwell Automation, speaking at the WSJ Pro Cybersecurity Executive Forum on Dec. 2, 2020

Deceiving the Deceivers

: A New Way to Combat Hackers

Companies use technology that makes attackers think they’ve been successful

BY HEIDI MITCHELL

An increasing number of companies are looking at an innovative approach to deal with hackers that break into their computer networks. They lure cybercriminals into thinking they’re getting close to the good stuff—and then they trap them.

That’s what Land O’Lakes, the suburban Minneapolis agricultural giant, is doing.

“Manufacturing-plant technology is difficult to protect, because those mills, generators and turbines were built 20 years ago with little consideration for security,” says Land O’ Lakes Chief Information-Security Officer Tony Taylor. If a hacker shuts down a dairy plant, “we lose hundreds of gallons of milk that we’ve already paid for. And we can’t make any butter.”

So, the company uses a tool called DeceptionGrid, created by Boston-based cybersecurity shop TrapX. The technology deploys an array of decoys and booby traps throughout the Land O’ Lakes network that mimic crucial information, to convince hackers that they have gotten access to the company’s crown jewels.

“Once any of the [decoys] are accessed or probed in any way, one centralized console alerts us, so we know to start investigating the source of that activity,” says Mr. Taylor. His team can then contain the intruder.

It is a method known as deception technology—and it is gaining momentum as cyberattacks become more sophisticated, and the world moves to less-secure work-from-home models and cloud computing.

This new method doesn’t try to bar intruders from getting in, like firewalls. Instead, deception technology scatters fake information—such as false credentials that can be used to access vital information—throughout a company’s network to lure attackers.

Then, when the false information gets hacked, the company is alerted and can either kick out the bad guys or isolate them from the rest of the network to study their methods—and better identify them in the future.

Land O’ Lakes says the technology has helped shield it from attack. For instance, the company

had a contractor whose laptop was infected with malware that began scanning the network, recalls Mr. Taylor. But the malware hit many of the decoys, and his security team was able to locate the source and disable the intruder quickly.

Land O’ Lakes hasn’t had an attack from an unauthorized outsider since it implemented deception technology, Mr. Taylor says. “We still have the older defenses like firewalls in place,” he says, “but we layer deception tech on top of it.”

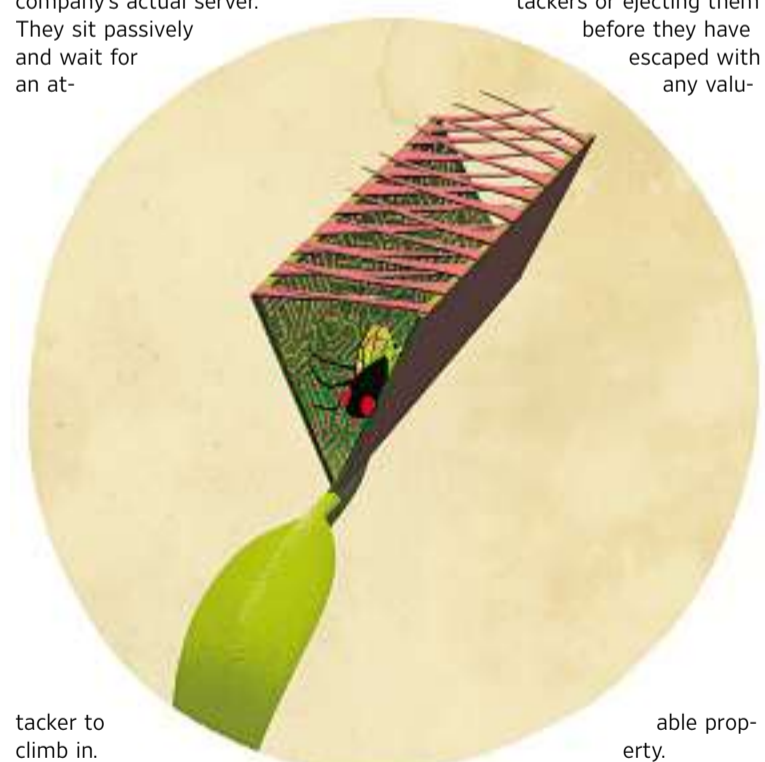
Beyond honey

Deception technology is the evolution of another idea called “honey pots”: fake servers that mimic a company’s actual server.

They sit passively and wait for an at-

Those honey pots can be linked together into a sophisticated network called a honeynet to make them even more effective, but that isn’t cheap, says Raj Badhwar, CISO at Voya Financial, who created such a network for the financial-services company last year. A large bank, for instance, could pay up to \$1 million in subscription fees alone for such a setup, he says, “plus you have to hire human monitors,” which brings up the price substantially.

Enter deception technology. Unlike honey pots, it isn’t just designed to study attackers but to stop them outright. As soon as a malicious actor interacts with a decoy, an alarm is raised, and the cybersecurity team can go into active-defense mode, isolating attackers or ejecting them before they have escaped with any valu-



tacker to climb in.

The problem with these baits is that they allow security teams only to monitor and learn the behavior of bad actors as they attempt to

Rather than keep hackers out, deception technology seek to trap intruders once they are in.

move closer to high-value targets. Studying patterns is useful, especially if that intelligence can be fed into a machine-learning system to adapt to hackers’ tricks, but it doesn’t capture the attackers.

wine, principal security researcher at deception-technology maker Rapid7 in Arlington, Va. For instance, he says, he builds defenses into his systems to look for suspicious credential uses, such as employees logging in from new locations.

A growing effort

Ofer Israeli, chief executive of deception-technology firm Illusive Networks, says the technology is more widespread than many assume, especially in highly regulated industries like banking, insurance and government.

Mr. Israeli believes that to stop an attack, you have to think like a cybercriminal. “If I’m an attacker, I’m going to dig into your browser history and find your saved login credentials. And I’ll go unnoticed because I’m using the same pathway that you use to log into the cloud as part of your daily routine,” he says.

Illusive’s technology plants dozens of fake but believable data points into every company-issued laptop or cellphone. If the attacker exploits an administrator’s credentials, the system disorients them with deceptive data and lets defenders know there is an unauthorized presence on the network. Setting up the system takes less than a second, Mr. Israeli says, “and we have a 95% true-positive rate, meaning almost no false alarms.”

Among Illusive’s competitors is Attivo Networks, of Fremont, Calif., which in 2018 helped supplemental-insurance giant Aflac install deception technology. Aflac Global CISO Tim Callahan is rolling out the system to subsidiary networks now. “Fortunately, we haven’t caught a criminal, but that means we have a high belief that so far we have had no theft,” Mr. Callahan says.

Steve Preston, vice president of growth and strategy at TrapX, says people would be surprised to see exactly how and where companies are hacked. “A lot of times it’s a third party that comes in with a USB to service a machine, and it has [ransomware] on it,” he says.

He knows of a petrochemical plant in Europe that wasn’t connected to the internet but was infected with ransomware through a coffee pot in a break room that was online. “Attackers are agile and fast. They’re adapting to the new-normal chaos, taking advantage of remote workers and new security gaps,” says Mr. Preston. “When security analysts can focus on real threats detected through deception technology, they waste less time chasing false alarms—and a quicker response means reduced loss.”

Ms. Mitchell is a writer in Chicago. Email her at reports@wsj.com.



You're adapting your business.
Empowering people
to collaborate remotely
and share data.
So you need the support of a network
with advanced technology,
managed security
and tools that help defend against threats.
A provider that gives you protection
on every connected device.
So you know you're covered
as you lead the way—
improving the technologies
that keep your business in business.
So you can do more than bounce back.
You can Bounce Forward.™

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COMCAST BUSINESS

JOURNAL REPORT | CYBERSECURITY



Productivity can plummet if employees mistrust every email.

Zimmermann at TU Darmstadt's Institute for Psychology in Germany.

Create a buddy system. Don't put people in a room and talk at them for hours about security. Give them a "buddy" who's there to help them in the office every day to help them carry out the actions you want.

In the system, instead of trying to train *everybody*, one employee in each department is appointed to serve as cybersecurity expert. This employee is close by to support colleagues day to day, available to answer questions about things like potential phishing messages. If a message does turn out to be a phish, the buddy can warn the rest of the department immediately. Or the buddy could help somebody with a question about how to send files outside the company securely.

Not only does everybody get less stressful support, but they get the message that cybersecurity isn't a solo sport but a team effort.

One company I spoke to uses a tactic along these lines, assigning an employee to be a contact for other workers about potential phishing messages. First, he always thanks them for consulting him. If the email isn't a phish, he will let them know it is safe to click the link or open the attachment. If it is a phish, he praises them for their alertness.

He told me that since this policy has been implemented, people have become far more confident in their ability to spot phishing emails, so most of the queries he now receives are about genuine threats, and he can warn all other employees in time. The organization has had zero successful phishing attacks since it implemented this policy.

Provide employees with adequate resources.

Instead of relying on people to take multiple complex steps to ensure security, give them tools that can help them or automate the job entirely.

For instance, if you want people to have strong passwords, give them a password manager. It can generate passwords for them and remember those passwords. Or if you want people to spot phishing messages, put a messaging system in place to warn everyone immediately when your organization is being targeted—as opposed to alerting by email, which might go unread for hours. The first person to spot the message lets everyone else know.

What's more, the alert can also explain how to spot similar messages in the future. The entire workforce gets trained on the spot and gains confidence in spotting phishing messages instead of living in a state of fear that they are going to click on something by accident.

Remove obstacles.

A lot of the fear-based cybersecurity messages involve telling people what tools they can't use in the office. But instead of banning such tools, companies should figure out how those tools can be used securely and effectively.

For example, many organizations forbid the use of USB memory sticks. At the same time, they don't provide a feasible way for people to transfer files to others they are collaborating with. When people improvise—such as emailing the files to other people—they also put the information at risk.

Far better to issue encrypted memory sticks that authenticate using fingerprints (no risk of forgetting the password or using a weak one, or being tempted to write it on the drive itself).

Yes, it is more expensive than banning the use of memory sticks in general, but it is better to spend a bit more to get actual protection, instead of engaging in what security expert Bruce Schneier calls "security theater"—thinking that banning every possible insecure action is going to work.

The idea is to work with your employees rather than against them. There is no short-term solution to the cybersecurity conundrum. We have to play the long game and find a better way—treating our employees with respect and dignity, and not as the *problem*, but as part of the solution.

Why Fear Tactics Don't Work

Continued from page R1
uncertainty. Her productivity is likely to plummet because she mistrusts every email that arrives in her inbox, and she isn't sure if links in messages are safe to click on.

In other words, a fear-based approach doesn't encourage genuine watchfulness. Once someone is in a state of heightened fear or anxiety, their brains are fully occupied in dealing with the emotion, making measured and thoughtful action unlikely or impossible, according to Paul Brown, Joan Kingsley and Sue Paterson in their book "The Fear-Free Organization." That means Jane might be so anxious that she can't make informed choices about messages and instead works entirely by impulse.

People don't believe fear appeals.

People have many things to fear in their lives—especially in 2020—and they resent people leveraging even more fear against them. Prof. Dupuis and I recently surveyed 400 people, and one of the issues that emerged during the study was that while many people might believe in fear-based appeals too much—as with Jane in the above example—others think that such appeals exaggerate the risk to give the message more power. We found that only 20.6% agreed that these fear appeals were necessary—so, people are suspicious and reject the entire message.

The crimes come with punishment.

Very often, fear appeals are coupled with harsh punishments for making security errors. Organizations do this for very understandable reasons: If people have an immediate, tangible personal stake in following the rules, the logic goes, they are more likely to stay on the straight and narrow.

One U.K. organization fined employees heavily if they opened attachments on test phishing messages the organization sent out itself. These fines were significant, up to 50% of employee salaries. Another company had a policy of firing staff who fell for such messages three times.

Yet another company posted a photo of people who fell for a phishing message on the communal fridge to embarrass them.

David Rock suggests in his research into the neuroscience of collaboration that an employee who is singled out this way already feels bad about being deceived—and will now experience the equivalent of physical pain at being shamed. One employee of a company using this kind of tactic told me that if she fell for a phishing message, she feared

that it would be brought up during her yearly performance review and affect her chances of being promoted—leaving her in a permanent state of anxiety.

These organizations don't seem to understand the harm that they do to employer-employee relations with these campaigns. An organization needs workers to be committed to securing the organization's devices and information. This can't be achieved by eliciting fear and imposing sanctions.

Fear puts employees in a bind.

Companies that rely on fear often make a demand of employees: Deal with the problem yourselves by following the rules. But those fixes are often difficult, at best. And might be impossible. So, in essence, workers are told the dire consequences of not following rules that they *can't* follow.

For example, it is common for password policies to instruct employees to (a) choose strong passwords, (b) not write them down and (c) not reuse them anywhere else. But, given that most people have tens if not dozens of passwords, this rule is impossible to follow—so

Give employees a cybersecurity buddy who can help them take the precautions you want.

it is likely that employees will end up in a state of long-term anxiety or simply give up on following the rules altogether.

WHAT WORKS BETTER

So, what is the alternative to fear? Creativity and trust. Giving employees more leeway and support works a lot better than infusing their lives with anxiety and creating an aversion to anything to do with cybersecurity.

Here's a more productive three-pronged approach—drawn from the works of Prof. Sidney Dekker at Griffith University in Australia; former submarine captain and current leadership expert David Marquet; speaker and author Wouter Hart; and my own research with Verena

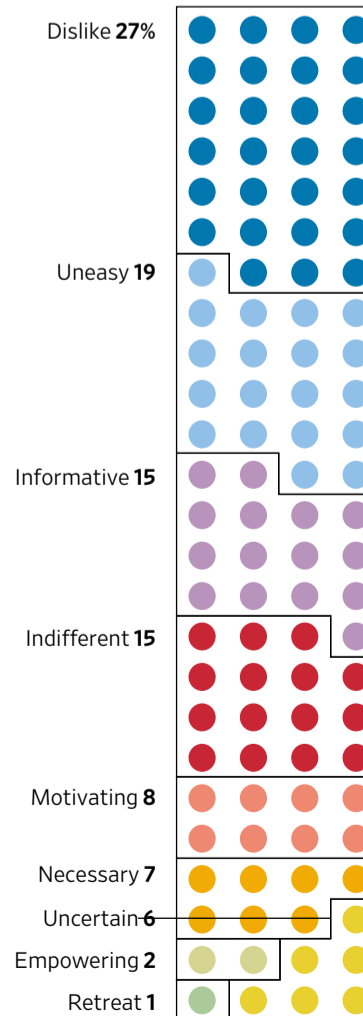
The Fear Factor

Many of the 400 workers in a study indicated they don't feel it is necessary to induce fear for the sake of company cybersecurity.

Response* to use of cybersecurity fear appeals:



When asked to choose only one response to the use of cybersecurity fear appeals:



*Multiple responses allowed
Source: Marc Dupuis and Karen Renaud, Ethics and Information Technology, Oct. 20, 2020



Little Is Certain

"Whenever there's uncertainty, there's opportunity for an attacker."

Think about changes that most employees have gone through over the past six to eight months. And imagine you got a phone call from somebody that says they were part of the IT department, or the health-benefits department, or a new Covid task force.

These may not seem out of the ordinary today. You could convince employees to do things they normally wouldn't do, to maybe install a piece of dangerous software on their machines.

We've seen attacks where they've taken a video that the CEO has given, taken an audio sample, and then generated software that can emulate the CEO's voice. We've seen some attacks where the CEO's voice is calling someone in the finance department, and asking them to send an urgent wire.

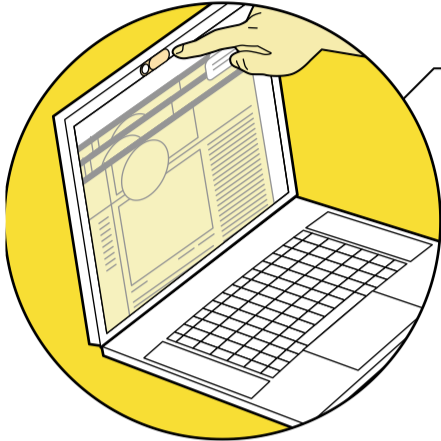
And these things are quite sophisticated in that the CEO, or the fake CEO in this case, can actually respond to questions that the victim has. Even if you were curious, and you had follow-up questions, 'Why should I send this \$10 million wire right now,' the CEO's voice can give you an answer."

—Hugh Thompson, managing partner, Crosspoint Capital Partners, speaking at the WSJ Pro Cybersecurity Executive Forum on Dec. 2, 2020.

JOURNAL REPORT | CYBERSECURITY

Shortcuts to Privacy

When you're working from home, privacy from everyday intrusion by family and colleagues suddenly becomes incredibly important. Here are a few ways to protect the boundaries between work and home.



Workstation security: Add an inexpensive webcam cover to your computer screen, with a sliding door to open or shut over the camera. Before sharing your screen, turn off notifications and hide all your other windows.

Separate computers: Get a second computer. But if your work gadgets do double-duty as the family computer or gaming platform, you can still create some sense of privacy by creating a separate user account (or email and social-media accounts) for family use.

'Do not touch' shelf: Set up a shelf or cupboard that is off-limits to your spouse, roommate and/or kids. Everything on it—work papers, charging cables, whatever—isn't to be looked at or touched by anybody in the house.

Headphones: Noise-canceling Bluetooth headphones do an amazing job of creating a sense of privacy from the rest of the family.

Walk it off: For sensitive office calls, take a walk around the neighborhood with your phone and headset so that you can talk freely out of earshot of your family and neighbors. You'll get some exercise, too.



Lock 'em up: Sometimes the best way to get privacy for yourself is by creating pleasant, private space for everyone else. Invest time and money in creating cozy spaces for other family members to hide out in—freeing up the common space when you need it.

Decor cover: A ceiling track with curtain clips allows you to quickly clip a piece of fabric to use as a curtain or enclose yourself in an instant booth. A pop-up, folding background can hide mess or give you a green screen for a digital background.



Source: WSJ reporting, Kevin Hand/WALL STREET JOURNAL

Privacy Tips for Remote Workers

How to keep colleagues from intruding on your home life, and family from intruding on your work life

By ALEXANDRA SAMUEL

The cybersecurity world pays a lot of attention to protecting privacy. Privacy from hackers. Privacy from governments intruding on the lives of their citizens. Privacy from businesses that have an unprecedented volume of data that can be used to target or profile consumers.

But with so many people working from home, privacy has taken on an added dimension: the privacy of information from the ordinary, everyday intrusion by family or colleagues.

There is, for instance, the loss of privacy when your colleagues overhear you arguing with your children, or see what you read on the bookshelves behind you. Or the loss of privacy when your spouse can see what's on your computer or how you handled your midafternoon Zoom call.

That's exactly why so many of us need a work-from-home privacy strategy: a set of guidelines for what needs to stay private from whom, and a plan that makes it easy to stick to those guidelines.

What's the problem?

It may be obvious to say this, but it bears saying anyway: Your employer and your clients are counting on you to keep their information private. That may not be a big deal when you're in an office and bring work home some nights or on weekends. But it's a much bigger issue when all your work and every conversation is available for anybody walking past you or your computer. Your spouse or your 10-year-old son may not feel quite as compelled to keep secrets as you do.

Just as important as your privacy obligations to your employer are your privacy obligations to the people you live with. No matter how many times my husband reassures me about his camera angles, I really hate getting dressed in the same room where he's taking a Zoom call with six colleagues. Even if they aren't in the room during your calls, your family members or roommates may not want their bookshelves, art projects or photos visible to your colleagues or clients, so consider a family meeting where you collectively talk through what needs to stay off-screen, out of earshot or off the radar of your work contacts.

It's no doubt tricky to keep your personal life out of sight when your company's newfound remote work culture encourages people to share their goings-on. But remember: You can't build successful relationships on a foundation of discomfort. Setting boundaries with colleagues as well as family members can help establish a comfortable line between work and home,



A nude portrait graces the wall of a bedroom in which the author often takes video calls. Her teenager transformed it with a paper-doll dress.

A pop-up folding background or a ceiling track with a curtain clipped on can keep home clutter out of sight during video calls.

allowing you to be much more effective on both fronts.

Privacy from your employer, clients or colleagues

Once you are clear on what you want to keep private, there are a range of tools and tactics that can help you protect those boundaries. The easiest is to have a designated, enclosed space in your home that is decorated (or not decorated) specifically for video calls. If that isn't an option, here are some alternatives:

Decor covers: The background blur available in many videoconferencing programs is one option, but I found it leaves you looking like a disembodied head. That's why I prefer to simply hide or disguise my background. A ceiling track with curtain clips allows you to quickly clip a piece of fabric to use as a curtain or enclose yourself in an instant booth. A pop-up, folding background can hide mess or give you a green screen for a digital background. You can also take a more targeted approach to hiding certain more problematic aspects of your surroundings. Since I often take video calls in our bedroom, where a nude portrait of my great-grandmother graces the wall, my teenager made a paper-doll dress that has transformed the portrait into something more work-friendly.

A physical webcam cover: Yes, I can turn off my camera at the end of the call, but I live in fear of forgetting—and of the various types of spyware that surreptitiously take over webcams. So I like to keep an inexpensive webcam cover that sticks onto my computer screen, with a sliding door to open or shut the camera.

Digital decluttering: Before sharing your screen, turn off notifications and hide all your other windows. If you're a Mac user, the PliimPro utility will do both with a single click.

Selective social media: Social isolation has made social media more important as a way of staying connected to friends and colleagues—but that doesn't mean you want everyone to know everything. I rely on Facebook's "restricted" list: Anyone who goes on that list can see anything I post publicly, but not the posts that I share only with friends. By putting all my colleagues on my restricted

list, I can be friendly without over-disclosing.

Privacy from your partner, roommate or children

I am just as conscious of keeping things private from my partner and children—especially when I'm working on something that might interest a curious teen, or create any conflict of interest for my husband.

The do-not-touch shelf: Set up a shelf or cupboard that is off-limits to your spouse, roommate and/or children. Everything—work papers, charging cables, whatever—isn't to be looked at or touched by anybody in the house. Period.

Separate computers—or, at least, user accounts: In an ideal world you will not have to share your phone, computer or any other device with family members. But if your work gadgets do double-duty as the family computer or gaming platform, you can still create some sense of privacy by creating a separate user account (or email and social-media accounts) for family use. That way the family can use the computer after hours without getting access to any of your work files.

Noise-canceling headphones: My noise-canceling Bluetooth headphones do an amazing job of creating a sense of privacy from the rest of the family. True, they can still hear my side of the conversation, but when I can't hear them, I feel like I have some privacy for my work.

Walk and talk: When I don't want my family to hear my side of the call, either, I often leave the house with my phone and headset. A walk around the neighborhood—out of earshot of my neighbors as well as my family—allows me to speak freely and get some exercise, too.

Lock 'em up: Sometimes the best way to get privacy for yourself is by creating pleasant, private space for everyone else. Now that we're all spending even more time at home together, I've invested time and money creating cozy spaces for each of my family members—closed-door rooms where they can retreat for schoolwork, Zoom calls or gaming sessions. When they're all locked away in their rooms, I enjoy the quiet bliss of a living room I have all to myself.

Dr. Samuel is a technology researcher and the co-author of the forthcoming book "Remote, Inc.: How to Thrive at Work... Wherever You Are." Email her at reports@wsj.com.



Easy Pickings

"The bad guys don't need to be sophisticated. We're all applauding how businesses were able to become digitized in the space of weeks. And yet many organizations left the back door open.

In January, we did an analysis to try to determine the number of organizations or the number of systems that had an open RDP access—the remote desktop protocol. The remote desktop protocol is the modus operandi for some of the most damaging post-intrusion ransomware groups.

We had 1.5 million in January. By about March when this pandemic was really kicking off, we had well over double that. In other words, in the rush to effectively maintain remote working, many organizations effectively took a shortcut.

We did work with law enforcement, and got access to what we call an RDP shop—dark web shops that sell credentials to companies. Do you want to guess the most common password that was being used for RDP systems being sold underground? There was no password. It was null.

The reality is that, yes, there are sophisticated threats out there. But there's so much low-hanging fruit that really cybercrime is the one industry that hasn't suffered economically from the pandemic."

—Raj Samani, McAfee fellow and chief scientist, McAfee, speaking at the WSJ Pro Cybersecurity Executive Forum, on Dec. 2, 2020.

JOURNAL REPORT | CYBERSECURITY

Parents need to know who has access to their children's data, and how that information is being used

By **LISA WARD**

Schools are relying heavily on technology—from videoconferencing programs to digital-teaching tools and temperature-taking apps—to educate children safely in the age of Covid.

But this rapid deployment of new technology means schools are collecting a lot more personal data on students. And that is raising some troubling questions about who has access to the data, how it is being used and whether it is being kept safe.

Infrastructure for protecting students' personal data wasn't that sound to begin with, says Leah Plunkett, a Meyer Research Lecturer at Harvard Law School, who likens the current situation to building something "using duct tape on top of Legos." The federal law governing student privacy dates back to 1974, and while some states have more stringent laws, sufficient funding to implement those statutes is often lacking, she says. And many public schools lack the technical expertise or personnel to deal with student-data privacy, she adds.

Schools, meanwhile, increasingly have become targets of cyberattacks.

Here is some information that might help parents better prepare to protect their child's privacy in an age of online learning.

What legal rights do parents have when it comes to protecting student data?

The federal law governing student privacy, called the Family Educational Rights and Privacy Act (FERPA), prohibits schools from releasing students' educational records or personally identifiable information without parental consent, but there are some key exceptions. Technology companies, for example, have access to student data if they are providing administrative or educational services for a school, and schools can release de-identified student information without parental consent.

Under the law, parents have the right to inspect, review and amend educational records, including contact information, grades, test scores, disciplinary records and school health records. The problem is, the average U.S. school was using 400 to 1,000 different online tools—this figure includes websites, software plug-ins, apps and games, among other things—even before the pandemic, according to the Student Data Privacy Consortium, an organization of school districts working to improve student-data privacy. That can make it difficult for parents to get a handle on what data is being collected.

What new information is your school collecting?

This semester, some school districts randomly tested students for Covid-19, while others required students to record their temperatures daily and report any travel outside the state or region. This gives school districts and tech vendors more granular information about students' health and daily movements.

Schools also may have a more detailed picture of students' online activities, especially if students are working on school-owned devices. If schools are using online-teaching tools, data on how individual students learn and perform is migrating from teachers, who had previously done these assessments, to technology companies.

Privacy advocates fear this could change the role of teachers. They also worry that the data could be shared and eventually used to create the academic equivalent of a credit score to be used by institutions of higher learning or even employers.



Data Privacy in an Age of Online Education



▲ Parents should understand how their children are being monitored and assessed online, experts say.

What steps does your school take to protect data privacy?

Schools that are better prepared to protect student data often have a formal vetting process for new technology that prohibits teachers and administrators from downloading and using nonapproved digital tools on their own. They also may be in one of the 9,000 school districts in the Student Data Privacy Consortium, which helps school districts negotiate privacy agreements with technology companies and provides model data-privacy agreements. Among other things, these contracts prohibit the sale or disclosure of student data to third parties, specify student data should be stored securely and deleted when it is no longer needed, and prohibit vendors from trying to match anonymous data with the student to whom it belongs. The contracts require vendors to take "reasonable security measures" to accomplish these objectives.

When the consortium was formed five years ago, there was "very little, if any, common understanding and expectation around student-privacy requirements," says Steve Smith, chief information officer at the Cambridge Public Schools in Massachusetts and the group's founder. Many school districts have joined the consortium since the pandemic began, he says.

Are teachers being trained to use new technologies?

The pandemic forced a rapid

site or via social-media post; and set screen sharing to host only.

What can be done at home to thwart cybercriminals?

The Wall Street Journal reported in November that since the onset of the pandemic, schools have been fighting a wave of increasingly aggressive ransomware attacks by hackers. In these types of attacks, thieves steal addresses, phone numbers, Social Security numbers, grades and other sensitive information and hold the information for ransom, sometimes posting it on the web or selling it to other entities.

"With schools online, there are a greater number of entry points into the network," says Reg Leichy, founder and partner at Foresight Law and Policy.

Phishing emails, where hackers try to tempt the receiver into opening an email with an attachment or link to malicious software, are a problem, as are weak passwords and insecure home computers and Wi-Fi networks.

Parents should talk to children about phishing emails and creating strong passwords, ideally a memorable phrase that has no personally identifiable information, maybe a character or two from a book, Mr. Leichy says. He also recommends installing anti-virus software on children's devices and changing the default name and password on the home Wi-Fi networks.

Additionally, he recommends setting up a virtual private network, or VPN, to make web browsing more secure. VPNs create safe, private connections to the internet, camouflaging a computer's location and making it more difficult for ransomware creators to track and target it.

How is your school using technology to evaluate students?

Parent need to understand how students are being monitored and evaluated online, says Amelia Vance, director of youth and education privacy at the non-profit Future of Privacy Forum.

To take attendance, for example, some schools require students to log in and stay logged in to a certain platform, or to turn on their web camera. But "what if a student forgets to log in that morning—or forgets to log out?" Ms. Vance says. "What if a student with limited Wi-Fi can't turn on their camera function every day? Should these students be penalized for their perceived lack of participation?" she asks.

Parents also should know that new tools being used to evaluate students aren't infallible.

The algorithms behind the tools may be biased or just flat-out wrong. For example, researchers have shown that some essay-grading programs will give high marks to essays with good grammar, even if the content is nonsensical.

Ms. Ward is a writer in Vermont. Email her at reports@wsj.com.

▲ Schools may be collecting more data on students than parents realize amid the move to online learning.



After a Breach

"This [breach] incident informed us in many ways. First and foremost, obviously addressing the vulnerabilities that led to that breach. But then more important, the way we prepare for incidents in general and the way we look at all of the stakeholders and their role in responding to a breach.

The organization grew a lot and learned a lot in its appreciation for the distributed nature of an incident response. It isn't just the tech workers responding. It's everybody.

You need to take every incident as a learning experience, or a close call as a learning experience, because there's a lot to learn, and it is beneficial. I think it also helps your stakeholder group really understand that it isn't just something that happens in the news; it can happen right here.

The most important thing when an incident happens is having a clear set of rules and responsibilities and processes, not wondering what to do, but having a very well-rehearsed incident plan for that particular attack, and making sure that the lines of communication and really all hands are on deck.

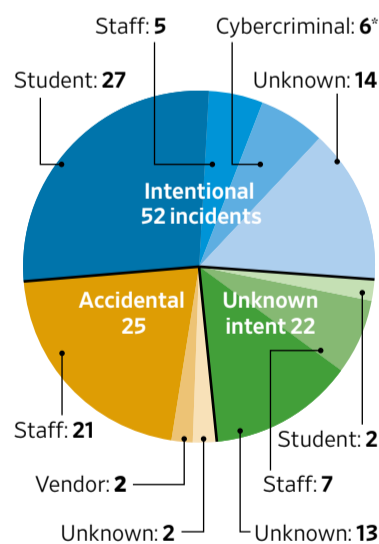
Everybody welcomes the learning opportunity. We have people who are excited about it, and people who aren't even on our team who want to participate. They want to learn, because there's a lot to be learned when you're looking at an attack happening. You can say, 'Oh, now I understand how this got in and why my action over here makes a difference.' "

—Christine Wheaton, vice president, chief information privacy and security officer, Henry Ford Health System, speaking at the WSJ Pro Cybersecurity Executive Forum on Dec. 2, 2020.

School Breaches

Thousands of K-12 students had their personal information compromised in 99 reported incidents between July 2016 and May 5, 2020.

Breaches by actor, intent:



*Defined as an actor external to the school district who breaches a data systems for malicious reasons
Source: U.S. Government Accountability Office analysis of K-12 Cybersecurity Resource Center data.

transition to online learning. As such, parents may want to request information from their school district about its procedures for vetting new classroom technology and its policies on training teachers and students how to use it.

Early in the pandemic, there were problems with so-called Zoom bombing, where outsiders disrupted classes being conducted on Zoom's videoconferencing platform by yelling profanities or racial slurs. Many of these issues could have been avoided with better training, such as: Don't make meetings or classrooms public; require a password and control the admittance of guests; don't share a link on an unrestricted publicly available

A Nutrition Label For Cybersecurity

As the Internet-of-Things proliferates, consumers want to know how their data will be used by the makers of these devices—before they purchase them

By **CHERYL WINOKUR MUNK**

Your milk and orange juice have nutrition labels. Soon your refrigerator and coffee maker could, too.

For years, consumer privacy advocates have pushed the idea of so-called nutrition labels for devices. Instead of telling consumers how much vitamin B or C a product has, these labels would tell prospective purchasers how their data will be used and by whom.

Any smart device connected to the internet could be a candidate for a label.

Researchers from Carnegie Mellon University's CyLab Security and Privacy Institute are floating a working prototype of how such a label could look. They're providing their label—vetted by researchers and numerous privacy experts—free of charge to Internet-of-Things, or IoT, device makers, standards organizations and others.

Discussions for adoption are still in the early stages. But advocates hope device makers will adopt this type of label, or that groups such as Underwriters Laboratories, an independent safety-testing and certification company, or Consumer Reports will use at

least portions of the label in their review processes, says Lorrie Cranor, the director and Bosch distinguished professor in security and privacy technologies at CyLab.

The label is designed to go on a product's packaging or on the websites where the devices are sold. Products under consideration for carrying the label could include any smart device that is connected to the internet—including security cameras, refrigerators, speakers, home controllers, doorbell and much more, says Dr. Cranor, who is also a professor of computer science and a professor of engineering and public policy at Carnegie Mellon.

The idea of protecting data privacy becomes more of an issue as more products connect to the internet. Apple Inc. has said that as of Dec. 8, it will require app developers to provide information about their applications' privacy practices before submitting new apps and app updates to the App Store. What's more, consumer organizations are increasingly incorporating data privacy into their ratings, while some states have enacted, or are considering, privacy legislation. The Federal Trade Commission, which also has raised the concept of a nutrition label, says it supports the efforts of industry groups in this area.

Here's a closer look at the Carnegie Mellon label.

Ms. Munk is a writer in West Orange, N.J. Email her at reports@wsj.com.

A Cyber-Label Guide

Privacy experts are floating a 'nutrition label' for Internet-connected devices. These labels could help consumers understand devices' data-collection and security practices. At the center, below, is a proposed cyber label for a fictional device, a smart doorbell. Here's what it tells consumers:

Security & Privacy Overview
Smart Device Co.
 Smart Video Doorbell NS200
 Firmware version: 2.5.1 - updated on: 11/12/2020
 The device was manufactured in: China

Security Mechanisms
 Security updates: Automatic - Available until at least 1/1/2022
 Access control: Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed

Data Practices
 Sensor data collection: Visual, Audio, Physiological, Location
 Sensor type: Camera, Microphone
 Purpose: Providing device functions, Research
 Data stored on device: Identified, No device storage
 Data stored on cloud: Identified, Options: delete
 Shared with: Manufacturer, Government, Manufacturer
 Sold to: Not disclosed, Not sold

Other collected data
 Motion, Account info, Payment info, Contact info, Device setup info, Device lock info, Device usage info

Privacy policy
www.NS200.smartdeviceco.com/policy

Detailed Security & Privacy Label
www.iotsecurityprivacy.org/labels

More Information
 CMU IoT Security and Privacy Label | CISPL 1.0 | iotsecurityprivacy.org

Overview: Provides basic product information including device name, version number and where it was manufactured.

Security Mechanisms
 Gives consumers information about the device's security, such as whether updates are automatic or manual, and how users can gain access to the device such as through a manufacturer-set password that can be changed by the user. Consumers can also see whether multiple account users are allowed and if there's an option for multi-factor authentication or biometric login.

More Information
 The link and QR code offer a more detailed list of device-specific security and privacy practices, including hardware safety, software safety, personal safety and encryption and key management.

Data Practices
 Outlines four mechanisms the devices could use for data collection—video, audio, physiological and location. Highlights what the collected data is being used for, how and where it is stored, and whether the stored data is anonymous or is identifiable. Also illustrates how and with whom customer data is shared or sold, along with other miscellaneous data the device collects. Other data collection is mentioned here and detailed at the link and QR code.

Source: WSJ reporting

What to Do—and What Not to Do—in the Aftermath of a Breach

Among the most-important: Don't create fear and uncertainty by firing the people who may know best how to recover from the attack

By **ROB SLOAN**

The immediate aftermath of a breach is a critical time for the hacked organization. If leaders don't learn quickly what went wrong and act swiftly—in the right ways—to fix the problem, they risk exacerbating the damage in terms of financial and reputational harm.

Cyberattacks have increased during the pandemic as a rush by businesses to digitize services and provide employees with remote access has made systems more vulnerable. And corporate leaders continue to make the same mistakes in their responses. We asked a number of experts to share their insights about what to do, and not do, after a breach.

specialized skills as part of a \$1.5 billion program to bolster security processes and technology and instill a focus on security.

Gregory Touhill, president of Appgate Federal Group, urges companies to take a proactive stance by regularly using independent third-party penetration testing, hunt teams and audits to find and fix issues before they turn into problems.

Don't play the blame game

After some of the largest breaches in recent years, removing top executives was seen as the best way to signal that the hacked company was implementing a change in strategy. But, according to one former executive, such a move can have "a chilling effect."

"Fear and uncertainty will not be your friend when everyone else is in the midst of trying to survive or recover," says Stevan Bernard, a cybersecurity consultant and former chief security officer at Sony Pictures Entertainment, which he helped steer through an attack in 2014.

Do update policies and document changes

It is crucial to establish new security policies and to document what went wrong and how it was fixed. Justine Phillips, a partner in the Data Privacy & Security Practice Group at law firm Sheppard, Mullin, Richter & Hampton LLP, quotes Maya Angelou: "When you know better, do better."

Incident-response policies defining roles, responsibilities, action items and expectations, she says, "demonstrate a business has learned and will do better next time."

Ms. Phillips adds that documenting changes is imperative not only from a regulatory perspective but to ensure the system is threat-free again, without backdoors.

Do help others

Being open and sharing lessons can help everyone in the security community.

Mr. Farshchi says Equifax has shared what it learned with a network of partners, including nonprofits, government agencies, customers and even competitors.

"No breach is a good thing," he says, but a silver lining can be "to share insights that allow other companies to avoid a similar fate."

Mr. Sloan is research director of WSJ Pro. He can be reached at rob.sloan@wsj.com.



Equifax learned lessons from a data breach in 2017.

Don't just fix it. Improve it.

Many companies jump into action by adding controls or software that defends against the type of attack they just suffered. They don't address the underlying vulnerabilities.

"The immediate aftermath is a time to focus on the fundamentals," says Jamil Farshchi, chief information security officer at Equifax Inc., who joined the company five months after a 2017 data breach.

Companies can avoid 99.9% of potential threats if they enforce a policy of doing the basics correctly and in a timely fashion, Mr. Farshchi says; things like applying security patches and understanding which devices are authorized to connect to the network.

That was Equifax's first step in a much greater transformation. Since 2017, it has recruited roughly 1,000 new employees with

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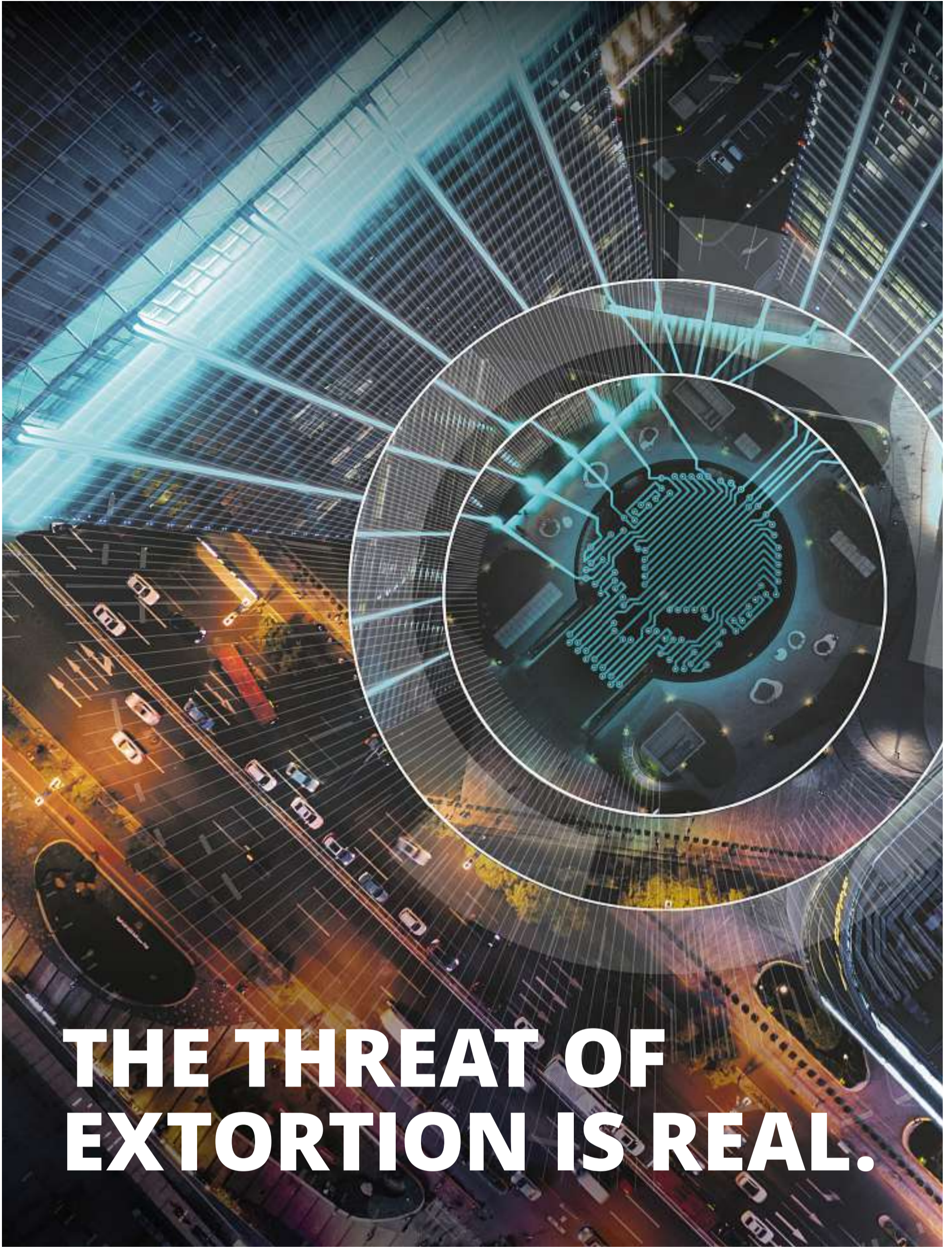
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