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NASDAQ Closed (11313.13)

STOXX 600 367.97 ▲ 1.7%

10-YR. TREAS. Closed (0.720%)

OIL Closed (\$39.77)

GOLD Closed (\$1,923.90)

EURO \$1.1816 **YEN** 106.28

What's

Business ぢ Finance

Production problems at a Boeing 787 Dream-liner factory have prompted air-safety regulators to review quality-control lapses potentially stretching back almost a decade, according to an internal government memo and people familiar with the matter. A1

- **♦ Investors returning** from the Labor Day weekend are keeping an eye out for signs that a rally in tech stocks and the market recovery it fueled are losing steam. A1
- ♦ Shares of SoftBank tumbled 7%, as investors reacted to news of a bet the company has placed on a rise in tech stocks. **B3**
- ♦ Samsung signed a \$6.65 billion contract with Verizon for network equipment and services, a major boost to the South Korean firm's quest to become a key 5G supplier. B1
- ♦ Wish joined Amazon in barring foreign seed sales after thousands of suspicious seed packets, many postmarked from China, arrived at households around the world this summer. **B1**
- ◆ Citigroup and a big hedgefund client are locked in an uncharacteristically public feud that has embroiled top executives and laid bare a \$900 million mistaken payment by the bank. B1
- ♦ Stock in China's SMIC fell sharply after the U.S. government said it was considering placing export restrictions on the semiconductor manufacturer. B4

World-Wide

- ◆ Entering a contentious stage in the presidential campaign, Trump is seeking to focus voters on an economic rebound and public safety, while Biden is redoubling efforts to make the election a referendum on Trump's performance on the corona-
- **♦ Germany signaled** it is prepared to reconsider its Nord Stream 2 gas-pipeline project with Russia in light of the poisoning of Kremlin critic Navalny, who was roused from an induced coma. A8
- ◆ PG&E was set to cut power in parts of Northern California to reduce wildfire risks, a move it said would affect about 172,000 customers in 22 counties. A3
- ♦ China is launching its own initiative to set global datasecurity standards, countering U.S. efforts to persuade like-minded countries to ringfence their networks from Chinese technology. A9
- **♦ A Belarus** opposition leader has been abducted, an opposition council said, raising fears that government authorities are intensifying a crackdown. A8
- ◆ A Saudi court reduced the death sentences of five men convicted in the killing of dissident journalist Khashoggi to 20-year prison terms. A8
- ◆ A British judge refused a request by lawyers for Julian Assange to adjourn the WikiLeaks founder's extradition hearing until 2021. A8

JOURNAL REPORT

Investing in Funds: Lessons From the Last Pandemic R1-10

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Opinion. Personal Journal A11-12 Technology... B9-10 World News..... A8-9



Labor Day Makes a Big Splash as Summer Draws to an End



ALL IN: A boy jumps into the water at Wekiwa Springs State Park in Apopka, Fla., on Monday. As crowds turned out around the country for the long weekend, officials worried that holiday gatherings could lead to a spike in Covid-19 cases. A6

Sharp Tech Pullback Unnerves **Investors in Highflying Stocks**

By Amrith Ramkumar

Investors returning from the Labor Day weekend are keeping an eye out for signs that a dizzying rally in technology stocks and the market recovery it fueled are losing steam.

The Nasdaq Composite slid more than 6% over two days last week after hitting a fresh high, led by Thursday's record one-day decline in market value at Apple Inc., the mostvaluable U.S.-listed company. Selling intensified Friday, at

one point pushing the index down almost 10% from its record and spreading to markets including crude oil and gold, before a broad reversal narrowed losses in some stocks and sent others back into more familiar, green territory.

Few investors believe the late-week rout signals the end of a rally that has taken the Nasdaq to 43 record closes and pushed the S&P 500 up more than 6% for the year. The economy continues to show signs of improvement, and with inter-

est rates near record lows, the investor mantra that "there is no alternative" to purchasing the shares of major U.S. corporations remains very much intact. The main driver of the tech boom—strong growth that has been boosted during the pandemic as more consumers work and learn remotely—also still holds, investors said.

Even so, the scale of the gains among major technology shares this year, the resulting rich valuations and the gobsmacking market capitalizations of many of these firms raise the possibility of large share-price drawdowns this fall.

The Nasdaq Composite is up 26% for the year. Swings in the shares of Alphabet Inc., Amazon.com Inc., Facebook Inc., Microsoft Corp. and others stand to accentuate expected volatility around the U.S. presidential election and attempts to control the coronavirus out-Please turn to page A7

♦ James Mackintosh: Where

Flaws in **Boeing's 787 Jets Prompt** Review

Regulators look into lapses at Dreamliner plant that may stretch back nearly a decade

By Andrew Tangel AND ANDY PASZTOR

Production problems at a Boeing Co. 787 Dreamliner factory have prompted air-safety regulators to review qualitycontrol lapses potentially stretching back almost a decade, according to an internal government memo and people familiar with the matter.

The plane maker has told U.S. aviation regulators that it produced certain parts at its South Carolina facilities that failed to meet its own design and manufacturing standards, according to an Aug. 31 internal Federal Aviation Administration memo reviewed by The Wall Street Journal.

As a result of "nonconforming" sections of the rear fuselage, or body of the plane, that fell short of engineering standards, according to the memo and these people, a high-level FAA review is considering mandating enhanced or accelerated inspections that could cover hundreds of jets.

The memo, a routine update

or summary of safety issues pending in the FAA's Seattle office that oversees Boeing design and manufacturing issues, says such a safety directive could cover as many as about 900 of the roughly 1,000 Dreamliners delivered since 2011.

The final language depends on the outcome of continuing reviews by Boeing and the agency, as well as decisions by more senior FAA officials. The extent of the review reflects

danger lurks in tech rally.... B1 Please turn to page A9

THE COVID STORM

'Diabolical' Virus Outpaces Science

SARS-CoV-2 is wily, with mysterious origins and powerful ability to infect and spread

By Robert Lee Hotz AND NATASHA KHAN

The new coronavirus is a killer with a crowbar, breaking and entering human cells with impunity. It hitchhikes across continents carried on coughs and careless hands, driven by its own urgent necessity to survive.

It has a gregarious side that makes it hard to resist. It loves a party. The persistent social climber claims its victims around the world by riding on moments of the

most innocent of human interactions—a shared laugh, a conversation, an embrace. And it is a liar. SARS-CoV-2, which causes Covid-19, often misleads the body's immune systems.

Taken on its own terms, SARS-CoV-2 is the infectious disease success of the past 100 years.

Almost unmatched in the annals of emerging human contagions, it has parlayed a few chance infections into a pandemic of around 27 mil-Please turn to page A10

2020 Presidential Race Enters Final Sprint





President Trump touted the recent jobs report and Democratic candidate Joe Biden arrived in Harrisburg, Pa., to meet with union members as Labor Day kicked off a key stretch of the race. A4

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Routines Get a Reboot At Work and at Home

By Arian Campo-Flores

Sonia Dillane, a software development engineer at Amazon.com Inc., won't be remote working at the kitchen table in her Seattle townhouse anymore, sitting in a dining chair that irritated her back.

Instead, roughly half a year into the coronavirus pandemic, she is setting up an office in a guest room. Her husband, a software development engineer at Amazon, is creating one in the den. She also won't be attending services for the Jewish High Holy Days later this month as she normally would. And she won't plan a getaway with her hus-

band for the winter. "We can't just limp along,"

said Ms. Dillane, 31 years old. "I think it's easier to mentally prepare that all the next year is a wash."

Fall is typically a season of revival, as people return to work, children head to school, sports seasons launch and cultural life awakens. This year, with the coronavirus pandemic still spreading in much of the U.S., it is a season of deeper adaptation.

Workers are overhauling routines and home offices, families are creating new rituals and businesses are trying Please turn to page A6

- ♦ With no child care, parents quit work.
- Α3 ◆ Families face dilemma over youth sports..

Travelers Win

Quarantine Hotel Lottery

In Singapore, you might get 'stuck' at the Ritz

By Chong Koh Ping

Joy Van Dee arrived in Singapore after a 12-hour flight from Amsterdam, dreading two weeks of mandatory quarantine with her toddler in a government-designated facility.

Until, that is, their shuttle bus parked at the five-star Ritz-Carlton Millenia Singapore, and they were taken to a 549-square-foot luxurious room, with river views. "We hit the jackpot," said Mrs. Van Dee, a 42-year-old interior designer, who didn't know her destination until the last moment.

This is Singapore's quarantine lottery, where most arrivals to the island city-state have Please turn to page A10



P2JW252000-2-A00200-1-----XA

A2 | Tuesday, September 8, 2020

Education Boost Isn't What It Used to Be



lacks a key ingredient that helped propel it to economic dominance in

the 20th century: productivity gains from higher education. Figuring out why could help influence the economy's long-term trajectory once it emerges from the coronavirus crisis.

In 2009, President Obama, worried about the economy's global standing, set a goal for the U.S. to have the world's most-educated workforce by 2020. The share of U.S. workers with college degrees has grown significantly, even if the country fell short of his goal. But those gains haven't translated into a substantial productivity boost as Mr. Obama and economists hoped.

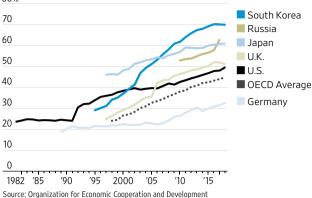
ising education levelsfirst in high school, then in college and graduate school—helped fuel strong economic growth in the latter half of the past century. In 1910, just 14% of Americans age 25 or older had a high-school diploma

and just 3% had a bachelor's degree, census data show. By 2000, 84% had graduated from high school and 26% had a bachelor's degree.

As Americans raised their skills, the country shifted from an agrarian economy in the 19th century to an industrial one and then a digital one, leading to electrified cities, the mass assembly line, television, the computer, men on the moon, and the internet. American households became wealthier, and living standards climbed rapidly.

It was all tied to education. argued Harvard economists Claudia Goldin and Lawrence Katz in their 2008 book, "The Race Between Education and Technology." More-educated workers use their knowledge and skills to invent and innovate, helping the economy become more efficient, thus boosting productivity—or output per labor hour—the key ingredient to rising living standards, they say.

Productivity rose an average of 2.3% a year from 1947 to 2000, Labor Department data show. Ms. Goldin and Mr. Katz estimate roughly a quarter of the average anShare of adults ages 25 to 34 with a postsecondary degree



nual gain came from rising educational attainment.

When Mr. Obama took office in 2009, his advisers worried that slow gains in higher education threatened to undermine long-term economic growth. In 1992, the U.S. had more college graduates as a share of all citizens between ages 25 to 64 than any other developed country, according to the Organization for Economic Cooperation and Development.

But by 2009, the U.S. ranked fourth, behind Canada, Israel and Japan. Mr.

Obama's advisers believed the U.S. economy could slip into mediocrity if it didn't further boost its "human capital," or workers' knowledge and skills. Improving human capital would lead to

stronger productivity

growth, they said. College enrollment, which had already started rising when Mr. Obama took office, accelerated during his first term. By 2019, under the Trump administration, nearly half of all Americans between ages 25 and 29 had an associ-

ate degree or higher, up from

37% in 2005, census data show. The share with a bachelor's rose to 39% from 29%.

Nonetheless, productivity has grown tepidly. From 2007 to 2019, the productivity of nonfarm businesses rose an average of 1.4% a year. Why is unclear.

r. Katz says the data show higher education still helps individuals and society on average. One piece of evidence is the college wage premium: In recent years, college graduates have, on average, earned 75% more than workers with a high-school diploma who never attended college, according to the Federal Reserve Bank of New York, Many economists believe employers' willingness to pay graduates more proves that grads are more productive. The persistent wage premium suggests demand for their skills and knowledge hasn't been satiated, the theory goes.

Mr. Katz says higher education, in the aggregate, doesn't carry the same productivity punch it once did. In the 21st century, the contribution of higher-education gains to annual productivity growth has been cut in half, compared with the past century, he said.

He believes one big factor is the change in the types of schools Americans attend. For those who attend public and nonprofit four-year universities, there is still a big payoff in the form of higher wages and productivity. But, he said, a lot of Americans who earned degrees this century attended schools without a big payoff, particularly many for-profit colleges.

George Mason University economist Bryan Caplan, in his 2018 book, "The Case Against Education," offers a different explanation. He argues that while many college graduates are more productive than nongraduates, it isn't because college made them that way. Rather, many graduates already had valuable attributes-such as an ability to focus and learn quickly-before college. Their degree simply signals to employers that they have long had these attributes, making it easier for hiring managers to sort through job

Worker Visa Bans Hamper Seasonal Businesses

By Justin Baer AND MICHELLE HACKMAN

GATLINBURG, Tenn.—Jerry Huskey, a senior staff member at Ober Gatlinburg, spent his summer struggling to hire enough staff to operate its amusement park and he is dreading the same challenge as the winter ski season approaches.

Lockdowns and travel restrictions because of the coronavirus pandemic created one set of hiring hurdles this year; Washington created others. In June, President Trump banned several work-based visa types through the end of the year, including the J-1 and H-2B programs for seasonal foreign workers, with the aim of safeguarding any open jobs for Americans.

Recruiting those U.S. workers, however, proved difficult this summer because the seasonal jobs aren't permanent. affordable housing is hard to find, and, in some locations, workers available, business leaders sav.

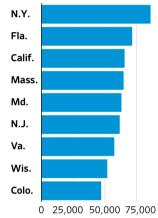
The enhanced unemployment benefits approved by Congress and the White House this summer also meant American workers could make more money staying at home rather than taking a temporary job.

On a July afternoon in Gatlinburg, a parade of cars with out-of-state license plates inched along Parkway, the city's busy commercial strip. Yet with a total population of just 4,000 residents, Ober Gatlinburg and other businesses couldn't fill all the jobs needed during the bustling

One restaurant that was closed in early July left a note on its door citing staffing issues, while others staked "Always Hiring" signs out front. The amusement park operated with reduced hours, and couldn't open all of its venues, Mr. Huskey said.

Ober Gatlinburg started hiring J-1 workers in 1995, when the business brought in about 15 foreign employees. That mer. As for the looming winter there simply aren't enough number has swelled to as season, the business hasn't many as 120 in the summer lined up any foreign workers and more than 150 during yet.

U.S. states with most foreign workers on seasonal jobs through J-1 summer work travel program since 2009



Source: U.S. State Department

most winter months. Along the way, Ober Gatlinburg created housing for its temporary staff. This year, though, Mr. Huskey could obtain only 25 .I-1-visa workers for the sum-

U.S. WATCH

"It's very frustrating," said migration policy at the U.S. Mr. Huskey, who previously ran human resources and now serves as Ober Gatlinburg's risk manager. "We depend heavily on winter—it's the only time when we're the only game in town."

The U.S. Chamber of Commerce, along with several other employers and organizations, have filed legal challenges to Mr. Trump's visa ban, arguing that the president issued the order without evidence that foreign workers actually displace Americans, and that he doesn't hold the power to single-handedly erase entire visa categories.

A federal court in Washington on Friday night partially upheld the ban, including on J-1 and H-2B workers, though a different court is set to reach a preliminary decision in a separate suit against the ban within a few weeks.

"Many J-1 employers in winter resort towns are scared about how the current visa relice, executive director of imChamber of Commerce. "These businesses will be left out in the cold."

Critics of the foreignworker programs are skeptical of businesses' arguments.

The visa programs offer employers a lot of flexibility to expand or contract their workforces, and those businesses aren't required to pay payroll taxes on those workers who arrive via J-1 visas, said David North, a fellow with the Center for Immigration Studies, organization advocating more immigration restrictions. For many seasonal employers, hiring foreign workers is convenient, and cost-effective.

"It's so much easier to call up this middleman who has an in with a J-1 program, to get people in bunches and who are rights-free," Mr. North said. They always talk about labor shortages, and they never talk about wage shortages."

He added: "If you're going to run a business like this in strictions will impact their the U.S., you ought to figure companies," said John Base- out how to recruit U.S. workers."

ECONOMIC CALENDAR

applicants.

Tuesday: Japan's secondquarter gross domestic product is expected to be revised down from the initial estimate of a 7.8% contraction from the prior quarter, reflecting weaker capital expenditure plans. A separate release on household spending for July is forecast to show a 3.7% decline, following June's 1.2%

Wednesday: China's consumer prices are estimated to have risen 2.5% in August from the same period a year earlier. The deflation of August's yearover-year producer-price index is likely to have narrowed to 2% from 2.4% in July thanks to an uptick in commodity prices.

Thursday: The European Central Bank is expected to leave its policies unchanged, but its officials may signal that a further expansion of the ECB's bond-purchase program is likely.

U.S. jobless claims are expected to have edged lower again in the week ended Sept. 5, more evidence the labor market is slowly healing. Even with another drop, however, the proxy for layoffs would remain well above levels seen during any previous recession, underscoring the severe dislocation from the new coronavirus and efforts to contain it.

Friday: U.S. consumer prices are expected to show a rise for the third consecutive month in August, though at a slower pace than June and July. Prices have picked up for some goods and services as the economy reopens, though overall inflation pressure has been muted and is expected to remain so in the coming months.

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Notice to readers

CALIFORNIA

Fires in 2020 Burned **Record 2 Million Acres**

Wildfires have burned more than 2 million acres in California this year, setting a state record even as crews battled dozens of growing blazes in sweltering temperatures Monday.

The most striking thing about the record is how early it was set, with the most dangerous part of the year ahead, said Lynne Tolmachoff, spokeswoman for the California Department of Forestry and Fire Protection.

"It's a little unnerving because September and October are historically our worst months for fires," she said. "It's usually hot, and the fuels really dry out. And we see more of our wind events."

The previous high was 1.96 million acres burned in 2018. Cal Fire began tracking the numbers in 1987

Firefighters struggled to corral several dangerous blazes ahead of dry, hot winds predicted to raise fire danger to critical levels in the coming days. Evacuation orders were expanded to more mountain communities as the largest blaze, the Creek Fire. churned through the Sierra National Forest.

Firefighters working in steep terrain saved the tiny town of Shaver Lake from flames that roared down hillsides toward a marina. About 30 houses were destroyed in the remote hamlet of Big Creek, according to resident Toby Wait.

"About half the private homes in town burned down," he said. "Words cannot even begin to describe the devastation of this community."

Sheriff's deputies went door to door to make sure residents were complying with orders to



INFERNO: A California firefighter in unincorporated Madera County doused flames Monday in one of the more than 20 blazes across the state.

leave. Officials hoped to keep the fire from pushing west, possibly toward Yosemite National Park.

Cal Fire said 14,800 firefighters were battling 23 major fires in the state. California has seen 900 wildfires since Aug. 15, many of them started by an intense series of thousands of lightning strikes. There have been eight fire deaths and more than 3,300 structures destroyed.

—Associated Press

GEORGIA

Fugitive Accused Of Firing at Officer

Authorities searched Monday for a Texas fugitive they describe as "armed and dangerous" who is accused of shooting a deputy in Dalton, Ga.

Dalton Potter, 29 years old, fired numerous gunshots at Whitfield County Sheriff's Deputv Darrell Hackney from inside his vehicle, the Georgia Bureau of Investigation said Monday. Deputy Hackney was struck, but his ballistic vest saved him, the GBI said.

Mr. Potter had been hauling a stolen trailer and was pulled over by deputies before the gunfire happened around midnight, authorities said.

Deputy Hackney and another deputy returned fire, but Mr. Potter made his getaway by driving south on Interstate 75. He wrecked the truck and escaped into the woods on foot, the GBI said.

-Associated Press

LAS VEGAS

Police Shoot Dead Woman's Attacker

Police said an officer fatally shot a man who was attacking a woman after being called to a home for a domestic dispute on Sunday.

The officer fired one shot through a mesh screen door after he spotted the man cutting the woman, the Las Vegas Metropolitan Police Department

It wasn't clear what he was using to cut the woman.

The man, who hasn't been identified, died at the scene. The woman was in stable condition with multiple lacerations.

-Associated Press

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By Gwynn Guilford

Clara Vazquez's 7-year-old son, Kevin, asks her a troubling question before he goes to sleep each night. "'Mom, who's going to take care of me tomorrow?' he asks me," said the 27-year-old resident of Sunnyside, Wash. "I feel so bad because I have to say, 'I don't know.'"

She will have to come up with an answer soon, and it may cost Ms. Vazquez a big part of her livelihood. In two weeks, her son's online-only classes start running from 9 a.m. to 3:30 p.m. If she can't find child care, she will give up at least one of her two jobs as a home health-care worker to help her son manage his studies.

"I don't want to quit my job because it's going to put us in financial strain," said Ms. Vazquez, whose husband is a truck driver. "But I feel like I'm out of options."

It is a trade-off that looms for millions of families across the U.S. whose children are returning to partial or completely remote learning at K-12 schools this fall, and the potential blow to the economy could be big enough to rival a small or medium-size recession.

According to research that Brevan Howard Asset Management recently shared with its investors, about 4.3 million U.S. workers could find themselves staying home unless they find other child-care arrangements.

If those parents are counted among the unemployed, it would boost the unemployment rate by 2.6 percentage points, according to Brevan Howard. That would be a sharper increase than occurred in both the 1990-91 and 2001 recessions, though smaller than what occurred in the 2007-09 downturn, the researchers said.

A recent analysis by Barclays economist Jonathan Millar and colleagues found that the closures of all schools from September to December 2020 would result in a reduction of U.S. gross domestic product in 2020 on the order of between 0.4% and 0.8%. That compares with an inflation-adjusted GDP decline of 0.1% in 1991 and a slight increase in 2001.

The release of these analyses comes as school plans remain in flux, and as outbreaks have flared up at K-12 schools that have opened around the country. This rocky start is under way as the U.S. economy's recovery brought the August unemployment rate down to 8.4%, from a peak of 14.7% in April during the height of pandemic-related business closures.

Brevan Howard arrived at its conclusions by calculating that

About 4.3 million workers could be forced to stay home, an analysis found.

around 5.3 million working parents with children under the age of 14 have full-time jobs that can't be done from home, and lack another parent or adult to take up the child-care slack. Based on the school-reopening plans of the nation's 100 largest school districts, which comprise around onefifth of public-school students. Brevan Howard's calculations suggest that at most around 19% of students are returning to in-person classes this fall. With around 81% of children attending classes from their kitchen tables, that translates to 4.3 million workers who will have to stop working unless they can cobble together an-

other source of child care.

The demands imposed on parents by this new virtual school year this fall are, for many working parents, straining stopgap measures that had gotten families through the

pandemic up until now.

Mary Ann Shepherd said that helping her sons through virtual learning when their Mobile, Ala., schools shut down in the spring was manageable. Teachers were flexible, and gave everyone a passing grade. "This is not like that—you can fail virtual school this time," said the mother of four.

Buses Forge New Path Back to School

By Valerie Bauerlein

One of the hardest parts of getting children back in school this fall is physically getting them there.

Covid-19 has turned the already difficult job of running school buses into a logistical nightmare, with transportation directors scrambling to figure out how to maintain social distance, sanitize a vehicle in near-constant use and protect the health of students and drivers, many of the latter who are retirees.

In school systems with alternating schedules, planners must draw multiple routes to get different groups of students to school on different days.

Managers commonly face start dates that are a moving target, making it hard to keep drivers who typically only get paid for the hours they work.

"I hate to use the word unprecedented, but this is unique," said Charles Hood, executive director of the National Association of State Directors of Pupil Transportation Services

The "yellow-bus industry" has spent decades refining how to prevent crashes and only a few months on the spread of diseases, Mr. Hood said. "Quite frankly, we're no more expert at it than anybody else."

Over the summer a coalition of national school transportation trade groups, including Mr. Hood's, studied how best to run a school bus program in a pandemic.

It quickly became clear that

there would be no one-size-fits-all template, said study co-author Jim Regan, a Chicagobased transportation consultant. More than 25 million students typically ride 480,000 school buses a day, according to the American School Bus Council. Each of the 13,000 school districts nationwide has its own financial constraints, state and local regulations and school board desires to consider, Mr. Regan said.

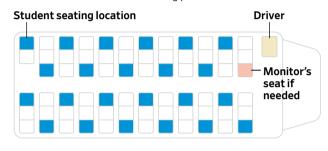
Instead the Student Transportation Aligned for Return To



Students get hand sanitizer as they stepped off the school bus last week at Heritage Elementary School in Lewis Center, Ohio.

Seating Chart

A common arrangement being used on school buses is to have one student to a seat in alternating positions.



Source: Massachusetts Department of Elementary and Secondary Education $\label{eq:condition} % \begin{center} \begin{center}$

School (STARTS) task force built a 225-item tool kit of best practices, based on a review of 50 pandemic response plans from companies such as Walmart Inc. and Delta Air Lines Inc. to agencies like the Metropolitan Transportation Authority, which runs the New York City subway system.

Among the major suggestions are requiring masks and boarding the bus from back to front.

"Remember the movie 'The Martian' with Matt Damon, and he says, 'Hey, you solve one problem and you solve the next one and you survive?' " Mr. Regan said. "That's what this is. This is a risk, we've got to solve it, then you solve the next one."

So far, only a handful of the 70 biggest city districts are planning to go back to in-person learning this fall, according to an analysis by The Wall Street Journal. In some states,

school districts are encouraged to reduce pressure on the transportation system by not offering bus service to students who live within 1.5 miles of the school, and otherwise encouraging students to walk, bike or carpool to school.

Many of the first districts to go back to physical school are in the Sun Belt. In Pensacola, Fla., the Escambia County School District this year is transporting 13,000, or a third of the system's 40,000 students. Typically, the district would transport 24,000, or 60%, of the students.

Transportation Director Darlene Hart said Escambia, like many districts, has long struggled to keep bus drivers on the payroll. Some of her drivers are older and decided not to come back; some took jobs in food delivery or other lines of work. The district has 230 drivers for 280 slots, she said.

Ms. Hart said she would have liked to space out children at one per window seat, or 24 riders on a 12-row bus, as many experts advise. But she said she didn't have the luxury of staff or spare buses, so her average ridership is from 30 to 50 students in pre-assigned seats, with siblings grouped together.

There are new hand-sanitizing stations at the front of the bus, plastic face shields for drivers and bottles of sanitizer to be sprayed on every touchable surface at the end of the shift, a major change from the quick sweep of the past.

Cor'Darius Jones, an Escambia County driver and maker of a series of "Mr. Bus Driver" viral videos, said he felt as well-trained as he could be for the first day of school, but was still caught off-guard.

"It was definitely more stressful," he said. "You already have the normal challenges of driving, watching mirrors, watching for students cutting up. Now I'm looking for any child that looks ill, too."

—Yoree Koh contributed to this article.

Unease Rises as Colleges Send Students Home

By Melissa Korn

Administrators at California State University, Chico, determined in late August that coronavirus outbreaks in classrooms and residence halls could be catastrophic at the school. Its response: to send students back home.

Many schools have made similar decisions, including **James Madison University**, North Carolina State University, Colorado College and the State University of New York in Oneonta. Public-health officials worry that dispatching students to their hometowns, often without testing them before departure, could lead to new outbreaks around the country.

"Shipping the problem back to the community, where they can further spread, just doesn't seem like the right answer," said A. David Paltiel, a professor at the Yale School of Public Health. "Just because a kid is asymptomatic doesn't mean it's safe to send that kid home. They could be exposed and incubating. They could be in fact a ticking time bomb."

Dr. Paltiel said the viral load rises steeply in the few days following exposure, and someone infected can transmit the virus to others starting around day three after exposure—before symptoms may present, if they ever present.

Vice President Mike Pence urged governors in a recent



A statue of Charles Leaming Tutt Jr. stands outside the library that bears his name at Colorado College

call to discuss isolation efforts with their university leaders.

"Even where you have test positivity on campuses, we want to encourage universities to have students remain on or near campus and minimize the potential exposure to the wider community," he said, according to a recording of the call reviewed by The Wall Street Journal.

At Chico State, more than

90% of classes were already online, and the school had just about 750 students in residence halls. Another 8,000 to 10,000 are living near campus. The school didn't test students on arrival, and local health officials have led testing of potentially symptomatic individuals.

By Aug. 30, there were nearly 30 cases on campus, with additional exposures "that could have an exponential and devastating effect on campus," President Gayle Hutchinson wrote to the school community, announcing plans to reduce campus housing significantly.

The school isn't sending home students who are currently in quarantine. More than 135 will stay in university housing because of hardships, and the school has worked with about 100 others to relocate to off-campus housing nearby.

Butte County, where Chico State is located, had been handling contact tracing for those who tested positive on campus. If students do test positive after heading home, Dr. Hutchinson said, "My guess is it would become part of their county public health responsibility."

As of Thursday, Chico State had reported 102 cumulative cases since the beginning of August.

Juanita Mottley, Chico State's pandemic manager and director of the campus health center, said the school has warned students about exposing family members and urged them to self-monitor for symptoms. "There's nothing we can really do about people who may be asymptomatic and continually shedding the virus," she said.

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, said on the "Today" show last week that sending students home after outbreaks is "the worst thing you could do." He said schools should isolate infected or potentially infected students on campus instead.

In the call with governors, White House coronavirus coordinator Deborah Birx warned that sending even asymptomatic students home could cause a repeat of what happened in parts of the South in June, when young people traveled to vacation spots and outbreaks soon developed.

PG&E Sets California Blackouts to Cut Wildfire Risk

By Katherine Blunt

PG&E Corp. said it planned to cut power in parts of Northern California late Monday to reduce wildfire risks, a day after the state narrowly averted rolling blackouts to relieve strain on its electric grid during a heat wave.

The San Francisco-based utility, which serves 16 million people in Northern and Central California, said the outages would likely affect about 172,000 customers in 22 counties stretching from wine coun-

try to the Sierra foothills.

The exact number of people potentially affected is uncer-

tain but would likely top more than 500,000, based on census data on people per household in California.

PG&E said the shut-offs would start about 9 p.m. Monday in some areas, with other areas seeing shut-offs starting Tuesday. The outages could last through Wednesday in all affected areas.

California utilities in recent years have resorted to public safety power shut-offs in which they cut off electricity to certain areas to reduce the risk of their power lines sparking wildfires when wind speeds pick up.

PG&E last year relied on

such measures after its equipment sparked a series of deadly wildfires in 2017 and 2018. Last October, it pre-emptively cut power to more than two million Californians across 34 counties, some for days at a time. It is the only U.S. utility to have ever initiated a weather-related shut-off of such Markey chut off warms.

The Monday shut-offs were the first of their kind since California wildfire season began earlier this summer. PG&E has been working to reduce the scope of its safety-related outages by installing technology to limit their size and improving its ability to detect weather

threats.
The shut-offs came a day af-

ter the California Independent System Operator, which operates much of the state's electric grid, anticipated a 4,000megawatt power-supply shortage, driven in part by import constraints and wildfires affecting transmission lines in parts of the state. On Sunday, it called a Stage 2 emergency, urging utility customers to conserve power during the early evening hours but stopped short of calling for rotating outages.

An extreme heat wave in the southern half of the state forced residents to shelter in-

side and crank their air-conditioning units as temperatures topped 120 degrees in parts of the region, boosting electricity demand. As a result, the grid operator's power reserve margins wore thin at several points throughout the evening as solar generation began to decline. Californians responded by

conserving energy during the supply crunch and the grid operator called off the emergency Sunday evening.

The state grid operator

The state grid operator called for rolling blackouts last month for the first time since 2001 as a heat wave swept California and other parts of the

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U.S. NEWS

President Courts Outrage to Control Agenda



CAPITAL JOURNAL By Gerald F. Seib

Shortly after the 2016 election, Corey Lewandowski, President Trump's onetime campaign manager and current informal political adviser, appeared at a conference of campaign leaders at Harvard University and



scolded journalists for misunderstanding the newly elected president. "This is the

problem with the media: You guys took everything Donald Trump said so literally," Mr. Lewandowski said. "The problem with that is the American people didn't, and they understood it.'

Today, almost four years into Mr. Trump's presidency and two months before Americans decide whether to re-elect him, that quandary remains at the heart of any effort to analyze President Trump: When should one take what he says seriously, and when is he merely toying with the press in a bid to control the agenda, or with his foes to bait them into responding in irrational ways?

wo recent controversies underscore the question—and illustrate the way the president's approach complicates life for the campaign of his Demo-



President Trump speaking during a news conference at the White House on Monday.

cratic opponent, Joe Biden.

Case No. 1: Last week, the president told his supporters to, essentially, try to vote for him twice in this fall's election, first by mail and then by showing up at a polling place on Election Day. By doing that, he said they could test whether mail-in ballot systems are as impervious to fraud as proponents say, and also ensure that they cast a vote that counts one way or the other.

Was the president seriously suggesting his supporters undertake what could be considered an illegal act by attempting to cast two ballots? Or was he merely using a shocking statement to underscore his argument about the pitfalls of mail ballots? More darkly, was he sowing seeds of doubt about the very legitimacy of the election to

In any case, if one of Mr. Trump's goals was merely to ensure that his complaints about mail-in voting got prominent attention, he suc-

Case No. 2: In recent days, the president issued a memo ordering federal agencies to explore ways to cut federal funding to cities that, in his view, haven't done enough to control unrest in the streets. As it happens, the memo mentions only cities with Democratic mayors—Seattle,

Portland, New York City and Washington, D.C.—and none in swing states where a threat to cut off federal funds could backfire on the president's re-election campaign.

Does the president seriously intend to try to cut off congressionally appropriated funds to major cities—a move of questionable legality and one certain to face immediate court challenges—or was he using a presidential memorandum to underscore a lawand-order message central to his re-election campaign?

In any case, the action left Mr. Trump's critics sputtering with rage. New York Gov. Andrew Cuomo responded by saying the president "better

have an army if he thinks he's going to walk down the street in New York." That response represents another characteristic of some of Mr. Trump's verbal broadsides: They often get his foes to respond with such outrage that they appear to be the irratio-

here are an abundance of other examples, but they all have one common characteristic: They allow the president to exert a lot of control over the national political agenda. Much as Mr. Trump knew during the 2016 campaign that reporters wouldn't ignore incendiary statements by a

nal ones.

leading presidential candidate, he now knows reporters and his political foes can't simply ignore statements by the leader of the free world. And he uses the power to his advantage.

"They take him literally when really they should take him figuratively in some cases," Mr. Lewandowski says now in an interview. "It drives the media story. It doesn't always mean it's the best narrative, but he's driving the media story. This isn't new, by the way. This has been going on for six years."

Mr. Trump's supporters seem, in many cases, to be in on the deal. They often tell reporters they don't take what the president says literally, but understand he uses bombast and exaggeration to make a point they want to

The problem with this style is that there are times of crisis or duress when a president needs the country to take him both literally and seriously. If the currency of presidential credibility is devalued, it isn't clear it can be revalued when it really matters, or that it can be used successfully to unite rather than divide.

All this represents a strategic problem for the Biden campaign. It has watched as Mr. Trump has used such tactics in recent weeks to move the agenda from the coronavirus to law and order and mail-in voting.

Can the Biden camp afford to simply ignore some of the things Mr. Trump says and stick to its own agenda? Mr. Trump's foes have struggled with that question for years, without finding a good an-

Candidates Enter Key Stretch in Campaign

By CATHERINE LUCEY AND KEN THOMAS

WASHINGTON-Entering a contentious stage in the presidential campaign, President Trump is seeking to focus voters on an economic rebound and public safety, while Democratic challenger Joe Biden is redoubling efforts to make the election a referendum on the president's performance on the coronavirus pandemic and the economy.

With the start of early voting in some states this month, Mr. Trump and Mr. Biden are fighting for control of a battleground map stretching across a dozen states against the backdrop of a pandemic that has upended traditional campaigning.

Mr. Biden threatens to make Mr. Trump, a Republican, the first president to lose re-election in nearly 30 years. A series of polls released since their late August nominating conventions show Mr. Biden maintaining a lead nationally and in key states, though Mr. Trump is within striking distance in some surveys.

Much could hinge on whether Mr. Biden can keep the focus on Mr. Trump's handling of the pandemic, as he argues that the president's response has cost American lives and damaged the economy.

Mr. Trump is countering with suggestions that life under a President Biden would lead to economic distress, as well as chaos in the streets because he is siding with protesters and insufficiently tough on lawbreak-



Democratic nominee Joe Biden during a meeting with labor leaders in Lancaster, Pa., on Monday.

ing. Mr. Trump is seeking to highlight recent economic gains, such as Friday's jobs report showing that the economy added 1.4 million jobs and the unemployment rate fell to 8.4%.

Their dueling messages are playing out before a fractured nation contending with a pandemic that has claimed more than 185,000 lives and a debate over racial justice that has spurred widespread peaceful protests and some violent

Mr. Biden marked Labor Day by meeting with union members in Lancaster, Pa., ahead of an event with the AFL-CIO in Harrisburg. Mr. Trump, meanwhile, staged a news conference from the North Portico of the White House, where he lambasted Mr. Biden in a preview of his lines of attack for the final weeks of the election.

Mr. Trump cast Mr. Biden as "pawn" for China and attacked his intelligence and mental fitness, saying: "In prime time, he wasn't good. And now, it's not prime time." Mr. Biden, joined by AFL-CIO President Richard Trumka, said the president was "not made of the same stuff" as U.S. workers.

"He lives by a code of lies. greed and selfishness," Mr. Bi-

Both running mates traveled to Wisconsin. Vice President Mike Pence delivered a message of law and order in La Crosse, Wis., while California Sen. Kamala Harris traveled to Milwaukee to meet with labor

Pennsylvania, a crucial tossup state, will draw both candidates later in the week for the 19th anniversary of the Sept. 11 attacks at a memorial in Shanksville to the Flight 93 passengers and crew who fought back against hijackers. Their planned appearances raise the possibility that the rivals could come face-to-face for the first time during the race.

Mr. Trump and Mr. Biden have traveled to key Electoral College states since their nominating conventions concluded last month, with both campaigns paying close attention to the industrial Midwest.

events on four days last week, including one in Wisconsin, in his most extensive week of campaigning since the spring. He plans to make stops in Michigan and Pennsylvania next week. In addition to Pennsylvania, Mr. Trump will travel to Michigan, Florida and North Carolina this week.

Mr. Biden held in-person

Mr. Trump's campaign aides argue that the former vice president's newly active travel schedule is evidence of momentum they see in internal polling.

"It's better to be on offense than defense. Obviously, that's where we are," said campaign manager Bill Stepien during a recent briefing with reporters.

Mr. Biden's advisers contend that the race has remained stable and dispute that Mr. Trump has made significant gains since the Republican convention. They also point to polls showing Mr. Biden at 50% support in a number of battleground states, an indication of his staving power.

'We still believe that this is referendum on Donald Trump. You know, he's desperately tried to change that and that really hasn't happened," said Mike Donilon, a top strategist for Mr. Biden.

Mr. Biden's campaign said during a recent briefing for reporters that it continues to maintain multiple paths to crossing the threshold of 270 electoral votes, pointing to polling advantages in several states, including Florida, Pennsylvania, Michigan, Wisconsin

Trump Backs Probe of Postmaster's Fundraising

By Rebecca Ballhaus

WASHINGTON-President Trump said he would support an investigation into Postmaster General Louis DeJoy's fundraising practices, after employees of his former business said they felt pressured by Mr. DeJoy to make campaign contributions for which he later reimbursed them.

Asked at a news conference Monday about the allegations in a report by the Washington Post, Mr. Trump said, "I don't know too much about it."

Pressed by a reporter on whether he would support an investigation, he said, "Sure, sure. Let the investigations go, but he's a very respected man." If the investigation proved Mr. De Joy committed a crime, the president said he would support his dismissal.

The Washington Post on Saturday reported that five employees of Mr. DeJoy's former business said they had been urged by Mr. DeJoy or his aides to make campaign donations or attend fundraisers he was hosting. Some of them said Mr. DeJoy subsequently arranged bonus payments to those employees, essentially reimbursing them for all or part of their donations.

Federal election laws ban the practice of reimbursing employees for donations to evade limits on campaign contributions. known as a strawdonor scheme.

A spokesman for Mr. DeJoy said Sunday that Mr. DeJoy was never notified by the emplovees that they might have felt pressured, and that Mr. DeJoy believes all campaign fundraising laws and regulations should be followed.

Mr. DeJoy, a Trump donor and GOP fundraiser, was named to lead the U.S. Postal Service this spring by the Postal Service Board of Governors, whose members were appointed by the president.

Democratic lawmakers have accused him of working with Mr. Trump to interfere in the November election, in which a historic number of voters are expected to cast ballots by mail due to the coronavirus pandemic. Mr. Trump has criticized efforts to expand mailin voting. Mr. DeJoy has rejected the notion he is trying to hurt the Postal Service.

Funding Expiration, Aid Talks Await Lawmakers

By Kristina Peterson AND NATALIE ANDREWS

WASHINGTON-Lawmakers returning to Washington after their late-summer break are hoping to revive long-stalled negotiations over additional coronavirus relief with less than two months until the election.

But if they can't reach an agreement on Covid-19 aid in coming weeks, they at least plan to avoid a government shutdown.

House Speaker Nancy Pelosi (D., Calif.) and Treasury Secretary Steven Mnuchin agreed last week to pursue a shortterm spending bill without any controversial policy measures. The government's funding expires at 12:01 a.m. on Oct. 1.

"The speaker and I have agreed, we don't want to see a government shutdown. So we've agreed that we are going to do a clean CR," Mr. Mnuchin said on Fox News Sunday, referring to a continuing resolution, or short-term spending bill. He said they would do this separately from the Covid-19 aid negotiations.

That agreement means that bogged-down negotiations over another relief package likely won't derail routine government funding and spark a shutdown. However, if lawmakers can reach an agreement with the administration over coronavirus aid, that could still get attached to the spending bill, aides said.

Both congressional leaders and White House officials have sounded increasingly pessimistic notes about the chances of a relief deal coming together in

the weeks before the election, when mounting political pressure makes it hardest to compromise. Talks between the White House and Democrats broke down last month.

Negotiations over another relief package likely won't spark a shutdown.

Senate Republicans, who have urged caution on the size of the next package, are discussing whether to bring forward this week a "skinny' package of aid that would cost less than their previous \$1 trillion proposal.

Democratic leaders, meanwhile. have said GOP proposals have fallen short of what is needed to respond to the coronavirus pandemic's health and economic toll.

The Republicans are now moving even further in the wrong direction," Senate Minority Leader Chuck Schumer (D., N.Y.) wrote in a letter to Senate Democrats last week. "Republicans may call their proposal 'skinny,' but it would be more appropriate to call it 'emaciated.'

Democrats and Republicans have clashed over what level to restore the weekly \$600 in federal unemployment benefits that expired in late July; how much aid should go to state and local governments; and how money for schools should be allotted; among other issues.

The appetite for a shortterm spending bill, meanwhile, reflects the widespread desire among both Democrats and Republicans to avoid even the threat of a government shutdown weeks away from an elec-

Staff-level talks over the spending bill, which largely extends funding at its current levels, began Friday. Some Democrats are pondering extending it until early 2021, but Republicans want to see it run out in mid-December, aides said.

House Democrats passed a \$3.5 trillion package in May, but Mrs. Pelosi has said they would be willing to compromise around a \$2.2 trillion bill. Mr. Mnuchin last week said Republicans could support legislation that cost somewhere around \$1.5 trillion.

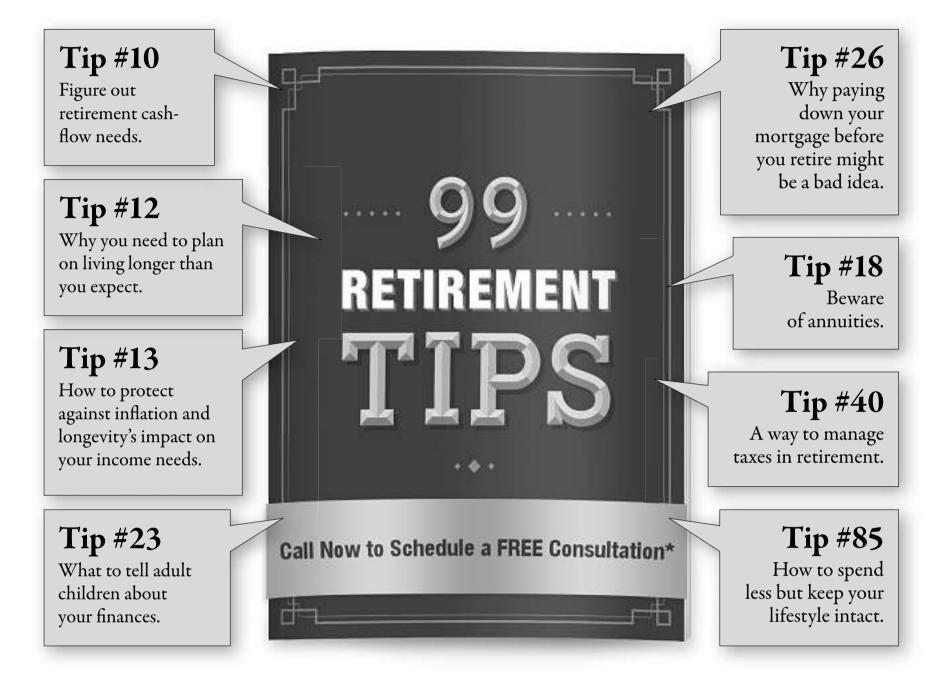
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How Lab Companies Tackled Surge in Tests

By Scott Patterson AND JOHN SIMONS

ELMWOOD PARK, N.J.-In early July, as coronavirus surged across the U.S., one of the nation's biggest laboratories involved in testing for Covid-19 made a wrenching decision: It would stop accepting new tests for the disease.

The testing facilities of **BioReference** Laboratories Inc. were overwhelmed, leading to a crippling backlog of thousands of patient samples. To catch up, the New Jersey-based company decided to halt new tests for several days.

"Our backlog was so significant," said BioReference Executive Chairman Jon Cohen. The plan worked, he says, even though he says his company "took a lot of heat for the pause." Afterward, average turnaround time for tests at BioReference fell to about two to three days from roughly a week, Mr. Cohen said.

That improved performance, and increasing testing capacity, allowed BioReference to expand its testing services to the National Basketball Association, the National Football League and Major League Soccer, as well as pharmacies such as CVS Health Corp.

Not every lab company felt it could make that trade-off, as an avalanche of test samples poured into labs in late June and July. The two biggest Covid-19 testing laboratories in Daily Covid-19 tests in U.S., seven-day moving average



Source: COVID Tracking Project

the U.S., Quest Diagnostics and Laboratory Corp. of America Holdings, kept taking in tests despite increasing backlogs that pushed turnaround times for results to a week or more as cases ballooned after dozens of states reopened their econo-

BioReference's move to stop taking in new tests-and its rivals' decision to keep accepting them-highlights a confounding dilemma the nation's biggest labs faced this summer as millions of Americans got sick, overwhelming testing capacity. While Quest and LabCorp raced to expand, they were unable to keep up with what became a tidal wave of tests flooding their facilities.

It is a dilemma labs could face again in the fall and winter if another wave of coronavirus hits the U.S., experts say.

Quest and LabCorp were processing more than 200,000 tests a day in early July, about one-third of all tests across the U.S., according to the Covid Tracking Project, BioReference was doing about 40,000 tests. Much of the rest was done at the local level, either with a quicker, point-of-care test that can run in urgent-care clinics, doctor's offices and nursing homes, or through a highly complex laboratory in a nearby location.

LabCorp weighed pausing but instead focused on expanding capacity "as fast as possible," according to Brian Caveney, president of the company's diagnostics division. Quest also didn't pause.

"If a customer comes to you and has a patient who needs testing, and is a patient in need, we'll provide the test." said Quest spokeswoman Wendy Bost. "Where else are they going to go?"

By August, Quest and Lab-Corp said they had worked through their backlogs, reducing average turnaround times to a day or two.

While the expansion of testing in the U.S. has been by many accounts an achievement. it hasn't been enough to track and contain the virus. Labs have competed for limited supplies of plastics and chemicals used to run tests, struggled to understand how federal supplies were allocated and scrambled to come up with workarounds.

Like other labs, BioReference had to build its Covid-19 testing program from scratch. Early

Technicians at BioReference Laboratories in Elmwood Park, N.J., in August. on, it decided to use multiple

testing platforms to hedge against supply-chain bottlenecks. If one platform was missing an important ingredient, the company would be able to continue testing on its remaining platforms—as long as they didn't encounter supply shortages.

BioReference committed to test workers at nursing homes throughout New York state. By late spring, the company had conducted about a quarter of a million tests in New York's nursing homes. But dedicating resources to nursing homes pushed delays for other customers to seven days, says Mr.

By early July, the company was getting thousands more tests a day than it could handle. That was when it decided to pause taking in new tests. Since then, turnaround times at the company have been about two to three days, Mr. Cohen **New Cases Decline; Officials Urge Care**

New coronavirus cases in the U.S. fell to their lowest level since June 22 as the Labor Day holiday weekend began to wind down, while governors in some states continued to urge people to remain vigilant to avoid the jumps in transmission that followed some previous holidays.

California Gov. Gavin Newsom said on Twitter Sunday that the state's hospitalization rates are down, but warned one weekend could change that. "Seriously-don't go to a big party. Wear a mask. BE SMART. I know we're tired of #COVID19 but literal lives are at stake," he wrote.

Many holiday-weekend events, including Labor Day parades across the country, have

been scrapped due to the pandemic and concerns about

The U.S. reported more than 31,000 cases for Sunday, down from 44,000 on Saturday, according to data compiled by Johns Hopkins University. The seven-day moving average for new daily cases in the U.S. fell to the lowest level since June 29, according to data collected by Johns Hopkins and analyzed by The Wall Street Journal. The U.S. death toll on Monday moved above 189,000,

Johns Hopkins reported. Meanwhile, India became the first country in the world to record more than 90,000 new coronavirus cases in a single day. India has now overtaken Brazil as the country with the second-highest number of total confirmed cases, behind only the U.S., according to Johns Hopkins.

—David Hall and Jon Kamp



Continued from Page One new ways to energize employees-all with an eye toward making things work in the long term.

Some states or cities have partially reopened, and people have continued to fill parks and outdoor events. Restaurants have relocated dining rooms to sidewalks and streets. Many people have figured out how to get haircuts.

Yet office buildings largely remain empty, many schools and colleges are remote teaching and cases are climbing in some places. The Big Ten and Pac-12 conferences postponed their college football seasons. The Austin City Limits Music Festival in Texas and the Art Basel in Miami Beach art fair in Florida were called off. Broadway shows, movie premieres and fall TV series were suspended.

Workers returning to company offices likely will find them sparsely occupied and reconfigured with work stations spaced apart and floor markings directing foot traffic.

Confirmed cases of Covid-19 top 6.2 million in the U.S. Most people have recovered, and more than 189,000 people have died, according to data compiled by Johns Hopkins Universitv. The seven-day average of daily new cases recently leveled off at about 40,000.

At commercial real estate firm JLL's Florida offices, "Labor Day has always been a rejuvenation of our culture," said Tim Rivers, the company's Florida market director based in Tampa. It is a time when staffing returns to full force, clients re-engage and the industry prepares to enter its often busiest quarter.

But this year, only about 25% of the company's employees in the state have returned to JLL's eight Florida offices. To try to recreate the cohesion that stems from office interactions, Mr. Rivers is scheduling regular one-on-one chats with staffers and encouraging more members of business teams to communicate with clients.

He also is pressing, when possible, to get younger employees into the office for training since they are missing out on learning by observing senior staffers. "Productivity comes when people know they're part of something," said Mr. Rivers, 55.

In San Francisco, Josh Golomb is grappling with another challenge: how to build camaraderie among new workers at telehealth company Ha-







Top left, Fashion designer Scott Studenberg takes phone meetings on the patio of his Los Angeles home; top right, Sonia and Kevin Dillane, software development engineers at home in Seattle; bottom, Dr. Eve Bloomgarden with her daughter in Northbrook, Ill.

zel Health Inc. as it pursues plans to continue expanding this fall. The company expects to add as many as 20 employees to the current staff of 50 in the next three months, with most working from home.

"How do you build that team when you're not in an office?" said Mr. Golomb, the 46-year-old chief executive of the company, which creates virtual medical clinics for schools. "We have to get more creative in that.'

He can draw on tactics Hazel tried out during an annual meeting that took place virtually over two weeks in July. To encourage interaction, Mr. Golomb said, the company complemented all-staff sessions with small-group gatherings, covering the tab for participants to order food at home to simulate the experience of table-side conversations. At the start of each session, a song chosen by the presenter would play and a DJ would offer an introduction, to replicate the energy of a live event and allow each speaker to show some personality.

Matthew Kinsella, managing director at venture capital firm Maverick Ventures in San Francisco, is adapting the way he evaluates companies for potential investments. Trips to visit startups and spend hours over meals and drinks to size up entrepreneurs are no lon-

ger feasible.

"A big part is getting to know that person, understanding what makes them tick." said Mr. Kinsella, 37, "I've had to shift tacks to do that without meeting in person."

Now he schedules hours of Zoom video meetings to get to know founders and employees and take virtual tours of manufacturing facilities or labs. Companies increasingly send "sizzle reels"—snappy, stylized videos providing an overview of their products or services. With business contacts closer to home, he plans to do more walking meetings in the Presidio park, chatting six feet apart, to get a break from the computer screen.

Jay Paxton, a real-estate attorney in Houston, said some innovations adopted in the spring and summer as a response to the pandemic are likely to become more prevalent. Virtual court hearings have eliminated drive time and cut down on courthouse waits.

Mr. Paxton now conducts seminars online for real-estate brokers, on issues like foreclosures, that he used to do in person. The audience is significantly bigger—though now it is harder to tell if they are laughing at his jokes.

"The technology has changed the way we do things," said Mr. Paxton, 68. "For personal and family interaction, it's not as satisfying...For busilery Ewkuks, are producing a ness, it works well.'

Small-business owners are retooling for different fall and adapting to changing tastes.

Scott Studenberg, a 37year-old fashion designer in Los Angeles, won't be heading to New York Fashion Week this month. About 80% of his orders were canceled after the pandemic hit, forcing him to let go of five of his six workers and reorient his brand, Baja East, to online sales.

Mr. Studenberg's coming

"We can't just limp along," says Sonia Dillane, a software engineer in Seattle.

collection will include 10 to 15 looks that are heavy on sweatsuits and other quarantinefriendly leisure wear—much fewer than the 50 looks he showed in his previous one. Rather than presenting the collection in a runway show, he will create an online version, filming videos of the looks and explaining each one.

"I'll fly to everyone virtually," Mr. Studenberg said.

Ed Choi and Ron Shawler, co-owners of the Los Angeles street wear shop and art gal-

clothing line for back-toschool season that will feature more muted colors to match the somber mood.

They had to cancel virtually all of the monthly art shows they had planned for fall featuring graffiti artists—usually festive Saturday-night events with drinks that draw crowds. Now they are trying to put together shows similar to one they did in July, held during the day, without alcohol and with a limited number of people in the store.

They are considering temporarily shutting down the store and going fully online for a while, Mr. Choi said. Or they might focus more on their video work creating art tutorials and filming street artists, including at a mural festival later this month in Kansas City, Mo.

In Amherst, Mass., this is normally a bustling time at the 106-year-old A.J. Hastings college gear and office supply store, as students start the fall semester at three area universities. But foot traffic is down by at least half because of restrictions on the numbers of students on campus and reticence over in-person shopping, said Sharon Povinelli, coowner of the store with her wife, Mary Louise Broll.

During the five months A.J. Hastings didn't allow custom-

the space to make it more conducive to social distancing. They got rid of a card rack, a magazine display, a counter and a soft-drink refrigerator. They widened aisles and reconfigured merchandise. They separated two checkout registers so customers waiting to pay wouldn't come in contact. Since reopening to in-per-

ers inside, the couple renovated

son shopping last month, the feedback has been encouraging, said Ms. Povinelli, 53. "It's a better shopping experience," she said. "When people come in, they're like, 'Whoa.' They feel safe."

For many people, the recent weeks have forced decisions and adjustments that could be in place for several more months or longer.

Eve Bloomgarden, a 39year-old endocrinologist who lives with her husband and two children in the Chicago suburb of Northbrook, Ill., saw patients only through telemedicine for the first several months of the pandemic. Ensconced in her children's playroom, she used four sets of headphones and several chargers and monitors, with toys arrayed in the background.

Now, Dr. Bloomgarden is taking appointments at her office at Northwestern Memorial Hospital about once a week. She answers screening questions on an app before entering, waits for the green light to clear her, then dons a mask and goggles.

Patients often seem anxious, Dr. Bloomgarden said, and are as likely to ask about Covid-19 as hormone imbalances.

"There is a lot of stress going into this fall"-for her patients, and for her, she said. "There's no outlet, no gym, no vacation. You can't hang out with friends." Her family's new escape: the Chicago Botanic Garden.

Lucien Tolbert, a 44-yearold human resources consultant in New Orleans, started a new job at an oil refinery in June, just as new coronavirus cases in Louisiana began climbing again. Except for three or four times he has physically seen colleagues, his entire experience at the company has been virtual. It has been tough, given

how sociable he is and the need to learn a new business, Mr. Tolbert said. He sets up regular video meetings and phone calls with colleagues and his supervisor, peppering them with questions. He prays each morning for strength and discipline, steeling himself for months more of remote work. His main outlet for socializing is on Sundays at Franklin Avenue Baptist Church, where he is a deacon.

"I'm typically a positive person," Mr. Tolbert said. "But it's just hard to see an immediate end to the pandemic."

AND ARUNA VISWANATHA

A search by U.S. authorities for Chinese researchers with ties to China's military is leading to intensifying cat-andmouse tactics involving what prosecutors say are foiled escapes, evidence tossed into a dumpster and a chase through an airport.

FBI agents have questioned dozens of researchers about their work and military affiliations. In recent weeks, the widening operation has triggered efforts by some suspects to evade authorities and led to the arrest of at least two researchers whose work is allegedly tied to China's military development, according to court filings by prosecutors.

In one case, a researcher at the University of California, Los Angeles studying artificial intelligence is accused by federal prosecutors of destroying evidence sought by the FBI in an investigation into potential technology theft. The researcher, Guan Lei, threw a damaged computer hard drive in a dumpster days after he was stopped from leaving Los Angeles International Airport, prosecutors allege.

In another, a scientist researching fluid dynamics at the University of Virginia is charged with stealing proprietary software code under development for two decades by his adviser, who received U.S. Navy funding. The adviser told investigators that Hu Haizhou, whom U.S. authorities prevented from boarding a flight in Chicago last month, hadn't informed him he planned to return to China, prosecutors allege in filings in his case.

Messrs. Guan and Hu, arrested separately in late August, are in custody and have yet to enter pleas. A lawyer for Mr. Hu said that in his experience trade secrets charges are "typically overstated." Guan's lawyer didn't respond to a request for comment. In an

affidavit Mr. Guan filed in a related proceeding, he said he spoke with the FBI because he "had nothing to hide" and he believes he was targeted because of the "political climate between China and the U.S."

Mr. Guan's fiancée, Yang Zhi-

A search by U.S. authorities leads to intensifying catand-mouse tactics.

hui, a Chinese national studying computer science at the University of California, Irvine, was arrested running through the Los Angeles airport to board a flight to China on Aug. 31, even though her lawyer had agreed she would surrender for detention as a witness against Mr. Guan, prosecutors said. Her lawyer said Ms. Yang is a lawabiding student.

The FBI sweep launched in June factored into the U.S. decision to close China's consulate in Houston, after authorities suspected that Chinese diplomats were assisting some of the scholars with evading investigators. On July 21, when the State Department ordered the consulate closed, it also told the Chinese ambassador to get the remaining military researchers out of the country, The Wall Street Journal reported.

China's Foreign Ministry has said its diplomats "have never engaged in activities incompatible with their status," and Beijing has denied U.S. accusations of intellectual-property theft, characterizing them as political. The Chinese Embassy didn't respond to a request for comment on the latest cases.

At least four cases the Justice Department filed in the weeks leading to the consulate closure accuse researchers of visa fraud. Two have pleaded not guilty while two have yet to enter pleas.

The latest cases appear to involve research with military applications that China's People's Liberation Army is trying to develop.

Mr. Guan's research centers on machine learning, an artificial intelligence field. One of his advisers at China's National University of Defense Technology is a lieutenant general and a leading figure in the PLA's supercomputer program, according to an FBI affidavit filed with his criminal complaint.

Mr. Hu, who works for a military-funded lab at Beihang University in Beijing, was researching underwater robotics, according to an FBI affidavit. The code prosecutors accuse him of stealing was developed by his UVA adviser, who runs a collaborative program with other schools funded by the Office of Naval Research.

In an interview with Customs and Border Protection officers at Chicago's O'Hare International Airport on Aug. 25, Mr. Hu admitted he had code on his

laptop that his adviser would be upset to learn he had, the affidavit said. Beihang University didn't respond to a request for comment.

The professor, who wasn't identified in court filings, told the FBI he had repeatedly denied Mr. Hu's requests to access his code and didn't know how he obtained it, according to the affidavit. He told authorities Mr. Hu "had left UVA to return to China without contacting him to bid him farewell," the filing said.

A university spokesman said the school is cooperating with law enforcement. The U.S. Office of Naval Research didn't respond to a request for comment.

At UCLA, Mr. Guan was working in the math department and studied "an optimization algorithm and its application in machine learning," the criminal complaint said. A UCLA spokesman said the university is cooperating with the investigation.

Liberty University Contemplates Future Without Falwell

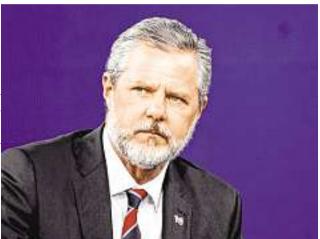
By Ian Lovett

In Jerry Falwell Jr.'s last years as president of Liberty University, employees said they saw frequent signs that he wasn't living by the values espoused by America's largest evangelical Christian college, where students and faculty can be disciplined for drinking, even off campus, and all sexual content is banned. Former school administra-

tors said staff and donors complained that he showed up to campus appearing drunk or smelling of alcohol. He told another Christian leader on Twitter to "grow a pair." One former staffer recounted overhearing him say a tea at a campus cafe reminded him of a whiskey he had tried. Once, at a Liberty football game, he accidentally sent a risqué photo of his wife to a number of administrators, including his son, according to people who witnessed it.

Mr. Falwell denied coming to campus drunk and noted that drinking wasn't banned for staff. He said he never drank tea, and denied sending any inappropriate text mes-

Two weeks ago, Mr. Falwell resigned amid a series of scandals. including allegations, which he denied, that he for years watched his wife have sex with another man. Now that he is gone, Liberty students and alumni are asking how Mr. Falwell was allowed



Jerry Falwell Jr. resigned as president of Liberty University in Virginia in August amid several scandals. He says he did nothing wrong.

to operate with impunity for so long and demanding changes to the board of trustees and the administration. which they say failed to hold him accountable.

"There was a culture of fear—I felt that very strongly." said Caitlin Elliott, an alumna who worked as director of the campus writing center until August, when she left because of her dislike of the campus culture. "He created this environment where he kind of had immunity to do whatever he

Dustin Wahl, one of the founders of Save71, an alumni group pushing for change at Liberty, said the board had failed to protect the school's reputation, and shouldn't be involved in picking the next president. "The board is not

capable of protecting Liberty or leading it in a new direction," he said.

The board of trustees said in a statement last week that it had hired what it described as a forensic firm to investigate "all facets of Liberty University operations" during Mr. Falwell's tenure as president.

"Some may say that all the signs were there for a long time before last week," the board added in its statement, "but all the signs were not there until the start of last

A spokesman for Liberty declined to comment on criticism of the board. Multiple board members declined to comment or didn't respond to inquiries.

Mr. Falwell, in recent interviews with The Wall Street Journal, said he had no regrets about his time at Liberty and had done nothing wrong. "I built it from zero to four billion," he said of the school's financial position. "I worked my butt off. I went through all kinds of stress."

Criticism from outside the school became common in recent years, particularly as Mr. Falwell became an outspoken advocate for President Trump. He often feuded with other Christian leaders who were less enthusiastic about the president.

On Liberty's campus, however, dissent was virtually nonexistent. One of the former employees said that a top administrator advised him to deal with Mr. Falwell by always agreeing, even about matters as seemingly trivial as

March

Sources: FactSet via Dow Jones Market Data (market cap); FactSet (performance)

Feb

May

July

Aug

Sept

the color of the wall.

Unlike at most universities, Liberty faculty members don't have tenure that offers protections from being fired, except those who teach at the law

Some of the former administrators, meanwhile, said Mr. Falwell warned them not to take their concerns about the school to the trustees. One of those people said that, several years ago, Mr. Falwell told 40 people at an executive meeting that they weren't allowed to talk to the board at all.

"There were a lot of people who probably knew" that Mr. Falwell was behaving in ways that weren't allowed on campus, one former administrator said. "There had been smoke for years. But if you said something, you were gone."

Mr. Falwell disputed employees' characterization of his leadership style. "We never let go of a faculty member for criticizing me," he said. He added that he told employees not to speak to the board to comply with accreditation rules. Janea Johnson, a spokeswoman for the Southern Association of Colleges and Schools, which accredits Liberty, said each institution had its own bylaws, but "nothing specifically in our standards that says faculty and board members can't communicate.'

Like most university presidents, Mr. Falwell reported to the board of trustees. But the board exercised little oversight, according to multiple former officials who attended board meetings.

Twice a year, the members would gather at the Lynchburg, Va., campus at around 9 a.m., according to former officials who attended meetings. They said Mr. Falwell and other Liberty administrators would make presentations and, once a year, present a budget, after which there was little time for questions and almost no deliberation. By around noon, lunch was served and some members were heading out to catch flights home.

"Until a few days ago, the M.O. was basically to give Jerry free rein and full authority to run the school and do as he pleases," said one of the former officials, who attended board meetings.

Tech Selloff Unnerves Investors

Continued from Page One breaks that have hobbled the global economy.

'They've run up so much, and they're overextended," said Leslie Thompson, managing principal at Spectrum Management Group in Indianapolis, which manages about \$700 million. She has been cutting her investments in tech stocks such as Apple and chip maker Nvidia Corp. recently. The speed of the climb "was just really ridiculous," she said.

The ascent by these stocks buoved markets in months of economic uncertainty: Apple, Facebook and Amazon each rose 85% or more from March 23, when markets bottomed following the Federal Reserve's announcement that it planned extensive support for the economy, to Sept. 2.

Now, though Friday's selloff was much milder than Thursday's, some investors are watching for signs that the tech trade is starting to unwind. It is a process that some fear could exert a heavy weight on markets given the firms' size and popularity with traders, and because many investors have struggled to rationalize the scale of the markets' gains at a time of economic dislocation and fractious politics.

The five biggest internet companies-Apple, Amazon, Microsoft, Google parent Alphabet and Facebook—made up 26% of the S&P 500 at the end of August, up from 14% for the five biggest stocks in the index three years ago.

After becoming the first U.S. public company to reach \$2 trillion in market value last month, Apple slid 8% on Thursday, losing \$180 billion in a historic slide. In the last two sessions of last week, Amazon, Microsoft, Alphabet and Facebook each fell at least 6.5%.

On Thursday, the five biggest tech firms and Netflix Inc. lost nearly \$500 billion in combined market value.

"Momentum is nice on the way up, but it's painful on the way down," said Gene Goldman, chief investment officer at Cetera Investment Management. He has been lowering investments in tech while increasing positions in beatendown value sectors that appear cheap like the financial and industrial groups.

Some traders said the proliferation of investments tied to momentum—the practice of buying assets on the expectation their current price trend will continue—and volatility means more of the gains could be in jeopardy.

Billions of dollars have flowed into tech exchangetraded funds like the Invesco QQQ Trust in recent weeks, while some gauges of investor sentiment have signaled investor optimism mounting. To some, that indicated the time might be ripe for a pullback.

At the same time, market sentiment isn't in crazily bullish territory the way it was 20 years ago before the Nasdag crash. Flows into equity funds broadly have been muted, while tens of billions of dollars have flowed into bond funds and funds tracking gold in recent months.

Investors have also cited surging activity in options mar-

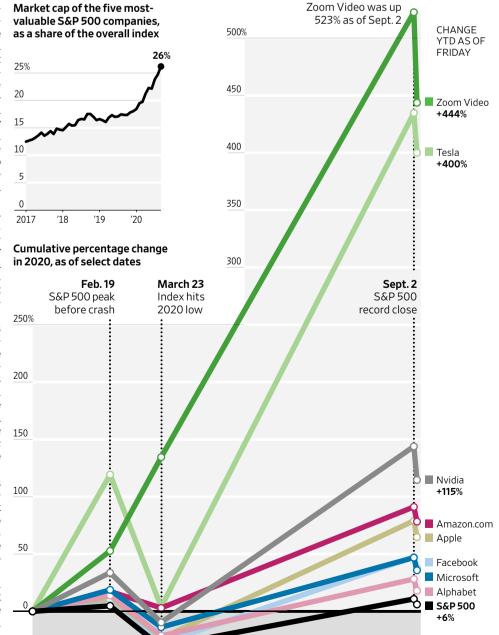
kets by companies such as Soft-Bank Group Corp. and individual investors using apps like Robinhood as factors that could tend to accentuate market moves in both directions. Analysts are concerned that some of these traders using borrowed money might be forced to sell unrelated assets to cover their losses, a trend that can amplify market downturns. The market might be vulnerable to a pullback in part because some economic data show a slowdown in the recovery. "It's likely to happen

quickly," said Lauren Goodwin, a multiasset portfolio strategist and economist at New York Life Investments, which holds a smaller position in U.S. stocks than the benchmark it tracks. "The recovery is precarious, and investors know it." The whipsaw action has

been evident beyond the biggest internet firms. One of the fastest-climbing stocks in recent months, Tesla Inc., is down 16% in September—a drop that began just after the electric-car maker on Aug. 31 passed Visa Inc. to become the seventh-largest U.S. public company, with a market value near \$465 billion.

Other heavily traded tech firms such as Zoom Video Communications Inc. and Slack Technologies Inc. have also fallen. The pullback highlights the disconnect between share prices and earnings for some companies, many investors said.

"A lot of the fundamental moves are real, but the stock prices have moved up more the fundamental changes," said Michael Lippert, who manages the Baron Capital Opportunity Fund that counts Microsoft, Alphabet and Amazon.com among its largest holdings.



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Poisoned Putin Critic Comes Out of Coma

Merkel considers sanctions on Russia, including scrapping pipeline, over attack

BERLIN-Germany signaled it is prepared to reconsider its Nord Stream 2 gas-pipeline project with Russia in light of the poisoning of Russian opposition figure Alexei Navalny, who was roused from an induced coma on Monday.

> By Bojan Pancevski in Berlin and Thomas Grove in Moscow

Chancellor Angela Merkel, who has been a champion of the pipeline project, couldn't rule out including Nord Stream 2 in possible sanctions against Russia should Moscow fail to investigate Mr. Navalny's poisoning, a spokesman for the German leader said.

Germany's reaction would depend on Russia's actions in the coming days, the spokesman said.

Berlin's Charité hospital said Mr. Navalny had been awakened from a coma and was responsive. German scientists determined last week that the opposition figure had been poisoned with Novichok, a Sovietera military-grade nerve agent.



Russian opposition leader Alexei Navalny has been treated at a Berlin hospital since his poisoning.

to Berlin for treatment with the help of the German government on Aug. 22, could still suffer long-term damage, the hospital said. He is now being weaned off mechanical ventilation as his condition improves, according to the clinic.

The case brought a new low in relations between Berlin and Moscow, which have rapidly deteriorated since Russia's invasion and partial annexation of Ukraine in 2014.

After Mr. Navalny, a critic

Mr. Navalny, who was flown of Russian President Vladimir Putin, was flown to Berlin, and with Russia showing little interest in investigating the case, members of Ms. Merkel's cabinet including Foreign Minister Heiko Maas and several lawmakers on both sides of the aisle said the Nord Stream 2 project should be reconsidered or abandoned.

> Until Monday, Ms. Merkel had rejected any such suggestion. On Aug. 28, she said the issue of Mr. Navalny's poisoning should be decoupled from

economic cooperation with Russia. "Our opinion is that it must be finished....It's a project by economic actors from Russia and Europe," she told a news conference when asked if work on Nord Stream 2 should be halted.

Nord Stream 2, running alongside an older pipeline on the same route, is set to double Moscow's gas exports to Germany. The project is nearing completion but is currently suffering delays because of U.S. sanctions imposed in

December. The pipeline is also around the world. A specialist controversial in Europe, which has tried to reduce its dependence on Russian gas.

The poisoning of Mr. Navalny has made further U.S. sanctions, possibly in cooperation with the EU, more likely, said Benjamin L. Schmitt, Harvard postdoctoral fellow and former European energy-security adviser at the State Department.

"Especially in light of the Navalny poisoning by Novichok, it's increasingly likely that the U.S. and EU may well pass joint sanctions to make sure that the pipeline is never completed," Mr. Schmitt said.

The Kremlin has denied any responsibility in Mr. Navalny's poisoning and has cast doubt on German doctors' conclusion that he was poisoned at all, referring to Russian doctors' initial assessment that the opposition politician was suffering from some metabolic imbalance, such as low blood

Mr. Navalny, who fell critically ill while on board a domestic commercial flight in Russia, was briefly treated at a local hospital before being transferred to Germany at the request of his family after Ms. Merkel suggested the move.

He underwent tests at Berlin's Charité hospital, which sent medical samples to clinics

military laboratory in Germany confirmed Aug. 24 that he had been poisoned with Novichok, a nerve agent that was developed in the Soviet Union and is now banned.

Russian officials started a preliminary probe into Mr. Navalny's illness but haven't opened a full-fledged investigation. Mr. Navalny's spokeswoman, Kira Yarmysh, said she requested an investigation when Mr. Navalny fell ill in late August.

Kremlin spokesman Dmitry Peskov said on Monday that Moscow was pleased with Germany's decision to send information on Mr. Navalny's condition and the course of his recovery. He also said he saw no risk to Germany blocking the Nord Stream 2 gas pipeline, calling proposals for Germany to rethink its cooperation with Moscow absurd.

"Keeping in mind the importance of this situation, we believe the information [on Mr. Navalny] will be handed over in the coming days," Mr. Peskov said. "We're waiting for it very expectantly."

Mr. Peskov said an investigation could be started if Moscow receives information on what exact substance German doctors concluded had poisoned Mr. Navalny.



Thousands marched in Minsk on Sunday as authorities cracked down on weeks of protests against authoritarian leader Alexander Lukashenko,

Belarus Opposition Leader Seized

By Georgi Kantchev

A Belarus opposition leader has been abducted, an opposition council said, raising fears that government authorities are stepping up efforts to crack down on the protest movement after nearly a month of rallies against the disputed election of longtime leader Alexander Lukashenko.

The opposition's Coordination Council said the leader, Maria Kalesnikava, and two other members of the panel were kidnapped by unknown people in the center of Minsk. Earlier, the independent Belarusian Tut.by news website cited a witness saying masked men had bundled Ms. Kalesnikava into a minibus and

driven her off early Monday. The Belarusian Interior Ministry said it had no information on the alleged detentions of



Maria Kalesnikava is said to have disappeared in Minsk on Monday.

opposition members, Russia's Interfax news agency reported. The ministry didn't respond to a request for comment.

The reports drew condemnation from the European Union. "Arbitrary arrests and

on

kidnappings

this morning's brutal actions against Andrei Yahorau, Irina Sukhiy & Maria Kalesnikova, are unacceptable," EU foreignpolicy chief Josep Borrell said in a tweet, using an alternate spelling of the opposition leader's name. "State authorities must stop intimidating citizens & violating their own laws and int. obligations."

Ms. Kalesnikava has been instrumental in leading the monthslong protests, which have mushroomed into the biggest challenge to Mr. Lukashenko's 26-year reign over the former Soviet state, a close Russian ally.

On Sunday, tens of thousands of people, many draped in the red-and-white flag of the opposition, marched in Minsk, demanding Mr. Lukashenko step down. Security forces detained 633 protesters,

grounds in Belarus, including Belarusian authorities said. Roughly 7,000 people were detained for protesting after the election, and nearly all were released. Human-rights researchers said they have documented more than 500 cases of people being beaten and tortured while detained by security forces or at detention centers.

> Since then, authorities have employed less violent methods but a more targeted approach, by detaining or harassing leading opposition members.

> "Instead of talking to the people of #Belarus, the outgoing leadership is trying cynically eliminate one by one," Lithuanian Foreign Minister Linas Linkevicius tweeted Monday about what he called the kidnapping of Ms. Kalesnikava. "Stalinist NKVD methods are being applied in 21st century's Europe," he said, referring to the Soviet security agency.

Saudi Court Cuts Sentences for Khashoggi Killers

By Stephen Kalin

RIYADH, Saudi Arabia—A Saudi court reduced the death sentences of five men convicted in the killing of dissident journalist Jamal Khashoggi to 20year prison terms and handed shorter sentences to three other nationals, in a case that drove a wedge between Saudi Arabia's heir-apparent and the West.

The public prosecutor declared the case closed nearly two years after Mr. Khashoggi was killed at the Saudi Consulate in Istanbul, undermining Crown Prince Mohammed bin Salman's reputation among some of Saudi Arabia's most important international partners and imperiling his economic-overhaul program, despite his continued support from President Trump.

Those convicted had been expected to avoid execution after Mr. Khashoggi's eldest son said in May his family had forgiven the killers, but the decision is unlikely to silence calls for accountability, including from influential members of Congress who have mulled a broad re-evaluation of the decades-old U.S.-Saudi alliance.

Prince Mohammed, the kingdom's day-to-day ruler, has struggled to repair his battered image ahead of the summit of G-20 leaders, which Saudi Arabia is set to host in November. He hasn't returned to the U.S. since the killing, following whirlwind visits to showcase his vision for Saudi Arabia and to pitch for investments.

Mr. Trump has stood by Prince Mohammed, despite the Central Intelligence Agency's assessment that he likely ordered the killing. The prince has denied that, but said that as de facto leader he bears ultimate responsibility for Khashoggi's death.

Agnes Callamard, the U.N.'s special rapporteur on extrajudicial killings who has called for Prince Mohammed and other senior officials to be investigated, said the final Saudi rulings lacked legal and moral legitimacy.

They came at the end of a process which was neither fair, nor just, or transparent," she said. "These verdicts cannot be allowed to whitewash what happened."

murder of Mr. The Khashoggi, a well-known critic of the kingdom's leadership who had fled fearing arrest and later wrote columns for the Washington Post, came amid a crackdown on critics of the crown prince. The clampdown has included the arrests of activists, intellectuals and clerics. It has coincided with Prince Mohammed's campaign to ease some of the country's conservative social rules, but the Saudi

heir has shown little tolerance for dissent among ordinary Saudis or former top officials. Mr. Khashoggi was killed and

his body dismembered by Saudi agents during an October 2018 visit to the kingdom's consulate where he was seeking papers needed to marry his Turkish fiancée, Hatice Cengiz.

"Everyone knows that Jamal Khashoggi's real killers are not the eight who were convicted and imprisoned, but those who planned, decided and gave the orders to assassinate him in this hideous way," Ms. Cengiz tweeted on Monday following the public prosecutor's statement.

The killing evoked an international outcry over Saudi Arabia's human-rights record and slowed foreign investments in the kingdom. Supporters of Prince Mohammed contend it is time to move on from one of the most controversial chapters of Al Saud family rule.

In the murder, a team of Saudi operatives flew to Istanbul and dismembered Mr. Khashoggi's body inside the



Crown Prince Mohammed bin Salman retains support from President Trump.

consulate. Saudi officials initially denied any knowledge of the killing and claimed the journalist had left the building A secretive trial in Riyadh

was meant to show Saudi Arabia's ability to deliver accountability, but human-rights groups denounced it as a coverup. Eleven people were put on

trial, but three were later released, including former deputy intelligence chief Ahmed al-Assiri, who is close to Prince Mohammed. Saud al-Qahtani, top royal adviser, was never charged or tried. He was fired from his position in the Saudi Royal Court following the killing but continued to play an informal advisory role, U.S. officials have said.

Saudi authorities have never publicly named those who were convicted of the killing. People familiar with the proceedings have said they are low-level officials, some with ties to Prince Mohammed, who flew into Turkey for the operation.

On Monday, Turkey said the verdict fell short and left many questions unanswered. "We still don't know what happened to Khashoggi's body, who wanted him dead or if there were local collaborators," Fahrettin Altun, Turkey's presidential communications director, said.

Assange Bid to Delay Extradition Hearing Fails exposed wrongdoing by the journment and shouldn't have

political

LONDON-A British judge refused a request by lawyers acting for Julian Assange to adjourn his extradition hearing until next year, as the WikiLeaks founder's fight against extradition to the U.S. resumed after months of delay caused by the coronavirus pandemic.

Mr. Assange, a 49-year-old Australian, is wanted in the U.S. on 18 charges of breaking espionage laws and conspiring to hack a military computer. The alleged offenses relate to the publication in 2010 and 2011 by WikiLeaks of a huge trove of classified material that painted a bleak picture of the American campaigns in Iraq and Afghanistan and their aftermath.

Mr. Assange has repeatedly defended his work and the wider WikiLeaks project as public-interest journalism that since June to request an ad-

U.S. and other governments. The latest stage of the hear-

ing, which had been due to take place in May but was pushed back when a nationwide lockdown to halt the coronavirus disrupted British courts, began on Monday and is scheduled to last several weeks. Lawyers say they would expect either side to appeal the initial ruling, meaning a final decision on Mr. Assange's extradition may not be made until next year or 2022.

Mark Summers, a lawyer representing Mr. Assange, on Monday asked the court for an adjournment until January to give the defense time to answer fresh allegations against the WikiLeaks founder presented by the Justice Department in June.

District Judge Vanessa Baraitser refused, saying the defense has had ample time done so once proceedings were again under way. "The defense have had ample time to return to court and explain that they had insufficient time," she said.

The U.S. case is that Mr. Assange broke the law by soliciting classified material from former U.S. Army intelligence analyst Chelsea Manning and by helping her crack a password to obtain that material. Publication of the diplomatic cables and military logs she provided endangered the lives of U.S. intelligence sources, the U.S. government alleges.

In June, the Justice Department issued a fresh indictment that included new allegations that broadened the scope, the department said, of the conspiracy surrounding alleged computer intrusions with which Mr. Assange has been

He is alleged between 2007 and 2015 to have encouraged and assisted hackers affiliated with the groups Anonymous and LulzSec to obtain classified information published by WikiLeaks, and to have played a role in helping Edward Snowden, a National Security Agency contractor who in 2013 leaked details of clandestine surveillance programs to the

press, to evade arrest.

Mr. Assange formally refused the U.S. extradition request in court on Monday. He denies he solicited anything from Ms. Manning or helped her steal classified files. The defense argues that Mr. Assange's prosecution is politically motivated, a potential bar to extradition under a bilateral treaty between the U.S. and U.K. that governs extradition requests.

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WORLD NEWS

China Exports Accelerate, **Top Forecasts**

By Jonathan Cheng

BEIJING—China's export machine gained steam in August as countries gradually recovering from coronavirus lockdowns, including the U.S., snapped up more Chinesemade goods.

Outbound shipments from China rose 9.5% in August from a year earlier, beating July's 7.2% increase and economists' median forecast for 7.3% growth, data released by the General Administration of Customs showed on Monday.

August marked the third consecutive month that China's exports outpaced those of the year-earlier month. It marks a stark turnaround from the start of the year, when the pandemic crippled China's factories and global shipping networks.

In the depths of the coronavirus pandemic, economists had predicted the export sector would be among the hardest-hit in China's economy, as countries shut their borders and global demand dropped.

Instead, Chinese exporters, aided by the government's heavy-handed but effective control of the coronavirus and its policies to support the economy, managed to grab a greater share of global exports in the second quarter, while other exporting countries remained paralyzed by the pandemic.

Key to the export recovery

has been China's outbound shipments of coronavirus-related medical supplies, including face masks, though economists expect the momentum to slow in the coming months as other countries resume production. Electronic goods have also fared well as swaths of the developed world shifted to online work, said Xing Zhaopeng, an economist with ANZ, an investment bank.

Beyond those two areas of strength, however, other export categories continued to be just lukewarm, which could mean China's outperformance on exports could fade, Mr. Xing said.

In the coming months, China's exporters are likely to face increased competition from countries such as Vietnam and South Korea, some of which have overcome the worst of the pandemic and are quickly ramping up production capacity again, says Ning Zhang, an economist at UBS.

"For low- and middle-end products, these exporters may gradually regain market share" from China, Mr. Zhang

China's imports, meanwhile, fell 2.1% in August from a year earlier, worse than July's 1.4% year-over-year drop and economists' expectations for a 0.2% fall. The steep drop-off in imports was mainly because of low commodity prices and a high-base comparison from the previous year, said Julian



The Shandong Pilot Free Trade Zone has helped China boost commerce since it was launched a year ago

Foreign Reporters **Are Left in Limbo**

Chinese authorities haven't renewed expiring press credentials for at least five reporters working for U.S. media outlets, the latest escalation in a backand-forth over journalist visas as relations between the U.S. and China deteriorate.

Beijing has issued special letters to the journalists, one of whom works for The Wall Street Journal, that allow them to con-

Evans-Pritchard, an economist at Capital Economics.

'Imports are doing just as well as exports once price effects are adjusted for," Mr. Evans-Pritchard said. He estimated that by volume, imports actually rose 9.5% in August from last year.

China has stepped up purchases of commodities in global markets thanks to intinue working with their expired press credentials for now.

"The relevant measures are a response to the measures the U.S. side took against journalists at Chinese media," Chinese Foreign Ministry spokesman Zhao Lijian at a regular press briefing on Monday.

CNN reported Sunday that its correspondent David Culver is among those affected by the move. On Monday, Bloomberg News said two of its reporters in China had also received special letters instead of renewed press credentials.

creased infrastructure investment at home and its tradedeal commitment to buy more

U.S. energy and farm products. China's imports from the U.S. rose 1.8% in August from a year earlier in dollar terms, slower than July's 3.6% in-

However, Chinese exports to the U.S. jumped 20% in August, up from 12.6% in July.

Normally, a Chinese press card has to be renewed for a visa to be issued

Two of the reporters, Mr. Culver and Journal senior correspondent Jeremy Page, were told their visas were being renewed but cut to two-month terms from one year previously.

China's latest move comes as the U.S. has yet to formally renew the work visas of U.S.based Chinese journalists, for whom a three-month grace period expires in early November, according to people familiar with the issue

That is partly because of the sudden drop in exports the previous year as the U.S. China trade war intensified, said Mr. Zhang of UBS.

The increased flow of Chinese goods to the U.S. in August widened the trade gap between the world's two largest economies to \$34.24 billion, the largest margin in almost two years.

Beijing Sets Policy On Data Security

By Chun Han Wong

HONG KONG-China is launching its own initiative to set global standards on data security, countering U.S. efforts to persuade like-minded countries to ringfence their networks from Chinese technology.

Announcing the initiative on Tuesday at a Beijing seminar on global digital governance, Chinese Foreign Minister Wang Yi cited growing risks to data security and what he characterized as efforts to politicize security issues and smear rival countries on technology matters—in an apparent swipe at Washington.

To counter such challenges, "it is important to develop a set of international rules on data security that reflect the will and respect the interests of all countries," Mr. Wang said, according to a transcript of his speech published by China's Foreign Ministry.

Beijing's initiative comes amid heightened tensions with Washington over issues including trade and technological competition, which has raised the specter of an increasingly bifurcated internet.

In recent months, the Trump administration has taken steps to curtail what it describes as national-security threats from Chinese tech firms like Huawei Technologies Co. and popular Chinese apps including Byte-Dance Ltd.'s TikTok and Tencent Holdings Ltd.'s WeChat. Chinese officials, meanwhile, have accused the U.S. of imposing a double standard and of trying to sabotage the efforts of Chinese businesses to expand.

The Chinese initiative comes about a month after U.S. Secretary of State Mike Pompeo announced the Clean Network program, which would exclude Chinese telecommunications firms, apps, cloud providers and undersea cables from internet infrastructure used by the U.S. and other countries.

Under its new "Global Initiative on Data Security," China would call on all countries to handle data security in a "comprehensive, objective and evidence-based manner" and maintain an open, secure and stable supply chain for information and communications technology and services, according to a text released by the Chinese Foreign Ministry.

It also would urge governments to respect other countries' sovereignty in how they handle data—in line with Beijing's vision of "cyber sovereignty," whereby countries exercise full control over their own corners of the internet.

The initiative doesn't mention the U.S. or its Clean Network program. Mr. Wang nonetheless made it clear in his announcement that the move comes in response to the White House effort.

"Bent on unilateral acts, a certain country keeps making groundless accusations against others in the name of 'clean' network and used security as a pretext to prey on enterprises of other countries who have a competitive edge," Mr. Wang said, according to the tran-

WORLD WATCH

Overnight Curfew Set As Infections Surge

Israel plans to impose nighttime curfews and close schools in dozens of cities and towns hit hard by the coronavirus, as Prime Minister Benjamin Netanyahu faces growing pressure to contain a surge in infections.

The curfews take effect Tuesday and last from 7 p.m. to 5 a.m., according to officials, who didn't specify how long they will remain in effect. Schools will close starting Wednesday in these areas, they said.

The restrictions come as Israel prepares for the Jewish New Year holidays this month, a period of travel and social gatherings that officials fear could further spread the virus after a sharp rise in recent weeks.

Mr. Netanyahu's government initially voted to impose a full lockdown on the nine or 10 most virus-ridden cities and towns, on the recommendation of the new coronavirus czar, Ronni Gamzu. Most are dominated by either ultra-Orthodox or Arab communities, who often live in the poorest and most crowded areas of the country.

On Sunday, Mr. Netanyahu changed tack after facing pushback from ultra-Orthodox mavors, who said their offices would not comply. His government instead decided to impose an overnight curfew and close schools in about 40 cities and towns with high infection rates. –Dov Lieber



SWAMPED: Typhoon Haishen damaged buildings, flooded roads and knocked out power to thousands in South Korea on Monday after battering islands in southern Japan, killing one person and injuring dozens. Above, the swollen Taehwa River in Ulsan, South Korea.

Two French Soldiers

Two French soldiers were killed in Mali on Saturday when their vehicle hit a bomb during operations under France's counterterrorism mission in Africa's Sahel region. France has around 5.100 soldiers in the region fighting jihadists in Mali, Niger, Burkina Faso and elsewhere.

—Matthew Dalton

LEBANON

Search For Possible Killed in Bomb Attack Blast Survivor Ends

The search for a possible survivor of the Beirut port explosion was ended after more than three days of combing through the rubble of a collapsed building by a Chilean rescue team. A sniffer dog first alerted

members of the team that someone might be in the rubble and a sensor and thermal camera indicated breathing. Several people remain unaccounted for in the blast that killed at least 190 people Aug. 4.

–Raja Abdulrahim

PHILIPPINES

U.S. Marine Pardoned In Transgender Killing

President Rodrigo Duterte pardoned a U.S. Marine in a surprise move that will free him from prison in the 2014 killing of a

transgender Filipino woman. Mr. Duterte said he decided to

pardon Lance Cpl. Joseph Scott Pemberton because the Marine wasn't treated fairly by opponents who blocked his early release for good conduct, Mr. Pemberton was convicted of homicide and has been serving a term of six to 10 years for the killing of Jennifer Laude. Her family denounced the pardon as an injustice, including to the LGBTQ community, a family lawyer said. -Associated Press

FROM PAGE ONE

Boeing Faces Probe Over Safety

Continued from Page One that the agency's concerns are significant.

Boeing has told regulators a defect resulting from the quality lapse doesn't pose an immediate safety threat to Boeflagship fleet Dreamliners, people familiar with the matter said. The wide-body jets have an excellent safety record and are frequently used on international routes. Regulators aren't preparing immediate action and haven't publicly signaled what steps they might take.

But that slip-up combined with another recently discovassembly-line defect unusual step in late August to voluntarily tell airlines to ground eight of their 787s for immediate repairs. Since then, Boeing has publicly confirmed the eight planes weren't safe to remain in service. Both defects together led

prompted Boeing to take the

Boeing to determine the eight jets didn't meet structuralsoundness "requirements for safe flight and landing," according to the FAA memo, which summarized the status of the agency's examination of the issue. Boeing also determined the second defect by itself doesn't pose an imminent safety hazard. The extent of FAA scrutiny

of Dreamliner production lapses and the period it covers haven't been reported previously. The Air Current, a trade publication, earlier reported the factory lapses and August groundings of the eight planes, which are slated to end when Boeing-led teams complete fixes expected to take about two weeks. A Boeing spokesman said

the plane maker is conducting a thorough review to understand the cause of the two defects and is inspecting newly produced airplanes before delivery. The company has fully briefed the FAA and is working closely with regulators, he added.

The agency's high-level review includes analyses of data and production parts. On Monday, after this article was published, the FAA released a statement saying it "is investigating manufacturing flaws affecting certain Boeing 787 jetliners,' and adding that "it is too early to speculate about the nature or extent of any proposed airworthiness directives that might arise" from the probe.

The manufacturing slip-ups mark the latest production problems for the troubled plane maker and present a test for Chief Executive David Calhoun and a revamped safety-review process after two fatal accidents

of its narrow-body 737 MAX. The crashes took 346 lives.

The Boeing spokesman said new internal safety-review process put in place after the MAX crashes worked as intended. He added that the company took proactive steps to address the problems.

Stepped-up safety inspections and repairs could disrupt airline maintenance schedules and passenger flight schedules.

Deliberations about mandated inspections and how many Dreamliners might be covered have been under way inside the FAA for months. people familiar with the matter said. Such a directive would target excessive stresses that could cause premature material fatigue affecting the carbon composite parts that fit behind the passenger cabin. A person familiar with Boeing's internal review on Sunday said there is no indication at this point suggesting the defects stretch back to the

jet's early years, but said the analysis was continuing.

The FAA, a person briefed on the agency's deliberations said, is focused on identifying how the manufacturing breakdowns occurred, why Boeing's computerized safeguards failed to flag mismatches between the parts that failed to meet design standards and what changes are required to ensure the 787 fleet's continued safety.

As Boeing engineers comb through records to identity planes with possible flaws, the has learned what prompted one of the defects: The plane maker didn't test how it produces shims, or material that fills gaps between barrel-shaped sections of the jets' fuselages, to ensure they meet requirements, according to the FAA memo. The shims are produced at Boeing's Dreamliner factory in North Charleston, S.C.

Boeing's process to generate shims was "not validated prior

to implementation into the production process" and lacked a quality check to verify the final product "meets the engineering requirements," according to the FAA memo. "Boeing has acknowledged a process that produces nonconforming products" and is working to change that, the memo adds.

According the memo, Boeing's request for more time to resolve some issues "adds to the risk of the fleet." Boeing identified the sus-

pect shims in August 2019 and immediately reactivated a computerized quality check that identifies improper shims that had been turned off, the person familiar with Boeing's internal review said. The second defect. which this person said Boeing detected in August as part of an internal review, stems from variations in the smoothness of the interior fuselage skin near the rear of the planes.

-Doug Cameron contributed to this article.

A10 | Tuesday, September 8, 2020

P2JW252000-2-A01000-1-----XA

FROM PAGE ONE

Some Win At Hotel Lockdown

Continued from Page One to spend 14 days holed up in a hotel room. No one has any choice in where they go and bus drivers shuttling travelers from the airport won't say where they are headed.

For some that means staying somewhere with marble bathrooms, big televisions and dramatic views, and which might run upward of \$400 a night, for a fraction of that or even

It is still far from a full fivestar experience. Guests can't leave their rooms, and there is no housekeeping. Hotel staff drop meals off outside guests' doors. In many hotels, guests get fresh towels every three days, and new sheets after a week. Lottery losers might get two weeks cooped up in cramped quarters in smaller hotels, travelers say. Rooms might be equipped with little more than a bed, desk and chair, and there can sometimes be little or no choice for meals, they say.

Jessie Ling, a 41-year-old consultant, was put up at the glitzy Marina Bay Sands Hotel earlier this summer after coming from Dubai. She was impressed with the wide selection and quality of the food. "I finished every dessert," she said. "And I'm not a dessert person."

On arrival, she said, staff warned her: "The keycard can only work once. If you leave the room, you can't enter again." The hotel declined to comment and said it is no longer used for the 14-day quarantine for returning travelers.

Mrs. Van Dee, the interior designer, said she washed her young son's clothes in the Ritz-Carlton bathtub and hung them up to dry next to the windows. To entertain him, she blew him bubbles and balloons, and let him frolic in the big tub.

Barbara Voskamp, a 44year-old lawyer from the Netherlands who now lives in Singapore, returned in late August with two of her children, aged 10 and 12, after visiting her mother. She got her husband, who had stayed in Singapore with their two other children, to bring wet wipes, a sponge, cleaning sprays, fresh fruit and even a vacuum cleaner. Her five-star hotel's fierce air-conditioning seemed impervious to the room's temperature controls, so her spouse also brought warm clothes, although outside it was more than 86 degrees Fahrenheit. "It is so cold inside. We're all wearing our ski jackets," she said.

The quarantine rules apply to people arriving from all but a few countries, and Singapore's government says this is effective in isolating people un-



If you must quarantine

til they prove virus-free.

Most arrivals pay the equivalent of about \$1,460 per person per room, for the 14 days, plus \$146 for a Covid-19 test during their stay.

Some local residents pay nothing, if they had left Singapore before the coronavirus began spreading widely. In contrast, the cheapest room available on Booking.com for two weeks at the Ritz-Carlton in early October costs nearly \$5,850 with taxes and fees.

The Ritz-Carlton didn't respond to a request for com-

Tan Yen Nee, the Singapore Tourism Board's director of hotel and sector manpower, said travelers were assigned hotels based on factors such as timing and hotel occupancy. She said some special requests had been granted, including allowing arrivees and emotional-support animals "to stay together at a pet-friendly hotel." She said guidelines for the hotels involved include measures to ensure a safe environment for guests and staff, security protocols, and infection-control measures and precautions.

Singapore has had more than 57,000 coronavirus infections, and 27 deaths, out of a population of about 5.7 million. Gatherings of more than five are banned, face masks are mandatory outdoors, and most people must still work from home, though all schools have reopened.

Others were less fortunate

in the quarantine lottery.

Ketan Mangal arrived from India recently to resume work as an IT sales manager. The 38year-old said he found windows that didn't open, among other complaints. Virtually every meal had the same ingredients, and he threw out most of the food, he said.

Ron Kaufman, a 64-year-old author and customer-service consultant, and his wife, Jenny Kaufman, returned from Brazil via London in March. They got a tiny room in a three-star hotel overlooking a parking garage, with a window that didn't open, and a shower, he said. Only one computer would fit on the table in the room, so his wife used a suitcase with a luggage rack as a second desk.

"As I imagined us staying in a nicer space, I could feel my spirit crumble," he said. "Then I saw an ambulance pull up to take someone out of the hotel for further medical care, and went back to counting my blessings.'

Wily Virus Outpaces Science

Continued from Page One lion confirmed cases so far.

Doctors long expected the advent of such a virus, but even so, the shrewdness of the coronavirus caught many by surprise, and goes a long way to explaining how the world has struggled to contain it ever since.

"We underestimated it," said Peter Piot, the head of the London School of Hygiene & Tropical Medicine and a codiscoverer of Ebola, who fell victim to the coronavirus himself in March.

Modern travel made it easy for the new coronavirus to spread to frequent fliers. It slipped unnoticed aboard a cruise ship in Japan and into Zumba classes in South Korea. It infected mourners at a funeral in suburban New York, a choir in Skagit County, Wash., and students on spring break in Florida.

Initially, it was widely believed the virus made its home in bats, which harbor hundreds of different kinds of coronaviruses. But it ventured into new species.

In Hong Kong, Yuen Kwokyung had been waiting more than a decade for a virus like this to surface.

The 63-year-old infectious diseases professor at the University of Hong Kong became enthralled with bat coronaviruses since making the connection between bats and the original SARS outbreak in 2003, which was caused by a related coronavirus. He amassed a database of animal surveillance, showing 39% of Chinese horseshoe bats could be harboring SARS-related coronaviruses. In 2007, he wrote in Clinical Microbiology Reviews that those findings

represented "a time bomb." Bats' cells can survive surges in metabolism-their hearts can go from 10 beats a minute during hibernation to 1,000 beats in flight. It is thought their constitution makes them ideally suited to be a reservoir where a virus can stay, biding its time before jumping to another host species, an event known as a

spillover. At the end of December, Dr. Yuen, who has been known to show off his photo collection of bats in caves, was beginning to suspect his fears were realized after hearing about a mystery pneumonia afflicting patients around 600 miles away in Wuhan. He warned Hong Kong officials that something was coming, help-

ing spur the city's response. After Chinese officials posted the gene sequence of the new coronavirus to share with scientists around the world on Jan. 12. he and others grew increasingly sure where the killer came from. It was so similar to known bat SARS-related coronaviruses, it must have once been one of

them, Dr. Yuen said. But around the same time at the HKU-Shenzhen hospital, where Dr. Yuen also heads the microbiology and infectiousdisease department, six family members had returned to the southern Chinese city after a visit to Wuhan. They began to feel unwell. The virus had got to them, from the oldest family member, who eventually died, to a 10-year-old boy.

The cluster suggested the virus had a dangerous trait, Dr. Yuen said: It was spreading

He shared his findings with experts from the Chinese Center for Disease Control and Prevention, adding to a growing body of evidence that led China to confirm to the world that the virus was leaping from person to person.

A borrowed life

All told, there are more viruses than stars in the known universe. Trillions upon trillions of viruses float in the air and ride on the clouds. Scientists at the University of British Columbia estimate that 800 million viruses rain onto every square meter of the planet every day. A coronavirus itself is so small that 500 of them could fit within the diameter of a human hair.

Many scientists can't decide whether a virus is actually alive in any conventional sense. All viruses lead a kind of borrowed life, chemists say. They are a submicroscopic essence of the need to reproduce that by nature is at cross-purposes with humankind.

'Viruses don't think. They don't have desires," said Columbia University virologist Angela Rasmussen.

In the absence of desire, they have purpose: to spread. multiply and survive.

SARS-CoV-2 isn't the first virus to have its impact broadened by travel. Smallpox, which killed 300 million peotury alone, first traversed the world by sailing with the Vikings a thousand years ago, new research into the history of epidemics suggests.

The coronavirus belongs to a category of viruses that work by transmitting chemical code, called RNA, sealed inside a protective protein envelope. RNA is a nucleic acid present in all living cells that usually acts as a messenger to relay genetic instructions in DNA, telling the cells what to do. Once the virus gets inside a host cell, it seizes the cell's re-

Without that maneuver, the coronavirus is impotent. It could never reproduce and churn out the millions of new coronavirus cells in a spreading infection. When it kills, it is almost out of carelessness. Its own survival depends on sparing its victims to continue as vehicles for its propagation.

While estimates varv widely. SARS-CoV-2 appears to kill about 0.6% of the people it infects—about six times that of a typical flu. By comparison, two other human coronaviruses are far more lethal but

As David Hui, a respiratory disease expert at the Chinese University of Hong Kong, said, it is "mild, until it decides to

Investigators quickly real-

between humans.

productive machinery.

harder to contract.

become nasty."

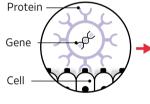
Melissa Marton and Robert Furatero at the New York Genome Center.

From Bat to Human

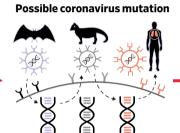
SARS-CoV-2 is very similar to known SARS-related coronaviruses in bats, especially horseshoe bats. It is believed that a bat virus mutated in order to infect humans.

Protein

Bat respiratory tract



The bat virus attached to cells in a bat's respiratory tract.



Scientists suspect the bat virus mutated to become able to infect an intermediate host, such as a civet or pangolin, before mutating again to become able to infect humans, in a process called spillover.

virus was free to replicate and infect others through coughing, sneezing and other contact.

ple or more in the 20th cen- Sources: Timothy Sheahan, University of North Carolina, National Institutes of Health

ized that SARS-CoV-2 usually seeks out type II lung cells in the people it hijacks. These coat membranes lining the nose, throat and sinuses, and into the lungs. The coronavirus pries the cells open with a molecular structure called a spike protein that it uses like a crowbar to force entry. In images that scientists made to study it, the round virus bristles with spikes. The spike protein locks onto a receptor called the angiotensin-converting enzyme 2, or ACE-2, which typically regulates a protein that increases blood pressure and inflammation.

Researchers at the Francis Crick Institute in London used a technique called cryo-electron microscopy to compare this structure to the spike protein of a bat coronavirus most like that of SARS-CoV-2. They saw subtle differences in the spike of SARS-CoV-2 that make it able to bind about 1,000 times more tightly to a human cell than the bat virus, the scientists said.

Once inside a human cell, the new coronavirus has a rare ability to silence alarms that would normally alert the immune system to mobilize antibodies and virus-killing cells, according to microbiologists at the Icahn School of Medicine at Mount Sinai, New York.

Bewildering complications

Doctors who first encountered it diagnosed it as a respiratory virus. They looked for symptoms of fever, cough and shortness of breath. But Covid-19 triggered bewildering complications.

People complained of nausea or diarrhea. Some had arrhythmias or even heart attacks. Some suffered kidney damage or liver failure. Some lost their sense of smell or

'Every two weeks or so, it seems that the virus picks up a new mutation?

taste. Others turned up at clinics with blood clots or swollen purple bumps on their

In most countries where the virus triggered outbreaks, it sent people to the hospital with delirium, blackouts, brain inflammation or strokes, researchers at the U.K.'s Liverpool University reported in The Lancet Neurology in July.

By coming into contact with this virus, "you wouldn't know with it would have: Maybe you will be unscathed, but maybe you would die," said University of Oxford vaccine expert Sarah Gilbert. Heidi Larson first met the

what kind of effect a meeting

After human infection, the

Human to human

virus when her husband started feeling lethargic and feverish. He lost his appetite and struggled to lift a spoon. When she touched his forehead, it burned. "But fever can mean many things," she said.

Prof. Larson, an anthropolo-

gist specializing in vaccines, has survived typhoid in Nepal and eosinophilic meningitis in Fiii. Her husband is 71-yearold Dr. Piot, the virus hunter who co-discovered Ebola. With no signs of Dr. Piot's fever subsiding over the course of a week, their suspicions began to sink in. A test confirmed: The man who had spent his life combating viruses was now besieged by one.

By the 14th day, his fever spiking, they rushed to the emergency room and he was immediately admitted. He had no breathing difficulties but his oxygen saturation levels were dangerously low, a condition called silent hypoxia. In his more lucid moments, he kept thinking: "It got me. The virus got me.

Dr. Piot was relieved when he was discharged. But then

New virus cells are released.

host cell in the process

sometimes destroying the

came a second wave: He got chills and a form of pneumonia. He thinks his body was hit by a so-called cytokine storm, a side effect in which the body's immune system goes into overdrive and attacks more than just the invader. Prof. Larson tested positive

for antibodies, suggesting she was also a victim, but her symptoms were different, too: conjunctivitis and splitting headaches. "This virus is really diabolical, it came like a thief in the night with an insatiable appetite for victims to devour," Dr. Piot said. "It behaves unlike any other virus."

The virus has infected millions of people who never got sick or were only mildly ill, which allowed it to reproduce while its victims spread it in ever-widening circles.

In the early days of the pandemic, researchers thought children might be less affected by the coronavirus, with lower rates of hospitalization and few deaths. But the very young are more vulnerable than initially suspected.

By the end of July, nearly 340,000 children in the U.S. had tested positive for Covid-19, or 8.8% of all reported cases. No one is sure vet how readily children transmit the virus or whether they are highly contagious when they show no symptoms.

The virus's own internal alone chemistry enough to account for so much variation of symptoms, severity and deaths.

Forensics team

There is no shortage of possible contributing causes: old gender, underlying age. chronic diseases such as diabetes, lack of health care and poor diet. Investigators also turned their attention to gene variations that might make some uniquely vulnerable.

"The immune system in people is as diverse as beauty, height, intelligence and any other human feature," said molecular immunologist Michel Nussenzweig at Rockefeller University in New York. "Not everybody is the same in their ability to fight infection."

At Rockefeller and the New York Genome Center, scientists are comparing the entire genomes of those most severely affected by the coronavirus to those who experience only mild symptoms—and then to the coronavirus itself. They are part of a network in 50 countries that is studying the new disease by analyzing the DNA from millions of people. At this level of molecular biology, the virus and its victim are one, their genetic material intermingled in a tiny vial awaiting processing.

They can already tell the virus is evolving.

"The virus changes on a fairly clockwork basis," said computational biologist Michael Zody at the genome center. "Every two weeks or so, it seems that the virus picks up a new mutation."

Most changes in the coronavirus don't make any difference now. In time, it is possible that some might make it easier to transmit from person to person or become deadlier.

So far, more than 1,200 natural variations in coronavirus strains have been identified. "Any of these mutations could functionally make the virus different," said Emma Hodcroft at the University of Basel in Switzerland who tracks its global transmission, "But this virus is very young and we haven't seen any evidence of this happening yet."

How SARS-CoV-2 Multiplies

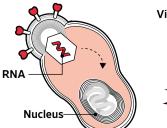
Human cell

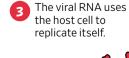
The virus uses its spike protein to attach to a receptor called the ACE-2 in a human cell and pries its way inside.

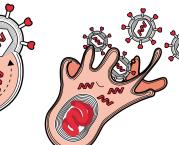
Receptor

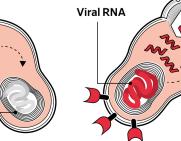


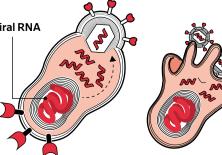
The virus injects its RNA into the human cell's nucleus and takes over.











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9/11 Workers Are Hit Hard by Covid-19

First responders with chronic conditions from Ground Zero exposure are especially vulnerable

By Melanie Grayce West

When the new coronavirus pandemic hit New York City. New York Police Department Sgt. Raymond Holub stocked up on disinfectants and bleach cleaners, scrubbing surfaces at work four times an hour. washing his hands and keeping a distance from others.

But Covid-19 sickened him and others in his detail in late March. Five months later, he still hasn't fully recovered, in part because of underlying health problems, including a respiratory condition, from his time spent working 14- to 16hour shifts at Ground Zero in the aftermath of the Sept. 11, 2001, terrorist attacks.

Sgt. Holub, 55 years old, is part of a small, particularly vulnerable population of New Yorkers who are ill from 9/11related conditions and suffered severe illness from the coronavirus. He avoided the hospital, but months later still relies on oxygen. His longterm prognosis remains unclear, and doctors now consider him a long-haul patient, he said. He has been out of work since April 1.

"My plan was to continue working till I could get kids through college without leaving them in debt," said Sgt. Holub. "I don't know if I will be able to do that now."

Roughly 400,000 New Yorkers-first responders, residents, workers, students and others—were exposed to caustic dust and toxic pollutants in the 9/11 dust-and-debris cloud, according to the U.S. Centers for Disease Control and Prevention. New Yorkers who survived the attacks and the aftermath suffer from dozens of medical conditions, ranging from asthma to chronic obstructive pulmonary disease and cancers. These are all dangerous underlying conditions that can make a case of Covid-19 far more serious, according to doctors at the World Trade Center Health Program at Mount Sinai, part of a federal program to track responders' health.

Recent data from the National Institute for Occupational Safety and Health, which tracks the long-term health of more than 86,000 Sept. 11 responders and survivors, show there have been more than 1,400 confirmed cases of Covid-19 with nearly 200 hospitalizations and 44 deaths. Those numbers only reflect a sample of the total





Sgt. Raymond Holub, left, is a long-haul patient. Martin Preston's symptoms lingered for months.

population in the program.

After a few calls from ill patients in early March, doctors at Mount Sinai recognized that they needed to shift their care to screen for Covid-19 symptoms. They pulled in mental-health practitioners and respiratory and pulmonary doctors to help create a targeted response.

Responders who worked on the World Trade Center site are alert to the risk of illnesses that might worsen an existing condition, delay an

organ transplant or affect chening to really climb in the popmotherapy, said Laura Crowley, deputy medical director for the Selikoff Centers for Occupational Health at Mount Sinai. Many are already on multiple medications for 9/11related conditions, she said.

Some 9/11 responders quickly became ill as the pandemic took hold, said Michael Crane, the medical director of the WTC Health Program at Mount Sinai. "A lot of them were on duty in the beginning of March, when it was beginulation, and they couldn't get out of the way," said Dr. Crane.

Martin Preston, 67, retired last year from the Department of Citywide Administrative Services. On Sept. 11, he was at Ground Zero with then-Mayor Rudy Giuliani. Mr. Preston said he believes he caught Covid-19 at a party in early March and had residual symptoms until last month.

He was sick, had gone to the doctor and was sent home with a negative Covid-19 test,

which turned out to be false. Mr. Preston's physician at Mount Sinai called him at 5:30 on a Saturday morning in mid-March after reviewing his chart. She urged him to go to the emergency room, said Mr. Preston, saying his symptoms were so severe that he should take an ambulance to the nearest hospital.

"I'm not getting into an ambulance," he recalled telling her. So he got in his car and drove to the Mount Sinai in Astoria, Queens. "I really wanted to live!"

Brian Curley, 55, a retired police officer, went to a hospital near his home in Rockaway, Queens, and was read last rites over the phone by his priest during a March stay that lasted more than a week. Working daily for weeks at Ground Zero left him with serious chronic sinus and respiratory conditions, skin cancer and gastrointestinal problems.

He believes he caught Covid-19 while working at a bar the weekend of the St. Patrick's Day parade in Rockaway. Two other co-workers his age were home sick for just a few days. Mr. Curley said he still suffers from muscle aches and weakness, something his Mount Sinai doctors are monitoring.

"I spend more time in bed than I usually do," he said.

West Indian American Day Parade Turns Into Virtual Celebration



still gathered early Monday in Crown Heights for the J'Ouvert party, where a shooting wounded five people, including a 6-year-old boy.

Immigration to City Is Declining, Raising Concerns About Economy

By KATE KING

New York City's economy depends on immigrants, but at a time when it needs all the help it can get, the flow of new residents from overseas is slowing.

Immigration to New York City dropped 45% between 2016 and 2019, with about 34,000 immigrants moving to the city last year compared with 62,000 in 2016, according to an analysis of U.S. Census Bureau population estimates by William Frey, senior fellow at the Brookings Institution, City officials and immigration advocates say tighter federal immigration policies and delays in processing visa applications during the pandemic have reduced the flow of transplants.

Immigrants make up about 45% of the local workforce and own more than half of the city's businesses, according to a 2019 report by the Mayor's Office of Immigrant Affairs.

"I am worried that declining rates of international immigration will hurt not only future economic growth in New York City but the stability of New York City's tax base," said Michael Hendrix, director of state and local policy at the Manhattan Institute, a conservative think tank.

Immigration has traditionally offset the departure of New York City residents to other parts of the U.S., according to Frank Donnelly, a geospatial-data librarian at Baruch

College. The recent slowdown in arrivals from other countries, however, contributed to an overall drop in the city's population the last three years. Bitta Mostofi, commissioner

of the Mayor's Office of Immigrant Affairs, said immigration is essential to the city's economic development.

"We are very much a city of immigrants," she said. "You cannot look at the history of our city and not see the impact and footprint that immigrants have had on building our companies, our infrastructure, our small businesses and the culture of who we are."

President Trump has restricted immigration since taking office, including banning travel from several Muslimmajority countries, reducing the number of refugees allowed to enter the country and imposing a public-charge rule that critics say will prevent immigrants from poor coun-

tries from moving to the U.S. Immigration has further slowed during the pandemic. with countries introducing travel restrictions and many consulates temporarily closing, delaying the processing of visa applications.

Yanki Tshering, executive director of the Business Center for New Americans, a nonprofit that provides small-business loans and financial guidance to immigrants and refugees, said she has heard from friends and family overseas that the response to the pandemic in the U.S. has dissuaded some people from moving here.

Muzaffar Chishti, director of the New York office of the Migration Policy Institute, predicts affordability will have a bigger long-term impact on immigration than the pandemic.

"Throughout New York's history, certainly in the last 120 years, immigrants have shown they have much more faith in the resilience of the city than native-born people have," he said. But, "middleclass immigrants are looking at options more than they used to

Immigrants make up about 45% of the local workforce, a 2019 report found,

because of the heavy cost of living, mostly due to rent."

Immigration has helped the city recover from previous disasters. After New York City lost more than one million net residents during the 1970s financial crisis, immigrants were a driving force behind the city's population recovery over the next two decades, according to the New York City Department of City Planning.

The population of illegal immigrants in New York dropped 25% between 2008

and 2018, according to the Mayor's Office of Immigrant Affairs. The office attributes the decline to the U.S.'s slow recovery from the 2008 recession, an improving Mexican economy and increased enforcement along the border.

Armando Villanueva moved to New York City in the early 1990s from the Mexican state of Puebla. Poverty was increasing in his hometown, and at age 20, Mr. Villanueva entered the U.S. illegally and moved in with his uncle in Queens. He worked in different low-wage jobs for years before eventually becoming an auto mechanic, and now lives on Staten Island with his wife and three children, ages 9, 13 and 20. His oldest son is studying biology at the City College of New York.

Mr. Villanueva said that for a long time, so many people from his hometown in Mexico were moving to the city that they referred to it as "Puebla York." Over the past two years, he has noticed fewer people arriving. He believes a big reason is that the immigrants who moved here between 1985 and 2000 are sending money home.

"Now the young people have the resources to attend schools in Mexico," Mr. Villanueva said, adding that he sends money to support his sister and nieces. "That's the case for many other people, and probably that's why we don't see more people coming over."

Ventilation Woes Keep 10 School **Buildings Closed**

By LEE HAWKINS

The deal reached between New York City and the teachers union on a delayed reopening of schools still partly hinges on an issue that has been on the radar all summer: the coronavirus and air quality.

The city Department of Education said Monday that it is delaying the reopening of 10 school buildings due to air quality and ventilation concerns, instructing staff at those schools to work temporarily from home instead.

The department said it plans to complete a number of repairs "within the next couple of days," and that it is identifying alternative spaces at schools where repairs can't be completed by Sept 21, the date when in-person instruction is set to begin at city schools.

'School leaders will work with Division of School Facilities staff to determine timelines for repairs and the impact temporary room closures might have on school programming," the department said.

The United Federation of Teachers, which represents about 120,000 city Department of Education employees, deployed its own teams to inspect ventilation, fans and windows, mainly to doublecheck the DOE's inspections. The DOE had earlier shut down some classrooms that it found unsafe, and the union said its involvement as a watchdog promises ventilation will be a key issue to reopening schools.

UFT President Michael Mulgrew said Monday that inspections by the DOE and the union identified "serious ventilation issues."

'We will continue to monitor these buildings and other schools to make sure all ventilation problems are solved," he said. "Where repairs and upgrades cannot be made, we will work with the DOE to help find alternative space before students return Sept 21."

The city's deal to delay the start of in-person instruction

authorization vote by union delegates and was contingent on the city's taking additional safety measures, including ventilation inspections. The deal calls for testing a random sample of 10% to 20% of students and staff at each school monthly. While students are allowed to learn remotely full time, city officials have said most children are expected to spend one, two or three days a week in school buildings and the rest of the time learning from home.

until Sept. 21 averted a strike-

Teachers return to classrooms Tuesday.

In a Thursday briefing, Mayor Bill de Blasio said that 90% of schools "are ready right now" and that any DOE buildings or classrooms that aren't ready won't be used.

"If there's a problem, obviously, there's some time to fix them," he said. "But we've been really clear, if for any reason the classroom's not ready for the first day of school, it'll be held back. If there's a building with a problem, we either fix the problem or we even hold that back."

The union set up a hotline for members to report problems and said it has found problems with ventilation in some schools. For instance, a building on Manhattan's Upper West Side known as the Martin Luther King Jr. Educational Complex, where most classrooms have no windows, was found to have a mechanical ventilation system that "has not worked properly for a number of years," according to a report from the union.

Located near Lincoln Center, the building houses six high schools, with two of the four levels located in the basement. The UFT said a 90-minute walk-through revealed that MLK had ineffective filters "drooping and clogged with dirt," as well as fans that didn't bring in outside air.

The MLK complex was among the 10 buildings whose reopening was delayed Mon-



Mayor Bill de Blasio toured a Brooklyn school earlier this month.

GREATER NEW YORK



Pink oyster mushrooms are among the lesser-known varieties produced by Smallhold. Company cofounders Andrew Carter, standing, and Adam DeMartino are looking to expand their market.

A Mushroom Business Grows in Brooklyn

By Charles Passy

For several years, Brooklyn has cultivated an image as a hotbed for all things artisanal, from cheese to chocolate. Now a pair of entrepreneurs say it is time for fungi to share the culinary spotlight.

Andrew Carter and Adam DeMartino are founders of Smallhold, a Brooklyn business that specializes in growing and selling lesser-known varieties of mushrooms. The company, started in early 2017, will open a 3,000-square-foot South Williamsburg facility to customers in mid-September as part of a significant effort to expand its market.

In the warehouselike space, Mr. Carter, 35 years old, and Mr. DeMartino, 36, are already tending to their crops, which are naturally suited to growing indoors in a matter of weeks with the right lighting, temperature and humidity controls.

The mushrooms come in assorted shapes and hues, and often more closely resemble

sci-fi alien life-forms than toppings on a pizza or ingredients in a salad.

The varieties include the vividly colored pink oyster and the lion's mane, named for its shaggy appearance. But these mushrooms aren't just about looks, the company founders insist.

Messrs. Carter and DeMartino, who met while students at the University of Vermont, said these fungi have a taste far more distinctive than the white button mushroom, which remains America's most popular variety.

Mr. DeMartino said the pink oyster is the "most mushroomy-tasting mushroom," with an intense, umami-like appeal. The lion's mane is characterized by a nutty flavor, he added, though it is also known for its stringy texture.

"It can be shredded like a fresh mozzarella cheese," Mr. DeMartino said.

Smallhold is being funded with an investment of about \$3.7 million, according to a filing with the Securities and Ex-

change Commission. The business, which has a staff of 15, has worked from other locations in the borough—it started its operations out of a shipping container-turned-grow house in Williamsburg—and has built a steady clientele with many restaurants and retailers in the city, including Whole Foods.

The mushrooms retail for around \$7 to \$10 a half-pound box. Smallhold said it is currently producing thousands of pounds a week, making use of another space it has in the borough.

Now, as the company prepares for further growth, it appears to be tapping into a few key trends.

As part of the back-to-theland movement and the burgeoning interest in locally sourced foods, a number of urban farms have established themselves in New York and other cities, according to culinary and agricultural professionals. Such locales are especially appropriate for mushroom farming because it



is generally done indoors, notwithstanding foraging for certain wild varieties. In addition, no soil is needed. The Smallhold team grows its mushrooms in bags that contain sawdust and other fillers.

And mushrooms tend to, well, mushroom.

"Their yield is fantastic," said Henry Gordon-Smith, an urban-farming pioneer who runs Agritecture, a New York-based consulting firm that works with city farms around the world. Mr. Gordon-Smith has also advised Smallhold.

On top of that, the Small-hold team says there is demand for these lesser-known mushroom varieties of late. Mr. DeMartino sees it in terms of what might be called the kale effect, when a dark, leafy green took off and expanded America's palate for vegetables.

"Ever since kale we've had an explosion with different kinds of produce," he said.

Chris Manca, who oversees partnerships with local suppliers in the Northeast for Whole Foods, said that when it comes to mushrooms, shoppers are looking beyond the button variety. "There's an evolution of consumer interest" in specialty mushrooms, he said.

As much as Smallhold identifies itself as a Brooklyn brand, plans call for the company to set up satellite grow houses in other parts of the country.

Smallhold also aims to add

facilities within restaurants and grocery stores, something it is already doing in the New York area at select locations, including a few Whole Foods stores.

The idea is to bring consumers as close to the source as possible for these decidedly different mushrooms.

"It's a completely different experience when you have a mushroom that's freshly harvested," said Mr. Carter.

GREATER NEW YORK WATCH

ROCHESTER

Protesters Demand Police Accountability

Naked except for "spit hoods" in a reference to the killing of Daniel Prude, several protesters sat outside Rochester's police headquarters Monday morning to push for police accountability.

Photos and video showed roughly a half-dozen demonstrators, naked or minimally clothed and some with "Black Lives Matter" written on their backs, sitting silently with their hands behind them, on a rain-slicked street outside the city Public Safety Building.

Mr. Prude, a 41-year-old Black man, died after police found him running naked in a street March 23, put a hood over his head to stop him from spitting, then held him down for about two minutes until he stopped breathing. He died a week later after he was taken off life support.

His brother, had called 911 seeking help for Mr. Prude's behavior.

Seven police officers were suspended Thursday, and state Attorney General Letitia James said Saturday she would form a grand jury and conduct an "exhaustive investigation" into Mr. Prude's death.

Police union officials have said the officers were following their training.

—Associated Press

NEW JERSEY

Two Men Arrested In Double Stabbing

Police in Point Pleasant arrested two people Monday in relation to a double stabbing on the Jersey Shore.

The police department said officers responded a call about a fight on the beach and found two men with stab wounds. They were taken to a hospital.

The police department said it had two men in custody and there is no threat to the public. Police were still investigating and said more information will be provided at a later date.

—Associated Press



PURCHASE ORIGINAL APPAREL AT WSJSHOP.COM

THE WALL STREET JOURNAL MAGAZINE

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PERSONAL JOURNAL.

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THE WALL STREET JOURNAL.

Tuesday, September 8, $2020 \mid \textbf{A11}$

By Jason Douglas

nimals can catch the coronavirus, but that doesn't mean you need to keep your distance from the family pet.

Disease experts say the chance of your pet catching the virus from you or another pet in the neighborhood or at the park is tiny. If they do, the chance they get sick is smaller still. And the chance you catch the virus from your pet is close to zero.

Some instances of infection in domestic and farmed animals have prompted a volley of inquiries to veterinarians and animal-welfare charities from concerned animal lovers world-wide. But transmission between animals is rare, unless they are in prolonged and close physical contact like at a zoo or farm—an unlikely scenario for domestic pets.

"It's not like cats meet together in pubs," said Rowland Kao, professor of veterinary epidemiology and data science at the University of Edinburgh.

The coronavirus has infected at least 26 million people world-wide and Covid-19, the disease it causes in humans, has killed more than 850,000 people, according to Johns Hopkins University data.

The first case of an infected animal reported to the Paris-based World Organization for Animal Health—known by its French acronym, OIE—was in February, when a dog quarantined in Hong Kong after its owner fell sick tested positive for the virus. In March, five tigers and three lions at the Bronx Zoo were found to be infected.

Domestic cats in Spain, France, Germany, the U.K. and Russia have been confirmed infected. So have cats in Illinois and Minnesota, and a dog in New York City. Laboratory tests have shown animals as diverse as macaques, ferrets and hamsters can also catch the virus. In all, the OIE has recorded

roughly 20 individual cases, as well as some larger outbreaks among groups of animals living in close proximity, since the pandemic began.

In almost all these cases, public-health authorities concluded the animals became infected through contact with an infected human—an owner, household member or, in the case of the Bronx Zoo, a zookeeper.

Few animals get badly sick. The cases recorded with the OIE list symptoms including cough, wheezing, some iloss of appetite and mild digestive issues.

And there are no re-

corded instances of pets passing on the virus to humans.

"The main message here is that even if pets get it they are unlikely to get sick, and there is so far no evidence that an infected pet can go on and infect a human," said Jenny Stavisky, assistant professor in veterinary medicine and science at the University of Nottingham in England.



Do Pets Spread Covid-19? Here's What Experts Say

Keep cats and dogs socially distant from other animals as transmission rates are low unless, like people, they are in prolonged and close contact



That animals can catch the pathogen shouldn't surprise us, animal-disease experts say. Seven viruses in the coronavirus family are known to infect humans, including the one that causes Covid-19. Animals, though, are hosts to thousands. The virus that causes Covid-19 is believed to have jumped to humans from an animal in China, possibly a bat,

according to the Centers for Disease Control and Prevention.

The most severe outbreaks among animals have been on mink farms. In the Netherlands, the virus was detected among mink at two farms in April. Since then, outbreaks have occurred on more than 40 farms, prompting the government to order a cull of some 1.5 million animals. Ministers in Au-

gust decided to bring forward a planned ban on mink farming to the spring of next year from 2024.

An examination of the genetic code of virus samples suggested two mink farm workers may have contracted the virus after exposure to infected animals. That fueled concern the farms could act as a reservoir for the virus to ricochet back into humans, said

The chances of getting Covid-19 from a pet is close to zero, experts say, adding that animals kept in close proximity, like tigers at the Bronx Zoo that were infected, are more at risk.

Wim van der Poel, professor of emerging and zoonotic viruses at the country's Wageningen University, who has researched the outbreaks. Other farms have been told to report any signs of respi-

ratory illness among animals, and to implement strict biosecurity measures to try to prevent infection, such as protective gear for workers and keeping all manure on site.

For pet owners, the CDC advises treating the household dog or cat as any other family member during the pandemic: Don't let them interact with people outside the household, and if someone within the household falls ill, isolate them away from others, including pets.

If you do contract the virus, get someone who isn't infected to care for your pet, if possible, while you isolate and recover, said Douglas Kratt, a vet in Wisconsin who serves as president of the American Veterinary Medical Association.

If that isn't doable, then limit contact, however difficult it may be, he said. Resist the urge to nuzzle, hug or kiss your pet, and wear a mask as much as possible to reduce the risk of infection. Wash your hands frequently. Seek the advice of a vet if the animal appears unwell, though he said with respiratory infections it is often hard to tell.

"If they have a sore throat they're not going to tell us," Dr.

"What I'm seeing is really that folks are keeping their animals safe by keeping themselves safe," said Teresa Keiger, a judge and editor for the Cat Fanciers' Association who has bred Russian blue cats for

more than 25 years. Some buyers picking up kittens are traveling by road rather than air to limit the risk of catching the virus, she said.

Ms. Keiger said the flip side of owning pets amid the pandemic is the comfort they bring owners during such a stressful time. "I think that our cats know that we need a bit of extra comfort right now."

Rosie Delaney, a freelance bookkeeper, welcomed two kittens to her London home amid the pandemic in late July. The 72-year-old said she's aware that

pets can catch the virus, but she isn't too concerned. She plans to keep 14-week-old Linus and Lula-Mae at home for the rest of the year anyway until they have grown bigger and accustomed to their new home—though she said she may take them out occasionally on harnesses.

"Once I do let them off the leash I won't think about it, to be honest," she said.

LETTERS

Readers Share Hope, Worry For Lonely Elders

ISOLATION IN the pandemic is hitting elderly people especially hard, wrote Betsy Morris in a recent Wall Street Journal article. Many nursing homes and retirement communities instituted restrictions on visits and socializing in an effort to protect their vulnerable residents from the coronavirus, but loneliness and perceived isolation have also been linked to poor health outcomes.

Many readers wrote in to share

their own experiences with these challenges. Below is a selection of reader responses, which have been lightly edited for length and clarity.

—Brandon Sanchez

Everyone who has a loved one in a nursing home, sadly, is enduring a truly awful separation. Truly awful. I will say this, though: My 91-year-old mother has always been a letter writer, and now more than ever, her skills have been put to the test. So, for me, writing the weekly letter to her has become a part of the new rou-

tine. As I remind her, she is on the "front lines" dodging the "bullet," and we, in relative safety, to boost her morale, will keep writing!

David McCann Akron, Ohio

My 91-year-old mother, a lifelong amateur artist, lives in a large retirement community that imposed strict Covid-19 lockdown measures. She is a very social person, and I worried that the isolation and loneliness of the lockdown would have a negative impact on her health and, in particular, her mental wellbeing. So I wanted to figure out a way to help not only her but other seniors in her network to deal with the situation.

'For me, writing the weekly letter to her has become a part of the new routine.'

Over the course of 10 weeks in April, May and the first half of June, I curated what I call "Artmails" and emailed them to my mother on a daily basis. In each Artmail, I profiled a modern or contemporary artist, included some bio and my own brief commentary and embedded a number of YouTube videos of the artist's work. All told,

I created 50 Artmails: one a day each weekday for 10 consecutive weeks, usually late at night after my day job. (Each one took me about three hours to make, but they typically take about 30 to 35 minutes to read and watch.)

My mother then shared them with a few of her senior-citizen friends. They were extremely popular among a handful of residents, and the positive feedback I received motivated me to keep going!

Peter Korzenik Norwalk, Conn.

I am a geriatric physician in Los Angeles who makes house calls in assisted living and nursing homes. I have had over 60 cases and 30 deaths from Covid—but, at the

same time, an equal number of deaths from general decline: poor appetite, falls, depression/suicidality. I have termed it "PRLD": Pandemic Related Lockdown Disease. It is much easier for agencies to pass guidelines and facilities to lock down than being creative in coming up with ways to interact, as well as the potential legal ramifications of a spread.

Matthew Lefferman Los Angeles



I agree with everything you said. I am a medical director of nursing homes. But having said it, what is the solution?

I thought we beat it by isolating to keep Covid-19 out of the homes. We did well for a while. Then came warmer weather and reopening. Insidiously, 19 out of 21 staff who tested positive were asymptomatic. Despite every good intention and practice, I now have 31 residents positive and four deaths so far. I am heartbroken.

So we throw it open? It might work with the Covid-19 survivors.

There will be more cases and more deaths among the non-infected. It is difficult to isolate everyone as we have wanderers, so contact tracing is elusive. Would families unanimously court the

risk to end the isolation?

We continue to pray for an effective vaccine that could be the solution.

Henry Lewis Gainesville, Ga. A12 | Tuesday, September 8, 2020

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ANATOMY OF A WORKOUT | JEN MURPHY

A Pro Drill That Can Work for You

The USWNT head of performance breaks down the importance of working all planes of motion



he human body moves three-dimensionally, even if exercise more often focuses on moving forward and backward on what's called the sagittal plane (think running or lunges). But complete exercise means also working the body side-to-side (frontal plane), as well as rotational movements (transverse plane).

Soccer players change direction constantly.

"We have to train players to run, sprint, jump, rotate, turn and kick, all through different planes of motion," says Ellie Maybury, head of performance for the U.S. Women's national soccer team.

Before joining U.S. soccer in 2016, Ms. Maybury worked for four years at the Football Association in England as a sport scientist for all of the youth women's national teams.

This fitness expert emphasizes mobility and stability in her work with the U.S. team.

In training camp, Ms. Maybury incorporates exercises that focus on mobility (flexibility and range of movement) and stability (strength and control of movement) in all three planes of motion.

You don't have to play soccer to reap the benefits of these exercises, Ms. Maybury says. "They are transferable to movements executed in everyday life, from bending to pick something up off the ground to rotating to move an item from one location to another," she says.

Head to WSJ.com to find a package of five drills that can provide a total-body workout. The routine incorporates a range of mobility and stability exercises, including the lunge matrix shown here.

The initial movements lay the foundations by utilizing stationary exercises to mobilize the hips and pelvis in all three planes of motion, Ms. Maybury says. The exercises gradually increase in intensity and become progressively more dynamic, through the inclusion of single-leg balance and plyometric exercises, to challenge your control and balance.

The three-part lunge matrix drill detailed here can provide a leg workout on its own, Ms. Mabury says.









Ms. Maybury, head of performance for the U.S. women's national soccer team, displays the exercise on the sagittal plane, top, frontal plane, middle, and transverse plane, bottom.

The Workout

Lunge Matrix

Why: Soccer players are constantly zigzagging to move the ball up and down the field. In real life, we find ourselves lunging in all planes of motion. "These three movements can be considered one full repetition per side." Perform 5 to 10 reps on each side.

How: To perform on the sagittal plane, step forward with your right foot into a lunge, reaching your hands down to knee height. Push off with the right

foot to return to starting position. Switch sides.

To perform on the frontal plane, step sideways to the right and drop into a lateral lunge, reaching hands down to knee height. Return to starting position. Switch sides.

To perform on the transverse plane, step back to 5 o'clock and sit into a drop lunge, reaching hands down to knee height. Return to starting position. Perform on the opposite side by stepping back to 7 o'clock.

Options: Hold a weight or a ball. Reach overhead rather than ankle height.



WEIGHTLIFTING AT HOME

My gym reopened but I'm not ready to venture back. How do I start a weightlifting routine from my home?



Think about splitting up the workout by muscle groups.

The bottom line

Truth is, you don't need much. Dumbbells, a barbell and a bench are enough to start. The key is to create the time and space for your new routine. Pick a spot in your home, and a time of day that is off limits to everything else—kids, work, chores, or other potential distractions. Make sure everyone in your household knows that these 30 minutes are yours and you don't want to be disturbed.

The details

To save space, consider buying instruments that are weight-adjustable—such as these dumbbells from Powerblock or barbell from Bowflex—which allow pounds to be dialed up or down in increments. The alternative—multiple sets of different weights—can take up more room.

Next, set yourself up for consistency: Aim for a half-hour of weight training, three or four times a week, in between rest days. Think about splitting up the workout by muscle groups: One option could be legs on one day; then shoulders; back and biceps another day; then chest and triceps on the fourth day. Or, you could alternate days between lower body and upper body.

Former national and world champion powerlifter Warren Fahrenfeld suggests starting by picking just two exercises per body part: For legs, that could include squats (hoisting barbell on shoulders) and walking lunges (holding dumbbells). For the upper body, examples include bicep curls and bench presses which can be done either with a barbell or holding dumbbells. Mr. Fahrenfeld says to aim for five sets for each exercise; 10 to 15 repetitions per set: with 45 to 60 seconds of rest between sets. Before working out any new body part, pick one exercise at a low weight, 15 to 20 repetitions. "Just to get the blood going, and joints and tendons warmed," says the nutrition coach and personal trainer based in Township of Washington, N.J.

He says many clients feel they have to do lots of cardio activity before hitting the weights. "Do the opposite," he recommends. If cardio is desired for fat burning, do it afterward. That way, you're not hitting the weights sapped of energy, he says. And keep things uncomplicated. "Cardio can be as simple as just walking around the neighborhood," he says. In fact, he says it is best to start working out at an easy pace and work your way up to a more rigorous one. "Most people start out overtraining," he says, and then burn out.

If you're not ready to invest in equipment, try simple things around the house. Gallon jugs filled with water or grocery bags filled with canned goods can be used instead of dumbbells.

—Anne Marie Chaker



ARTS IN REVIEW



Retuning a Jazz Guitar Legacy

On his album 'Django-shift,' Rez Abbasi offers muscular new renditions of the music of Django Reinhardt

By Martin Johnson

uring the past decade or so, Rez Abbasi has established himself as one of the leading guitarists in jazz. The musician—who was born in Pakistan, grew up in California, and attended college in both Los Angeles and New York-has become known for innovative fusions of jazz with Indian and Pakistani musical traditions, as well as for unique approaches to soundtrack music and a recording where he shared the frontline with a harpist. But he pushes boundaries in other ways as well. On "Intents and Purposes" (Enja, 2015), he drew his repertoire from the electric jazz fusion movement of the early '70s but performed the music with his acoustic quartet. And now, on "Diango-shift" (Whirlwind Recordings), he offers another set of reimaginings, playing the nimble music of guitar great Django Reinhardt with a brawny trio.

This project began in January 2019 with a commission for the Berkeley, Calif.-based Freight and Salvage Django Reinhardt Birthday Festival. Reinhardt (1910-1953), one of the founding fathers of jazz guitar, was a brilliant soloist and one of the first

Mr. Abbasi has become known for fusing traditions and drawing on an eclectic repertoire

guitarists to lead a jazz band. Mr. Abassi felt that Reinhardt's comoosing skills were often overlooked and, after a thorough review of his catalog, chose seven originals and two standards ("Anniversary Song" and "Sentember Song") that Reinhardt made his

"Diminishing," the first track on "Diango-shift." begins with a

sinewy intro from Mr. Abbasi before drummer Michael Sarin and keyboardist Neil Alexander kick in with sturdy support, yet Reinhardt's melody is crystal clear as the band embellishes it throughout the performance. "Swing 42" is slowed from the original's frenetic pace, which highlights the elegance of the melody. Then Messrs. Abbasi and Alexander engage in aggressive solos with Mr. Sarin's enthusiastic accompaniment. "Django's Castle" is faithful to the serene mood and easygoing tempo of the original, but the new version is deeper thanks to extended solos by Messrs. Abbasi and Alexander and subtle percussion from Mr. Sarin.

"Anniversary Song," a waltz by Iosif Ivanovici, undergoes one of the most radical changes. Mr. Abassi converts it into a noirish piece, with probing solos—his improvisation is a highlight of the recording—and abstract ensemble sections. Kurt Weill's "September Song" has been widely covered, and Reinhardt's rendition is distinguished by bravura guitar flourishes. Mr. Abassi turns it into a meditative duet for him and Mr. Alexander that seems to refer to

the television and movie soundtracks on which the song has appeared.

Much of Reinhardt's music evokes the settings of its creation, the smoky cafes and nightclubs of Paris, while Mr. Abbasi's renditions recall more modern

venues—the upscale jazz clubs and small performance halls where the music might have been performed this year in the absence of a pandemic.

"Django-shift" adds to a growing number of recordings in the past five years that use classic repertoire as points of departure. Albums like Rudresh Mahan-

The WSJ Daily Crossword | Edited by Mike Shenk

thappa's "Bird Calls" (ACT Music). Jason Moran's "All Rise: a Joyful Elegy for Fats Waller" (Blue Note), Adam Nussbaum's "The

Lead Belly Project" and "Lead Belly Reimagined" (both Sunnyside), and Anna Webber's "Clockwise" (Pi) turn works in the canon into contemporary sonic portraits that mesh the old with the new. It is a wise tactic for Mr. Abbasi.

Reinhardt's solos are extraordinary; copying them would be only slightly less ridiculous than copying Jimi Hendrix. In "Djangoshift," Mr. Abbasi has found an exciting way to present legendary material in an up-to-date style.

Mr. Johnson writes about jazz for the Journal.

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45 Aduba of

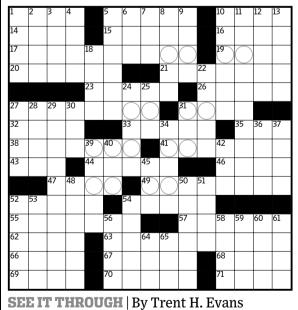
Weather AccuWeather Plan your week | Get the NEW app Shown are today's noon positions of weather systems and precipitation. Temperature bands are highs for the day 50s 0s 60s 10s Winnip Seattle 20s 80s 30s 'Montrea Portla Ottawa 40s 80s / 50s Albany Boston 20s 60s 60s Detroit Cleveland 50s 70s Cheyen *Philadelphia 80s Salt Lake City 20s 90s San Francisco **50**s 100+ St. Louis 70s Los Angeles 60s Oklahoma City Memphis 100s Rain Warm San Diego . Little Rock Cold T-storms 40s ... 90s 80 Stationary Snow · Orlando 50s 80s 60s 80s 70s Anchorage.

U.S. Forecasts s...sunny; pc... partly cloudy; c...cloudy; sh...showers; Hi Lo W City 50 Anchorage 60 Atlanta 70 71 88 83 Austin 72 Baltimore 49 68 **Boston** 60 63 68 72 Dallas 89 Detroit 77 75 90 Honolulu Houston Indianapolis 65 53 61 Las Vegas Los Angeles 79 Minneapolis 44 43 70 80 67 79 69

New York City

Oklahoma City

	Today			Tomorrow			I		Toda	lay To		omorrow	
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Orlando	88	76	t	90	76	t	Geneva	75	55	S	80	57	рс
Philadelphia	87	69	pc	84	72	C	Havana	89	73	t	88	74	t
Phoenix	101	70	S	92	68	S	Hong Kong	89	78	t	87	80	t
Pittsburgh	89	64	рс	89	66	S	Istanbul	84	73	рс	83	71	S
Portland, Maine	78	63	pc	76	62	pc	Jakarta	93	75	pc	93	75	t
Portland, Ore.	83	60	S	92	61	S	Jerusalem	89	72	S	89	71	S
Sacramento	97	66	pc	93	60	pc	Johannesburg	78	48	pc	79	49	рс
St. Louis	91	70	t	88	66	t	London	74	60	pc	74	48	рс
Salt Lake City	56	39	S	61	45	S	Madrid	81	54	S	85	60	S
San Francisco	84	60	S	77	61	S	Manila	92	79	t	91	79	t
Santa Fe	76	37	рс	54	39	рс	Melbourne	71	49	C	62	44	pc
Seattle	83	56	S	90	58	S	s Mexico City		57	t	76	58	t
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Baghdad	116	81	рс	114	80	рс	Shanghai	96	76	pc	94	75	pc
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Beijing	88	62	S	88	59	S	Sydney	77	61	C	63	54	r
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- 47 Gymnast Korbut 49 Financing option for the cashstrapped
- 52 Machismo epitomizers 54 Internet connection
- 55 Stalemate
- 57 Perplexing puzzle 62 Long, long time, in London
- ► Solve this puzzle online and discuss it at WSJ.com/Puzzles.

- 7 Altar affirmative 8 "It's a Wonderful Life" director Frank
- 9 Strike zone's bottom 10 Shepherd,
- formerly of "The 11 Place to spot bows, belts and
- blows 12 "Black-ish" star

Tracee ___ Ross

- 13 Itty-bitty 18 Affirmative votes 22 Like some UFO
- pictures 24 Forearm bones 25 Haunted house
- holler 27 It's earned by an
- 58 Egyptian 28 Historic periods 29 Chucklehead
- 59 General idea 30 Place for a price 60 Burrowing
- 31 Soccer game 61 Once again 34 Beagle, borzoi or 64 Shapiro of NPR
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The contest answer is MIAMI. As suggested by the clue at 68-Across, the grid contains five three-bythree blocks that contain the names of U.S. cities: BALTIMORE, Maryland; POCATELLO, Idaho; ANCHORAGE, Alaska: CAMBRIDGE, Massachusetts: the states spell the contest answer.

A14 | Tuesday, September 8, 2020

P2JW252000-0-A01400-1----XA

The Youth Sports Dilemma

Families have to answer for themselves whether their kids should play. Nobody knows if they're right.

By Ben Cohen

Sahil Gandhi wasn't sure what to do when the adults decided last spring that it was time for teenagers to play baseball again. A pandemic could shut down the global economy, but it wasn't enough to stop the American youth sports ma-

Sahil is a pitcher who plays almost every position for his travel baseball team in Atlanta, and this was supposed to be a glorious summer for 14-year-old athletes like him. But then something unexpected happened. He read his team's safety protocols. He talked to friends about masks and risks. The more he thought about it, the less he wanted to play.

"I'm not supposed to go out of my house, but I'm going to baseball?" Sahil said. "That didn't make sense to me."

There were few teenagers more qualified to make this decision than Sahil. He didn't need to experience a pandemic to start listening to public-health experts. He's been listening to them for his entire life: His parents happen to be infectious disease epidemiologists.

Neel Gandhi and Sarita Shah, who are colleagues at Emory University's Rollins School of Public Health in addition to being husband and wife, spend almost every waking hour these days thinking about Covid-19. Dr. Gandhi speaks in the measured tone of a scientist who strives to follow the data wherever it leads him, and that was especially important when the human variables were his own children: a son who was excited about the baseball season and a daughter who couldn't wait to get back on the soccer field.

Their teams would keep playing—but without the Gandhis.

"We didn't feel like it was safe for us," Dr. Gandhi said. "We felt that we should make the decision that we're most comfortable with as a family."

This is a conversation happening in living rooms across the country. The agonizing calculus of risk tolerance is an equation that each family must solve for itself.

The Gandhis decided to stay home. Some of their best friends sent their children back to soccer practice. Everyone hopes they made the right call. Everyone fears they

We really do get that it's really



complicated," Dr. Shah said.

This is our choice," Dr. Gandhi said. "But I wouldn't tell any family that they're making the wrong

Parents are split. The chance of their kids and teenagers developing severe illness appears to be low, but experts say the greater danger is a young person contracting the virus and passing it to more vulnerable people around him. They also have to consider the mental health of their children. The most recent survey from The Aspen Institute's Project Play in June showed that 44% of parents felt comfortable sending kids back to elite travel and club teams, while higher percentages felt better about school sports (51%) and individual sports (69%).

Athletes have the choice to play or not to play, and teams have promised that decisions won't be

held against them. Most elect to

But there are exceptions on almost every team in professional leagues, college athletics and youth sports, who have looked at the same data and come to a different conclusion.

The first problem with youth sports in a pandemic is that there is no way to play in a bubble. Weekend tournaments bring together children and parents from all over the state for an extended amount of time. Outdoor sports are better than indoor sports, and certain parts of the country have lower rates of infection than others, but the pooling of people also pools

The second problem is what happens when kids are not playing sports. In between games, they eat lunch. They linger inside and savor

the air conditioning. They use public restrooms. For all the safety regulations at tournaments and hand sanitizer in the dugouts, one asymptomatic teenager forgetting his mask or splitting chips and salsa with teammates is enough for the virus to spread.

The restart of youth sports amid this uncertainty brought a wrenching choice for many kids and parents who never imagined having to think so hard about playing sports. Sahil wanted to play. He wasn't sure he should.

His travel baseball team in Atlanta—a city with the highest rate of public-health experts per capita of perhaps anywhere in the world was supposed to begin practicing in March. The start was delayed until April. Then it was pushed again to

Sahil, a New York Yankees fan

like his father, wasn't on the field when his team returned. In a series of interviews this summer, Dr. Gandhi worried that his son would get left behind—or get blacklisted. The economics of youth sports are built on such anxiety.

"I fear that there is peer pressure for parents, too," he said. "If practices are happening and my child doesn't go, are they going to get less playing time in the fall or spring or whenever down the

Nearly six months after baseball season ended abruptly, with the school year starting remotely, fall baseball is right around the corner. That meant it was time for another tough call in the Gandhi household. They decided that baseball could wait until next year.

Sahil is sticking with tennis and

Yeaaaaahhh ... you can't do that. In the end, it doesn't matter if Novak Djokovic meant to do it or not—and he

says he wasn't trying to hit a line judge with a tennis ball at the U.S. Open on Sunday—you just can't do

Djokovic struck a ball in frustration, the ball hit a judge, she frighteningly tumbled to the ground, and even if he didn't see her there, or says it was an accident, a terrible mistake, it's still considered a punishable no-noenough in the minds of tournament officials to send Djokovic, the Open's No. 1 seed, shockingly

"We all agreed he didn't do it on purpose, but the facts are still that he hit the line umpire," the Open's tournament referee, Soeren Friemel, said at a post-match news conference. "And the line umpire was clearly hurt."

In case you're mounting a furious defense of Djokovic in the Court of Tennis Court Second Opinions, be advised: Your client Nole has pleaded nolo.

In a contrite Instagram statement issued after his default, the World No. 1 offered no excuses.

"This whole situation has left me really sad and empty," Djokovic's statement read. "I checked on the lines person and the tournament told me that thank God she is feeling ok. I'm extremely sorry to have caused her such stress. So unintended. So wrong."

"I need to go back within and work on my disappointment and turn this all into a lesson for my growth and evolution as a player and human being. I apologize to the [U.S. Open] tournament and everyone associated for my behavior."

As sports apologies go—as any apology goes-that's not bad. What happened Sunday was a selfinflicted professional humiliation, and credit to Djokovic for not doing the 21st-century usual: blaming everyone but himself.

What a weird, pandemic-edition U.S. Open. No fans, no towel service, no Rafa, no Roger, some scattered drama over Covid-19 testing,

JASON GAY

How Does Novak Djokovic Rally From His U.S. Open Bounce?



Novak Djokovic with the line judge who was hit with a tennis ball at the U.S. Open.

and now, Novak hitting the bricks with an epic unforced error. There is a silver lining—the men's singles winner will be a first-time major winner—but the first Covid-era tennis major has faced substantial headwinds. (If you work for the USTA, and you're up to four Honey Deuces a night, I understand.)

I know there are folks pointing out an apparent irony: that the pandemic U.S. Open is using the "Hawk-Eye Live" robotic line-calling service to officiate matches on most of its courts, in order to cut down on the number of people required to put the tournament on,

and had Djokovic been playing his fourth round match against Pablo Carreño Busta on any court besides Arthur Ashe or next-door Louis Armstrong Stadium—the two courts that are still using oldfashioned humans-he wouldn't be in this situation.

Which I guess is true. You know what's also true? Novak Djokovic doesn't play tennis matches at the U.S. Open out in the sticks. He's not playing Hawk-Eye Live on

Djokovic is the best men's tennis player in the world, and has been for a while. He's won five of the last seven major tournaments-Wimbledon 2018, U.S. Open 2018, Australia Open 2019, Wimbledon 2019 and Australia 2020—and is up to 17 majors, two behind Nadal (19) and three behind Federer (20). He's got a lifetime winning record against both of those all-timers

He flies in the highest possible airspace. Only a fool would dispute the depth of Djokovic's talent, his all-around skill, his outrageous athleticism and court coverage.

And yet Djokovic is consistently put in a corner next to Nadal and especially Federer. His matches

against the latter have a distinct WWE vibe, with Djokovic installed as the heel. While some of this tension is overbaked—everyone plays the heel when pitted against the wildly-beloved Federer—it is awkward to watch the historically great Djokovic reduced to such easy villainy.

Which is why Sunday was a disaster, and he knows it. With Roger icing his knee and Rafa prepping for the French, this U.S. Open men's tournament had the potential to be The Novak Show, a stage largely to himself. He'd been playing very well (he'd won the Western & Southern tuneup, and had dropped one set thus far in the Open) and appeared to be enjoying his rabble-rouser status as a leader of an upstart players organization called the Professional Tennis Players Association. The folly of Djokovic's summer tennis exhibition in Serbia and Croatia, where he and several other players tested positive for Covid-19, appeared to be fading. He was a heavy favorite in New York, undefeated (26-0) on

All of which makes this such an unnecessary fiasco. Djokovic's default was the kind of viral moment everyone heard about, even if they don't pay the slightest bit of attention to tennis, or to sports at all. Suddenly, he was back to Novak the Heel.

Here's the truth about heels: Heels only work when they want to be heels. Djokovic wants to be loved. He's a temperamental player with a self-destructive side, but he also has the potential to finish his career with more majors than any men's player ever. I've seen few athletes with a greater capacity to dig deeply in pressurized moments, yet at this point in his arc, he needs to locate more grace in his game. I suspect he realizes this. I keep going back to a sentence in Djokovic's apology: I need to go back within and work on my disappointment and turn this all into a lesson for my growth and evolution as a player and human being. In the wake of a mortifying moment, it's valuable self-awareness. May it turn into wisdom.

P2JW252000-0-A01500-1-----XA



STREET By William McGurn

would deny that he has often disregarded norms of political behavior-from the derisive nicknames he

uses to diminish political rivals to ill-advised tweets such as the one suggesting we delay the election. These are impossible to ignore, not least because when they happen the entire press and political establishment talk of nothing else for days.

So let us stipulate that the president is a serial norm breaker, and it's perfectly fair to call him out on it. But Mr. Trump's foes break plenty of norms themselves, justifying it because of, well, Trump—and then adding a lecture about civility on top. The latest example: Can anyone imagine a sepublication news running a story accusing Joe Biden or Nancy Pelosi of maligning the war dead with all anonymous sources?

The Trump-justifies-themeans rationale has been as poisonous for the nation as anything the president has done. Start with this: Has there ever been a norm violation more grievous than the way the Justice Department and FBI were politically weaponized to intervene in an election and then take down an elected president, built on a salacious Russian dossier commissioned by the Hillary Clinton campaign and lies to when Mrs. Pelosi ostenta- pand on how awful Mr.

Not even Donthe Foreign Intelligence Sur-tiously tore up her copy of Trump is, starting with the ald Trump's most ardent mention intelligence chiefs such as CIA Director John Brennan and Director of National Intelligence James Clapper who publicly painted the president as a Russian agent while privately testifying to Congress they'd seen no evidence for such a claim.

In the Age of Trump, calls to change any norm seen as working in the president's favor are frequent. Mr. Trump wins the election but loses the popular vote? Eleven Democratic candidates for president call for doing away with the Electoral College. Mr. Trump appoints jurists who don't believe in legislating from the bench? Sens. Kamala Harris, Kirsten Gillibrand and Elizabeth Warren propose packing the Supreme Court.

Meanwhile, Mrs. Clinton. still sore about her loss in 2016, urges Mr. Biden not to circumconcede in *any* Trump Supreme stances. Court nominee Brett Kavanaugh is accused of gang rape and we are told about our obligation to believe the women as the allegation is splashed all over the news. but when a former Senate staffer accuses Mr. Biden of sexual harassment, it turns out you don't have to believe that woman, or even pay attention to her. Meanwhile the speaker of the House, Nancy Pelosi, launches an impeachment inquiry of the president without a floor vote authoriz-

veillance Act court? Not to the State of the Union on her first question, which asked podium? Or how anyone Mr. Biden to give his take on wearing a MAGA hat is automatically a racist, including a high school kid wearing one to a pro-life rally? Or Rep. Maxine Waters calling for people to confront Trump officials wherever they're found—at restaurants, shops, or a gas station—and create a

> Trump haters wage a war on standards and use his bad behavior as an excuse.

crowd to harass them?

So long as a norm violation works against Mr. Trump or his supporters, it gets a pass. That's mostly because the institution that should be holding violators accountable, the press, has abandoned even the pretense of objectivity with anything Trump.

The most recent example came Friday. The president held a press conference in which reporters rightly peppered him with tough questions about everything from the attempted assassination of Russia's opposition leader, to whether America is making as much progress against Covid-19 as he says, to whether he regretted saying John McCain was no hero.

The same day, Mr. Biden held one of his (infrequent) press briefings. This time, it apply to Donald Trump. was all softballs. Most report-Or remember in February, ers simply asked him to ex-

Mr. Trump's soul.

We've been seeing this for years. Where was the press skenticism about the Steele dossier or the whole Russia collusion narrative? Can anyone remember headlines about norm busting when Americans learned the FBI agent accused of altering a document for a FISA court had declared himself part of the "resistance"? Or when a text revealed the FBI's lead investigator into the Trump and Clinton campaigns telling his FBI lover that they will "stop" Mr. Trump from becoming president? Against this, the standard rhetorical excesses likening the president to murderous totalitarians—Trump is Hitler, Trump is Stalin. Trump is Mussolini—look almost quaint.

The critics will say this is all whataboutism. But that's not an answer, it's an evasion. If norms are norms, they apply to everyone. Unfortunately, as my colleague Kim Strassel notes in her book "Resistance (at All Costs)," the reigning standard of the Trump norm busters is this: "You either hate the man, or you are as bad as the man."

The new approach to norms was signaled in the thick of the 2016 campaign, in a front-page New York Times op-ed by Jim Rutenberg. In it Mr. Rutenberg asked whether "normal" standards should

Plainly we have our answer: No.

Write to mcgurn@wsj.com.

BOOKSHELF | By Gerald J. Russello

Why Was He In Vietnam?

The Last Brahmin

By Luke A. Nichter (Yale, 527 pages, \$37.50)

want you to know that if it will serve the United States, I am expendable. Just don't do it for unimportant reasons." This was former senator Henry Cabot Lodge Jr.'s response to President John F. Kennedy's 1963 request that he, a lifelong Republican, return to public life as ambassador to South Vietnam and serve in a Democratic administration. The Vietnam post was only one milestone in Lodge's cursus honorum—besides serving as a senator and ambassador he was also, at different times, a state legislator, a military officer, a vice-presidential nominee and a possible presidential candidate. For almost five decades, Lodge was at the center of American public life.

Luke A. Nichter's comprehensive biography sets Lodge's story amid the twilight of the WASP elite—the "Brahmins," meaning primarily that set of interrelated families in and around Boston—and of an America it's almost impossible to believe existed, where yacht clubs and boarding schools led naturally to public service. The Vietnam episode helped

bring about the dissolution of their political class.

In "The Last Brahmin" Mr. Nichter, a professor of history at Texas A&M University-Central Texas, presents Lodge as a man who believed he owed much to the nation, and so believed the nation should use him as it saw fit. Lodge (1902-1985) descended from multiple old American families; there had been a Lodge in federal public service almost continuously since the Revolution. Lodge's father died when his son was 7, and his grandfather.

Sen. Henry Cabot Lodge (1850-1924), became a strong influence on the grandson. The elder Lodge was a confidant of Theodore Roosevelt and a well-known center of opposition to Woodrow Wilson's League of Nations, which he considered a threat to American sovereignty.

Handsome, courageous, charismatic, an engaging public speaker, politically savvy and hardworking, the younger Lodge was elected to the Massachusetts state legislature in 1932, arguing that "the economic system should be changed to provide a better distribution of wealth," one that rewarded initiative but not greed, and one that protected those harmed by economic dislocation. Lodge championed improved worker conditions and civil liberties. He later called this combination "practical progressivism," but it was more a form of secularized Christianity applied to politics. His affability and wide network of contacts (recorded meticulously on index cards) represented that ease with other social classes possessed by the American ruling class at its best: His social status had not been achieved via meritocracy or mere chance, and he felt no need to guard it with snobbery. Lodge won a Senate seat in 1936, and meanwhile became a captain in the Army Reserve. In 1944 he resigned from the Senate to serve full time in the military, the first senator to do so since the Civil War.

Lodge would become a colonel, and Mr. Nichter depicts his experience in World War II as a turning point: He moved politically from the isolationism of the older elite to the internationalism of the postwar period. Lodge had campaigned for Wendell Willkie in 1940 on a program emphasizing "Americanism, preparedness and peace," and called proposals for internationalism "suicidal." By early 1941, however, after taking advice from his friend Army chief of staff George (Marshall, he split with the Republicans—and his grandfather's principles—in voting for the Lend-Lease policy.

Henry Cabot Lodge Jr.'s conversion from isolationism to internationalism was emblematic

of postwar shifts within the Republican party.

What Mr. Nichter does not quite explain is what led Lodge to continue this shift after the war. By 1947 he was advocating for the U.S. to take on the role of guarantor of world peace, and he thought it imperative that the country maintain armed forces abroad. Returning to the Senate after the war, Lodge formed part of the bipartisan "vital center" expanding America's superpower role. His positions alienated him from Sen. Robert Taft and others in the old-guard Republican leadership. In 1952, Lodge led the movement to draft Gen. Dwight D. Eisenhower in order to steer the party "in an internationalist direction," as Mr. Nichter terms it, and to take the Republican presidential nomination from Taft. This sealed the fate of the nationalist wing of the party.

The dramatic centerpiece of Mr. Nichter's account is the fall of the Diem government in Vietnam in 1963. In a conversation secretly recorded by Kennedy but not previously known to have been recorded by the president, Kennedy seems to give approval for Lodge to support a coup attempt against Diem. At the time, Diem was considered insufficiently strong against the communists and was becoming difficult to deal with. Elements within the State Department and the CIA thought that a group of generals would be more favorable to the American policy of resistance to North Vietnam.

Lodge was thrust into a volatile situation and did as well as he could to further what he understood as the national interest. He was careful to keep informed of what was happening but stayed at arm's length. He knew he was exposed both personally (armed staffers slept outside his room in Saigon) and professionally, since U.S. support for a coup was not public knowledge. And he knew that he was "expendable" if the plan went awry: Robert Kennedy and others later laid considerable blame for the coup and the worsening war at Lodge's feet. But Lodge never explained his actions in Vietnam, or indeed throughout his career. "Never tell them how vou

did it" is how he phrased his life in public service. The Vietnam episode is emblematic of Lodge's life, and the dilemma of the American ruling class. Lodge comes across in this account as dedicated to American traditions and institutions, but those were irrevocably changed because of the internationalist shift he led. A nation organized around WASP dominance and a generic Christianity was transformed into a universalizing democracy facing off against the communists. Mr. Nichter makes a good case for the Brahmins, and laments that the U.S. has "lost more than it gained through the exit of these families from politics and public service." Perhaps; they did have strong virtues. But the country is bigger than Newport, R.I., Long Island, N.Y., and Boston. While Mr. Nichter chronicles Lodge's active role in the era, the reader still is left to wonder about the man's ultimate motivations, and what he made of it all. "Never tell them how you did it," indeed.

Mr. Russello is the editor of the University Bookman.

Russia and China Wield Dull Wedges



GLOBAL VIEW **Bv** Walter Russell Mead

cerns experts President Trump's foreign policy is that by alienating key allies like Germany,

offers China and Russia an opportunity to divide Europe from the U.S. Yet while trans-Atlantic tensions have worsened since 2016 and public opinion in speech before the Taiwanese key European countries has Senate was provocative. "I turned sharply against the am Taiwanese," he said in together rather than president, there are few signs Mandarin, consciously echo-Russia or China are effec- ing John F. Kennedy's speech tively capitalizing on the mo-

On the contrary. Far from severing the ties between the U.S. and Europe, China and Russia seem to be strengthening them. The poisoning of Alexei Navalny—Vladimir Putin's chief political rival—so outraged the German public Chancellor Angela Merkel is coming under renewed pressure to shut down controversial Nord Stream 2 gas pipeline project. Moscow is evidently preparing to double down on support for embattled Belarusian leader Alexander Lukashenko, even as Europeans cheer the peaceful public protests against his rule.

China seems to be trying even harder to make itself

One of the emergence of more horrifying For Beijing or Moscow to drop the occasional stitch. details about Chinese treatment of Uighurs, Beijing's have about crackdown on Hong Kong, and its threats against Taiwan have roiled Europe's powerful human-rights lobby.

When Czech Senate President Milos Vystrcil led a 90person delegation to Taiwan last week. China's Foreign Ministry condemned the visit and Foreign Minister Wang Yi warned that Mr. Vytrcil would pay "a heavy price" for his temerity. Mr. Vytrcil's in Berlin at the height of the Cold War.

The gap between the major European countries and China widened noticeably last week: France called for a European effort to develop homegrown 5G technology rather than relying on Huawei, and Germany adopted an "Indo-Pacific" strategy that will reduce its reliance on China. Both French and German officials reacted angrily to China's threats against the Czechs.

These events suggest several conclusions. The first is that neither China nor Russia is ready to do what it would take to pry Europe and Washington apart. In part this is because, as Americans well know, Europe demands a

meet European demands on But despite the supposed everything change to human rights and authoritarian governwould require changes that neither is willing or perhaps able to make.

The second is that the trans-Atlantic alliance will remain bound by the same powerful force that creates many international bonds: a sense of common threat.

They push the U.S. and Germany closer driving them apart.

Winston Churchill and Joseph Stalin did not like or approve each other, but they worked together because of a mutual fear of Nazi Germany. Ms. Merkel is not fond of Mr. Trump and vice versa, but both can recognize an overriding common interest. A smoother diplomat in Washington or a more flexible government in Berlin might ease the path for trans-Atlantic Russia and China will concooperation, but diplomatic tact isn't what holds the alli-

The third is a helpful reminder that our adversaries are not 10 feet tall. The U.S. makes its full share of mistakes in foreign policy, and America's European allies unpopular across Europe. The high price for its support. have also been known to

ance together.

from climate advantages that a secretive ment is said to provide in foreign policy, antidemocratic powers are fallible too. One problem is that autocratic governments get so used to bullying and intimidating their people that they fail to grasp how counterproductive such tactics can be when deployed overseas. At home, critics of an authoritarian regime can be easily cowed; foreign governments are less easily forced into compliance.

Finally, there is the somewhat less encouraging observation that both Russia and China feel relatively unconstrained at the moment. With the U.S. consumed by election politics and domestic polarization, and the European Union still divided and slow-moving, neither Moscow nor Beijing seems to fear consequences for its reckless behavior. The rest of 2020 could have a few more nasty surprises up its sleeve.

All of this suggests that tinue to anger and alarm their neighbors and the world at large. And much as the bluster and bullving of Germany's Kaiser Wilhelm II strengthened the encircling coalition that he feared, so China and Russia are driving much of the rest of the world into a defensive alliance.

Dad, Please Get a Covid Shot

By Marc Siegel

💙 en. Kamala Harris suggested Saturday that she might refuse a vaccination for Covid-19 because "I would not trust Donald Trump." My father, 96, feels the same way about Gerald Ford. "No way," he says when I tell him I hope he gets the new shot as soon as it's available. "I got the swine flu vaccine in 1976. I was in bed for three days, and my memory hasn't been the same

That fiasco has fueled anti-vaxxers since. many More than 40 million people received a rushed, flawed vaccine against a virus that never emerged, and at least 500 cases of the paralyzing Guillain-Barré syndrome were linked to it, along with thousands of cases of other unreported symptoms like my father's

This time at least the epidemic—and the need for a than 30 vaccines currently in cine will be when 15,000 vol-

three are in Phase 3, the final stage before approval, in the Trump administration's Operation Warp Speed. Factories are gearing up, and distributions centers have been instructed to be in

You too, Sen. Harris. This isn't the swine flu; it's a genuine deadly pandemic.

place by Nov. 1. That's a good move even if the vaccine isn't ready to distribute by then. The last thing we need right now is a bureaucratic

The leading vaccine candidates—from BioNTech/Pfizer, Moderna, and Oxford/Astra-Zeneca-have all cleared early safety trials and shown a robust immune response. What remains to be seen is vaccine—is real. Of the more how safe and effective a vac-

delav

vs. the response of 15,000 who receive a placebo. Anthony Fauci, longtime director of the National Institute of Allergy and Infectious Diseases, told me in an interview last week that the ultibased on whether a safe vaccine offers actual protection against this coronavirus.

According to Dr. Fauci, the Data Safety Monitoring Board could use this information to reach a decision even before the completion of the trials: "If you get a number of events, namely infections, and your trial happens to be focused in an area where you have it and you reach the predetermined number of events, you could get an answer before the trial is officially over."

The FDA could approve it conditionally, using an emeruse authorization. gencv "That's the reason why you have data and safety monitoring boards. They intermittently look at the data for Fox News.

clinical trials for Covid-19, unteers receive it in Phase 3, adverse events . . . and for data that is for efficacy. . Is it conceivable that you could get an answer in October? The answer is certainly. think its unlikely, but I think we can get it.

Once we have a vaccine, mate decision will be made the next challenge will be getting people to take it. This will involve considerable community engagement, outreach and transparency on the science, especially given the distrust of vaccines in some segments of societyapparently now including the Democratic presidential ticket.

> I will try to convince my patients to overcome their fear and help them to recognize that the dangerous virus should be scarier than the vaccine. That's the only way to beat Covid-19.

> Dr. Siegel is a clinical professor of medicine and medical director of Doctor Radio at NYU Langone Health and a medical correspondent for

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Will Courts Pick the Next President?

If the election is close,

the fallout could make

Bush v. Gore look like

an ice-cream social.

eorgia's voting deadline is unambiguous: ing ballot stragglers, up to 10 days late in Ohio, Absentee ballots are due when the polls close on Election Day. Late arrivals are

meant to be set aside, stored, and eventually destroyed without being opened. That's what state law says, and the way to protect democratic legitimacy in an anxious age is to run elections by the book.

But in the Twilight Zone of 2020, everything is apparently

up for grabs. Last Monday a federal judge issued a preliminary injunction that orders Georgia officials to count all ballots postmarked by Election Day, even if they don't show up until three days later. The suit was filed by the New Georgia Project, a group founded by Democrat Stacey Abrams. The judge expressed a reluctance to "interfere with Georgia's statutory election machinery," but she concluded that "the risk of disenfranchisement is great."

Similar litigation is taking place across the country. Pennsylvania's Supreme Court last Tuesday accepted a lawsuit filed by the state Democratic Party, and officials suggested last month in a separate case that ballots be counted if they arrive by Nov. 6, even if the postmark is missing or illegible. In Ohio, the League of Women Voters is challenging the process for verifying signatures. Minnesota has waived its rule that absentee ballots must be signed by a witness, and the state Supreme Court is weighing an appeal of that suspension, brought by President Trump's campaign.

If the presidential election is decided by a whisker, with Donald Trump or Joe Biden leading by some thousands of votes in a few states, a court ruling could prove decisive. The pivotal jurisdictions will be flooded with Republican and Democratic lawyers, and the resulting chaos could resemble the 2000 Florida recount, with smudged postmarks as the new

The simple fact is that mass mail voting introduces slack into the election system. Unrealistic deadlines are one problem. For an election held on Nov. 3, voters in 10 states can request an absentee ballot on Nov. 2, according to a report last week by the U.S. Postal Service's inspector general. During this year's primary season, the audit says, more than a million ballots were sent to voters in the seven days before an election, placing them "at high risk" of tardiness.

The Postal Service audit describes how seven USPS processing centers performed from April through June. About 8% of identifiable election and political mail, or 1.6 million pieces, was delivered late. Don't blame the new Postmaster General, Louis DeJoy: He took over June 15.

Some states try to factor in delays by count-

as long as they're postmarked by Election Day. Alas, the audit finds that "ballots are not always

being postmarked as required." Ballots can also be rejected by local workers, who eyeball a voter's signature to see if it matches the version on

In this year's primaries, according to a tally by NPR, 558,032 absentee votes were

tossed out. Al Gore won the nationwide popular vote in 2000 by 543,895. The discarded ballots this spring included 23,196 in Wisconsin, a state Mr. Trump won last time by 22,748. Some states give voters a week, or 14 days in Illinois, to "cure" bad signatures. Yet a study of Florida in 2018 found that mail-vote rejection rates were twice as high for black as for white voters.

The finagling over late ballots and messy signatures might stall the reporting of credible results. About a dozen states, including Michigan, Wisconsin and Pennsylvania, don't begin processing absentee votes until Election Day, per the National Conference of State Legislatures. In the absence of a partisan skew, this might not matter. But a recent Journal poll says that 66% of Trump supporters intend to vote in person, compared with 26% of Biden backers.

On election night, the electoral map might suggest a solid lead for Mr. Trump that is eroded as mail ballots are canvassed. What if Mr. Trump reprises his tweet from six days after Florida's 2018 elections? "An honest vote count is no longer possible—ballots massively infected. Must go with Election Night!" Remember Hillary Clinton's advice this summer: "Joe Biden should not concede under any circumstances, because I think this is going to drag out."

The fight would probably drag out in the courts. Say it's mid-November, and absentee ballots are being counted in a key state. Although Mr. Trump retains a modest lead, mail votes are breaking 3 to 1 for Mr. Biden. Perhaps the law in this jurisdiction requires ballots to arrive by Election Day, so there's a pile to the side of thousands of late deliveries. Some are missing postmarks, and it's not clear when they were mailed. Thousands more have been discarded for suspect signatures, but the rejection rates are higher in urban areas.

The best way to prevent this democratic debacle is to act before things get that far. If states tighten ballot deadlines now and prepare to process mail votes before Election Day, it would cut the risk of an outcome that causes half the country to claim it's illegitimate. With each lawsuit that puts the count into the hands of judges, this

nightmare gets more likely.

LETTERS TO THE EDITOR

Reflections on College Teaching as Therapy

Joseph Epstein's "Today's College Classroom Is a Therapy Session" (op-ed, Aug. 29) highlighting the current obsession with "nurturing" by college faculty is disconcerting. My wife taught medical students a few years ago and was disturbed by their sensitivity. Someone in the class would become upset with an innocuous comment, no matter how carefully she tried to avoid controversy. Other friends in faculty positions at other institutions have related the fear of being targeted if they express their views and possibly be summoned to defend themselves before some disciplinary board. Sadly, they avoid any debate on political subjects as well as politicized scientific issues for fear of retribution. One commented that he is approaching retirement in a few years and his pension could be affected unless he avoided controversy and went along with the party line.

Fifty years ago during the initial lecture in a course on applied anatomy, the professor (a Dr. Habel) mentioned that there seemed to be the impression on campus that a professor should be your buddy. After another pause he shook his head and said: "I'm not your buddy." We learned quickly that he was tough but fair, if you studied diligently. We realized his primary concern was our assimilating the course material well to improve our knowledge and ultimately make us more proficient at our job. We were wise enough to realize we were being nurtured and were in a safe space.

MITCH TEDESCHI, DVM Midlothian, Va.

Thirty-five years of teaching undergraduates has taught me that not all students respond well to "shame and fear." No doubt some do, or Mr. Epstein would not tell us so. To be "safe" means feeling able to contribute to complex classroom discussion. It isn't some namby-pamby need of snowflake post-millennials.

What, exactly, is wrong with a teaching style which "integrate[s] `methodological rigor, impactful engagement, and human sensitivity"? This prizewinning Northwestern University instructor sounds worthy of

her award rather than deserving of Mr. Epstein's derision.

R.A. HASKELL Chapel Hill, N.C.

The focus must be on learning outcomes. Once we move from a teacher-centered approach to a learner-centered approach, college teaching effectiveness should address one crucial question: Did we achieve our learning outcomes? Let's agree on what we want students to learn, what they want to learn and what our greater society wants as outcomes, and stop focusing on the professor as the center of the room. Let's measure against the learning outcomes, not whether someone was a tough guy or a sweetheart.

DANIEL S. FOGEL Huntersville, N.C.

Therapy looks inward. Education looks outward to the ideas, writings, discoveries and achievements of others over millennia, a vast and inspiring world. If education has one lesson, it is that trauma is a universal experience and every society does and has inflicted plenty of it—and some societies like the U.S. aim to inflict as little as possible. If therapy has one lesson, it is that by a temporary process of self-examination, educated "victims" can learn to let go of the past and go out into the world as competent survivors. College professors who take pride in attending to each psychological injury or issue of their students are denying the intellectual development that they will need if they have trauma severe enough to require therapy. They are in fact disabling those they claim to help.

E. Morgan, M.D., Ph.D. Cary, N.C.

I was critiquing a presentation of one student when another student interrupted with the following: "You can't say that to us, it's not good for our self-esteem." That was 16 years ago, so those students would be about 36-40 years of age today. I do wonder about their current state of self-esteem.

> MIKE BASSETT Wellington, Fla.

Jerry Nadler Loses to . . . Himself

erhaps you've read, a thousand times, that the Trump Administration has illek former White House counsel Don Mc-Gahn from testifying. Well, a federal court ruled on Aug. 31 that House Democrats are the party exceeding their legal authority (Committee on the Judiciary v. McGahn).

Readers may not have heard about this amid

the clamor of the presidential campaign. But a panel of the D.C. Circuit Court of Appeals ruled 2-1 that Rep. Jerrold Nadler's House Judiciary Committee lacked a "cause of action" necessary to enforce its subpoena. The committee wants Mr. McGahn to testify about President Trump and special counsel Robert Mueller, though Mr. Mueller had full access to Mr. McGahn's personal notes and referred on them in his 448page report on the Russia collusion myth.

The legal simplicity of the majority opinion ought to embarrass Mr. Nadler and House lawyers. Judge Thomas Griffith didn't need to invoke profound constitutional principles. He merely had to point out, first, that Congress itself has never granted an express cause of action to enforce a subpoena to the House—only to the Senate.

"Second, the Senate statute expressly exgally resisted Congressional subpoenas cludes suits that involve executive-branch assertions of 'governmental privilege,'" the judge writes. Perhaps Judge Griffith put "excludes" in italics because he was startled that a committee Chairman would sue without knowing the law. The judge observes dryly that "we should not ignore Congress's carefully drafted limitations on its authority to sue to enforce a subpoena."

> Judge Judith Rogers writes in dissent that the House can properly infer a cause of action from its Article I powers. But this is the sort of claim that Democrats call a violation of the separation of powers when Mr. Trump invokes his inherent Article II authority. Judge Rogers may hope the liberal majority on the D.C. Circuit will take an appeal en banc, as they are increasingly doing in political cases.

> But the plain language of the statute will be hard to overcome. Maybe next time Mr. Nadler. who is allegedly a lawyer, will pass a law giving the House a cause of action to enforce a subpoena before humiliating his committee and his branch of government in court.

Free Speech, Wrong Speech and Ivory Towers ments do not teach astrology, for ex-

In "Free Speech Absolutism Killed Free Speech" (op-ed, Aug. 31), Tony Woodlief asseverates that one reason the academic commitment to free speech has declined is due to free speech advocates' unreflective tolerance of ideas that are either morally or factually outlandish.

Mr. Woodlief raises a serious point that calls for a more precise and thoughtful defense of vibrant free speech in academic contexts. Such a defense is already in place in academia, but it needs to be reinvigorated. First, the right to express an idea does not mean the right to have that idea respected or acted upon. Indeed, the marketplace of ideas loses its connection to truth if we neglect the obligation to check and critique bad ideas and false claims.

Second, there is the vital distinction between "academic freedom" and freedom of speech more generally. Academic freedom applies to speech in such formal settings as research, the classroom and hiring sessions, where standards of reason and empirical validation must prevail along with the unshakable commitment to protecting ideas germane to the topic at hand. Astronomy depart-

Stop All Idiocy About Ben Franklin and Washington

Regarding your editorial "Benjamin Franklin, 'Person of Concern'" (Sept. 2): Ben Franklin, too? The mere conceptualization of this ridiculous study by Mayor Muriel Bowser and her bureaucrats should in itself render the District ineligible for statehood. But if they decide to "relocate" the Washington Monument, I want to watch.

Doug Wolff Cincinnati

Now that Washington, D.C., has discredited Benjamin Franklin as a "person of concern," I am volunteering to be a collection point for all tainted currency bearing his name and image.

> ARTHUR MILLER Athens, Ga.

If the mayor were to actually adopt such a silly, dystopian and racist proposal, it would clearly be time for Congress to revoke the Home Rule Act and reinstitute full federal control of the District of Columbia.

> DON W. CROCKETT Washington

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ample. Nor may a physics instructor teach political organizing. Outside these contexts, the right of campus free speech is properly much more wide open. In my view, the two realms should nourish each other at the same time that they must remain distinct.

Today's increasingly politicized higher education too often compounds the problem by dishonoring both freedom and standards of truthfulness. Em. Prof. Donald A. Downs

University of Wisconsin-Madison Verona, Wis.

Tony Woodlief wants professors to stop teaching ideologies that aren't "reasonable" or "coherent" and should be "put to rest." But who gets to make those judgments? Better not to teach any ideology at all. American universities used to focus on disciplines like biology and linear algebra and, yes, classical economics that try to show students how the world actually works. These were, in Karl Popper's phrase, "falsifiable." Ideologies don't share this quality.

Adj. Em. Prof. Stephen M. Maurer University of California at Berkeley

A Quick Way to Reduce Drug Prices, Increase RゼD

The letters of Sept. 1 ("Trump's Better Deal for Pricing U.S. Drugs") are too narrowly focused in that they don't mention the U.S. as one of the very few countries that allows prescription-drug advertising. Ban that advertising and pharma research budgets could likely double.

GLEN FREIBERG Rancho Santa Fe, Calif.

Pepper ... And Salt

THE WALL STREET JOURNAL



"Can I start you off with an anti-depressant?"

arents in North Carolina struggling to rollment for kindergarten and first-grade get their children back to the class-

A Carolina Victory for School Choice

GOP legislators call

Gov. Cooper's bluff on

news. The state Legislature's \$1.1 billion Covid-19 relief package includes a provision expanding the state's school choice program.

The victory is all the more significant because

the state's Democratic Governor, Roy Cooper, came into office vowing to eliminate the program. In late August he proposed taking \$85 million from the Opportunity Scholarship program while spending \$360 million for a \$2,000 bonus for all public school

This debate concerned money from the unspent portion of the \$4 billion that Congress sent to the state under the Cares Act. North Carolina Republicans who control the Legislature made school choice a condition of support for the bill, and the Governor had to sign or risk losing all those unspent federal dollars. As GOP state Sen. Rob Bryan put it, "no one really wants to vote against parental choice in this climate."

The bill expands the Opportunity Scholarship voucher program by raising the income limit for a family of four to \$72,000 from roughly \$63,000. It also lifts the caps on en-

students, which will now give 1,000 kids on room have received some welcome the waiting list a choice. It allows the state's

two virtual charter schools to enroll an additional 3,800 students. It also includes \$335 in

Cares Act relief money. "extra credit" grants to families with children that can be used for anything from private tutors to upgrading a WiFi sys-

tem for better remote learning. Union-run public schools have no basis for complaint because the bill insulates school districts from budget cuts if they report a decline in enrollment.

North Carolina's decision comes as Covid-19 has exposed the union-first, students-last priorities of traditional public schools. Many union schools refuse to return to in-person learning, while charters and private schools are doing so. Parents worried about their children falling behind are learning that the union schools' take-it-or-leave-it approach leaves them without options.

"North Carolina's actions show what can be done when legislators, even in a state governed by both parties, are willing to put party loyalties aside," says Jeanne Allen, CEO of the Center for Education Reform. Let's hope more states follow North Carolina's lead.

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The Fed Puts Its Independence on the Line By Kevin Warsh

merica's Founding Fathers are having a very bad year. Their names sullied. Their likenesses defaced. The they principles pronounced attacked. Of greatest consequence, the institutions at the core of our republic are being tested.

Commentators tend to anthropomorphize the most prominent independent government institutions: the Roberts Court and the Powell Fed. The person atop is regularly glorified or vilified. Yet the institution matters more than the person. Liberal democracy relies on the strength and resilience of longstanding entities, especially when popular sentiment is running hot and circumstances are grave. People in positions of power are flawed, the Founders warned, so the institutions in our government must be robust,

The central bank is on a one-way path to a larger role in our government and economy.

resilient and responsible. Our finest institutions are well-designed, rich in tradition and humble in orientation. They must defend themselves against unexpected shocks that can harm them and those they are charged to serve.

The Supreme Court is an independent institution that has long faced political and social scrutiny. Its decisions, however divided and divisive, are the unquestioned law of the land. The court's doctrine of stare decisis (deference to precedent) and the lengthy appellate process serve as bulwarks. Its foundation is laid firmly in Article III of

the Constitution. And its powers are restrained by the Constitution's other six articles.

The Federal Reserve rests on lesssettled ground, so its success and survival are less certain. America's two prior experiments with an independent central bank failed. The Fed's recent centennial celebration is only a mark of longevity, not a guarantee of permanence.

The Fed's formal authority comes from a congressional statute. The real source of its power, however, is more diffuse and fleeting. Since Chairman Paul Volcker's tenure (1979-87), the Fed has developed a strong institutional culture: an apolitical bearing, a resistance to whims, a durable record of ensuring price stability and a strong sense of collegiality and mission. Its successeswhipping inflation in the Volcker era, encouraging a productivity surge in the Greenspan era (1987-2006), responding with imagination and acuity to the financial crisis in the Bernanke era (2006-14)—have enhanced

Yet the Fed's recent errors are equally clear. It came into the past two major shocks as surprised and illprepared as the economy it oversees. The Fed missed the decadelong window between the 2008 crisis and this year's pandemic to prepare and reform. Its policies are predicated on a typical business cycle. Yet unanticipated shocks put the Fed at far greater distance from its employment and inflation objectives than normal downturns do. The Fed needs a robust ex ante plan to mitigate economic harm from major shocks.

Beginning in 2011, the Fed made a big institutional bet on a benign forecast. It wagered that the long period of relative prosperity would continue without another shock. The global financial crisis of 2008 would be the great aberration to the Great Moderation; the long period of rela-



tively stable output and inflation would continue uninterrupted.

As recently as this January, Fed leaders assured the public that even if the economy weakened significantly, the policy mix of the 2008 crisis—rate cuts, purchases of Treasurys and agency securities, and forward guidance-would ensure financial and economic stability.

Then the pandemic hit. The economy collapsed and financial market prices followed. The Fed was on the precipice of losing its hard-earned credibility and vaunted status. With few good options, it was compelled to double down. It made low interest rates lower and its big balance sheet

That wasn't enough. The 2008 playbook of shock and awe had become too routine to provide sufficient stimulus this time. So the Fed crossed red lines that had stood for a century. It backstopped private corporate bonds and public municipal securities, including some with dodgy prospects.

In his address at last month's Jackson Hole conference, Chairman Jerome Powell unveiled the conclusions of the Fed's new policy regime: Inflation has been running too low for a decade. Monetary policy has long been too tight. The monetary spigot must be opened wider to get to a higher average inflation rate.

If the economy does well in coming quarters, I expect the Fed will expand significantly the scale, scope and duration of its asset purchases. If the economy weakens or financial markets fall, the Fed will do even more. This is what political scientists call path dependency. When an institution sticks to a path for so long, it finds its options limited, detours difficult and exits infeasible.

The Fed is on a one-way path to a larger role in our economy and government. On the current trajectory, the Bank of Japan might be the model for Fed policy: a large buyer of public stocks and an indistinguishable partner with fiscal authorities. The unimaginable can become the inevitable.

What has been the response to Fed flexing? Most on Wall Street are thrilled. They quite like stimulus for all seasons and all reasons. The Fed will buy assets others don't and pay prices others won't. Even if the central bank were to pull back its support for corporate and municipal bonds, traders believe it would step up again in a pinch.

Main Street is rightly more circumspect about the Fed's largess. Interest-rate cuts have a much more direct and significant effect on the real economy than the latest Fed machinations do. But there is no room left to cut interest rates. And Main Street firms are receiving far less fiscal and monetary support than Wall Street.

Bipartisan majorities in Congress are praising the Fed's expanded role. The Fed's growing purchases of the government's expanding debt lowers the costs of fiscal spending. Mr. Powell's apolitical demeanor and relationship-building efforts with lawmakers have provided the institution with substantial leeway. But elected representatives can be fickle. If the last crisis is a guide, the recriminations will come once the panic recedes.

For now, the Fed sits atop the commanding heights of the economy-its growing authority unquestioned, its pride manifest. But over time, citizens in a constitutional system tend to grow wary of omnipotent institutions.

The Fed is exercising understandable but unprecedented power at an ahistorical moment. Without vigilance, it will risk morphing into a general-purpose government agency. America cannot afford to have its central bank lose its independence. gravitas and record of success. To paraphrase Ben Franklin on the institutional challenge: a central bank, if you can keep it.

Mr. Warsh, a former member of the Federal Reserve Board, is a distinguished visiting fellow in economics at Stanford University's Hoover

The 'Resistance' Sows Distrust in the Electoral Process



EXPRESSION By Gerard Baker

e live in an age of hyperactivist journalism and supercompressed news cvcles, one in which eager leakers inside the Trump administration are primed to run to the nearest reporter every time they hear something they don't like. So the cynical reader can be forgiven a little skepticism when a story about an event that is said to have happened nearly two years ago surfaces two months before a presidential election.

We have no way of knowing if President Trump said those cruel things on his trip to France in 2018 about military veterans who died at war, as four anonymous sources told the Atlantic. Given some of the cruel things the president has uttered before, it's surely possible. though reporting did once require a slightly higher evidentiary standard than "it's the kind of thing he would say, so it must be true.'

But the timing is certainly interesting, The revelation came the day before the first ballots were sent to voters, at a moment when Democrats, including Joe Biden, have been putting it about that the military might be needed to forcibly eject Mr. Trump from the White House were he to refuse to accept the result of the election.

Chances are this rhetorical extremism is just that. The specter of tanks on the White House lawn is for now just another of the devices Democrats are using to scare people into voting in large numbers for Mr.

But the level of distrust in the political process is higher than ever. With mail-in voting expected at record levels, and practiced mostly by supporters of the Democrats, the chances are good that Mr. Trump will lead after votes submitted in person are counted the night of Nov. 3, only to have the win seized from him as the postal votes are counted over the next few days. It's a slim hope that this gets resolved in a rerun of the meticulously litigated Bush v. Gore (2000).

There's a larger crisis of legitimacy that haunts this election and beyond. Democracy rests on the fragile foundation of consent-primarily the consent of the losers to the outcome of an election. If the losers feel that they have been cheated, that the winners have

The specter of tanks on the White House lawn is one more scare tactic intended to delegitimize Trump.

played by a set of rules that have redefined politics in their own narrow interest, the losers may withhold their consent. The fragile foundations are eroded further.

It's this, rather than specific concerns about mail-in ballots or voter suppression, that is the largest threat to postelection America. To a large number of the president's supporters, Mr. Trump's defeat in November would represent the political validation of a yearslong extraconstitutional effort to discredit, delegitimize and ultimately destroy

Many of those voters may come to think that the long campaign of protest accompanied often by street violence and intimidation succeeded in persuading enough voters to heed the warning by Mr. Biden that the unrest will continue unless Mr. Trump is defeated.

They may believe that state governments and mayors politically opposed to the president have in many places manipulated a publichealth crisis for their own political ends: enforcing lockdowns that suppress economic activity in the hope of weakening the president's support and creating the impression that only a vote for Mr. Biden would alleviate the suffering.

Looking further back over this presidency, they may conclude that the law-enforcement arm of the federal government was used to target Mr. Trump and his team in an unfounded investigation that consumed the first $2\frac{1}{2}$ years of his

from their prisoners. In 1945, that

ing the war in Vietnam, where I

served as a combat reporter. I've

The independent-minded

military newspaper has

patriotically told GIs'

stories for 150 years.

My own time on Stripes was dur-

won Mauldin the Pulitzer Prize.

administration and forced the removal and conviction of some of his key political allies.

They may suspect that influential figures in the permanent bureaucracy, the intelligence community and the military undermined the president at critical times, selectively leaking information designed to weaken his position and thwart his policy initiatives.

They will surely find that an almost monolithically one-sided press, which has abandoned even the pretense of objectivity, participated eagerly in all this, often backed by leaders of ever more powerful technology companies.

This is no ordinary case of a healthy pluralism at work in a vibrant democracy. Four years ago a resistance to the democratically elected president was founded. Embraced by some of the most powerful figures in civil society and government, who simply refused to consent to the election result, it has done its job. The risk in this election is that it may have spawned ever more resentful and determined

I Hope American Soldiers Read Stars and Stripes Forever

By Seth Lipsky

t's nice to see that tweet from President Trump that "America will NOT be cutting funding" for the GI daily Stars and Stripes. He was responding to reports that Pentagon budgeteers were going to shut the paper down by the end of September for the lack of \$15 million. Even Congress protested.

I'm not here to plump for subsidies for Stripes, even though it ranks among the greatest newspapers of all time. If the government doesn't want to support the paper, my instinct would be to see if a private owner can make a go of it. Rather, my purpose is simply to savor Stars and Stripes.

During World War II, some wag

supposedly quipped that Stripes was where the brass assigned those GIs who, if left to the regular Army, would contribute to the Allied defeat. It was a wry libel. Stripes was always plenty patriotic, but also independent, in the newspapermanly way.

The tradition that the paper would be reported and edited by enlisted men goes back, legend has it, to World War I. That's when the sergeant who was its managing editor got arrested in an argument over a comma—or, one version has it, for getting scooped by the Paris Herald. The officer who precipitated that catastrophe quickly realized his error, and freed the sergeant to get the pa-

The sergeant was Harold Wallace Ross, who, no doubt finding postwar

Robert Thomson

Chief Executive Officer, News Corp.

Almar Latour

Chief Executive Officer and Publisher

Natalie Cerny, Chief Communications Officer

Christina Van Tassell. Chief Financial Officer

Jason P. Conti, General Counsel; Tracy Corrigan, Chief Strategy Officer;

Frank Filippo, Print Products & Services

Thomas San Filippo, Customer Service;

Josh Stinchcomb, Advertising Sales;

Suzi Watford, Chief Marketing Officer:

Nancy McNeill, Corporate Sales,

Jonathan Wright, International

Christopher Lloyd, Head;

Professional Information Business

Ingrid Verschuren, Deputy Head

Kristin Heitmann, Chief Commercial Officer,

Kamilah Mitchell-Thomas, Chief People Officer;

DOW JONES MANAGEMENT: Ramin Beheshti, Chief Technology Officer;

OPERATING EXECUTIVES:

journalism weak tea, went on to found the New Yorker.

Stripes' most famous figure was its World War II cartoonist, Bill Mauldin, who created the archetypical GIs Willie and Joe. Those two hapless heroes exemplified the American grit that won the war. "I can't git no lower, Willie," Joe calls out in one strip, as he hugs the ground under fire. "Me buttons is in th' way."

Another classic shows Willie and Joe helping lead a group of prisoners through the rain and mud. The caption: "Fresh-spirited American troops, flushed with victory, are bringing in thousands of hungry, ragged, battleweary prisoners. (News Item)." The gag is that Willie and Joe are themselves so ragged and battle-weary that it is hard to distinguish them

never been in a newsroom I didn't love, but it would be hard to beat the

band that covered the war for One was an unassuming GI named

Bill Toliver, who in civilian life had studied botany. One day in Saigon, he received a letter from his professor asking for help finding a rare—and poisonous—yellow flower that grows only in the remote Central Highlands of Vietnam. Spec. 4 Toliver borrowed a flower press from the University of Saigon and disappeared into the most dangerous hills in Vietnam. After a week of silence, we were preparing to report Spec. 4 Toliver missing in action when he walked into the bureau and proudly produced the poisonous petals. Stripes ran the story under the heading "Combat Botanist."

Stripes had the best headline writers I've ever encountered. One classic ran over a story about a conscientious objector medic—a religious Christian—who refused a weapon as he was lowered into combat to rescue any survivors from a downed chopper. The unarmed medic managed to get the wounded out, but when it came time to lift him out, he waved away his own chopper because it was coming under fire. Alone on the jungle floor, surrounded by the enemy, he could hear bamboo on fire going "pop, pop, pop."

What did he do? He kept "praying that Jesus Christ's will be done." His buddies came back to rescue him. Stripes ran out the story under the headline: "Trapped Pacifist GI Sticks to His 'Guns.'

My favorite example of the spirit of Stripes involves two of its GI reporters, Spec. 4 Jack Fuller and Spec. 5 Phil McCombs. When U.S. and South Vietnamese forces plunged into an area of Cambodia known as the Parrot's Beak, they grabbed a station wagon from Stripes' circulation department and raced to the border in pursuit of American armor. Once inside Cambodia, though, they were met with an ominous sign-everything was deserted. They pressed on until they encountered, in a bombedout village, an American officer poring over a map. He would answer no questions.

Finally, Spec. 5 McCombs asked, "How far can we go until someone kills us?" The preoccupied officer appeared to be doing the math in his head. "Eight klicks," he said, finally. The reporters jumped back into their station wagon and drove until they caught up with the American tanks—12 kilometers up the road.

That was the spirit of Stripes. The paper may have had its brushes with the brass and budgeteers over the years. In covering for American GIs their own astounding story, though, Stripes always went the extra klick.

Mr. Lipsky is editor of the New York Sun. As an enlisted man in the Army, he served on Stripes in Vietnam, 1970-71.

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Notable ゼ Quotable

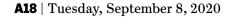
From a Sept. 3 report by San Francisco's KNTV:

For months, the city of San Francisco health order has prevented local gyms from opening [their] doors, but some city-owned gyms have been back open for months and are allowing city employees to use them. . . .

"It just demonstrates that there seems to be some kind of a double standard between what city employees are allowed to do and what the residents of San Francisco are allowed to do," said Dave Karraker, owner of MX3 Fitness in the Castro.

He said there is a slight silver lining to this discovery.

What the city has unwillingly done is created this great case study that says that working out indoors is actually safe," said Karraker.



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THE WALL STREET JOURNAL.

Tuesday, September 8, 2020 | **B1**

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Samsung Wins Big 5G Contract

By Elizabeth Koh

SEOUL—Samsung Electronics Co. has signed a \$6.65 billion contract with Verizon **Communications** Inc. for network equipment and services, a major boost to the South Korean company's quest to become a key 5G supplier.

Samsung's agreement with Verizon runs through the end of 2025 and primarily covers 5G infrastructure, though it broadly includes networkequipment sales, installation and maintenance, according to a Monday corporate filing in South Korea.

Samsung declined to specify how much of the deal is directly related to 5G. Verizon didn't respond to a request for comment.

The Verizon deal could help bolster Samsung's credibility with carriers in an important year for 5G rollouts, especially in the U.S., analysts said. Adoption of the next-generation technology is expected to expand significantly after the expected launch later this year of Apple Inc.'s first 5G-enabled

Global adoption of the nextgeneration phones has been delayed by the coronavirus pandemic. Handset makers are already dropping prices for 5G devices, looking to entice skeptical buyers.

Among 5G network sales. Samsung ranks No. 4 with about 13% of the total market, according to market research firm Dell'Oro Group. The company trails the top three, which include China's Huawei Technologies Co. and the European firms Ericsson AB and Nokia Corp.

that it had signed more than 90 5G contracts, and Ericsson last month touted its 100th 5G "commercial agreement." Samsung hasn't divulged

Huawei said early this year

how many 5G contracts it has signed. But the company has high hopes, having invested more than \$30 billion in the U.S. market alone.

Samsung said in 2018 that it aimed to capture one-fifth ternet. Verizon officials have previously pledged not to use of the global 5G market by next year. It is a key growth area for the South Korean conglomerate, along with advanced semiconductors and biopharmaceuticals. The company's ambitions

have been given a major boost by Washington's campaign to limit Chinese competitor Huawei, as the U.S. pushes allies to forego Huawei gear over national-security fears.

Verizon joined with Samsung long before 5G made its debut in smartphones last spring. In early 2018, the two companies teamed up for trial runs of 5G-powered home inHuawei for its next-generation rollout. Samsung has supplied some network gear for prior generations including 4G LTE.

To Samsung, the deal represents a major 5G win. The contract, valued at 7.898 trillion South Korean won (\$6.65 billion) over five years, compares with the roughly 5 trillion won Samsung's network business racked up in revenue in 2019.

Last year, 5G represented less than half of Samsung's network business, of which U.S. carriers accounted for 10%, said S.K. Kim, a Seoulbased analyst with Daiwa Securities.

Seed Curbs Unlikely To Stop Mailings

AND JON EMONT

E-commerce giants are enacting new restrictions on the sale of seeds, but the moves are unlikely to eliminate the tactics government officials and industry experts suspect are behind the mystery seeds caper that gripped the world this summer.

Amazon.com Inc. is barring foreign sales of seeds into the U.S. and e-commerce company Wish will ban the sale of seeds.

Amazon said sales of plants from outside the U.S. would also be barred and some overseas sellers would have their offers removed from the site. A representative for San Francisco-based Wish cited an "ongoing threat to U.S. consumers."

The e-commerce companies actions to restrict and eliminate seed sales came after thousands of people in the U.S. over the past few months received seeds by post they say they didn't order. Most were postmarked from China, and the shipments were often labeled as jewelry, toys or other goods. Canada and the U.K. are among other countries that have also experienced the phenomenon.

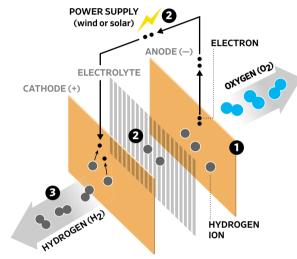
In discussing their investigations into the mystery seeds, U.S. officials have raised concerns about the ease of importing seeds online, citing threats to American agriculture posed by pests or diseases that such shipments could contain. Ecommerce experts say that restricting online seed sales will

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Greener Energy

Utilities are using wind and solar power to create hydrogen from water using a process known as electrolysis.

How an electrolyzer works



Water molecules split at the anode into oxygen and positively charged hydrogen ions.

Source: Energy Department

2 The electrons flow through an external circuit powered by renewable energy and the hydrogen ions move across the electrolyte. 3 At the cathode, the hydrogen ions combine with electrons to form hydrogen



The Los Angeles Department of Water and Power is heading an effort to convert a power plant in Utah, to run on natural gas and hydrogen produced with excess wind and solar power.

Utilities Look to Switch to Green Hydrogen

ingly exploring the use of what is called green hydrogen made from wind and solar energy to reduce emissions from power plants and pipelines.

The early investments by companies including NextEra Energy Inc. and Dominion Energy Inc. are expected to help commercialize a costly technology that has been slow to develop despite its ability to provide a steady source of car-

U.S. utilities are increas- view the technology as neces- significant power sources. sary to support ambitious re-

newable-energy goals. The Los Angeles Department of Water and Power, the nation's largest municipal utility, is spearheading a \$1.9 billion effort to convert a coalfired power plant in Utah to run on natural gas and hydrogen produced with excess wind and solar power. The plant, which serves numerous small utilities and electric co-

The gas turbines, slated for completion in 2025, will initially burn a 30% hydrogen fuel mix. Within two decades, they are expected to run entirely on hydrogen to comply with a California law that requires the state's electricity supplies to be carbon-free by 2045.

"From a cost perspective, it doesn't compete with natural gas at this point," said Paul Schultz, director of external en-

policy makers are beginning to of Southern California's most he said the utility considers the emitting processes. The proconversion a long-term invest- duction of green hydrogen ment in changes that lawmakers and regulators are requiring.

And the price of green hydrogen is expected to become more competitive. "The costs are going to go one direction, and that's down," said Craig Wagstaff, Dominion Energy's senior vice president for Western gas distribution.

Hydrogen, which is used in a range of industries, is most often produced from coal or

bon-free power. Utilities and operatives, has long been one ergy resources for LADWP. But natural gas through carboneliminates those emissions by using renewable energy to strip hydrogen atoms from water molecules through a process called electrolysis. Currently, 1% of the hydrogen produced is green hydrogen.

A relatively small number of electrolyzers were deployed Please turn to page B2

◆ Heard on the Street: Coal gets a charge.....

By Matt Wirz, Becky Yerak and Alexander Gladstone

Citigroup

Feuds With

Hedge Fund

Citigroup Inc. and a big

hedge-fund client are locked in

an uncharacteristically public

feud that has embroiled top executives at both firms and laid

bare a \$900 million mistaken payment by the bank.

At the root of the dispute: Citi's role helping billionaire investor Ron Perelman restructure the corporate loans of cosmetics company Revlon Inc. Some investors wanted Citi to bow out of the transaction: when it didn't, they blamed the bank for facilitating a deal that hurt their investments, according to people familiar with the matter and court documents.

Chief among those investors: \$28 billion money manager Brigade Capital Management LP.

Until recently, Brigade and its founder, Donald Morgan. had worked closely with Citi. Brigade had hired Citi to help it raise at least \$1.5 billion of new loan funds over the past two years, according to S&P Global Market Intelligence. The bank had also advised Mr. Morgan on potential merger-and-acqui-

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INSIDE



BUSINESS

Netflix founder is eager for staff to go back to the office once vaccine is ready. **B5**

Airlines Fight For Passengers at All Costs

By James Mackintosh

STREETWISE

Where the Danger Is When Tech Rallies



terrible to be an **Apple** shareholder lately. Yet, after falling 8%

on Thursday and swinging wildly to end flat on Friday, the price is back down to

Investors might reasonably a bigger correction. There down a lot more. Yet, there are still good reasons for liking companies whose growth has been helped rather than

To assess just how bad things could get, we should start by examining the warnings that have been flashing recently. I'll do that in this column, then in subsequent ones come back to the questions of what is likely to trigger a major reverse in these popular stocks, whether it has

It's been a

where it was two weeks ago.

worry that this is the start of was far too much enthusiasm for the big disruptive technology stocks, so prices could go hindered by the pandemic.

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By Doug Cameron

Millions of passengers have yet to return to flying since the pandemic started, but cash-strapped airlines are showing they are ready to compete fiercely for those who do travel.

With demand stuck at roughly one-third of prepandemic levels, the industry faces a lean post-Labor Day season. This year, most of the travel linked to business conventions and family holiday gatherings just won't happen, airline executives said. Airlines appear poised to

fight for the business that is out there. United Airlines **Holdings** Inc.'s pledge last week to end change fees on most tickets was quickly matched by American Airlines Group Inc., Delta Air Lines Inc, Alaska Air Group Inc. and Hawaiian Holdings Inc. Relaxing domestic ticketchange fees will cost airlines hundreds of millions of dollars in lost revenue when passenger bookings start to improve, but it is a loss aimed at winning back customers. Meanwhile, competition is intensifying as airlines restore or expand flights on a limited number of popular routes.

"It does seem like airlines are trying to take a little bit of their neighbors' business," said Andrew Watterson, chief commercial officer at South-



United's pledge last week to end ticket-change fees was quickly matched by other major carriers.

west Airlines Co.

United Chief Executive Scott Kirby said he doesn't expect demand to reach 50% of prepandemic levels until a vaccine or treatment becomes widely available, and the industry expects it could be three or four years before 2019 passenger levels are regained. Chicago-based United said Friday that it planned to fly 46% of its schedule in October compared with the same month last year. It is restoring service on 50 routes and limiting flying on quieter days by reducing frequencies, targeting customers seeking week-

end getaways. Among the flights being re-

stored by the industry include those to Mexico and the Florida beach markets as well as destinations including Colorado that offer outdoor pursuits. Southwest is adding flights for the first time to Miami and Palm Springs, Calif., with American targeting passengers headed to Florida and Mexico. However, flying is being reduced to dozens of other cities as the industry shrinks.

United's move to kill change fees—at a time demand, flying schedules and passenger behavior are in such flux-is a sign airlines are taking competitive risks sooner than many investors expected, Stifel airline analyst Joe DeNardi said.

U.S. carriers are still burning around \$6 billion in cash each month, according to trade group Airlines for America, and have responded by furloughing staff, retiring old planes and deferring new aircraft deliveries. Industry employment has fallen by over one-fifth to 400,000 since the start of the year, the Labor Department said Friday.

By itself, the loss of revenue from relaxing the fees is limited, and airlines have some relief from fuel prices, which are down about 40% from a year ago. Still, items like change fees, baggage charges and loyalty programs have Please turn to page B2

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BUSINESS & FINANCE



The luxury retailer is poised to come out of bankruptcy having shed \$4 billion of its \$5 billion debt load.

Neiman Restructuring Approved

By Soma Biswas

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A bankruptcy judge signed off on Neiman Marcus Group Ltd.'s restructuring plan, ending one of the first major chapter 11 filings after the Covid-19 pandemic forced thousands of businesses to shut their doors this spring.

"Neiman Marcus today will get a second chance to remake itself," the company's lawyer, Matthew Fagen of Kirkland & Ellis LLP, said at a hearing in the U.S. Bankruptcy Court in Houston.

The ruling came after the company's chief critic, hedgefund manager Dan Kamensky, was arrested and charged in connection with his efforts to acquire a prized piece of Neiman's business while shutting down a rival bid.

The luxury retailer is poised to come out of bankruptcy having shed \$4 billion of its more than \$5 billion debt load. Neiman will have new owners, including Pacific Investment Management Co., Davidson Kempner Capital Management LP and Sixth Street Partners LLC. Pimco will be the largest shareholder, controlling three of the company's seven board seats, according to

court records.

Investors traded debt for equity, wiping out much of the debt Neiman accumulated through two separate leveraged buyouts, the latest of which put the company in the hands of Ares Management Corp. and the Canada Pension Plan Investment Board.

The company opted to hold on to the majority of its namesake stores in bankruptcy but to close most of its discount Last Call locations. Retailers often take advantage of the ease of breaking leases under the chapter 11 code to close unprofitable stores.

Neiman is estimated to be valued at more than \$2 billion as it emerges from bankruptcy. according to documents filed by its banker, Lazard Ltd.

The bankruptcy proceedings took a turn Thursday, when federal prosecutors in New York arrested Mr. Kamensky, a bondholder who had waged a legal battle against Neiman and its owners since 2018.

He was charged with securities fraud for allegedly suppressing bids for MyTheresa, the retailer's prized e-commerce business. Mr. Kamensky is founder of hedge-fund firm Marble Ridge Capital LP.

erational error of this nature is

unacceptable," a Citi spokes-woman said. "We have put sig-

nificant, additional controls in

place until the new system is

operational."

Citigroup Feuds Over **Payment**

Continued from page B1 sition opportunities for Brigade in previous years, people familiar with the matter said.

Now Citi and Brigade are slugging it out in court, cutting ties and arguing over the return of around \$170 million the fund received when the bank accidentally paid Revlon lenders about \$900 million. Citi even took the extraordinary step last month of backing out of a nearly completed deal to arrange a \$400 million collateralized loan obligation for Brigade as well as another deal that was in earlier stages, according to people familiar with the matter. This cost the bank about \$1 million in lost fees, the people said.

Though our fiduciary duty to our clients has put us into conflict with Citibank relating to their role as agent on the Revlon Term Loan, Brigade has not sought to limit any other business or trading activity with Citibank as a consequence of this specific disagreement," a spokeswoman for Brigade said.

The fight is an example of a big Wall Street bank caught between the competing interests of its corporate and investment clients. Years ago, banks typically served one group or the other. Today's megabanks are one-stop shops that serve clients across the financing and markets spectrum, sometimes leaving them in what can appear to be conflicted positions.

For Citi, the dispute, and especially the mistaken payment, have added to a string of missteps over the past decade, raised questions from analysts about the bank's internal controls and drawn the attention of regulators.

"The management team has acknowledged in the past that it had credibility issues, so it doesn't help that," said Brian Kleinhanzl, a managing director at Keefe, Bruyette & Woods Inc.

Past examples include a fine in 2018 for failures in antimoney-laundering controls, the disclosure of large frauds in 2014 in its Mexican unit and a \$590 million settlement in 2012 of a class-action suit filed in 2007 over alleged deceitful mortgage-lending practices. The bank has since invested in antimoney-laundering programs and this year appointed a new compliance chief and created a new role, chief administrative officer, to enhance safety and controls, according to a bank spokeswoman and memos from Citi chief Michael Corbat.

Meanwhile, Brigade finds itself in the kind of limelight that



Until recently, Donald Morgan, had worked closely with Citi.

Mr. Morgan, a former high-vield bond analyst, typically avoided. While Brigade was launched primarily as a hedge-fund manager in 2006 and sometimes plays an activist role at companies, the bulk of the money it now manages is in more traditional highyield bond funds and collateralized loan obligations, or CLOs, some of the people familiar with the matter said.

Trouble between the two firms dates at least to April. A group of hedge funds led by Brigade. HPS Investment Partners LLC and Symphony Asset Management asked Citi to resign from its role as the agent responsible for administering a loan it had arranged for Revlon and then distributed to clients.

according to people familiar with the matter and court documents. Symphony and HPS both declined to comment.

The lenders' beef? They believed Citi was helping Mr. Perelman's Revlon restructure its debt in a way that would depress the value of their investments and lower their odds of being fully repaid, according to people familiar with the matter and court documents. The bank helped Revlon with a separate transaction that gave it the votes needed to push the restructuring through.

Revlon has said it would vigorously defend itself against the "meritless" lawsuit. It said after the lawsuit was filed that the lenders have resorted to baseless accusations to try to enrich themselves and hurt the company by blocking Revlon from exercising its rights to secure the financing needed to turn around the company and navigate the Covid-19 crisis.

Mr. Perelman declined to comment.

Brigade's Mr. Morgan contacted Citi Chief Executive Mr. Corbat and Richard Zogheb, the bank's head of global debt capital markets, in late April, people familiar with the matter said. Mr. Zogheb said the bank would step down as loan agent and Mr. Corbat confirmed Mr. Zogheb was handling the resignation, according to the people and a lawsuit filed on behalf of Brigade and other lenders.

But days passed without Citi resigning. The bank felt it couldn't do so because the credit agreement with Revlon required it to first get consent from the company and appropriate instructions from lenders, a person familiar with the bank's thinking said.

In early May, Revlon completed the debt restructuring. In its wake, the loan held by Brigade and other investors fell to a value of around 32 cents on the dollar. It had been quoted by traders at around 70 cents before the transaction was announced, according to AdvantageData Inc.

The unhappy lenders began preparing a lawsuit accusing Revlon and Citi of fraud and breach of contract. They sued through an agent chosen to replace Citi, UMB Bank NA, in federal court in New York on Aug. 12. The day before UMB did so,

the fight took a surprising turn. Citi unexpectedly paid lenders back about \$900 million of the loan's outstanding value.

That was a mistake, Citi says. The bank said in a court filing it had planned to disburse only an interest payment it received from Revlon. Instead, it paid more than 100 times as much—out of Citi's own funds-because of a human processing error that wasn't caught in subsequent manual checks, according to the filing.

"We...recognize that an op-

As soon as Citi realized its mistake, executives began trying to claw back the cash. Ish McLaughlin, the bank's top salesman in North America,

sought return of the money from senior executives he knew at firms that received payments, people familiar with the matter said. Mr. Corbat also called fund managers, they said. Some firms, such as Carlyle

Group Inc., KKR & Co. Inc. and Octagon Credit Investors LLC, sent the money back, people familiar with the matter said. Brigade and others, still furious with Citi over the Revlon restructuring, refused and said the cash belonged to the clients invested in their funds, according to people familiar with the matter and court documents.

Mr. McLaughlin and other Citi executives threatened in August to sue anyone refusing to return the money, people familiar with the matter said. Some lenders offered to give Citi the money back on the condition that the bank would forfeit the funds if it lost in court. Citi refused, people familiar with the talks said. The bank ultimately sued Brigade and about a dozen other lenders that haven't returned the money.

Utilities Seek Green Hydrogen

Continued from page B1 globally through 2019. Many more are expected to be in use by 2025 as companies look for ways to cut emissions from power and gas supplies, transportation and other sectors, according to a report by research firm Wood Mackenzie.

In June, German engineering firm Apex Energy Teterow GmbH completed a greenhydrogen plant with a twomegawatt electrolysis system located near the Baltic Sea.

Growth in green-hydrogen production has been slow in part because it typically costs three to six times as much as hydrogen derived from fossil fuels, said Dan Hahn, who leads the global energy-providers practice for research firm Guidehouse. He expects costs could fall significantly within the next decade as production technology develops and policies are implemented that favor green hydrogen over that derived from fossil



produced with wind and solar power.

fuels. "We think that even in the next two to three years. costs will decrease because of the investments that are being made in the market," he said.

Juno Beach, Fla.-based NextEra, the nation's largest owner of wind and solar farms, earlier this year announced plans to invest \$65 million in a project that will use excess solar energy to produce hydrogen for use in a Florida natural-gas plant. The 20-megawatt electrolysis system, expected to be online in 2023, will be used to replace a portion of the natural gas in one of the plant's three gas turbines.

"What makes us really excited about hydrogen...is that it has the potential to supplement significant deployment of renewables," Chief Financial Officer Rebecca Kujawa said in a recent earnings call. NextEra declined to elaborate on plans.

Dominion Energy, a Richmond, Va., company that provides electricity or natural gas to about seven million customers in 20 states, is planning to blend hydrogen into its gasdistribution system to reduce methane and carbon emissions. It is aiming to test a 5% blend at one of its training sites early next year, with the intent to incorporate it more widely and eventually increase the percentage of hydrogen in the system.

AirlinesFight forCustomers

Continued from page B1 been largely immune from competitive pressures in recent years as carriers kept charges broadly similar, Mr. DeNardi said. Many network airlines added charges for things that were once free—including seat assignments and bags—matching the approach of fast-growing low-cost rivals such as **Spirit Airlines** Inc.

Mr. Kirby said removing the fees was the top request in customer surveys about what would encourage them to fly again. United collected \$625 million in change and cancellation fees last year, or \$3.82 per passenger, compared with \$819 million at American and \$830 million at Delta. Revenue from bag fees had been running at about twice that level.

Mr. Watterson said absent the sales from change fees, U.S. carriers may have to raise fares to cover the loss, equivalent to around 4% of their operating revenue.

SOUTHERN CALIFORNIA EDISON COMPANY NOTICE OF REDEMPTION OF ALL OUTSTANDING SHARES OF

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NOTICE IS HEREBY GIVEN pursuant to Paragraph 2(d) of Article Sixth of the Restated Articles of Incorporation of Southern California Edison Company (the "Company"), as filed with the Secretary of State of California on March 2, 2006 (the "Articles") that the Company has elected to redeem all of the outstanding shares of its Cumulative Preferred Stock at the redemption price set forth in

All outstanding shares of Preferred Stock will be redeemed on September 27, 2020 (the "Redemption Date") at a redemption price equal to

\$28.75 per share, plus accrued and unpaid dividends to the Redemption Date of \$0.261 per share, for a total redemption price of \$29.011 per share for the 4.32% Preferred,

\$25.50 per share, plus accrued and unpaid dividends to the Redemption Date of \$0.0765 per share, for a total redemption price of \$25.5765 pe share for the 4.08% Preferred,

\$25.80 per share, plus accrued and unpaid dividends to the Redemption Date of \$0.0795 per share, for a total redemption price of \$25.8795 per share for the 4.24% Preferred, and

\$25.80 per share, plus accrued and unpaid dividends to the Redemption

Date of \$0.089625 per share, for a total redemption price of \$25.889625 per share for the 4.78% Preferred.

per share for the 4.78% Preferred.

On or prior to the Redemption Date, the Company will deposit with Equiniti Trust Company, as redemption agent ("EQ"), cash in the aggregate amount of the Redemption Price for all of the outstanding shares of Preferred Stock in trust for the account of the holders of shares of the Preferred Stock. EQ shall pay to the registered holders of the Preferred Stock the applicable Redemption Price, net of any withholding tax, upon presentation and surrender of the certificate(s) for such shares at the offices of EQ in accordance with the instructions set forth in a Letter of Transmittal sent to all holders of Preferred Stock. EQ's address is EQ. Shareowner Services. Equiniti Trust Company. Attn: Account Management Team 1110 Centre Pointe Curve, Suite 101, Mendota Heights, Minnesota 55120-4101. Pursuant to Paragraph 2(d) of Article Sixth of the Charter, upon deposit of the aggregate amount of the Redemption Price with EQ, all shares of Preferred Stock shall be immediately deemed no longer to be outstanding for any purpose, and all rights with respect to such shares shall thereby cease and terminate, excepting only the right of the holders of the certificates for such shares to receive, out of funds so deposited in trust with EQ, the Redemption Price with the tribute of the contribute of the certificates for such shares to receive, out of funds so deposited in trust with EQ, the Redemption Price, without interest and net of any withholding tax, to which each is entitled. Notwithstanding the foregoing, all shares of Preferred Stock represented by global certificates registered in the name of the nominee of The Depository Trust Company ("DTC") will be redeemed, and payment of the Redemption Price for such shares will be made, in accordance with DTC's procedures and all other uncertificated shares held electronically will be redeemed automatically. Date of Notice: August 28, 2020

SoftBank Stock Declines on Tech Bet

Japanese investing powerhouse bought options on up to \$50 billion in stock

By Phred Dvorak

Shares in SoftBank Group Corp. tumbled 7% on Monday, as investors reacted to news of a bet the company has placed on a rise in tech stocks.

The size of the bet-which used stock options tied to as much as \$50 billion in individual tech stocks, means Soft-Bank could win big if the market goes its way or lose a sizable down payment for the options if tech shares drop, as they did at the end of last

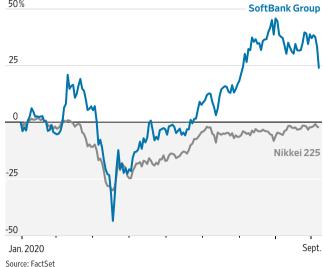
Details about the trade remain sketchy, so it is unclear how risky that bet is for the Japanese conglomerate. The company, best known for its

\$100 billion venture-capital vehicle, the Vision Fund, hasn't published any details of the trade. A company spokesperson declined to comment.

SoftBank shares fell to ¥5,881, or about \$55, on Monday, pulling Japan's benchmark Nikkei Stock Average down

"The scale is what is concerning," said David Gibson, an analyst at Astris Advisory Japan. If SoftBank is betting on tens of billions of dollars worth of shares, "it's a change in the risk profile of the company."

SoftBank's billionaire founder, Masayoshi Son, built his reputation on making smart investments on fastgrowing privately held tech firms. But last month he announced a new asset-management unit that plowed billions of dollars into the public markets as well. The bulk of the money has come from more than \$50 billion in asset sales SoftBank share price vs. Japan's benchmark stock index



that SoftBank is executing.

Although much of that cash is earmarked for share buybacks or debt redemption, until those deals are completed

SoftBank is parking the money in tech companies such as Amazon.com Inc. or Microsoft Corp. SoftBank held almost \$4 billion worth of such stocks as

of the end of June, according to regulatory filings.

SoftBank's aggressive use of its cash holdings to invest in the market isn't "usual in our corporate culture," said Pierre Ferragu of New Street Research. Most companies invest excess cash in Treasurys or corporate bonds. "It's very unsettling for investors," he said, until they know more details about the trade.

SoftBank may get little credit from investors. Even if they made \$5 billion, "it's a one-off, you don't know what risk they've taken," said Mr. Ferragu.

Investors and options traders have been trying to piece together the contours of Soft-Bank's position through options data available to the market. Some institutional holders of SoftBank say the company is a sophisticated investor and is unlikely to be taking a lot of

One possibility is that Soft-Bank's trade let the company bet on the direction of share prices while limiting the amount of money it could lose. Investors often do this by buying and selling options-contracts that confer the right to buy a stock at a certain price at a later date. For bullish bets, options let investors make money when the stock price goes up, while if it goes down, they would only be out the premiums paid to own the options. SoftBank likely also sold options at a higher price, further limiting its risk, investors

SoftBank's options bet was big enough, however, that people familiar with the trade said it represented billions of dollars in premiums. Some of that money could go to waste if the underlying shares didn't perform as expected.

-Paul J. Davies contributed to this article.

'Tenet' Opens in a Test Of Virus-Era Moviegoing

By R.T. Watson

U.S. movie theaters enjoyed their best few days since the pandemic shut down much of the economy, as the first major film in months opened with modest box-office returns.

Sci-fi spy film "Tenet,"—distributed by AT&T Inc.'s Warner Bros. studio-grossed \$20.2 million in the U.S. and Canada through the long holiday weekend, according to preliminary estimates. Directed by Christopher Nolan, the \$200 million film was regarded in Hollywood as having a solid chance of reviving the theatrical business. Mr. Nolan's last movie, "Dunkirk," grossed \$50.5 million in its opening weekend in 2017.

Movie theaters around the world closed their doors as governments moved to contain the spread of the coronavirus:

studios canceled plans to release big-budget movies and almost overnight the few theaters still open lacked the highprofile films it takes to sell a significant number of tickets.

Theaters waited anxiously as Warner Bros. repeatedly changed its release plans for "Tenet" and public-health authorities shifted their guidelines for public gatherings. Walt Disney Co. canceled plans to release its live-action remake of "Mulan" in the U.S., opting instead to ship it to its Disney+ streaming service, where it became available over the weekend. The company hasn't said how many viewers watched it, at a cost of around \$30 on top of a monthly \$6.99 fee.

"We always knew this release plan would be a marathon not a sprint as we await openings in more markets and theaters."

in the U.S. Hollywood's biggest Warner Bros. said. The studio cautioned against judging "Tenet" against other film debuts, saving "any comparisons to the pre-Covid world would be inequitable and baseless."

Many nations have outpaced the U.S. in terms of reopening public spaces, so "Tenet" made its debut a week earlier in more than 40 international markets, where it made a total of \$53 million in its opening weekend.

Major theater chains began reopening their U.S. locations last month, though they remained closed in several major population centers, including New York and California. Around two-thirds of domestic theaters have reopened, according to a recent estimate from Disney.

The movie earned an additional \$58.1 million in overseas markets Friday through Sunday, according to Warner Bros.,



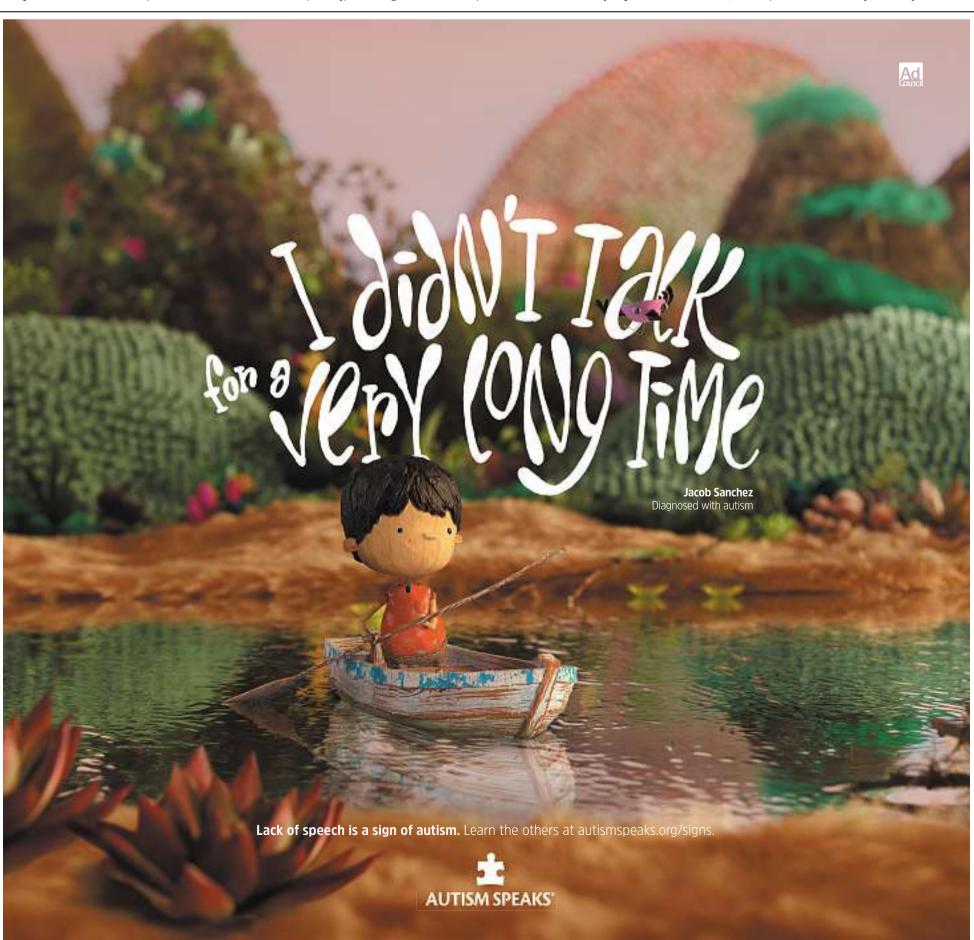
The long-delayed Warner Bros. movie 'Tenet' plays in an AMC movie theater in northern Virginia.

for a total \$146.2 million globally. "Tenet" performed best in China, the world's second-largest theatrical market behind the U.S., where it made \$30 million its first weekend, according to Comscore. China be-

gan reopening theaters in July. Comscore analyst Paul Dergarabedian said it is nearly impossible to assess the performance of "Tenet," as "traditional metrics simply do not apply."

Pandemic-driven closures have obliterated the year's boxoffice revenue. Heading into the weekend, with only four months remaining in 2020, domestic box-office revenue for the year stood at about \$2 billion, according to Comscore. Last year, theaters in the U.S. and Canada sold \$11.4 billion of movie tickets.

Most U.S. theaters that have opened are operating at reduced capacity, meaning fewer people can attend screenings. To compensate, many are showing "Tenet" on more screens than they normally would.



B4 | Tuesday, September 8, 2020

'Fortnite' Seeks Return to Apple

By Sarah E. Needleman

The creator of "Fortnite" is taking another stab at getting a judge to bring the popular game back to Apple Inc.'s devices, this time disclosing that roughly a third of players access it through the tech giant's App Store.

Epic Games Inc. last week filed a motion seeking a preliminary injunction against Apple, reiterating arguments made in a federal lawsuit last month when it accused the tech giant of monopolistic behavior after pulling "Fortnite" from the App Store. The closely held software developer also sued Google for removing the game from its Google Play store the same

Apple and Google made that move after Epic introduced an in-game payment system that would skirt the 30% fee certain developers are required to pay the companies for in-app purchases.

Epic said that more than 116 million registered "Fortnite" players have accessed the survival-shooter game through a device running Apple's iOS operating system, making it the game's largest platform. Of those players, Epic said 63% only play "Fortnite" this way. The game has



While 'Fortnite' is free to play, Epic sells virtual goods inside it such as character costumes.

350 million registered players overall, according to Epic.

"Apple has driven a stake in 'Fortnite' community," Epic said in its filing.

Apple declined to comment on Epic's latest filing. Apple has previously said Epic has put customers in the middle of their fight and that it hopes to work with the software developer in the future.

Epic's new filing comes ahead of a hearing scheduled for Sept. 28 on its broader case, which seeks an end to what it describes as anticompetitive conduct with how Apple operates its App Store.

The dispute is the latest tussle between companies and app-marketplace operators. Companies including Facebook Inc., Microsoft Corp., and Spotify Technology SA have been critical of Apple and the commission it charges software developers.

Though "Fortnite" can be played on mobile devices as well as gaming consoles and computers, Epic said Apple's irreparably have moves harmed its business.

Apple and Google have defended their business practices, saying the commission fees are necessary because of the services the stores provide, including security and safeguarding user privacy. Apple has also said its 30% commission is the same amount that most other app marketplaces charge.

A California federal judge ruled Aug. 24 that Epic can maintain access to Apple's software-development tools needed to update its Unreal Engine, but that "Fortnite" would remain out of the App

"Epic's renewed push for the same thing as last month will most likely result in the same mixed ruling again," said Florian Mueller, an independent analyst in Munich focused on antitrust issues. "Apple won't have to tolerate an alternative payment system in

access to Apple's developer tools to improve and maintain its Unreal Engine."

Beyond "Fortnite," Apple later removed Epic's games "Battle Breakers," "Spyjinx" and "Shadow Complex Remastered" from iOS and Mac app stores.

Epic, which launched a public-relations campaign critical of Apple along with its lawsuit, has since continued to urge players and other game developers to take its side. The company is valued at more than \$17 billion and has said it is committed to the fight, but the dispute could cost more than legal fees.

While "Fortnite" is free to play, Epic sells virtual goods inside it such as character costumes and special modes. In July, the shooter-survival game generated about \$52.5 million of in-app spending through the App Store and Google Play combined, according to estimates from research firm Sensor Tower Inc. "The continued loss of 'Fortnite' as a gathering place for users on all platforms will lead Epic's customers to defect," Epic said in its filing.

Epic's battle with Apple comes as the Justice Department is investigating Apple over antitrust concerns sur-'Fortnite,' but Epic will retain rounding its App Store.

time. You can set a do-not-dis-

other meetings, and when you

turn off the screen at the end

of the day, said Mr. Wu, that

Users who get squirmy about

giving colleagues such easy ac

Post-it Notes over the camera.

Sidekick was originally

signifies "leaving the office."

cess have taken to putting

made for a 55-inch screen;

workers would just walk up

and join conversations with

turb mode when you are in

Shares In China's Top Maker Of Chips Fall 23%

By Joanne Chiu

Stock in China's top semiconductor manufacturer fell sharply after the U.S. government said it was considering placing export restrictions on the company, in what would mark a major escalation in the Trump administration's crackdown on Chinese technology companies.

Shares in **Semiconductor** Manufacturing International Corp., which is China's most advanced chip maker, fell nearly 23% to a more than three-month low in Hong Kong on Monday. In Shanghai, where the company recently raised billions of dollars through a second listing to boost its production capacity, SMIC shares fell more than 11%.

The Trump administration could add SMIC to the Commerce Department's "entity list," as U.S. officials did recently with Chinese telecomequipment maker Huawei Technologies Co.

That would require companies to go through a difficult layer of review before exporting any U.S. technology to SMIC.

Like all chip makers, SMIC depends on U.S. equipment and software, Citigroup analysts led by Roland Shu wrote in a note to clients, adding: "We would expect SMIC production line expansion and upgrades to largely cease if SMIC is added to the entity

SMIC competitors such as Taiwan Semiconductor Manufacturing Co. and United Microelectronics Corp. could eventually gain market share, Mr. Shu added.

However, he said any U.S. restrictions on SMIC could damage the broader industry in unpredictable ways, "as business relationships between China and U.S. companies become disrupted."

The move is a major escalation in the administration's crackdown.

Other Chinese chip companies also dropped. Hua Hong **Semiconductor** Ltd., smaller Chinese rival to SMIC, fell more than 14% in Hong Kong. A Wind index of semiconductor stocks listed on mainland Chinese markets retreated 4%, underperforming a 1.9% drop in the benchmark Shanghai Composite.

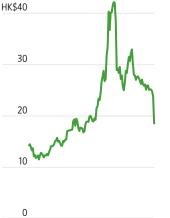
Jefferies analysts led by Edison Lee said the potential export ban was a "lose-lose proposition" that would be bad news for Chinese semiconductor companies and the global semiconductor production equipment industry.

The Jefferies team estimates China's planned semiconductor plants will require \$36 billion of capital expenditure on equipment, and China could make up 24% of global SPE procurement this

SMIC stock has soared in recent months, as investors have piled into a company seen as strategically important to China.

Despite Monday's selloff, the shares are still up 53% this year.

SMIC's Hong Kong share price



Note: HK\$10=US\$1.29

April 2020

Office Water Cooler Gets Virtual Treatment Ever since

the coronavirus pandemic struck and the work world went remote, there has been a giant hole where face-to-face interac-

PERSONAL TECHNOLOGY | By Katherine Bindley

tions used to be. When coworkers can't see each other, it is more than just a potential morale issue. Proximity and serendipitous encounters have long been associated with increased collaboration and innovation.

So employers are looking to digital services that attempt to mimic what we are missing out on in person. But replacing in-person connections is hard, and it will only

get harder as some workers return to offices.

"The water cooler as a place to build relationships just evaporated when everybody went remote," said Dan Manian, chief executive of workplace-networking software maker Donut Technologies Inc.

Launched in 2016 in New York City, the Donut service uses an algorithm to introduce employees to people on other teams or in other departments every few weeks. It opens a direct message with the person you've been paired with in Slack. Donut plans to expand its services to companies that don't use Slack.

Since the pandemic shut offices, clients have started using Donut in ways the company didn't anticipate.

After workers were sent home, Donut users started asking for daily connections. Now employees can create programs that pair people up on a schedule. For example, team members might get prompted to catch up for 15 minutes, several times a week. The Slack notification can include meeting-agenda notes and suggested times to chat based on everybody's calendar availability.

Mr. Manian said 12,000 companies use Donut worldwide, with 6,000 having started since March. Some clients started using Donut for onboarding new employees by pairing them with the roster of people who would otherwise be guiding them through their first weeks

An app called Hallway also uses Slack to foster impromptu interactions, but it takes a different approach. In a Slack channel of the users' choosing, it posts a video-chat link every couple of hours. The chat lasts 10 minutes, and is meant to replace break-room encounters. Users can launch their own quick video chats with a simple command.

Parthi Loganathan, Hallway's founder and chief executive, was working on another app before the pandemic, but decided to turn his attention to Hallway in April, building it over four days. The app is now used by close to 900 companies.

Miro aims to digitize the office whiteboard with a service allowing employees to fill a shared screen with virtual sticky notes. They can vote on them, group them together and build them out, just as they might in an inperson brainstorming ses-

Miro has been around since 2011, but growth has soared during the pandemic. It has more than eight milA Colleague Can Be **Just a Portal Away** Products that aim to in-

crease contact between coworkers can sometimes feel like surveillance gear. Sidekick is a tablet-based video portal that is always on. Co-workers can tap on one another's video feeds, unmute themselves, and then start chatting, sort of like walking up to someone's desk. Arthur Wu, co-founder and

chief operating officer of Sidekick's maker, Realism Labs Inc., thinks Zoom meetings are too scheduled to feel spontaneous. "It doesn't actually feel like you're there with your teammates," he said.

With Sidekick, you can see the device out of the corner of your eye (kind of like your old deskmates) but it isn't something you are staring at all the

people in other offices. Once the pandemic hit, the company moved to 10-inch tablets that employees keep at home. About 80 companies now use Sidekick As companies begin re-

opening facilities, Mr. Wu anticipates some employees will continue using at-home Sidekick tablets to stay connected with their colleagues in the office, who would use the larger

lion users on 40,000 paid accounts, more than double the 3.7 million users and 14,800 accounts as of March 1.

As it has learned more about customers' needs during this period, Miro has adjusted the product, such as by adding attention-management features to help combat conference-call fatigue. A presenter can now draw everyone's attention to a specific part of the whiteboard at the same time, for instance. In July, the company added the ability for those using Microsoft Teams to embed the Miro app into their user interface so employees have fewer apps to toggle between.

Microsoft Corp. added other new capabilities to Teams since the pandemic started, including virtual whiteboard sticky notes and the ability for people to "raise their hands" in meetings. The company released Together mode, which uses artificial intelligence to cut out each person on a video

chat, and superimpose them all against a shared background. It can visualize them together at a table or in an auditorium.

Eddie Obeng, a professor at Henley Business School at the University of Reading in the U.K., created a virtual-reality tool called Qube about a decade ago for the purpose of teaching executives remotely. It is a cartoonlike 3-D campus filled with meeting rooms, common areas and outdoor green spaces, with video screens and whiteboards. Avatars can walk up and

tap one another, then go find a spot to catch up. When avatars sit together at a table, or gather before a whiteboard in beanbag chairs, they can have a private conversation that others in the room can't hear. Avatars were originally humanlike, but people were too focused on their own appearance and the appearance of others. Now the avatars have block-shaped heads.

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Abating Chinese Supply Chain Risks Much has been recently written about the fragility of global supply chains. COVID 19, the trade war, increasing tariffs, and a sliding dollar have all been cited as good reasons to revisit the rationale of global sourcing and consider re-shoring. What global solicing and colliside resistanting, what has not been written about is the situation on the ground in China. The industrial supply base in China is in turnoil, many manufacturing companies have gone out of business, and many more are on the verge of doing so. It is anticipated that 30% of these companies will be gone in a matter of months, most truly informed observers consider that figure optimistic.

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BUSINESS & FINANCE

Netflix's Hastings Isn't Fan of Remote Work

Executive is eager to have staff back in the office once a coronavirus vaccine is available

By Joe Flint

As a founder and co-chief executive of Netflix Inc., Reed Hastings has reshaped both the way people watch television and how the entertainment industry operates.

Launching Netflix in 1997 as a DVD-by-mail movie-rental service with Marc Randolph, Mr. Hastings grasped early that the internet was the future of distribution. First with

old movies and

BOSS TALK

TV shows that Hollywood studios and networks were more than happy to sell, then with original programming such as "House of Cards" and "Stranger Things," the streaming giant has built a global subscriber base approaching

200 million households world-

Along the way, Mr. Hastings has built a distinctive—and, to some, cutthroat—corporate culture. The Netflix way encourages staff to take big risks, typically without the need of approval from a chain of bosses, and to communicate with bluntness. Leaders often practice what is called the "keeper test," in which they ask themselves: If a staffer were offered a job elsewhere, would you fight to keep that employee? If the answer is no, the person is let go.

In his new book "No Rules Rules: Netflix and the Culture of Reinvention," Mr. Hastings likens being employed at the streaming giant to being part of a sports team: Getting cut is disappointing but carries no shame. "Unlike many companies, we practice: Adequate performance gets a generous severance package," reads one of Netflix's mottos.

Mr. Hastings spoke with The Wall Street Journal by video from his son's bedroom in the family home in Santa Cruz, Calif. Here are edited excerpts.

WSJ: What elements of the Netflix culture are tougher to maintain now that so many employees are working from

MR. HASTINGS: Debating ideas is harder now.

WSJ: Have you seen benefits from people working at home? MR. HASTINGS: No. I don't see any positives. Not being able to get together in person, particularly internationally, is a pure negative. I've been super impressed at people's sacri-

WSJ: It's been anticipated that many companies will shift to a work-from-home approach for many employees even after the Covid-19 crisis. What do you

MR. HASTINGS: If I had to guess, the five-day workweek will become four days in the office while one day is virtual from home. I'd bet that's where a lot of companies end up.

WSJ: Do you have a date in mind for when your workforce returns to the office? MR. HASTINGS: Twelve hours after a vaccine is approved.

WSJ: I like that.

MR. HASTINGS: It's probably six months after a vaccine. Once we can get a majority of people vaccinated, then it's probably back in the office.

WSJ: In the book you say, "It's impossible to know where a business like ours will be in five years." What kind of prognosticating do you do?

MR. HASTINGS: We keep trying experiments. The business model will be pretty similar in five years. Can we figure out animation? Can we catch Disney in family animation?

WSJ: You've said you want Netflix to be able to pounce on unanticipated opportunities. What's an example of one you didn't see coming?

MR. HASTINGS: Nonfiction programming is a pretty good one. We started as superpre-



Reed Hastings's way encourages staff to take big risks, typically without the need of approval.

mium TV, and the expansion into nonfiction has been a huge success. The whole sharing of content around the world has been a huge success. Prior to that, people thought Americans won't watch content that's produced outside the U.S.

WSJ: Netflix is about radical candor. Just how candid can people be with each other from a personnel-management standpoint?

MR. HASTINGS: We want people to be very constructive. We don't want people to go around like a drunken fool, saying terrible things to people. We want people to be engaged with positive intent, to create an environment where people thrive from getting feedback.

Like when you do push-ups or when you run—it hurts, but you know you're getting stronger. You have to think about it in terms of giving feedback: It's producing enough discomfort for learning, but not so much discomfort that you're attacking the person or it feels like

WSJ: You write, "Only a CEO who is not busy is really doing their job." I'm sure a lot of CEOs and their families would beg to differ. Can you elabo-

MR. HASTINGS: You don't want to be, as CEO, consumed by the tactics. For me, making casting decisions or product feature decisions—there are too many to make. You get too busy so that, even if you are good at it, you're not thinking about the long-term health and evolution of the business. You want to really know what's going on in all kinds of places, but not making decisions.

WSJ: You recently chose to share the CEO title with Chief Content Officer Ted Sarandos. The corporate world is littered with examples of co-CEO structures that haven't worked out well.

MR. HASTINGS: It's littered with examples of single CEOs not working out also. Co-CEOs are an unusual thing, for sure. It only works well when two people really work well together. Ted and I have been working together for more than 20 years. He's been a virtual co-CEO for a couple of years, and we just decided to make it official.

WSJ: Netflix is known for paying top-of-the-market salaries. Are you concerned that has driven up costs for you and others in Hollywood?

MR. HASTINGS: When you're looking at great sports teams, they're often the teams that can pay high for the best players. We want to have the absolute best players and compensation is one part of that. We'd rather have three outstanding people than four OK people.

WSJ: You wrote that value or creative worth shouldn't be measured by time and that you've never paid attention to the hours people are working. Yet many people at Netflix describe it as a 24/7 lifestyle. Does the lack of work-life balance or potential for burnout concern you?

MR. HASTINGS: Coming back to the athletics, think about a coach's view: It's not how many hours you spend in the gym, but how well you play. But if you're going to play at an elite level, you're probably in the gym quite a bit. It's just not the goal state. The goal state is the effectiveness.

WSJ: Who is the audience for vour book?

MR. HASTINGS: The book is for smaller organizations and newer organizations that are trying to be very creative. For big companies like WarnerMedia or Disney, they'll read it and kind of roll their eyes, and that's fine. Hopefully it will help smaller companies that are still trying to figure out what they're trying to be.

WSJ: How would the Netflix culture work in politics? **MR. HASTINGS:** Politics is tough because in many ways people elect people who lie a lot. In business, we really try to avoid that. The skills to succeed in politics are really quite different than in business

WSJ: How is the return to production since the pandemic shutdowns going?

MR. HASTINGS: We're up and running in much of Europe and much of Asia, and we've got a few things going on already in [Los Angeles]. The hope is that, through September and October, we can really getwith proper testing—a lot more running.

WSJ: You're not running out of original programming anytime

MR. HASTINGS: We expect to have more original titles next year than this year. That's pretty incredible.

WSJ: If Netflix options your book, who should play you? MR. HASTINGS: There's always

$Doubts\ on$ Seed Curbs Emerge

Continued from page B1 help solve the problem by cutting off major retail avenues for foreign seeds to enter the

Yet some experts are also skeptical that the latest actions by e-commerce companies will solve the core issue federal officials believe may underlie much of this summer's seed mystery: unsolicited seed orders used to generate fake sales for other products, a tactic known as "brushing."

"The only way they are going to reduce any successful brushing schemes is to attack brushing at the source," said Chris McCabe, a former Amazon investigator and Amazon sales consultant who noted the company would have to devote more resources to tracking down these scams if it wanted to prevent objects like unsolicited seeds from being used in

Brushing scams work like this: Vendors selling on online retailers like Amazon pay thirdparty brushers to place orders for their own products-which could be anything from stuffed animals to televisions or furniture. The fake orders artificially boost sales, which surfaces the products higher on Amazon's website and gives the sellers the chance to write their own positive product reviews.

To make the fake sales seem real to e-commerce sites, brushers will send packages with tracking numbers to actual addresses. But instead of sending the actual product being boosted-which might be bulky and expensive, such as furniture—the brusher will ship cheap and lightweight items such as seeds. These are placed inside the packages with the hope that whoever receives it will assume it is an unexpected gift and not raise a fuss with authorities, according to ecommerce experts familiar with how brushing works. From the e-commerce company's perspective, the tracking number's arrival at the address makes it look like a genuine sale.

E-commerce experts say brushing is more than just an annoyance for the people barraged by unsolicited products like seeds. It generates fake reviews that mislead customers. It manipulates sales volumes to promote products that may not deserve the extra attention.

Amazon on Monday reiterated its view that seed deliveries linked to orders on its site were genuine orders delayed due to Covid-19 and not incidents of brushing. A spokesperson for the company said thirdparty sellers are prohibited from sending unsolicited packages. "We take action on those who violate our policies, including withholding payments, suspending or removing selling privileges, or working with law enforcement." The spokesperson said brushing is an industrywide scam, similar to phishing, and not specific to Amazon.

Online marketplace eBay Inc. said it is reviewing the seeds matter and any further restrictions that may be warranted. The company's current

Some experts are skeptical that the actions will solve the core issue.

policy holds that plants or seeds prohibited by government or shipping regulations are disallowed. It said most plants and seeds can be listed provided they are allowed in the location the seller is shipping to, though there are exceptions, including some seeds and noxious weeds.

Jerry Kavesh, chief executive of 3P Marketplace Solutions, which sells apparel and footwear on Amazon and advises companies on selling on Amazon, said he found it unlikely that thousands of people would get apparently unsolicited orders of a similar product, seeds, if it wasn't brushing. "It walks like a duck and quacks like a duck," he said.

Mr. McCabe was also skeptical that mass unsolicited seed orders were something other than brushing. He was also doubtful that a possible brushing scheme of this scale wouldn't involve boosting Ama-

zon products. "If you're going to do any brushing you would probably focus on Amazon because that's the biggest and most important marketplace,' Mr. McCabe said.

Howard Thai, the Shenzhen, China-based head of Signalytics, an e-commerce consulting firm, said he didn't think Amazon's new policy restricting seed imports would have an effect on sending seeds from China for brushing purposes. because seeds used in brushing schemes are purposely disguised and logged as sales for other, nonprohibited products.

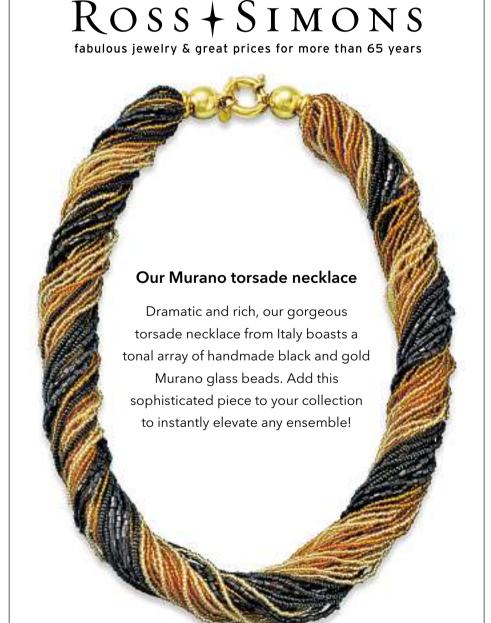
Agriculture officials have been concerned the seeds could introduce invasive species, weeds, pests or diseases that might harm U.S. agriculture. Osama El-Lissy, a deputy administrator for the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, said the agency had received nearly 20,000 reports from seed recipients and collected some 9,000 packages.

Amid the mystery, The Wall Street Journal reached out to roughly 70 recipients of mystery seeds. The Journal found that the majority had accounts consistent with brushing schemes. Of 68 people who said they were recent recipients of unsolicited seed packages, about 20 said they hadn't recently ordered seeds online but received at least one seed package in the mail. Approximately 20 others said they had recently ordered seeds and after receiving their order got additional unsolicited seeds. E-commerce experts said these cases all suggested brushing, as the people had received unsolicited seeds not connected to any specific e-commerce order they had made.

Not everyone who received unsolicited seed packages was considered a likely brushing victim. Some of the people contacted by the Journal said they never received their original seed order and then received a seed package that wasn't what they ordered.

Even if the bans on e-commerce seed sales and imports don't prevent brushing, the extensive attention given to this summer's unsolicited seed packets may render seeds less effective as a brushing tool.

> –Annie Gasparro and James R. Hagerty contributed to this article.



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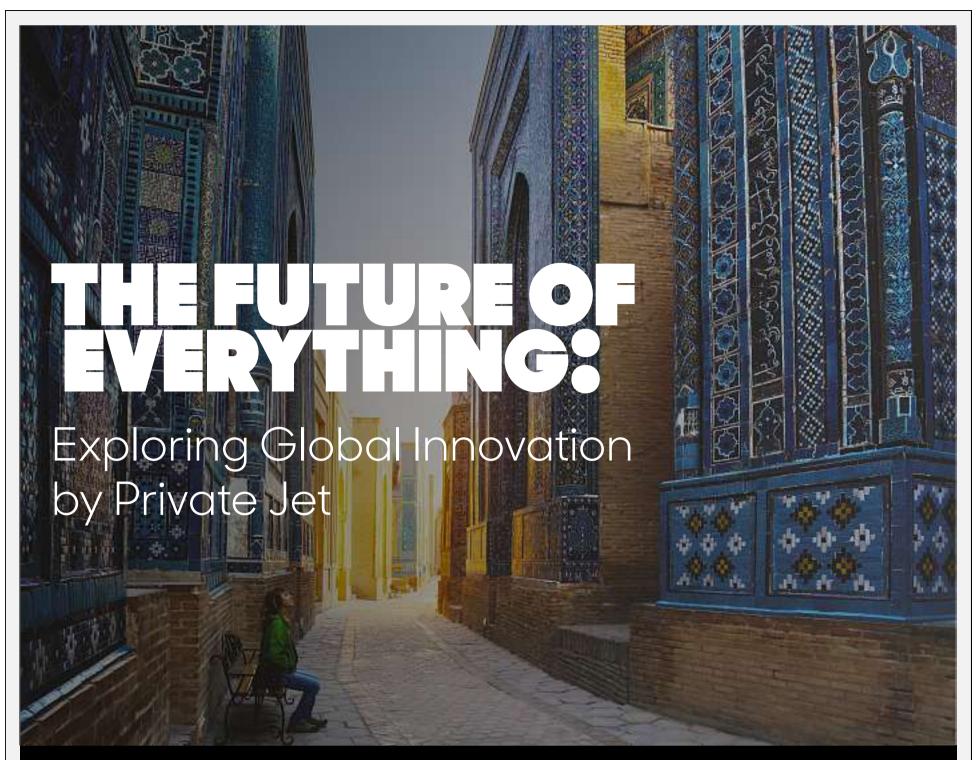
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In collaboration with the Italian Trade Agency, the Ministry of Foreign Affairs and International Cooperation and Confindustria - Federorafi

B6 | Tuesday, September 8, 2020



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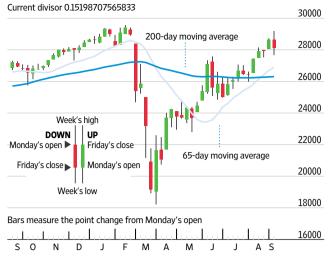
THE WALL STREET JOURNAL.

Please note: This trip will be operated by National Geographic Partners Chicago, the tour operations branch of National Geographic, on flights operated by Icelandair. © 2020 Dow Jones & Co., Inc. All rights reserved. 6DJ6870

MARKETS DIGEST

Dow Jones Industrial Average

Last Year ago **28133.31** ▼520.56, or 1.82% last week Trailing P/E ratio 27.62 19.25 P/E estimate * 26.70 17.36 High, low, open and close for each of Dividend yield 2.21 2.28 the past 52 weeks All-time high 29551.42, 02/12/20





*Weekly P/E data based on as-reported earnings from Birinyi Associates Inc.; †Based on Nasdaq-100 Index

S&P 500 Index

Last Year ago **3426.96** ▼81.05, or 2.31% last week Trailing P/E ratio * 37.92 22.95 P/E estimate * 25.64 18.06 High, low, open and close for each of Dividend yield 1.77 1.93 the past 52 weeks All-time high 3580.84, 09/02/20



Financial Flashback

The Wall Street Journal, September 8, 1997

Apple Computer's surprise decision not to split off its troubled Newton division signals Steve Jobs's determination to push simplified computing devices, particularly for education.

Major U.S. Stock-Market Indexes

International Stock Indexes

The Global Dow

DJ Global Index

DJ Global ex U.S.

Sao Paulo Bovespa

S&P/TSX Comp

S&P/BMV IPC

DJ Americas

Region/Country

World

Americas

Brazil

Canada

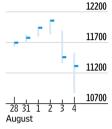
Mexico

Major 0.5. Stock-Market indexes											
			- Latest We				52-Week				chg —
Dow Jones	High	Low	Close	Net chg	% chg	Low	Close (●)	High	% chg	YTD	3-yr. ann
Industrial Average	29199.35	27664.68	28133.31	-520.56	-1.82	18591.93	•	29551.42	5.0	-1.4	8.6
Transportation Avg	11488.70	10981.13	11225.51	-96.49	-0.85	6703.63	•	11451.51	9.0	3.0	6.3
Utility Average	826.89	791.13	803.70	2.97	0.37	610.89	•	960.89	-5.3	-8.6	2.7
Total Stock Market	36498.93	34020.27	34848.03	-872.37	-2.44	22462.76	•	36434.12	14.4	5.5	10.8
Barron's 400	752.15	707.09	720.64	-19.08	-2.58	455.11	•	752.15	8.0	-1.6	3.6
Nasdaq Stock Mark	et										
Nasdaq Composite	12074.07	10875.87	11313.13	-382.50	-3.27	6860.67	•	12056.44	39.6	26.1	20.7
Nasdaq 100	12439.48	11145.99	11622.13	-373.72	-3.12	6994.29	•	12420.54	48.0	33.1	24.7
S&P											
500 Index	3588.11	3349.63	3426.96	-81.05	-2.31	2237.40	•	3580.84	15.0	6.1	11.4
MidCap 400	1970.37	1860.73	1897.86	-48.65	-2.50	1218.55	•	2106.12	-0.7	-8.0	3.0
SmallCap 600	922.22	876.56	891.81	-20.21	-2.22	595.67	•	1041.03	-4.1	-12.7	1.7
Other Indexes											
Russell 2000	1595.04	1501.52	1535.30	-43.04	-2.73	991.16	•	1705.22	2.0	-8.0	2.8
NYSE Composite	13299.73	12723.79	12917.15	-253.81	-1.93	8777.38		14183.2	-0.1	-7.2	2.7
Value Line	489.58	466.01	474.08	-10.54	-2.17	305.71	•	562.05	-7.7	-14.1	-3.0
NYSE Arca Biotech	5498.18	5118.53	5240.17	-130.07	-2.42	3855.67	•	6142.96	22.7	3.4	7.4
NYSE Arca Pharma	678.21	649.88	657.28	-16.31	-2.42	494.36	•	675.64	11.9	0.6	7.5
KBW Bank	80.72	75.77	79.23	0.88	1.13	56.19		114.12	-16.3	-30.1	-5.4
PHLX§ Gold/Silver	156.90	144.03	149.58	-3.27	-2.14	70.12	•	161.14	58.7	39.9	18.2
PHLX [§] Oil Service	36.35	34.72	35.56	-0.818	-2.25	21.47		80.99	-46.6	-54.6	-33.8
PHLX§ Semiconducto	or 2382.32	2137.01	2212.73	-51.41	-2.27	1286.84	•	2370.18	41.1	19.6	25.5
CBOE Volatility	38.28	21.77	30.75	7.79	33.9	11.54	•	82.69	105.0	123.1	44.8
§ _{Nasdaq PHLX}								Sources: Fact	tSet; Dow	Jones Ma	ırket Data

12

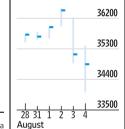
Nasdaq Composite

▼ 382.50, or -3.27% last week



DJ US TSM

7 872.37, or -2.44% last week



0.20 **0.23** -1.58

WSJ Dollar Index

YTD

% chg

-5.7

0.9

-5.0

4.6

-12.5

-5.0

-15.9

Commodities and Currencies Close Netchg %Chg %chg

88.14

Euro, per dollar	0.8463	0.0018	0.21	-5.09
Yen, per dollar	106.28	0.04	0.04	-2.17
U.K. pound, in dollars	1.32	-0.011	-0.85	-0.69
		ast Wee		YTD
	Close	Net chg	% Chg	% chg
DJ Commodity	623.14	-13.18	-2.07	-2.98
TR/CC CRB Index	149.69	-3.75	-2.44	-19.43
Crude oil, \$ per barrel	39.77	-3.20	-7.45	-34.87
Natural gas, \$/MMBtu	2.588	-0.069	-2.60	18.23
Gold, \$ per troy oz.	1923.90	-40.70	-2.07	26.61
U.S. Dollar Index	92.97	0.60	0.65	-3.55
WSJ Dollar Index	87.94	0.42	0.48	-1.81
Euro, per dollar	0.8446	0.0047	0.56	-5.29
Yen, per dollar	106.24	0.87	0.83	-2.21
U.K. pound, in dollars	1.33	-0.007	-0.53	0.16
		— 52-W	eek —	
	Low	Close()	High	% Chg
DJ Commodity	433.70	•	647.86	3.16
TR/CC CRB Index	106.29	•	187.39	-13.28
Crude oil, \$ per barrel	-37.63	•	63.27	-29.64
Natural gas, \$/MMBtu	1.48	•	2.86	3.69

1452.10

102.37

1.15

Yen, euro vs. dollar; dollar vs.

92.14

87.52

0.84

WSJ Dollar Index
Euro, per dollar
Yen, per dollar
U.K. pound, in dolla
WC1

.COM

Gold, \$ per troy oz.

U.S. Dollar Index

Real-time U.S. stock quotes are available on WSJ.com. Track mostactive stocks, new highs/lows, mutual funds and ETFs.

2051.50 27.73

102.82

97.02 -3.64

0.94 **-6.84**

112.11

All are available free at WSJMarkets.com

Santiago IPSA 1.14 Chile 2655.86 -20.4 30.05 **EMEA** 367.97 1.67 -11.5 Stoxx Europe 600 6.04 1.69 1.47 Bel-20 3359.38 Belgium 48.69 -15.11.78 1310.55 Denmark **OMX Copenhagen 20** 22.89 15.4 5053.72 1.79 -15.5 France **CAC 40** 88.65 2.01 DAX 13100.28 257.62 -1.1Germany 0.10 Israel **Tel Aviv** 1344.34 1.37 -20.1 19738.01 1.79 **FTSE MIB** 346.76 -16.0 Italy 1.27 547.14 Netherlands AEX 6.88 -9.5 **RTS** Index 1218.52 -0.12 -21.3 Russia -1.49 0.97 FTSE/JSE All-Share **54400.2**8 -4.7 South Africa 521.33 1.30 Spain IBEX 35 7080.66 90.94 -25.9 2.21 Sweden **OMX Stockholm** 707.81 15.32 4.0 1.43 **Swiss Market** 10297.80 Switzerland 144.71 -3.0 0.97 **BIST 100** 1096.81 -4.1 Turkey 10.49 2.39 FTSE 100 5937.40 -21.3 U.K. 138.32 17642.20 1.66 U.K. **FTSE 250** 287.92 -19.4 **Asia-Pacific** 5944.80 Australia **S&P/ASX 200** Shanghai Composite 3292.59 China 24589.65 Hang Seng Hona Kona India S&P BSE Sensex 38417.23 Nikkei Stock Avg Japan 23089.95

Close

3067.02

437.79

250.31

795.68

101241.73

16218.01

36637.45

Net chg

11.88

1.42

0.13

188.95

% chg

unch.

Closed

Closed

0.39

0.57

0.02

0.52

19.29	0.33	-11.1
-62.78	-1.87	7.9
105.80	-0.43	-12.8
60.04	0.16	-6.9
115.48	-0.50	-2.4
1.57	0.06	-22.1
15.97	0.67	8.5
-36.55	-0.29	5.0
	Closed	-17.0

Consumer Rates and Returns to Investor

U.S. consumer rates A consumer rate against its

Sources: FactSet; Dow Jones Market Data

Straits Times

Kospi

TAIEX

SET

Singapore

Taiwan

Thailand

South Korea

benchmark over the past year



Selected rates Money Market/Savings Accts

2511.21

2384.22

12601.40

1311.95

Bankrate.com avg†:	3.30%
BankDirect	0.75%
Richardson, TX	877-839-2737
DollarSavingsDirect	0.75%
New York, NY	866-395-8693
CFG Community Bank	0.80%
Baltimore, MD	888-205-8388
First Internet Bank of Indiana	0.81%
Indianapolis, IN	888-873-3424
TAB Bank	0.90%
Ogden, UT	(800) 355-3063

Sources: FactSet; Dow Jones Market Data; Bankrate.com

Interest rate		Rate (%) -) Week ago	52-W Low 0	eek Range 2 4 6	e(%) — 8 High	3-yr chg (pct pts)	
Federal-funds rate target	0.00-0.25	0.00-0.25	0.00		2.00	-1.00	
Prime rate*	3.25	3.25	3.25	•	5.25	-1.00	
Libor, 3-month	0.25	0.24	0.23		2.16	-1.07	
Money market, annual yield	0.23	0.23	0.23		0.78	-0.04	
Five-year CD, annual yield	0.65	0.66	0.65		1.71	-0.80	
30-year mortgage, fixed [†]	3.09	3.15	3.03	•	4.22	-0.71	
15-year mortgage, fixed [†]	2.55	2.59	2.55	•	3.57	-0.49	
Jumbo mortgages, \$510,400-plus	3.13	3.20	3.06	•	4.71	-1.16	
Five-year adj mortgage (ARM)	3.30	3.29	3.06	•	4.78	0.04	
New-car loan, 48-month	4.18	4.19	4.17	•	4.65	1.17	
Bankrate.com rates based on survey of ov banks.† Excludes closing costs.	Bankrate.com rates based on survey of over 4,800 online banks. *Base rate posted by 70% of the nation's largest						

Benchmark Yields and Rates Treasury yield curve

Yield to maturity of current bills,

major U.S. trading partners notes and bonds 2.50% WSJ Dollar index One year ago 2.00 1.50 Tradeweb ICE Friday Close 1.00 0.50

____0.00 3 6 1 2 3 5 7 10 20 30 2019 2020 month(s) years - maturity Sources: Tradeweb ICE U.S. Treasury Close; Tullett Prebon; Dow Jones Market Data

Corporate Borrowing Rates and Yields

	Spread +/- Treasurys, Yield (%) in basis pts, 52-wk Range				Total Return		
Bond total return index	Last	Wk ago	Last	Low	High	52-wk	3-yr
U.S. Treasury, Barclays	0.520	0.510				6.45	5.17
U.S. Treasury Long, Barclays	1.360	1.400				12.09	11.06
Aggregate, Barclays	1.150	1.180	n.a.	39	127	6.13	5.13
Fixed-Rate MBS, Barclays	1.120	1.260	n.a.	28	132	4.32	3.67
High Yield 100, ICE BofA	4.559	4.238	419	271	1018	1.719	3.694
Muni Master, ICE BofA	1.048	1.000	29	-12	41	3.898	3.918
EMBI Global, J.P. Morgan	4.637	4.730	375	277	662	3.951	4.115

New to the Market

Public Offerings of Stock

IPOs in the U.S. Market

None expected this week

Lockup Expirations

Below, companies whose officers and other insiders will become eligible to sell shares in their newly public companies for the first time. Such sales can move the stock's price.

expiration	Issue date	Issuer	Symbol			Friday (%)	
Sept. 8	March 12, '20	lmara Inc	IMRA	16.00	75.7		180 days
				Sources: [Dealogic; V	VSJ Market	Data Group

IPO Scorecard

Performance of IPOs, most-recent listed first							
% Chg From							From
Company SYMBOL IPO date/Offer price	Friday's close (\$)	Offer price	1st-day close	Company SYMBOL IPO date/Offer price	Friday's close (\$)	Offer price	1st-day close
HighCape Capital Acquisition CAPAU Sept. 4/\$10.00	10.15	1.5		PainReform PRFX Sept. 1/\$8.00	6.73	-15.9	-0.1
Tailwind Acquisition TWND.UT Sept. 4/\$10.00	10.00			Harbor Custom Development HCDI Aug. 28/\$6.00	t 5.65	-5.8	-24.7
BCTG Acquisition BCTG Sept. 3/\$10.00	10.25	2.5	0.2	Burgundy Technology Acquisition BTAQU Aug. 27/\$10.00		-0.1	0.1
INSU Acquisition II INAQU Sept. 3/\$10.00	10.25	2.5	-0.1	CF Finance Acquisition I CFIIU Aug. 27/\$10.00	10.07	0.7	1.3
CM Life Sciences CMLFU Sept. 2/\$10.00	10.32	3.2	0.7	FTAC Olympus Acquisition FTOCU Aug. 26/\$10.00	10.01	0.1	8.0

Sources: Dow Jones Market Data; FactSet

Other Stock Offerings

Secondaries and follow-ons expected this week in the U.S. market None expected this week

Off the Shelf

"Shelf registrations" allow a company to prepare a stock or bond for sale, without selling the whole issue at once. Corporations sell as conditions become favorable. Here are the shelf sales, or takedowns. over the last week:

Issuer/Industry	Takedown date/ Registration date	Deal value (\$ mil.)	Bookrunner(s)
NIO Inc Auto/Truck	Aug. 31 June 9,′20	\$1,730.2	MS, China Int'l, BofA Securities
Zosano Pharma Corp Healthcare	Sept.1 March 16,′20	\$20.8	BTIGLLC
Hamilton Lane Inc Finance	Sept. 2 Sept. 12,′18	\$154.9	JPM
iClick Interactive Asia Group Ltd Professional Services	Sept. 3 June 28,′19	\$72.3	BofA Securities, China Renaissance Holdings, Ind. & Comm. Bank of China, Alliance Global Partners

Public and Private Borrowing

Treasurys

The Week's Action —

Tuesday, September 8 Thursday, September 10 Auction of 13, 26 and 52 week bills; Auction of 4 and 8 week bills; announced on Sept. 3, settles on Sept. 10 announced on Sept. 8; settles on Sept. 15 Auction of 3 year note: announced on Sept. 3, settles on Sept. 15

A Week in the Life of the DJIA

A look at how the Dow Jones Industrial Average component stocks did in the past week and how much each moved the index. The DJIA lost 520.56 points, or 1.82%, on the week. A \$1 change in the price of any DJIA stock = 6.58-point change in the average. To date, a \$1,000 investment on Dec. 31 in each current DJIA stock component would have returned \$30,340, or a gain of 1.13%, on the \$30,000 investment, including reinvested dividends.

Pct		Point chg in average	* Company	Symbol	Close	\$1,000 Invested(year-end '19) \$1,000
5.54	2.55	16.78	Dow	DOW	\$48.60	
3.17	4.55	29.94	Caterpillar	CAT	148.18	1,027
3.05	3.13	20.59	American Express	AXP	105.67	860
2.43	1.21	7.96	Coca-Cola	KO	51.04	938
2.06	1.22	8.03	Verizon	VZ	60.48	1,017
			Walmart			
1.80	2.53	16.65		WMT	142.83	1,218
1.56	3.23	21.25	Goldman Sachs	GS	210.94	935
0.73	0.75	4.93	JPMorgan Chase	JPM	103.52	763
0.59	0.68	4.47	Travelers	TRV	116.57	863
0.10	0.11	0.72	Nike	NKE	112.40	1,118
0.07	0.11	0.72	3M	MMM	165.77	967
-0.48	-0.41	-2.70	Merck	MRK	85.24	952
-0.58	-0.81	-5.33	Procter & Gamble	PG	137.96	1,126
-0.69	-0.35	-2.30	Intel	INTC	50.08	851
-0.75	-2.37	-15.59	UnitedHealth Group	UNH	312.00	1,070
-1.00	-1.69	-11.12	Honeywell	HON	166.69	959
-1.48	-3.18	-20.92	McDonald's	MCD	211.73	1,092
-1.86	-4.72	-31.06	Amgen	AMGN	248.40	1,052
-2.21	-2.77	-18.23	IBM	IBM	122.30	947
-2.62	-3.55	-23.36	Walt Disney	DIS	131.99	913
-2.70	-4.75	-31.25	Boeing	ВА	171.05	528
-3.08	-3.85	-25.31	Apple	AAPL	120.96	1,659
-3.27	-1.38	-9.08	Cisco	CSCO	40.82	872
-3.29	-5.05	-33.23	Johnson & Johnson	JNJ	148.59	1,039
-4.32	-3.70	-24.34	Chevron	CVX	81.93	708
-4.82	-1.87	-12.30	Walgreens	WBA	36.89	646
-5.12	-11.05	-72.70	Visa	V	204.66	1,094
-5.81	-16.63	-109.42	Home Depot	HD	269.66	1,257
-6.05	-16.40	-107.90	salesforce.com	CRM	254.70	1,566
-6.40	-14.66	-96.46	Microsoft	MSFT	214.25	1,369
			*Based on Composite	orice. DJI	A is calcul	ated on primary-market price.

.Source: Dow Jones Market Data; FactSet . Source: Dow Jones Market Data; FactSet

Currencies

U.S.-dollar foreign-exchange rates in late New York trading

			US\$ vs,				US\$ vs,
Country/currency	in US\$	∕lon — perUS\$	YTD chg (%)	Country/currency	in US\$	on — Der US\$	YTD chg (%)
	111033	pei US\$	(70)				
Americas				Vietnam dong	.00004315	23175	0.01
Argentina peso	.0134	74.6355	24.6	Europe			
Brazil real	.1887	5.3007	31.9	Czech Rep. koruna	.04463	22,407	-1.2
Canada dollar	.7635	1.3098	8.0	Denmark krone	.1588	6.2983	-5.5
Chile peso	.001290	775.10	4.8	Euro area euro	1.1816	.8463	-5.1
Colombiapeso	.000269	3715.00	13.2	Hungary forint	.003284	304.52	3.1
Ecuador US dollar	1	1	unch	Iceland krona	.007164	139.58	15.3
Mexico peso	.0463	21.6162	14.2	Norway krone	.1118	8.9407	1.8
Uruguay peso	.02355	42.4550	14.3	Poland zloty	.2663	3.7547	-1.0
Asia-Pacific				Russia ruble	.01320	75.744	22.0
Australian dollar	.7276	1.3744	-3.5	Sweden krona	.1140	8.7724	-6.3
China yuan	.1464	6.8307	-1.9	Switzerland franc	1.0915	.9162	-5.3
Hong Kong dollar	.1290	7.7504	-0.5	Turkey lira	.1341	7.4574	25.4
India rupee	.01362	73,447	2.9	Ukraine hryvnia	.0359	27.8500	17.6
Indonesia rupiah	.0000678	14740	6.2	UK pound	1.3168	.7594	0.7
Japan yen	.009409	106.28	-2.2	Middle East/Afri	ca		
Kazakhstan tenge	.002358	424.04	11.1	Bahrain dinar	2.6525	.3770	_0 01
Macau pataca	.1252	7.9865	-0.4	Egypt pound		15.7984	
Malaysia ringgit	.2405	4.1575	1.6	Israel shekel		3.3789	
New Zealand dollar	.6692	1.4943	0.6	Kuwait dinar	3.2694	.3059	0.9
Pakistan rupee	.00604	165.652	6.9	Oman sul rial	2.5974	.3850	
Philippines peso	.0206	48.626	-4.1	Oatar rial	.2747	3.641	
Singapore dollar	.7319	1.3664	1.5	Saudi Arabia riyal		3.7511	
South Korea won	.0008419	1187.77	2.8	South Africa rand		16.7452	
Sri Lanka rupee	.0054127	184.75	1.9	Journal I Cu Turio	.0277	10., 772	2710
Taiwan dollar	.03410	29.323	-2.0		Close Net C	hg %Chg '	YTD%Chg
Thailand baht	.03188	31.370	5.4	WSJ Dollar Index	88.14 0.2	20 0.23	-1.58

Sources: J.P. Morgan; S&P Dow Jones Indices; Bloomberg Barclays; ICE Data Services Sources: Tullett Prebon, Dow Jones Market Data

CLOSED-END FUNDS

Listed are the 300 largest closed-end funds as measured by assets. Glosed-end funds sell a limited number of shares and invest the proceeds in securities. Unlike open-end funds, closed-ends generally do not buy their shares back from investors who wish to cash in their holdings. Instead, fund shares trade on a stock exchange. Ma signifies that the information is not available or not applicable. NS signifies funds not in evisitons for the parties needed 12 month valid is: evisitence for the entire period. 12 month yield is computed by dividing income dividends paid (during the previous 12 months for periods ending at month end or during the previous 52 weeks for periods ending at any time other than month-end) by the onth-end market price adjusted for capital

Friday, September 4, 2020 Fund (SYM) NAV Close/Disc Ret General Equity Funds

Adams Diversified Equity ADX 19.23 16.44 -14.5 13.4 Boulder Growth & Income **BIF 12.50 10.23 -18.2 -3.1** Central Secs **CET** 36.47 29.35 -19.5 CohenStrsCEOppFd **FOF** 11.64 11.60 -0.3 EVTxAdvDivIncm **EVT** 21.99 20.13 -8.5 GabelliDiv&IncTr GDV 22.50 18.90 -16.0 Gabelli Equity Tr GAB 5.25 5.48 GeneralAmer **GAM** 42.02 34.78 -17.2 1.8 JHancockTaxAdvDiv HTD NA 19.47 Librty AllStr Eq USA 6.58 6.03 NA -8.4 Librty AllStr Gr **ASG** 6.85 7.12 +3.9 30.9 Royce Micro-Cap Tr **RMT** 9.43 7.92 -16.0 7.8 Royce Value Trust RVT 15.42 13.35 -13.4 Source Capital **SOR** 42.00 35.51 -15.5 Tri-Continental **TY** 30.71 26.43 -13.9 1.9

Specialized Equity Funds Aberdeen Glb Prem Prop **AWP** 5.70 4.86 -14.7 -13.1 Adams Natural Resources **PEO** 12.58 11.38 -9.5 -20.3 GI DivInt&PremStr NFJ 14.01 12.17 -13.1 7.7 ASA Gold & Prec Met Ltd **ASA 26.22 22.47 -14.3 76.5** BR Enh C&I CII 17.36 15.48 -10.8 BlackRock Energy & Res BGR 7.71 6.74 -12.6 BlackRock Eq Enh Div BDJ 8.47 7.53 -11.1 BlackRock Enh Intl Div BGY 6.12 5.37 -12.3 6.0 BlackRock Hith SciTril BMEZ 24.76 22.70 -8.3 NS BlackRock Hith Sciences BME 42.21 42.93 +1.7 20.1 BlackRock Res & Comm **BCX** 7.66 6.39 -16.6 -8.5 BlackRock Sci&Tech Trll **BSTZ** 28.06 25.20 -10.2 27.8 BlackRock Sci&Tech Trust BST 41.60 41.00 -1.4 36.6 BlackRock Utl Inf & Pwr BUI 21.49 22.05 +2.6 -1.1 CBRE CIrnGlbRIEst IGR 7.47 6.14 -17.8 -11.9 CLEARBRIDGEENGY MDS OPP EMO 14.12 10.95 -22.5 -71.2 ClearBridge MLP & Midstm **CEM 17.37 13.78 -20.7 -71.9** ChnStrInfr UTF 23.27 23.06 -0.9 -6.3 Cohen&SteersQualInc RQI 12.52 11.26 -10.1 -20.3 Cohen&Steers TotRet RFI 12.71 12.78 +0.6 -9.8 CohenStrsREITPrefinc **RNP** 22.56 19.78 -12.3 -9.4 Columbia Sel Prm Tech Gr **STK** 22.21 21.81 -1.8 12.2 DNP Select Income **DNP** 8.68 10.12 +16.6 -14.7 Duff&PhUti&InfraIncFd **DPG** 12.63 11.07 -12.4 -20.6 EtnVncEqtyInc **EOI** 15.87 15.01 -5.4 5.9 EtnVncEqtyIncoll **EOS** 19.14 18.75 -2.0 19.5 EVRskMnDvsEqInc ETJ 10.02 9.96 ETnVncTxMqdBuyWrtInc ETB 13.87 13.69 -1.3 -4.3 EtnVncTxMgdBuyWrtOpp ETV 13.65 14.17 EvTxMnDvsEqInc **ETY 12.16 11.20 -7.9** 2.5 EtnVncTxMgdGlbB **ETW** 9.67 8.84 EVTxMnGblDvEqInc **EXG** 8.54 7.73 -9.5 First Trust Energy Inc G FEN 12.28 9.58 -22.0 First Tr Enhanced Eq **FFA 16.79 15.26 -9.1 2.8** FirstTrEnergyInfra FIF 11.77 FirstTrMLPEner&Inc FEI 6.53 5.07 -22.4 -48.7 Gabelli Healthcare **GRX 12.66 10.60 -16.3** 3.92 7.59 +93.6 23.1 Gab Utility **GUT** GAMCOGIGold&NatRes **GGN** 4.12 3.55 -13.8 -7.6

J Han Finl Opptys **BTO** NA 23.61 NA -17.3

Neuberger Brmn MLP & EI NML 3.54 2.60 -26.6 -59.0 Nuv Dow 30 Dyn Overwrite DIAX 15.93 14.00 -12.1 -16.7

NuvCorEqAlpha **JCE** 14.42 13.12 -9.0 -0.9 Nuveen Nasdaq 100 Dyn Ov **QQQX** 25.50 24.82 -2.7 18.1

Nuv Real Est **JRS** 9.17 7.93 -13.5 -21.3 Nuveen RI Asst Inc & Gro **JRI** 14.58 12.37 -15.2 -20.8

NuvS&P500DynOvFd **SPXX** 15.29 13.87 -9.3 -9.4 NuvSP500BuyIncFd **BXMX** 13.08 11.52 -11.9 -4.5

Insider-Trading Spotlight

-8.8

ReavesUtilityIncome **UTG** 30.98 31.42 +1.4

Fund (SYM) NAV Close/Disc Ret Tortoise Enrgy Infra Crp TYG NA 16.01 NA -78.7 Income & Preferred Stock Funds CalamosStratTot CSQ 14.16 13.75 -2.9 16.4 CohenStrsLtdDurPref&Inc LDP 24.87 23.87 CohenStrsSelPref&Income PSF 25.68 26.75 +4.2 0.8 FirstTrIntDurPref&Inc FPF 22.82 21.95 JHanPrefinc HPI 18.76 19.79 +5.5 18.43 18.05 -2.1 -15.5 JHPrefincil HPF HnckJPfdIncoIII **HPS** 16.49 16.27 -1.3 -9.3 JHan Prm **PDT** 12.87 13.02 +1.2 -19.3 LMP CapInco **SCD** 12.30 10.85 -11.8 -12.4 Nuveen Pref & Inc Opp **JPC** 9.11 8.70 -4.5 -5.9 Nuveen Fd **JPS** 9.35 8.97 -4.1 -1.4 Nuveen Pref & Inc Term **JPI** 23.22 22.88 -1.5 0.4 Nuveen TxAdvDivGr **JTD** 15.35 13.37 -12.9 -14.2 Convertible Sec's. Funds

TCW Strat Income TSI NA 5.77 NA 7.2 AdvntCnvrtbl&IncFd AVK 16.47 13.93 -15.4 5.4 GI Conv & Inc II NCZ 4.78 4.20 -12.1 -7.4 AGI Dvs Inc & Conv ACV 28.94 26.06 -10.0 20.7 AGI Eqty & Conv Inc **NIE** 27.99 24.53 -12.4 20.5 CalamosConvHi **CHY** 13.49 11.98 -11.2 16.8 CalmosConvOp CHI 12.80 11.37 -11.2 18.2 World Equity Funds Aberdeen Emg Mkts Eq Inc. **AEF** 7.78 6.65 -14.5 -3.2 Aberdeen Tot Dyn Div. **AOD** 9.42 8.02 -14.9 6.7

Calamos GloDynlnc **CHW** 8.48 8.18 -3.5 16.3 Cdn Genl Inv **CGI** 41.29 26.71 -35.3 13.8 China **CHN** 30.59 26.05 -14.8 38.6 EV TxAdvGlbDivInc **ETG** 17.35 15.43 -11.1 3.9 EtnVncTxAdvOpp ETO 24.02 21.57 -10.2 Gabelli Multimedia GGT 7.09 7.14 +0.7 -3.5 Highland Global Alloc **HGLB** 9.85 6.50 -34.0 -24.5 India Fund **IFN** 19.57 16.59 -15.2 -4.7 Japan Smaller Cap **JOF** NA 8.05 NA 4.9 LazardGlbTotRetInc **LGI** 17.78 15.61 -12.2 6.8 MS ChinaShrFd **CAF** 26.85 21.82 -18.7 20.66 17.26 -16.5 -4.3 19.44 16.83 -13.4 25.0 MS India IIF New Germany **GF** Templeton Dragon **TDF** 25.34 21.65 -14.6 40.7 Templeton Em Mkt **EMF** 17.49 15.50 -11.4 14.4 Wells Fargo GI Div Oppty **EOD** 5.14 4.50 -12.5 -5.8

Prem12 Mo NAV Close/Disc Yld U.S. Mortgage Bond Funds BlckRk Income **BKT** 6.33 6.20 -2.1 6.6 Invesco HI 2023 Tgt Term **IHIT** 8.26 7.83 -5.2 7.6 Investment Grade Bond Funds
BIRck Core Bond BHK 16.26 15.86 -2.5 BR Credit Alloc Inc **BTZ 15.21 13.93 -8.4** Insight Select Income **INSI 21.89 20.34 -7.1** nvescoBond VBF 3.8 4.7 J Han Income JHS 16.20 15.14 -6.5 4.01 3.86 Western Asset Inf-Lk Inc WIA 14.00 12.73 -9.1 3.1 Western Asset Inf-Lk O&I **WIW 13.40 11.51 -14.1** Westn Asst IG Def Opp Tr IGI 21.61 21.24 -1.7 3.9

Loan Participation Funds Apollo Senior Floating AFT NA 12.76 NA
BR Debt Strategy **DSU** 11.32 10.06 -11.1
BR F/R Inc Str **FRA** 13.55 11.67 -13.9
BlackRockFloatng Rt Inc **BGT** 13.15 11.44 -13.0 8.5 Blackstone/GSO Strat **BGB 13.70 12.00 -12.4 10.4** Blackstone/GSO Sr Flt Rt BSL 15.23 13.37 -12.2 EtnVncFltRteInc **EFT** 13.87 12.18 -12.2 EV SenFIRtTr **EFR** 13.65 11.81 -13.5 EVSnrIncm **EVF** 6.50 5.94 -8.6 6.8 FT/Sr Fltg Rte Inc 2 **FCT** 12.68 11.13 -12.2 FT/Sr Fltg Rte 2022 TgTr **FIV** 9.25 8.62 -6.8 9.3 3.4 Highland Income **HFRO** 12.64 8.88 -29.7 10.4 InvDYCrOpp **VTA** 11.01 9.20 -16.4 9.8 9.8 7.5 InvSnrIncTr **VVR** Nuveen Credit Strat Inc JQC 6.98 6.10 -12.6 18.1 NuvFloatRateIncFd JFR 9.63 8.34 -13.4 NuvFloatRteIncOppty **JRO** 9.54 8.27 -13.3 8.2 PionrFltRate Tr **PHD** 10.94 10.34 -5.5 6.9

Prem12 Mo NAV Close /Disc Yld Fund (SYM) Barings Glb SD HY Bd BGH 15.11 13.40 -11.3 11.5 BR Corporate HY **HYT** 11.49 11.09 BlackRockLtd Dur Inc **BLW** 16.41 15.02 BNY Mellon Hi Yield Str **DHF** 3.15 2.75 -12.7 9.4 Brookfield Real Asst Inc **RA** 19.49 17.11 -12.2 14.1 CrSuisHighYld **DHY** 2.42 2.11 -12.8 DoubleLine Inc Sol **DSL** 16.58 16.18 -2.4

 DoubleLine Yld Opps DLY
 NA
 NA
 NA
 NS

 EVHilnc2021 EHT
 9.83
 9.61
 -2.2
 4.0

 First Tr Hilnc Lng/Shrt FSD
 15.88
 13.99
 -11.9
 9.3

 IVY HIGH INCOME OPP IVH
 13.71
 12.06
 -12.0
 10.3

 NeubHgYIdStrt **NHS** 12.01 11.20 -6.7 New Amer Hi Inc **HYB** 9.53 8.30 -12.9 NexPointStratOppty **NHF** 17.35 9.26 -46.6 NuveenClNov2021Tgt **JHB** 9.42 9.16 -2.8 4.9 Nuveen Crdt Opps 2022 TT JCO 8.18 8.10 Nuveen Global High Inc JGH 16.19 14.18 -12.4 8.9 PGIM High Yield Bond ISD 16.10 14.06 -12.7 PioneerHilncmTr **PHT** 8.91 8.04 Wells Fargo Income Oppty EAD 8.58 7.47 -12.9 WstAstHIF II HIX 7.05 6.67 Western Asset Hi Inc Opp HIO 5.37 4.99 Western Asset Hi Yld D O HYI 15.58 14.42 Other Domestic Taxable Bond Funds

Ares Dynamic Crdt Alloc ARDC 14.85 12.65 -14.8 Barings Part Inv MPV NA 10.99 BlackRock Mlt-Sctr Inc BIT 17.82 16.08 BlackRock Tax Muni Bd **BBN 25.07 26.29 +4.9** DoubleLine:Oppor Crdt Fd DBL 19.36 19.14 Duff&Ph Util Cor **DUC** 9.68 9.22 -4.8 EVLmtDurlncm **EVV** 13.36 11.80 -11.7 Franklin Ltd Dur Income **FTF** 9.33 8.72 J Han Investors **JHI** 17.73 16.47 KKR Income Opportunities **KIO** 14.67 13.56 MFS Charter **MCR** 8.84 8.57 Nuveen Taxable Muni Inc NBB 22.68 22.64 -0.2 PIMCO Corp & Inc Oppty PTY 12.77 16.16 +26.5 PIMCOCorp & Inc Strat PCN 13.08 15.88 +21.4 8.9
PIMCOCorp & Inc Strat PCN 13.08 15.88 +21.4 8.9
PIMCO IncmStrFd PFL 9.72 10.10 +3.9 10.6
PIMCO IncmStrFd II PFN 8.71 9.06 +4.0 10.5 Putnam Mas Int **PIM** 4.34 4.14 -4.6 8.6 Putnam Prem Inc **PPT** 4.80 4.60 -4.2 9.1 Wells Fargo Multi-Sector **ERC 12.41 11.33 -8.7 10.4** World Income Funds

Abrdn AP IncFd FAX NA 4.11 NA
BrndywnGLB Glb Inc Oppts BWG 13.88 12.45 -10.3 EtnVncStDivlnc **EVG** 13.36 11.47 -14.1 MS EmMktDomDebt EDD 7.00 5.81 -17.0 PIMCO Dyn Crd & Mrt Inc PCI 18.88 19.01 PIMCO Dynamic Income PDI 23.49 24.49 +4.3 PIMCO Income Opportunity **PKO 22.25 23.46**

 PIMCO Stratg Inc RCS
 6.23
 6.39
 +2.6

 Templeton Em Inc TEI
 9.04
 7.52
 -16.8

 Templtn Gibl Inc GiM
 6.14
 5.30
 -13.7

 +2.6 10.9 WstAstEmergDebt **EMD** 15.14 13.09 -13.5 Western Asset GI Cr D Op **GDO** 18.36 17.25 -6.0 National Muni Bond Funds

AllBerNatlMunInc AFB 15.09 13.49 -10.6 BlackRock Muni 2030 Tot BTT 26.15 24.58 BlackRock Muni **BFK** 14.28 14.00 BlackRock Muni II BLE 14.75 14.65 BlckRk Muni Inc Qly BYM 15.55 14.06 4.3 4.2 BR MuniAssets Fd MUA 14.02 14.34 BR MuniEnhanced MEN 12.19 11.17 BR MuniHoldings Qly **MFL** 14.73 13.30 BR MH Qly 2 **MUE** 14.01 12.79 4.0 4.2 4.7 4.6 4.7 4.8 4.1 4.1 3.9 4.6 4.9 5.0 4.2 4.2 4.4 BR MuniHoldngs **MHD** 16.76 15.40 BR MuniVest Fd **MVF** 9.61 8.73 BR MuniVest 2 MVT 15.08 13.88 BR MuniYield Fd **MYD** 14.74 13.59 BR MuniYield Qlty **MQY** 16.26 15.68 BR MuniYld Qlty2 **MQT** 14.25 13.16 BR MuniYld Qly 3 **MYI** 14.85 13.36 -10.0 BNY Mellon Muni Bd Infra **DMB** 14.24 13.57 -4.7 BNY Mellon Str Muni Bond DSM 8.13 7.45 BNY Mellon Strat Muni LEO 8.42 8.28

High Yield Bond Funds
AllianceBernGlHilncm AWF 12.32 10.73 -12.9 7.2 DWS Muni Inc **KTF** EVMuniBd **EIM** 12.54 11.20 -10.7 14.15 12.89 -8.9 Angel Oak FS Inc Trm **FINS** NA 16.77 NA 7.7 $\mathsf{EVMuniIncm}\ \mathbf{EVN}$ 13.93 12.52 -10.1

No. of shrs in Price range (\$) \$ Value

Thomson Financial on September 4, and year-to-date stock performance of the company KEY: B: beneficial owner of more than 10% of a security class CB: chairman CEO: chief executive officer CFO: chief financial officer CO: chief operating officer D: director DO: director and beneficial owner GC: general counsel H: officer, director and beneficial owner I: indirect transaction filed through a trust, insider spouse, minor child or other O: officer OD: officer and director P: president UT: unknown **VP**: vice president Excludes pure options transactions

Trading by 'insiders' of a corporation, such as a company's CEO, vice president or director, potentially conveys new information about the prospects of a company. Insiders are required to report large trades to the SEC

within two business days. Here's a look at the biggest individual trades by insiders, based on data received by

Biggest weekly individual trades

Based on reports filed with regulators this past week

Company		IIIsidei	Title	trans (0003)	intransaction	(0003)	C103€ (ψ)	114 (70)
5								
Xerox Holdings	XRX	C. Icahn	ВІ	1,309	17.20-17.70	22,790	18.65	-49.4
SmileDirectClub	SDC	D. Katzman J. Katzman	CEOI DOI	1,278 663	8.05-8.10 8.05	10,320 5,338	9.58	9.6
Franchise Group	FRG	B. Kahn	CEO	175	25.50	4,463	25.17	8.5
Invesco	IVZ	M. Flanagan	CEOI	295	10.19-10.24	3,000	11.39	-36.7
Live Oak Bancshares	LOB	J. Mahan	CEOI	73	20.36-20.62	1,503	23.69	24.6
Baker Hughes	BKR	L. Simonelli	CEO	71	14.12	1,006	14.53	-43.3
BioMarin Pharmaceutical	BMRN	D. Pyott	D	13	78.22-78.84	1,002	76.00	-10.1
Flexsteel Industries	FLXS	D. Schmidt	co	59*	16.41-16.80	987	18.13	-9.0
Quidel	QDEL	D. Bryant	CEO	5	174.99	875	154.41	105.8
Aegion	AEGN	W. Galvin	D	50	16.26	813	16.00	-28.5
New Fortress Energy	NFE	C. Griffin	D	25	28.00-28.72	706	28.74	83.4
1Corcept Therapeutics	CORT	G. Baker	DI	46	12.48-12.50	578	19.98	65.1
Lindblad Expeditions Holdings	LIND	T. Smith	D	55	10.14	553	11.64	-28.8
Camping World Holdings	CWH	M. Lemonis	CEO	18	29.04	509	30.47	106.7
B. Riley Financial	RILY	B. Riley	CEO	18*	27.15	483	26.40	4.8
Calix	CALX	D. Listwin	DI	22	20.40	448	19.13	139.1
Flotek Industries	FTK	D. Nierenberg	DI	163	2.30-2.40	392	2.55	27.5
	Xerox Holdings SmileDirectClub Franchise Group Invesco Live Oak Bancshares Baker Hughes BioMarin Pharmaceutical Flexsteel Industries Quidel Aegion New Fortress Energy ICorcept Therapeutics Lindblad Expeditions Holdings Camping World Holdings B. Riley Financial Calix	Xerox Holdings XRX SmileDirectClub SDC Franchise Group FRG Invesco IVZ Live Oak Bancshares LOB Baker Hughes BKR BioMarin Pharmaceutical BMRN Flexsteel Industries FLXS Quidel QDEL Aegion AEGN New Fortress Energy NFE ICorcept Therapeutics CORT Lindblad Expeditions Holdings LIND Camping World Holdings CWH B. Riley Financial RILY Calix CALX	Xerox Holdings XRX C. Icahn SmileDirectClub SDC D. Katzman J. Katzman J. Katzman Franchise Group FRG B. Kahn Invesco IVZ M. Flanagan Live Oak Bancshares LOB J. Mahan Baker Hughes BKR L. Simonelli BioMarin Pharmaceutical BMRN D. Pyott Flexsteel Industries FLXS D. Schmidt Quidel QDEL D. Bryant Aegion AEGN W. Galvin New Fortress Energy NFE C. Griffin ICorcept Therapeutics CORT G. Baker Lindblad Expeditions Holdings LIND T. Smith Camping World Holdings CWH M. Lemonis B. Riley Financial RILY B. Riley Calix CALX D. Listwin	Xerox Holdings XRX C. Icahn BI SmileDirectClub SDC D. Katzman DOI Franchise Group FRG B. Kahn CEO Invesco IVZ M. Flanagan CEOI Live Oak Bancshares LOB J. Mahan CEOI Baker Hughes BKR L. Simonelli CEO BioMarin Pharmaceutical BMRN D. Pyott D Flexsteel Industries FLXS D. Schmidt CO Quidel QDEL D. Bryant CEO Aegion AEGN W. Galvin D New Fortress Energy NFE C. Griffin D ICorcept Therapeutics CORT G. Baker DI Lindblad Expeditions Holdings LIND T. Smith D Camping World Holdings CWH M. Lemonis CEO B. Riley Financial RILY B. Riley CEO	Xerox Holdings XRX C. Icahn BI 1,309 SmileDirectClub SDC D. Katzman DOI 663 Franchise Group FRG B. Kahn CEO 175 Invesco IVZ M. Flanagan CEOI 295 Live Oak Bancshares LOB J. Mahan CEOI 73 Baker Hughes BKR L. Simonelli CEO 71 BioMarin Pharmaceutical BMRN D. Pyott D 13 Flexsteel Industries FLXS D. Schmidt CO 59* Quidel QDEL D. Bryant CEO 5 Aegion AEGN W. Galvin D 50 New Fortress Energy NFE C. Griffin D 25 Icorcept Therapeutics CORT G. Baker DI 46 Lindblad Expeditions Holdings LIND T. Smith D 55 Camping World Holdings CWH M. Lemonis CEO 18* B. Riley Financial RLY <td>Xerox Holdings XRX C. Icahn BI 1,309 17.20-17.70 SmileDirectClub SDC D. Katzman DOI 663 8.05-8.10 B.05 Franchise Group FRG B. Kahn CEO 175 25.50 Invesco IVZ M. Flanagan CEOI 295 10.19-10.24 Live Oak Bancshares LOB J. Mahan CEOI 73 20.36-20.62 Baker Hughes BKR L. Simonelli CEO 71 14.12 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 Quidel QDEL D. Bryant CEO 5 174.99 Aegion AEGN W. Galvin D 50 16.26 New Fortress Energy NFE C. Griffin D 25 28.00-28.72 Icorcept Therapeutics CORT G. Baker DI 46 12.48-12.50 Lindblad Expediti</td> <td>Xerox Holdings XRX C. Icahn BI 1,309 17.20-17.70 22,790 SmileDirectClub SDC D. Katzman DOI 663 8.05-8.10 10,320 (8.05) 5,338 Franchise Group FRG B. Kahn CEO 175 25.50 4,463 Invesco IVZ M. Flanagan CEO 175 25.50 4,463 Live Oak Bancshares LOB J. Mahan CEO 173 20.36-20.62 1,503 Baker Hughes BKR L. Simonelli CEO 71 14.12 1,006 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 1,002 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 987 Quidel QDEL D. Bryant CEO 5 174.99 875 Aegion AEGN W. Galvin D 50 16.26 813 New Fortress Energy NFE C. Griffin D 25</td> <td>Xerox Holdings XRX C.Icahn BI 1,309 17.20-17.70 22,790 18.65 SmileDirectClub SDC D. Katzman J. Katzman DOI 663 8.05-8.10 10,320 5,388 9.58 Franchise Group FRG B. Kahn CEO 175 25.50 4,463 25.17 Invesco IVZ M. Flanagan CEO 295 10.19-10.24 3,000 11.39 Live Oak Bancshares LOB J. Mahan CEO 73 20.36-20.62 1,503 23.69 Baker Hughes BKR L. Simonelli CEO 71 14.12 1,006 14.53 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 1,002 76.00 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 987 18.13 Quidel QDEL D. Bryant CEO 5 174.99 875 154.41 Aegion AEGN W. Galvin D 50 16.</td>	Xerox Holdings XRX C. Icahn BI 1,309 17.20-17.70 SmileDirectClub SDC D. Katzman DOI 663 8.05-8.10 B.05 Franchise Group FRG B. Kahn CEO 175 25.50 Invesco IVZ M. Flanagan CEOI 295 10.19-10.24 Live Oak Bancshares LOB J. Mahan CEOI 73 20.36-20.62 Baker Hughes BKR L. Simonelli CEO 71 14.12 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 Quidel QDEL D. Bryant CEO 5 174.99 Aegion AEGN W. Galvin D 50 16.26 New Fortress Energy NFE C. Griffin D 25 28.00-28.72 Icorcept Therapeutics CORT G. Baker DI 46 12.48-12.50 Lindblad Expediti	Xerox Holdings XRX C. Icahn BI 1,309 17.20-17.70 22,790 SmileDirectClub SDC D. Katzman DOI 663 8.05-8.10 10,320 (8.05) 5,338 Franchise Group FRG B. Kahn CEO 175 25.50 4,463 Invesco IVZ M. Flanagan CEO 175 25.50 4,463 Live Oak Bancshares LOB J. Mahan CEO 173 20.36-20.62 1,503 Baker Hughes BKR L. Simonelli CEO 71 14.12 1,006 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 1,002 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 987 Quidel QDEL D. Bryant CEO 5 174.99 875 Aegion AEGN W. Galvin D 50 16.26 813 New Fortress Energy NFE C. Griffin D 25	Xerox Holdings XRX C.Icahn BI 1,309 17.20-17.70 22,790 18.65 SmileDirectClub SDC D. Katzman J. Katzman DOI 663 8.05-8.10 10,320 5,388 9.58 Franchise Group FRG B. Kahn CEO 175 25.50 4,463 25.17 Invesco IVZ M. Flanagan CEO 295 10.19-10.24 3,000 11.39 Live Oak Bancshares LOB J. Mahan CEO 73 20.36-20.62 1,503 23.69 Baker Hughes BKR L. Simonelli CEO 71 14.12 1,006 14.53 BioMarin Pharmaceutical BMRN D. Pyott D 13 78.22-78.84 1,002 76.00 Flexsteel Industries FLXS D. Schmidt CO 59* 16.41-16.80 987 18.13 Quidel QDEL D. Bryant CEO 5 174.99 875 154.41 Aegion AEGN W. Galvin D 50 16.

Copt 1	Bill.Com Holdings	BILL	D. Chao	DI	4,000	96.37	385,480	87.05	128.8
Sept.1									
Sept. 1-2	Snap	SNAP	E. Spiegel	CEO	5,942	22.13-23.04	133,772	22.44	37.4
Aug. 27	Procter & Gamble	PG	N. Peltz	DI	697	138.56-139.36	96,759	137.96	10.5
Aug. 25	L Brands	LB	L. Wexner	DOI	3,000	29.70	89,100	30.14	66.3
Aug. 27-28	Intuit	INTU	S. Goodarzi	CEO	184	344.37-347.37	63,642	333.11	27.2
Sept.1	Workday	WDAY	D. Duffield	DO	207	238.67-244.40	50,007	215.80	31.2
Aug. 31			M. Mcnamara	D	150	239.00-246.72	36,292		
Aug. 31	Estee Lauder Companies	EL	F. Freda	CEO	184	219.85-222.61	40,678	216.22	4.7
Sept. 1-2	Dollar General	DG	T. Vasos	CEO	198	200.07-202.17	39,655	195.72	25.5
Aug. 28	Ceridian HCM Holding	CDAY	D. Ossip	CEO	500	72.18	36,090	72.66	7.0
Sept.1	Stamps.Com	STMP	J. Carberry	CFO	121	241.59-249.96	29,766	220.93	164.5
Aug. 31-Sept.	Verisk Analytics	VRSK	S. Stephenson	CEOI	159	185.43-187.55	29,571	182.77	22.4
Aug. 26	Silgan Holdings	SLGN	D. Horrigan	DO	800	36.40	29,120	38.47	23.8
Sept.1	NVIDIA	NVDA	J. Huang	CEO	50	538.64-559.78	27,525	504.90	114.6
Aug. 26-27	Costar Group	CSGP	A. Florance	CEO	31	848.16-851.66	26,490	826.89	38.2
Aug. 28-Sept.]Fastly	FSLY	S. Dhaliwal	D	260*	90.32-97.10	24,316	80.92	303.2
Aug. 28	Regeneron Pharmaceuticals	REGN	C. Poon	D	40	598.91-603.20	24,049	580.36	54.6
Sept.1	Datadog	DDOG	O. Pomel	CEO	259*	83.25-87.07	22,151	79.57	110.6

tions were indirect **Two day transactior

Buying and selling by sector

Based on actual transaction dates in reports received this past week

Sector	Buying	Selling	Sector	Buying	Selling
Basic Industries	813,000	12,091,901	Finance	4,957,110	49,924,946
Business services	186,924	9,868,668	Health care	2,790,619	73,939,190
Capital goods	0	0	Industrial	109,981	85,341,004
Consumer durables	1,080,229	19,674,295	Media	0	7,912,903
Consumer nondurables	7,813	64,464,535	Technology	641,266	159,990,846
Consumer services	220,375	137,965,621	Transportation	0	20,417,389
Energy	1,836,599	16,662,106	Utilities	46,323	12,206,349

Sources: Thomson Financial; WSJ Market Data Group

Prem12 Mo Fund (SYM) NAV Close /Disc Yld	52 wk Prem Ttl	Prem12 Mo Fund (SYM) NAV Close /Disc Yld
EVNatMuniOpp EOT 21.32 20.51 -3.8 4.0	Fund (SYM) NAV Close /Disc Ret	CLIFFWATER CL FD;I 10.28 NA NA 4.4
InvAdvMuIncTril VKI 11.94 10.88 -8.9 4.8	Bluerock Total Inc+ RE:L 29.10 NA NA 1.9	CNR Strategic Credit 9.22 NA NA 9.1
Invesco MuniOp OIA 7.47 7.45 -0.3 5.1	Broadstone RI Est Acc:l 9.55 NA NA -5.0	FedProj&TrFinanceTendr 9.91 NA NA 3.8
InvescoMuOppTr VMO 13.36 12.37 -7.4 4.7	Broadstone RI Est Acc:W 9.54 NA NA -5.2	FS Global Crdt Opptys D NA NA NA 7.5
InvescoMuTr VKQ 13.37 12.23 -8.5 4.7	CIM RA&C A 25.08 NA NA NS	Garrison Capital Inc GARS NA 3.47 NA NA
InvescoQual Inc IQI 13.57 12.36 -8.9 4.7	CIM RA&C C 25.01 NA NA NS	Schrdrs Opp Inc;A 24.79 NA NA NS
InvTrInvGrMu VGM 13.79 12.51 -9.3 4.7	CIM RA&CI 25.10 NA NA NS	Schrdrs Opp Inc;A2 24.77 NA NA NS
InvescoValMunInc IIM 16.47 14.87 -9.7 4.6	CIMRA&CL 25.06 NA NA NS	Schrdrs Opp Inc;l 24.83 NA NA NS
MAINSTAY:MKDEFTRMUN OP MMD NA 20.70 NA 4.7	Clarion Partners REI D 9.82 NA NA NS	Schrdrs Opp Inc;SDR 24.86 NA NA NS
NeubrgrBrm NBH 14.90 14.80 -0.7 4.9	Clarion Partners REII 9.82 NA NA NS	Invesco Sr Loan A 6.05 NA NA 4.9
Nuveen AMT-Fr Mu Val NUW 16.96 16.25 -4.2 3.0	Clarion Partners RELT 9.81 NA NA NS	Invesco Sr Loan C 6.06 NA NA 4.1 Invesco Sr Loan IB 6.05 NA NA 5.2
Nuveen AMT-Fr Qlty Mun I NEA 15.69 14.25 -9.2 4.6	Clarion Partners REIT 9.80 NA NA NS	Invesco Sr Loan IB 6.05 NA NA 5.2 Invesco Sr Loan IC 6.05 NA NA 5.0
Nuveen AMT-Fr Mu CI NVG 16.98 15.55 -8.4 5.0	Griffin Inst Access RE:A 25.23 NA NA -3.6 Griffin Inst Access RE:C 24.31 NA NA -4.3	Invesco Sr Loan Y 6.05 NA NA 5.0
Nuveen Enh Muni Val NEV 15.26 14.90 -2.4 4.5	Griffin Inst Access RE:C 24.31 NA NA -4.3 Griffin Inst Access RE:I 25.56 NA NA -3.4	Pioneer Sec Inc 8.72 NA NA NS
Nuveen Int Dur Mun Term NID 13.88 13.36 -3.7 3.8	GS Real Est Div Inc:A 9.61 NA NA -5.8	High Yield Bond Funds
Nuveen Mu Crdt Opps NMCO 13.10 12.91 -1.5 NS	GS Real Est Div Inc:C 9.59 NA NA -6.4	Griffin Inst Access Cd:A 23.04 NA NA 6.5
Nuv Muni Credit Income NZF 16.23 14.76 -9.1 5.1	GS Real Est Div Incil 10.02 NA NA -5.6	Griffin Inst Access Cd:C 23.04 NA NA 6.5
NuvMuniHilncOpp NMZ 13.40 13.19 -1.6 5.3	GS Real Est Div Inc:L 9.61 NA NA -6.0	Griffin Inst Access Cd:F 23.04 NA NA 6.5
Nuveen Muni Val NUV 10.59 10.58 -0.1 3.4	GS Real Est Div Inc:W 9.75 NA NA -5.8	Griffin Inst Access Cd:I 23.04 NA NA 6.5
Nuveen Quality Muni Inc NAD 15.96 14.41 -9.7 4.5	NexPointRIEstStrat; A 15.36 NA NA -20.7	Griffin Inst Access Cd:L 23.03 NA NA 6.5
Nuveen Sel TF NXP 16.17 16.91 +4.6 3.2	NexPointRIEstStrat;C 15.53 NA NA -21.0	PIMCO Flexible Cr I;A-2 8.67 NA NA NS
Nuveen Sel TF 2 NXQ 15.45 15.12 -2.1 3.2	NexPointRIEstStrat; Z 15.51 NA NA -20.2	PIMCO Flexible Cr I;A-4 8.67 NA NA 10.6
Nuveen Sel TF 3 NXR 16.68 16.41 -1.6 3.1	PREDEX;I 25.31 NA NA 0.4	PIMCO Flexible Cr I;Inst 8.67 NA NA 11.4
PIMCO Munilno PMF 12.97 13.35 +2.9 5.0	PREDEX;T 25.39 NA NA 0.4	PionrILSBridge 10.00 NA NA 0.0
PIMCOMuniIncll PML 12.13 13.34 +10.0 5.4	PREDEX;W 25.39 NA NA 0.4	WA Middle Mkt Dbt 609.45 NA NA 8.3
Pimco Muni III PMX 11.05 11.40 +3.2 4.9	Principal Dvs Sel RA A 23.19 NA NA -5.8	WA Middle Mkt Inc 590.65 NA NA 9.7 Other Domestic Taxable Bond Funds
PioneerHilncAdv MAV 12.17 10.91 -10.4 4.2	Principal Dvs Sel RA Y 23.24 NA NA -5.5	Am Beacon Apollo TR:T 10.14 NA NA NS
PioneerMunHilcmT MHI 13.03 11.59 -11.1 4.6	SharesPost100;A 31.47 NA NA 8.1	Am Beacon Apollo TR:Y 10.14 NA NA 3.0
Putnam Mgd Inc PMM 7.99 7.72 -3.4 4.9	SharesPost100:I 31.68 NA NA 8.3	Am Beacon SP Enh Inc:T 9.22 NA NA NS
Putnam Muni Opp PMO 13.68 13.23 -3.3 4.8	SharesPost100:L 31.27 NA NA 7.8	Am Beacon SP Enh Inc:Y 9.25 NA NA 4.4
RiverNorth Mgd Dur Mun I RMM 18.66 16.86 -9.6 5.9 Western Asset Mgd Mun i MMU 13.64 12.20 -10.6 4.5	USQ Core Real Estate: 24.89 NA NA 0.1	BR Credit Strat; A 10.11 NA NA NS
Western Asset Mig Def Opp Tr MTT 20.81 20.24 -2.7 3.5	USQ Core Real Estate: IS 24.90 NA NA 0.2	BR Credit Strat;Inst 10.11 NA NA 5.1
Single State Muni Bond	Versus Cap MMgr RE Incil 26.83 NA NA NE	BlackRock Mlt-Sctr Oppty 83.94 NA NA 8.8
BlackRock CA Mun BFZ 15.54 13.44 -13.5 3.4	Versus Capital Real Asst 24.73 NA NA 0.0 Wildermuth Endwmnt: A 13.29 NA NA -1.3	BlackRock Mlt-Sec Opp II 86.64 NA NA 8.6
BR MH CA Qly Fd Inc. MUC 15.69 14.25 -9.2 3.8	Wildermuth Endwmnt: A 13.29 NA NA -1.3 Wildermuth Endwmnt: C 12.82 NA NA -2.2	Carlyle Tact Pvt Cred: A 8.35 NA NA 8.7
BRMH NJ Qly MUJ 15.76 13.98 -11.3 4.6	Wildermuth Endowment: 13.35 NA NA -1.5	Carlyle Tact Pvt Cred: 8.39 NA NA 9.6
BRMHNYQIy MHN 14.90 13.79 -7.4 4.0	Income & Preferred Stock Funds	Carlyle Tact Pvt Cred:L 8.35 NA NA 9.1
BR MuniYld CA MYC 15.87 13.90 -12.4 3.6	A3 Alternative Cr 10.63 NA NA NS	Carlyle Tact Pvt Cred:M 8.40 NA NA NS Carlyle Tact Pvt Cred:N 8.35 NA NA 9.7
BR MuniYld CA Qly MCA 15.81 14.59 -7.7 3.9	Calamos L/S Eqty and DI CPZ NA 15.08 NA NS	Carlyle Tact Pvt Cred: Y 8.35 NA NA 9.7
BR MuniYld MI Qly MIY 15.67 13.99 -10.7 4.2	Destra Multi-Altrntv; A 11.63 NA NA -8.3	CION Ares Dvsfd Crdt; A 23.77 NA NA 5.9
BR MuniYld NJ MYJ 15.80 14.19 -10.2 5.1	Destra Multi-Altrntv; C 11.14 NA NA -9.1	CION Ares Dysfd Crdt;C 23.73 NA NA 5.9
BR MuniYld NY Qly MYN 14.31 13.12 -8.3 3.9	Destra Multi-Altrntv;I 11.86 NA NA -8.1	CION Ares Dysfd Crdt; 23.84 NA NA 5.8
EVCAMuniBd EVM 12.70 11.45 -9.8 3.9	Destra Multi-Altrntv; T 11.30 NA NA -8.8	CION Ares Dysfd Crdt; L 23.76 NA NA 5.8
Eaton Vance NY Muni Bd ENX 13.34 11.91 -10.7 4.0	Flat Rock Opportunity 17.17 NA NA -2.9	CION Ares Dvsfd Crdt;U 23.83 NA NA NS
InvCaValMuIncTr VCV 13.51 12.37 -8.4 4.2	The Relative Value:CIA 24.63 NA NA 1.3	CION Ares Dvsfd Crdt:U2 23.84 NA NA NS
InvPAValMuIncTr VPV 14.02 12.54 -10.6 4.6	Variant Altrntv Inc:Inst 26.51 NA NA 6.0	CION Ares Dvsfd Crdt;W 23.89 NA NA 5.8
InvTrInvGrNYMu VTN 14.11 12.42 -12.0 4.5	Variant Altrntv Inc:Inv 26.51 NA NA 5.7	CNR Select Strategies 11.18 NA NA 0.0
Nuveen CA AMT-F Qual MI NKX 16.64 15.32 -7.9 4.0	Convertible Sec's. Funds	GL Beyond Income 0.89 NA NA NE
Nuveen CA Val NCA 10.76 10.54 -2.0 3.1	Calmos Dyn Conv and Inc CCD 25.50 22.61 -11.3 39.3	KKR CREDIT OPPTY;I 26.16 NA NA NS
NuveenCAQtyMulnc NAC 16.06 14.50 -9.7 4.2	World Equity Funds	KKR CREDIT OPPTY;T 25.91 NA NA NS
Nuveen MD Qual Muni Inc NMY 14.97 13.08 -12.6 4.1	ACAP Strategic: A 25.34 NA NA 38.4	KKR CREDIT OPPTY;U NA NA NA NS
Nuveen MI Qual Muni Inc NUM 16.05 14.04 -12.5 3.9	ACAP Strategic:W 18.90 NA NA 39.4	Lord Abbett Cred Opps Fd 9.39 NA NA NS Lord Abbett Cred Opps Fd 9.40 NA NA 8.2
NuvNJ Qual Muni Inc NXJ 16.27 13.64 -16.2 4.6	BMO LGM Front ME;I 6.29 NA NA -23.3 CalamosGlbTotRet CGO 12.68 12.81 +1.0 20.1	Lord Abbett Crd Op:U 9.40 NA NA NS
Nuveen NY AMT/Fr Qual MI NRK 14.77 12.90 -12.7 4.1	Primark Priv Eq Inv:III 10.00 NA NA NS	Palmer Square Opp Inc 17.36 NA NA 6.5
Nuveen NY Qual Muni Inc NAN 15.26 13.74 -10.0 4.3	VirtusTotalRetFd ZTR 9.00 7.98 -11.3 -2.6	Resource Credit Inc:A 9.81 NA NA 7.9
Nuveen OH Qual Muni Inc NUO 17.59 15.22 -13.5 3.4		Resource Credit Inc:C 9.90 NA NA 7.1
Nuveen PA Qual Muni Inc NQP 15.66 13.68 -12.6 4.5	Prem12 Mo Fund (SYM) NAV Close /Disc Yld	Resource Credit Inc: 9.83 NA NA 8.1
Nuveen VA Qity Mun Inc NPV 15.05 15.27 +1.5 3.5		Resource Credit Inc:L 9.80 NA NA 7.6
PIMCO CA PCQ 13.96 17.42 +24.8 4.6	Loan Participation Funds	Resource Credit Inc:W 9.80 NA NA 7.9
PIMCOCAMunill PCK 8.87 9.10 +2.6 4.3	1WS Credit Income 19.20 NA NA 6.2	Thrivent Church Ln&Inc:S 10.96 NA NA 2.8
Pimco CA Muni III PZC 1 0.06 10.64 +5.8 4.5	AlphCntrc Prime Merid In 9.96 NA NA NS	World Income Funds
52 wk	Angel Oak Str Crdt:Inst 21.63 NA NA 8.0 Axonic Alternative Inc 20.93 NA NA 3.9	Destra Int&Evt-Dvn Crd:A 23.84 NA NA 5.4
Prem Ttl Fund (SYM) NAV Close /Disc Ret	Axonic Alternative Inc 20.93 NA NA 3.9 Blackstone/GSO FR EI D 22.93 NA NA 6.1	Destra Int&Evt-Dvn Crd:I 23.85 NA NA 5.6
	Blackstone/GSO FR EI J 22.90 NA NA 6.4	Destra Int&Evt-Dvn Crd:L 23.83 NA NA 5.1
General Equity Funds FNEX Ventures 10.00 NA NA N	Blackstone/GSOFREIT 22.86 NA NA 5.9	Destra Int&Evt-Dvn Crd:T 23.81 NA NA 4.9
FNEX Ventures 10.00 NA NA N	5.5 NA NA 3.7	National Muni Bond Funds

Borrowing Benchmarks | wsj.com/market-data/bonds/benchmarks

Blackstone/GSO FR EIT-I 23.35

Blackstone/GSO FR EI U 23.87

BISTN Commnty Dev BNYM Alcntr Glb MS Cr Fd NA

NA

NA NA

Money Rates

Specialized Equity Funds

Bluerock Total Inc+ RE:C 27.98 Bluerock Total Inc+ RE:I 29.88

Bluerock Total Inc+ RE: A 29.34 NA

NA 2.1

September 7, 2020

PIMCO Flex Mun Inc;A-3 11.04 PIMCO Flex Mun Inc:A1 11.04

PIMCO Flex Mun Inc;Inst 11.04 Tortoise Tax-Adv Soc Inf 9.65

Treasury

MBS

Friday

0.130 40.600 6.007 0.002

0.132 82 000 6 699 0 011

Key annual interest rates paid to borrow or lend money in U.S. and international markets. Rates below are a

guide to ge	eneral le	vels b	out do	n't alw	ays repres	ent act	ual tra	nsacti	ons.					
	Inflat	ion				Late	Week est ago	: —52 Hig	-WEEK— h Low		Lates	Week ago	—52- High	WEEK— Low
	July inde leve		hg From ne '20	(%) July '19				ept. 4,		13 weeks 26 weeks	0.105	0.100 0.120	1.945	0.000
U.S. consun	ner price	index				July ir		Cha Fror	n(%)					
Allitems	259.1		0.51	1.0				une '20	July '19	Se	condar	y mar	ket	
Core	267.7	03	0.53	1.6	U.S. consu	mer nri	ce inde	Y		Fannie Ma	e			
Int	ernatio	nal ra	tes		Allitems	•	9.101	0.51	1.0	30-year mort	gage yield:	S		
	,	Week	_E2.\	Week –	Core	26	7.703	0.53	1.6	30 days		1.895		
	Latest	ago	High	Low	In	ternat	ional r	ates		60 days	1.95/	1.951	3.403	1.804
Prime rates										Othe	er short	-term	rates	
U.S.	3.25	3.25	5.25	n.a.		Latest	Week ago	- 52 High	-Week [—] Low			Week	- 52-	Week –
Canada	2.45	2.45	3.95	n.a.	Prime rate	es	age				Latest	ago	high	low
Japan	1.475	1.475	1.475	n.a.	U.S.	3.25	3.25	5.25	3.25	Call money	,			
Policy Rate	s				Canada	2.45	2.45	3.95	2.45		2.00	2.00	4.00	2.00
Euro zone	0.00		0.00	n.a.	Japan	1.475	1.475	1.475	1.475	Commerci	al paper	(AA fir	iancia	I)
Switzerland	0.00	0.00	0.50	n.a.	Policy Rat	es				90 days	n.a.	n.a.	2.53	0.04
Britain Australia	0.10 0.25	0.10 0.25	0.75 1.00	n.a. n.a.	Euro zone	0.00	0.00	0.00	0.00	Libor				
			2.00		Switzerland Britain	0.00 0.10	0.00 0.10	0.50 0.75	0.00 0.10	One month	0.15425	0.15675	2.05700	0.14925
Overnight r U.S.		0.10	3.40	-0.07	Australia	0.25	0.25	1.00	0.25	Three month	0.24800			0.23375
				-0.07	Overnight	repurc	hase			Six month One year	0.29213 0.42100			0.28725 0.42100
Othe	r short-	term	rates		U.S.	0.10	0.10	3.40	-0.07		0.42100	0.44727	2.07413	0.42100
	,	Week	−52-\	Week —	115	. gover	nmon	tratos	,	Euro Libor	0.545	0.545	0.3/0	0 (21
La		igo	high	low		gover	IIIIIeii	trates	•	One month Three month				-0.621 -0.539
Libor					Discount					Six month	-0.485	-0.473	-0.052	-0.491
One month	0.15563	0.15675	2.05700	n.a.		0.25	0.25	2.75	0.25	One year	-0.398	-0.371	0.008	-0.441
Three month	0.24175	0.24088	2.16413	n.a.	Federal fu		0.0000	2 2/00	0.0400	Secured O	vernight	Financ	ing R	ate
Six month	0.29325			n.a.	Effective rate High				0.1000		0.10	0.07	5.25	0.01
One year Euro Libor	0.42100	0.44525	2.0/413	n.a.	Low	0.0500	0.0500	2.0500	0.0100			Value	-52-	Week -
One month	-0.551	-0 5/15	-U 360	n.a.	Bid				0.0100	L	atest	Traded	High	Low
Three month	-0.513			n.a.	Offer	0.0900	0.1100	2.5000	0.0500	DTCC GCF	Repo Inc	lex		
Circonomble	0.403	0.472	0.052		Troacury	sill auct	ion			т	0.120	40 (00	/ 007	0.000

Notes on data:

One year

U.S. prime rate is the base rate on corporate loans posted by at least 70% of the 10 largest U.S. banks, and is effective March 16, 2020. Other prime rates aren't directly comparable; lending practices vary widely by location; Discount rate is effective March 16, 2020. Secured Overnight Financing Rate is as of September 3, 2020. DTCC GCF Repo Index is Depository Trust & Clearing Corp.'s weighted average for overnight trades in applicable CUSIPs. Value traded is in billions of U.S. dollars. Federal-funds rates are Tullett Prebon rates as of 5:30 p.m. ET.

4 weeks

Treasury bill auction

0.090 0.080 2.025 0.000

Sources: Federal Reserve; Bureau of Labor Statistics; DTCC; FactSet; Tullett Prebon Information, Ltd.

0.492 -0.473 -0.052

-0.404 -0.371 0.008

Cash Prices | wsj.com/market-data/commodities Monday, September 7, 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

	Monday		Friday		Friday
(U.S.\$ equivalent)	*1937.60 *1926.30 *£20.1900 *26.8150	American Eagle-e Mexican peso-e Austria crown-e Austria phil-e Silver, troy oz. Engelhard industrial Handy & Harman base Handy & Harman fabricated LBMA spot price	2024.19 2332.35 1892.63 2024.19 26.7000 26.4300 33.0380 *£20.3000	Meat-bonemeal,50% pro Mnpls-u,w Oats,No.2 milling,Mnpls-u Rice, Long Grain Milled, No. 2 AR-u,w Sorghum,(Milo) No.2 Gulf-u,k SoybeanMeal,Cent IL,rail,ton48%-u Soybeans,No.1 yllw IL-bp,u Wheat,Spring14%-pro Mnpls-u Wheat,No.2 soft red,St.Louis-u Wheat-Hard-KC (USDA) \$ per bu-u	183 2.9350 n.a. 5.3300 310.10 9.4850 6.8250 5.6325 4.8250
Other metals LBMA Platinum Price PM Aluminum, LME, \$ per metric ton	*903.0 *1753.0	(U.S.\$ equivalent) Coins,wholesale \$1,000 face-a	*26.9000 20472	Wheat,No.1soft white,PortId,OR-u Food	5.2850
Fibers and Textile: Cotlook 'A' Index-t Food	*69.85	Other metals LBMA Platinum Price PM Platinum,Engelhard industrial Palladium,Engelhard industrial Aluminum, LME, \$per metric ton Cooper,Comex spot	*898.0 908.0 2302.0 *1743.5 3.0465	Beef,carcass equiv. index choice 1-3,600-900 lbsu select 1-3,600-900 lbsu sroilers, National comp wtd. avgu,w Butter,AA Chicago	184.90 167.92 0.6398 1.4925
Coffee,Brazilian,Comp Coffee,Colombian,NY Friday, September 4, 2020		Iron Ore, 62% Fe CFR China-s Shredded Scrap, US Midwest-s,m Steel, HRC USA, FOB Midwest Mill-s Fibers and Textile		Cheddar cheese,bbl,Chicago Cheddar cheese,blk,Chicago Milk,Nonfat dry,Chicago lb. Coffee,Brazilian,Comp Coffee,Colombian, NY	170.00 212.50 103.00 1.2301 1.7815
Energy Coal,C.Aplc.,12500Btu,1.2S02-r,w Coal,PwdrRvrBsn,8800Btu,0.8S02-r,w	55.500 11.600	Burlap,10-oz,40-inch NY yd-n,w Cotton,1 1/16 std lw-mdMphs-u Cotlook 'A' Index-t Hides,hvy native steers piece fob-u Wool,64s,staple,Terr del-u.w	0.6200 0.5962 *70.50 n.a. n.a.	Eggs,large white,Chicago-u Flour,hard winter KC Hams,17-20 lbs,Mirl-US fob-u Hogs,lowa-So. Minnesota-u Pork bellies,12-14 lb MidUS-u Pork loins,13-19 lb MidUS-u	0.8050 14.60 n.a. 57.93 n.a. 0.7461
Metals Gold, per troy oz		Grains and Feeds		Steers,TexOkla. Choice-u Steers,feeder,Okla. City-u,w	102.00 150.46
Engelhard industrial Handy & Harman base Handy & Harman fabricated LBMA Gold Price AM LBMA Gold Price PM Krugerrand, wholesale-e Maple Leaf-e	1926.00 1926.30 2138.19 *1934.10 *1940.45 2004.91 2024.19	Barley,top-quality Mnpls-u Bran,wheat middlings, KC-u Corn,No. 2 yellow,Cent IL-bp,u Corn gluten feed,Midwest-u,w Corn gluten meal,Midwest-u,w Cottonseed meal-u,w Hominy feed,Cent IL-u,w	n.a. 88 3.4300 103.6 410.3 n.a. 95	Fats and Oils Com oil,crude wet/dry mill wtd. avgu,w Grease,choice white,Chicago-h Lard,Chicago-u Soybean oil,crude;Centl IL-u Tallow,bleach;Chicago-h Tallow,edible;Chicago-u	43.5000 n.a. n.a. 0.3415 n.a. n.a.

KEY TO CODES: A=ask; B=bid; BP=country elevator bids to producers; C=corrected; E=Manfra,Tordella & Brooks; G=ICE; H=American Commodities Brokerage Co; M=monthly; N=nominal; n.a.=not quoted or not available; R=SNL Energy; S=Platts-TSI; T=Cotlook Limited; U=USDA; W=weekly; Z=not quoted; K=Prices are now in \$ per bushel *Data as of 9/3

Source: Dow Jones Market Data

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MARKETS

European Stocks Rebound From Rout

By Anna Isaac

European stocks climbed after wild swings in tech shares dragged markets lower last week. U.S. stock trading was closed for Labor Day.

The pan-continental Stoxx Europe 600 finished the day up 1.7%.

Early Tuesday, in Asia, Japan's Nikkei **MONDAY'S** Stock Average MARKETS was up 0.5% at

midday. Soft-Bank Group, which lost 7.2% on Monday, was down a further 1.3%. It was disclosed Monday that SoftBank placed a bet on a rise in tech stocks involving options tied to as much as \$50 billion in shares.

In U.S. stock futures trading, S&P 500 futures were up 0.4% Monday night. But Nasdaq futures were down 0.5%.

The gains in Europe came as data on German industrial production showed a continued but slowing recovery. Concerns remained that the longrunning tech rally which has

to records, skewing indexes Index futures performance toward technology companies, might be ending.

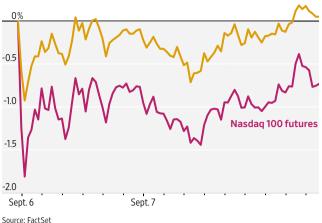
'We're getting a bit of a rotation out of the stay-at-home trade," said Mark Haefele, chief investment officer at UBS Global Wealth Management. "That's boding well for the value and cyclical stocks.

"It also should be good for Europe as while infections have risen a little bit, death rates are extremely low and people are starting to focus on the recovery," He added.

Low interest rates, a weak outlook for inflation and the risk of a prolonged recession were also making it hard for strategists to plan for a shift downward in equity prices.

"We're exiting the exciting part of the recovery where you've had rapid growth for a short period of time," said James McCormick, a strategist at NatWest Markets. "As we reach the cruising altitude for the recovery, we're going to find it a lot more worrying."

"If equities and credit do driven major U.S. benchmarks experience some downside,



where are you going to go? You've got record low yields, fixed income isn't going to provide that natural hedge anymore," Mr. McCormick

On Monday, shares in Semiconductor Manufacturing International Corp., which is China's most advanced chip maker, fell as much as 24% in Hong Kong after the U.S. government said it was considering placing export restrictions the company. The step would mark a major escalation in the Trump administration's crackdown on Chinese technology companies. Early Tues-

S&P 500 futures

day, the shares were up 2.6%. In Shanghai, where the company recently raised billions of dollars through a second listing to boost its pro-

duction capacity, SMIC shares fell more than 9% and were down 1.4% early Tuesday.

In a day thin on data due to the U.S. holiday, China's exports continued their strong performance in August, as the continued global recovery boosted external demand.

Exports rose 9.5% from a year earlier, following a 7.2% increase in July, the General Administration of Customs said. Economists in a Wall Street Journal poll had expected 7.3% growth.

German industrial production increased for the third consecutive month in July, but its recovery lost steam, federal statistics office Destatis said. Economists said the data suggested the German manufacturing sector was still far from a full recovery.

Segments of the Stoxx Europe 600 most exposed to bets on industrials led gains in the

In currencies, the ICE Dollar Index, which tracks the dollar against a basket of major currencies, rose 0.4%. The British pound fell 0.9% against the dollar and 0.7% against the euro.

News reports suggested a worsening risk the U.K. would exit from a transition phase at the end of the year without striking a trade deal with its largest trading partner, the European Union. This, along with the prospect of potential tax increases and rising coronavirus cases, weighed on sterling.

"The temperature in talks has risen overnight," said Jordan Rochester, currency analvst at Nomura Bank. "The mood music was awful for the past few weeks and the market largely ignored it—that is shifted. It seems like there is no optimism for a proper deal.

"I'm bearish on sterling, and I expect a weak pound to continue," he added.

In commodities, benchmark Brent crude fell 1.4% to \$42.06 a barrel after state oil giant Saudi Aramco on Saturday lowered pricing for oil it will sell to Asia and

Euro's Rally Spells Trouble For Companies on Continent

By Caitlin Ostroff

The euro's rally this year is seen as a vote of confidence by investors on the prospects for Europe's economic recovery. But companies and their shareholders are bracing for pain.

The euro has climbed 5.6% against the dollar this year, its biggest advance since 2017. On Sept. 1, it surpassed \$1.20 for the first time since May 2018. The currency is

CURRENCIES near a record what is known as a trade-weighted basis. That means the euro has also strengthened against the currencies of other major trad-

ing partners, including China

and the U.K. When the euro is strong, it makes exports such as machinerv. cars and chemicals from the eurozone more expensive for foreign buyers. It also erodes the value of overseas sales for companies in the 19 member states and can chip away at profits just as they

emerge from the Covid-19 economic crunch.

'We're at the start of the pain threshold when I look at the trade-weighted index," said Viraj Patel, a foreign-exchange and global-rates strategist at research firm Arkera. "If it stays here, it's a small problem. If it goes higher, it's a big problem.'

The gains in the euro mirror a weakening in the dollar. Investors have eased out of the greenback in recent months, after the Federal Reserve signaled it would keep interest rates low and allow inflation to climb. That has erased 3.7% from the dollar's value this strengthening euro

hasn't weighed much on European stocks yet, though it is one of the reasons equity benchmarks in the region have lagged behind the U.S. gauges, analysts said. The Euro Stoxx index, a benchmark tracking a broad swath of stocks in the euro area, is down about 11% this year, compared with the S&P 500's 6% advance.

The real impact from the currency's strengthening will start showing up on companies' bottom lines, analysts

But it is hard to quantify how much it will eat into corporate earnings. Companies with more than \$250 million in earnings typically deal in 40 currencies with more than 200 cross currencies, said Wolfgang Koester, senior strategist at Kyriba, a financial-software company.

"There is a tendency to really balance this off what's happening between the U.S. versus Europe, but in reality it's much more complex than that," Mr. Koester said.

Eurozone companies in general derive more of their income from abroad than large U.S. businesses, which rely more on the American consumer, said Lars Kreckel. global equity strategist at Legal & General Investment Man-

Market value change this year



When the euro is strong, it makes exports such as cars more expensive for foreign buyers.

agement. For every 10% that bank Intermonte Sim SpA. Italthe euro strengthens against the dollar, eurozone corporations stand to lose about 3% in profits, he estimated. For S&P 500 companies, a 10% appreciation in the dollar costs companies as much as 2%.

European car makers are likely to see profits eroded by a stronger euro, said Gianluca Bertuzzo, an equity research analyst at Italian investment ian-American **Fiat Chrysler Automobiles** NV and Italian racing-car manufacturer Ferrari see much of their sales outside the eurozone. Fiat Chrysler, for instance, draws an estimated 70% of its revenue from North America.

Ferrari only builds its cars in Italy, which means much of its costs are in euros while its sales are largely in other currencies. For every 1% that the euro strengthens against the dollar, Ferrari's earnings per share could fall about 1%, Mr. Bertuzzo estimated. The car maker's earnings for the third and fourth quarters, year over year, are likely to be eroded by the currency's depreciation.

Fiat Chrysler declined to comment. Ferrari didn't respond to requests for com-

Warnings About Tech Shares

Continued from page B1 already begun and what the broader effects on the rest of the market and the economy could be.

The danger signs cover three broad areas: overly optimistic sentiment, the impact of options trading, and the speed and scale of the rise of leviathan technology stocks. which have left much of the rest of the market in the dust.

ny indicator tied to the big tech stocks shows how sentiment is extremely positive, aided by the return of the day trader. This shows up both in the stock and option markets, where Japan's **SoftBank** has poured in roughly \$4 billion. Most obviously, trading volume on Nasdaq, where most of the tech stocks are listed, are running at more than double their levels before the pandemic, while trading in NYSE stocks—which surged when markets plunged—fell almost all the way back to normal.

Day traders piled into options, too, especially the call options that offer a way to multiply one's money if the market rises—or lose it all if it falls. Options trading took off as brokers made it free, and is focused on big, popular stocks. As a result, they became a lot more volatile, even as the price rose, because the brokers have to hedge their positions. Hedging call options accentuates moves in the price, because when the stock price rises, the dealers need to buy more to cover risk, and when the price falls they can sell. The optimism of SoftBank

and the day traders is visible in the ratio of calls on individual stocks to the defensive put options that protect against losses. Smoothing the noisy ratio over 10 days, on Wednesday call options outnumbered puts by the most since March 2000, the height of the dot-com bubble.

Options are intimately tied to volatility, and volatility has been weird. The VIX index of implied volatility on the S&P 500 usually falls

S&P 500 **Apple Amazon** Microsoft **Facebook Alphabet** \$0.5 \$1.0 \$0 trillion

when stocks rise a lot, but in the past two months it has risen even as the S&P had some of its best returns in history. The breakdown of normal market relationships is a good reason to worry.

Source: Refinitiv

Even as tech optimism is obvious, sentiment in much of the rest of the market remains morose. Bears still outnumber bulls in the weekly survey of members of the American Association of Individual Investors—a group that doesn't capture those new to trading since lockdown.

The split is captured by the gap in performance of the growth stocks and cheap stocks, known as value. By Wednesday's high, the Russell 1000 measure of growth stocks was up by a third this year, while the value index was down almost 8%.

Still, the excess is different from that of the dot-com bubble. Back then, stocks thrived on hope, with little in the way of sales and profits a figment of someone's spreadsheet. This time, the stocks that are up a lot are frequently highly profitable, and almost all are winners from the pandemic and from low bond yields. The danger isn't that they prove worthless, as with so many dot-coms. Instead, it is that investors are projecting that every year will be like this year.

Perhaps the biggest pandemic winner is Zoom Video Communications, which scored the rare success of turning its name into a verb. Sales and profit are soaringbut the shares are soaring even more. At 144 times its own upgraded forecast of operating profits (adjusted, but let's be optimistic!) its shares are priced not only for workfrom-home to become the norm, but for Zoom to beat deep-pocketed contenders for the verb, such as Microsoftowned Skype, Google's Meet and Facebook's WhatsApp.

\$1.5

Thursday's price moves showed what can happen when investors change their minds. Zoom shares fell 10%, while the biggest gainer in the S&P 500 was cruise line

Carnival, with a 5% rise.

The big tech stocks might have fallen, but they remain enormous. The market hasn't been so dominated by a handful of giants since the 1970s. The value of just the big five of Amazon, Apple, Alphabet, Facebook and Microsoft rose by \$2.87 trillion in the year to Wednesday, just ahead of the \$2.85 trillion rise in the S&P 500's value. The five then lost an astonishing \$522 billion of value on Thursday and Friday.

he difficulty with calling what's been going on a bubble is that it makes sense that the companies performing the best should also have the top-performing shares, and the shares of the companies doing the worst should plummet. When views on the pandemic and the political reaction switch, the winners rightly fall back and the losers jump.

The trouble is that momentum has taken hold too. The gap between the winners and losers is vast; on some measures it is the biggest ever. Small changes in reality or in sentiment can lead to big rotations when that gap closes just a little, as in last week.

Friday

up 0.6%

up 0.2%

up 0.5%

Peloton is expected to post earnings on Thursday of 9 cents a share.

THE TICKER | Market events coming this week

Tuesday

Consumer Credit June, previous up \$9 bil. July, expected up \$13 bil.

Earnings expected* Estimate/Year Ago(\$) Casey's General Stores

2.06/2.31 HealthEquity 0.27/0.45 Lululemon Athletica 0.56/0.96

Slack Technologies **(0.03)**/(0.14)

Wednesday

Mort. bankers indexes Purch., prev. down 0.2% Refinan., prev. down 3%

Earnings expected* Estimate/Year Ago(\$

American Eagle Outfitters **(0.17)**/0.39 BigCommerce Holdings

Descartes Systems 0.13/0.10 Group **HD** Supply Holdings

0.73/1.08 RH **3.40**/3.20 0.03/0.07 Zscaler

Thursday

Short-selling reports Ratio, days of trading volume of current position, at Aug 14

Nasdag

EIA status report Previous change in stocks in millions of barrels (0.50)/n.a. Crude-oil stocks down 9.4

Gasoline stocks down 4.3 Distillates down 1.7

EIA report: natural-gas billions of cubic feet

up 35 Initial jobless claims Previous

881,000 Expected 850,000

Earnings expected*

Chewy Oracle

(0.18)/(0.21) **0.86**/0.81 Peloton Interactive 0.09/(0.14)

Producer price index

All items, July

Aug., expected

Aug., expected

Wholesale inventories

June, previous down 1.4%

July, expected down 0.1%

Estimate/Year Ago(\$)

Core, July

Treasury budget

consumer-price index

up 0.6%

up 0.3%

up 0.6%

up 0.3%

All items, July

Aug., expected

Aug., expected

Core, July

Aug., '19

\$200.0 bil. deficit Aug., '20, exp

Earnings expected* Estimate/Year Ago(\$)

0.52/0.44

* FACTSET ESTIMATES EARNINGS-PER-SHARE ESTIMATES DON'T INCLUDE EXTRAORDINARY ITEMS (LOSSES IN PARENTHESES) ◆ ADJUSTED FOR STOCK SPLIT

NOTE: FORECASTS ARE FROM DOW JONES WEEKLY SURVEY OF ECONOMISTS

Share of U.S. electricity

HEARD ON STREET

FINANCIAL ANALYSIS & COMMENTARY

Electricity Gives Coal a Charge

Energy source for powering the grid gets a boost as natural gas prices rise

Coal is on its way out of the electrical grid, but not without some dving flickers.

Cheap, cleaner natural gas had been eating away coal's market share for some time. But with natural gas prices around \$2.50 per million British thermal units, nearly 70% higher than the lowest point this year, the tables are about to be turned.

Natural gas prices are being propped up by stronger-than-expected power demand—lots of air conditioners running in homes helped offset losses in commercial usage—as well as muted supply. Energy companies halting production from oil wells due to low oil prices have shut off associated gas in the process. Despite the price rally so far, producers are cautious about ramping up production, having weathered so many lean years.

As a result, the U.S. Energy Information Administration estimates that coal's share of electricity generation will tick up to 22% in 2021

from 18% this year while natural gas-fired power's share will decline to 35% from 40%. That comes after more than a decade over which coal gradually lost share.

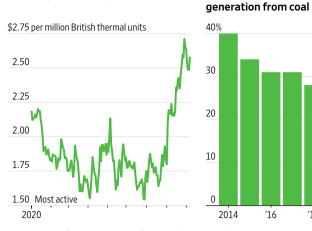
RBC analyst Christopher Louney estimates that natural gas burn for electricity could decline 2% year over year in 2021 while coal generation picks up 6%—at the conservative end of his forecast.

Despite cheerleading from the White House, the reversal will do little to salvage coal's bleak future. But it reveals how cutthroat the natural gas business has been in recent years. There have been other surges-in 2018 natural gas prices struck close to \$4 and temporary gas-to-coal switching was observed-but those rallies weren't as sticky as analysts predict this one will be and were never enough to shift the annual share of electricity away toward coal.

Luke Jackson, team leader for North American natural gas at S&P Global Platts, expects natural gas prices to average \$2.90 for the remainder of 2020 and \$3.30 for 2021, while RBC's Mr. Louney estimates prices will edge up to \$2.60 in the fourth quarter and gradually move up to \$2.80 by the end of 2021.

The shift will vary significantly by region. The Midwestern and Southeastern power markets, which need to bring in natural gas through pipelines, already are seeing signs of natural gas-to-coal switching, according to Mr. Jackson. Pipelines are running at full capacity, leading to regional gaps in natural gas prices. As an example, prices for the Chicago Citygate index in the Midwest averaged \$2.05 in August, while the price in Dominion South—a hub close to the gas-producing Marcellus and Utica basins—was \$1.21. The Midwest and the Southeast also still rely on coal for a substantial share of their electricity generation: The hydrocarbon accounted for 49% and 44% of electricity generated in

Natural gas futures price



Sources: FactSet (futures); U.S. Energy Information Administration (share)

the respective markets as of midday Friday. The Northeast, on the other hand, is closer to dry gas basins and hasn't seen signs of coal switching yet. That could change in winter months when heating demand surges.

Yet none of this portends a lasting comeback for coal-fired power. As recently as 2015, coal was the largest fuel source for electricity in the U.S., but low natural gas prices and rigorous environmental standards have pushed many coal gener-

ators to shut down. An additional 25 gigawatts, roughly 11% of coal power capacity as of year-end 2019, is expected to retire by 2025, according to the EIA. Already, many coal plants are unable to operate enough hours to cover costs and some have evaluated plans to run only during seasons with high demand.

This may not be the last time that market forces temporarily reverse the tide. Coal's fade to black could be a long one.

—Jinjoo Lee

'20

Sustainable Investing Can Be Blurry

There's one area where risk ratings are possible

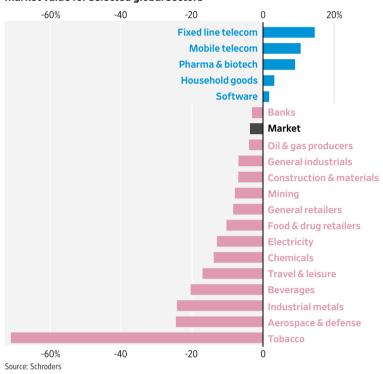
Can environmental, social and governance risks be quantified? With the notable exception of carbon emissions, probably not—but that doesn't mean the exercise isn't useful for investors.

Interest in sustainable investment is ballooning. One sign is the money given to mutual funds: In the first half of 2020, net flows into sustainable funds totaled \$20.9 billion in the U.S., according to Morningstar, compared with \$21.4 billion for 2019 as a whole.

Fund managers that don't specialize in ESG strategies are scrambling to incorporate them into their investment frameworks. There is an industry of risk ratings, but these come with a problem: The correlation between companies' ratings of the same stock is low because they measure performance differently. An example is Tesla. MSCI rates the electric-car maker highly because of its environmentally friendly products, while FTSE Russell gives it a middling score for other reasons. This confusion gives ESG ratings a reputation for fuzziness.

Quantifying the risk to earnings from a given concern is a pleasingly sharp-edged alternative. London fund manager **Schroders** has developed a tool, SustainEx, to put a value on a company's "externalities"—the unpaid costs of its activity borne by society. The rationale

Estimated social value as a proportion of market value for selected global sectors



is pressure is building on companies to assume a greater share of these costs, which it estimated last year at \$2.2 trillion or 55% of corporate profits globally.

SustainEx sees the tobacco sec tor as most at risk, given the health problems caused by smoking. The market agrees: After many years of stellar performance, tobacco stocks have fallen from grace since 2017 as the U.S. Food and Drug Administration has toughened its stance. Other conclusions, such as the social risk to the earnings of highly rated alcoholic drinks producers such as Diageo, are more surprising.

Such an approach has the advantage of bridging the gap between ESG analysis and conventional stock analysis, which revolves around earnings estimates. Some companies made similar efforts: Sportswear brand **Puma** has published a survey of what its products cost the environment for almost a decade. Yogurt maker Danone this year started to report earnings per share adjusted for its carbon footprint.

Ultimately, putting a number on ESG risks isn't so different from is suing a qualitative rating. Schroders used academic studies to estimate costs in as objective a way as it could, but another investor could package the same or other studies differently and come up with different numbers.

One area where ESG risks can easily be compared is the carbon emissions held responsible for climate change. Tougher carbon capand-trade programs in particular could crystallize risks to earnings identified in models such as SustainEx. Amid the confusion around how to approach ESG factors, com paring companies' carbon footprints is a good place to start.

–Stephen Wilmot

Facebook Is Face of Politics

Try as it might, politics are now a friend Facebook can't block.

Amid pressure from virtually all angles, the social media network has slowly been layering in regulations to check the dissemination of hateful and inaccurate content in posts and ads on its platforms. Facebook said last week that it will prohibit new political ads in the week before the U.S. presidential election and seek to flag candidates' premature claims of victory.

Chief Executive Officer Mark Zuckerberg said the new measures are intended to combat the risk of civil unrest among a "nation so divided." But at this point, any attempt by Facebook to depoliticize its platform is futile at best and potentially even harmful to users and its own bottom line. The social media app, which was founded on the relatively innocuous premise of students sharing flattering photos of themselves with one another, has evolved from personal to politicking.

For one thing, the majority of the nearly 1.8 billion users logging into its legacy Blue app every day seem to specifically be there for or at least be willing participants in some amount of the political discourse. It is now virtually inescapable on its platforms, be it election news, views about Covid-19 or photos and fundraising toward social justice.

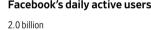
Meanwhile, attempts by Facebook to limit misinformation actually might be compounding the political divide. Adding a voting information banner to the top of American users' feeds, for example, will help to spread the word about when and how to vote during the pandemic. But it also primes users to approach its app in a politically charged manner. Meanwhile, offering the ability to mute political ads could mean users see only those shared by friends, perpetuating an echo-chamber effect, while adding warning labels to

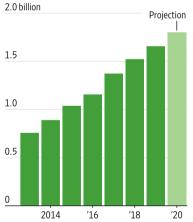
offending posts seems to serve as a sort of proof to those who allege their voices are being silenced.

At the heart of the issue is the blurring of the lines between what is politics and what is personal, as the average citizen in Facebook's home country undoubtedly has become more political in an election year racked by pandemic and recession. Some now feel that a personal post without a political statement is in and of itself a political statement. That couldn't have been Mr. Zuckerberg's intent when he advocated for a public town square of free speech. And yet, with a business that Wall Street is predicting will generate nearly \$80 billion in advertising revenue this year precisely by targeting its avid users, it is unlikely Facebook wants to tinker too much.

No matter the optics of the safeguards the company continues to implement, the reality is that as America's deep political divide persists, there will be no easy way to separate what is a picture and what is a position. The best warning label would be one that explains just that.

—Laura Forman





Source: the company (actual); FactSet (projection)

MARKETS

In an Election Year, a Rally Can Point to a Winner

The stock market's performance won't definitively determine who wins the White House, especially in a year as unpredictable as 2020. History, however, shows the incumbent has a clear advantage when the market rallies in the months preceding Election Day.

Going back to 1928, incumbent presidents, or candidates from the controlling party, have won nearly 90% of elections when the S&P 500 is positive in the previous three months, according to brokerage firm BTIG.

That is about as close to unequivocal as you are ever going to get," said BTIG analyst Julian Emanuel, who researched the history.

August kicked off the period with big gains. The S&P 500 rose 7% last month, its best August since 1986, while capping the strongest five-month run since 1938. That sounds like a bullish sign for a sitting president, especially one who enjoys tweeting about the stock market's rallies.

But the big market selloff S&P 500 Months before election Thursday and modest decline Friday highlight how distant last month's performance might seem to investors if the coming months end up being as volatile as many expect.

September is historically the stock market's weakest month, with the S&P 500 down 54% of the time over the past 93 years, according to Dow Jones Market Data. Its average return is negative 0.96%. The index, however, tends to fare better during presidential election years than in the other three years of the cycle, falling 0.3% on average.

The rally already began to falter last week, with the S&P 500 falling 4.3% over the last two sessions. The losses trimmed the year's gains to 6.1% and the rebound since March to 53%. Many investors saw it as a reaction to a market that was running hot. This year's biggest winners, including Apple Inc., Microsoft Corp. and Amazon.com Inc.,

suffered the steepest losses. Some investors are bracing for more volatility ahead, par-

2000 election 1350 July 2000 Oct. Aug. Sept 1400 1000 2008 election July 2008 Oct. Sept

ticularly in the period surrounding the election.

Many predict the race to be tight, or even contested, and fear the result won't be known for days, or possibly weeks, after Election Day. That scenario would likely put pressure on stocks.

The market faces other unknowns as well. If the coronavirus pandemic were to surge anew, the fledgling economic

recovery might be in jeopardy. And there is still no guarantee

a vaccine for the virus will be ready in the near term. A strong summer gives

stocks an even higher perch from which to fall, Mr. Emanuel said. And when the market is down from the end of August through Election Day, that is bad news for the in-

cumbent party. There have been six in-



Index performance since Aug. 3

stances when in an election year the market fell from the end of August through Election Day, he said. It happened in 1932, 1960 and 2008, when Republicans held the White House. It also occurred in 1952, 2000 and 2016, when Democrats held the White House.

party lost the election. Yet it is hard to say

whether stocks drive elections

All six times, the incumbent

or the other way around, said Shawn Snyder, the head of investment strategy at Citi Personal Wealth Management.

For one thing, if investors think the incumbent will win. they anticipate less policy change and are therefore less likely to shift their portfolios ahead of an election, he said. Conversely, if they expect the incumbent to lose—and anticipate greater policy change-they may position differently by buying and selling various stocks.

National polls would indicate investors should prepare for change. A recent NBC/WSJ poll showed Joe Biden leading President Trump, 50% to 41%. The gap, though, was narrower in several key states, including Ohio, Texas and Florida.

One thing on which many analysts agree: The winner of the election won't be as big of an influence on the stock market as some politicians suggest.

"A good company with good earnings is more of a driver than Washington," Mr. Snyder

JOURNAL REPORT • A Monthly Analysis

INVESTING IN FUNDS & ETFS

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THE WALL STREET JOURNAL.

Tuesday, September 8, 2020 | R1



Lessons From

The Previous Pandemic

When Covid-19 hit, bullish investors looked for lessons from 100 years ago. But comparisons may be misleading.

By Mark Hulbert

n February and March,

when the Covid-19 pandemic was just gathering steam, investors began scouring the historical record for precedents: How do you forecast the market in such a global crisis?

Many zeroed in on the 1918-20 Spanish flu pandemic. On the surface, it bore many similarities to the Covid-19 emergency, involving a lethal virus with fastspreading global contagion. And so it was encouraging to investors that the U.S. stock market was impressively resilient throughout that health crisis.

Now, half a year after the current crisis began, it is clear that this "Covid market" is writing its own playbook.

According to several economists, the similarities that were initially identified have turned out to be misleading. Yes, the markets have bounced back, just as they traded higher in the months after the pandemic's start 100 years ago. But a careful analysis of the two periods shows that economic uncertainty has been far higher during the current pandemic than it ever was then. To learn more about what the future may hold, we must examine periods *other* than the Spanish flu pandemicones that weren't as deadly, but had much higher economic uncertainty than that crisis.

Difference in lockdowns

The biggest supposed similarity between the two pandemics has been the strength of the markets. But a closer look shows that the market performance of the two Please turn to page R6

INSIDE

DIY **Annuity**

The notion of creating a do-it-yourself annuity might sound intriguing, but there are pros and cons to it. R4



Saving for College

What parents need to know about Fafsa and CSS as the financial-aid process starts on Oct. 1. R9



Fund Results

Mutual-fund and ETF monthly data on pages R6, R8 and R9 and at WSJMarkets.com

SCOREBOARD

August 2020 fund performance. total return by fund type. More on R2.

stocks

5.5%

Intl. stocks*

Bonds (intmd.)

-0.5%

4.7% *Diversified funds only, excluding secto Source: Refinitiv Lipper and regional/country funds

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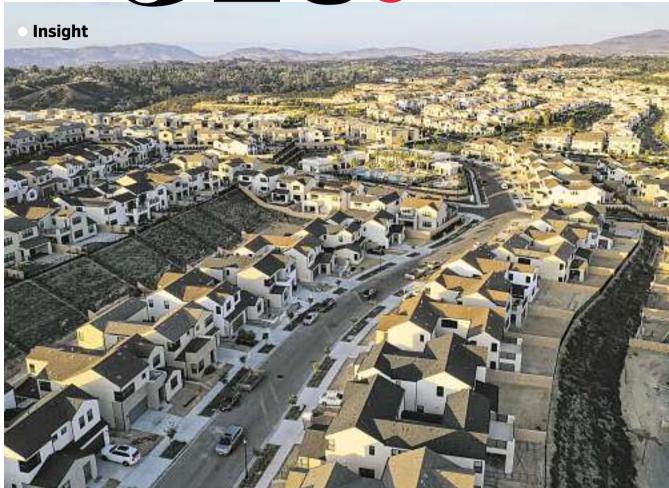
The Nasdaq-100 Index comprises the 100 largest non-financial companies traded on the Nasdaq.

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JOURNAL REPORT | INVESTING IN FUNDS & ETFS

U.S.-stock funds A Journal Report special look at the 13.5% numbers and news about this month's investing



08.31.20

 $\$304,\!100$ Median existing-home sale price in the U.S., up 8.5% from a year ago

Average rate 2.93% Average rate on a 30-year fixed mortgage

House Money

Home-building stocks have repaired the damage. Record-low mortgage rates have attracted buyers—helping the housing market recover from its Covid slump earlier in the year. (Above, new luxury homes at the Pacific Highlands Ranch masterplanned community in San Diego.) Among funds that invest in the sector, iShares U.S. Home Construction ETF (ITB) is up 19% this year. That doesn't match last year's pace, when the fund was up 48%, but the sector is no longer a fixer-upper.

'Don't expect real GDP to reach pre-Covid levels until 2022. Despite tremendous policy support, the economic recovery will be in fits and starts.'

Anwiti Bahuguna, head of multiasset strategy, Columbia Threadneedle Investments



Charted

Out With the Old, In With the New

The Dow Jones Industrial Average got a makeover at the end of August. Three of Switch happened the 30 stocks were changed. The makeover was triggered by Dow component Switch was announced after the close Apple Inc.'s 4-for-1 stock split, which would have given the informationtechnology sector a smaller representation in the price-weighted Dow. Salesforce.com Amgen Stock being added 200 150 100 Ravtheon Stock Exxon Mobil removed

In Translation

Explaining

Source: FactSet

Contango/Backwardation

Two exotic-sounding terms are important for commodities investors to understand

Investors in commodities funds that hold futures contracts will hear or read the words contango and backwardation. The terms are apt to confuse even those with some Wall Street experience.

Consider palladium, a precious metal used to make catalytic converters: When you buy a futures contract for palladium, effectively you are agreeing to purchase the metal at a certain price for delivery at a specified date in the future.

However, different palladium contracts have different delivery dates and hence different prices. In mid-August, the price for September-dated palladium was \$2,209 an ounce. If you wanted to wait until December for delivery, you would pay more-

those contracts were priced at \$2,238,50

This is where contango and backwardation come into play.

When the prices are higher for longerdated contracts, the market is in contango. You pay more for materials delivered later to cover the costs of the merchant who has to hold the commodity longer.

"The cost of storage and other costs is why normally the deferred contract is higher than the closer one," says James Roemer, a commodity trading adviser and weather forecaster at Bestweatherinc.com in Sarasota, Fla. In addition to storage,

other costs include the money tied

up in owning the commodity, as well as insurance and security.

There are times, however, when the shorter-dated contracts cost more than the longer-dated ones. That's an inverted market, or backwardation.

"Backwardation reflects a situation with very tight nearby supplies, and everyone wants the producers to sell it to them now," says Shawn Hackett, president of Hackett Financial. "Think of backwardation as a premium for convenience."

-Simon Constable

Monthly Monitor



William Power



U.S.-Stock Funds Rose 5.5% in August

Fund investors continued to be rewarded in August by a defiant stock market.

The question is how long stocks can continue to thrive with so much uncertainty. Market declines late last week, headed into the Labor Day weekend, could be either an omen or a blip.

The Dow's

—the best

percentage

five-month

The Nasdaq

Index's year-to-

blowing away

performance,

even after the

declines of late

Composite

date gain,

the overall

tech-stock

last week.

Gain so far

this year for

gold-oriented

mutual funds

and ETFs

Oil Futures

Crude-oil futures' decline

from the record high in

July 2008. The

thanks to virus

decline this

year alone-

impact and

a barrel.

Sources:

Dow Jones

Market Data;

Refinitiv Lipper

price wars—is 35%, to \$39.77

market's

April. It has a

winning streak.

point and

gain since

point gain, or 7.6%, in August

The average U.S.-stock fund posted a total return of 5.5% in August, according to Refinitiv Lipper data, to push them into the black for the year to date, at 3.6%. International-stock funds were up 4.7%, but are down 1% so far this year.

"I think August was pretty incredible in light of a normally low-volume month, and the market performance has just continued to surprise people on the upside," says Linda Zhang, senior adviser to financial-tech startup SoFi and chief executive of Purview Investments in New York, a firm specializing in global and sustainable investing.

"Many people are worried if the market is ahead of itself," says Dr. Zhang. "But if history is any guidance, the real economy and capital markets are not necessarily in sync, especially during dramatic economic developments," such as in 2008-09, she says. "So, we'll probably see history kind of repeat itself, where the two sidesthe real economy and marketsare not in sync, and might continue to be so for some time."

Many investors are turning to the relative safety of bonds. Funds tied to intermediate-maturity, investment-grade debt (the most common type of fixed-income fund) slipped 0.50% in August but are up 6.8% this year.

Dr. Zhang notes that there is a rising risk of sector rotation. For example, though tech stocks have sold off the past two sessions, the tech sector's performance was recently at 70 percentage points above the worst sector, fossil-fuel energy.

When sector rotation happens, when tech loses leadership, what will be the next sector to thrive? "That's something that nobody will know for sure. Some industries may experience a near-term rebound, yet be watchful for their long-term damage," she says. (More on stock sectors, page R5.)

Andrew Mies, chief investment officer at 6 Meridian, an investment adviser in Wichita, Kan., says a lot of the firm's clients are confused lately by what they see in the day-to-day real economy. and what is happening in financial markets.

The two don't have to always march in step, he says, but they "need to converge eventually, or the valuations of some of these companies aren't going to be logical at all."

Mr. Power is a Wall Street Journal news editor in South Brunswick, N.J. Email him at william.power@wsj.com.

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Ask Encore Glenn Ruffenach



The

predictable

retirees, but

income of

annuities

doing it

yourself

stretch.

could be a

A Do-It-Yourself Annuity: The Pros and Cons

Also: Answering a reader's question on naming a charity as a 401(k) beneficiary

I'm approaching retirement, and the turmoil in the markets this year has me thinking, for the first time, about buying an annuity. I like the idea of predictable income, but I don't like the idea of handing my money, permanently, to an insurance company. What do you think about a person building his or her own annuity? Is there a good way to do this?

Yes, there are ways to create an annuity. And I think it's wise to consider how an annuity might help you and your nest egg. But I think the do-it-yourself approach can be difficult for

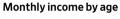
many investors and carries some sizable risks. To start, I'll focus on the product you seem to be considering: an immediate fixed annuity. In other words, you hand a lump sum to an insurer, which, in turn, guarantees you a monthly paycheck for life. Period. (We'll save, for another day, talking about more-complicated **is useful for** products, such as equity-indexed annuities.)

If you wish to build something resembling an immediate fixed annuity, you could, for instance, assemble a "TIPS ladder," a collection of Treasury inflation-protected securities of various maturities. Or you could construct a bond portfolio with high-quality corporate and municipal bonds. Both approaches would produce a predictable stream of income.

Even something as simple as a "balanced" mutual fund, one with a mix of stocks and bonds and a long history of solid returns, could, in theory, serve as an annuity. An example: T. Rowe Price Balanced Fund (RPBAX) has posted an average annual total return of 9.46% since its start in 1939.

Income From an Annuity

Estimates of what an immediate fixed annuity would pay out, given current interest rates and cost being \$200.000





Source: ImmediateAnnuities.com

The point: With each of these strategies, you retain control of your cash. But let's take a step back. Do you have the skills and time to build, say, a TIPS ladder or search for top-notch bonds? I would argue that many people don't. And a balanced fund, however simple, highlights some of the limitations involved with the DIY route. Among them:

- Longevity: Even the best investments can have rough years, which could hurt the long-term prospects of a homegrown annuity. That's where a highly rated insurance company typically has an edge: It will keep pumping out cash, year after year, regardless of market and economic conditions.
- **Risk:** Yes, TIPS and corporate bonds

tend to be safer investments than most others-but there is still some risk. State governments mitigate some of the risk of annuities by requiring insurers to maintain specific levels of capital to make annuity payments. If you build your own annuity, you won't have the protection of a regulator looking over vour shoulder.

• Discipline: You might be able to build an annuity—but will you have the discipline to keep from fiddling with it? Put another way: Will the next market meltdown prompt you to undo your handiwork?

Again, I think it's smart to look at annuities; most retirees want, and need, predictable lifetime income. But doing this yourself could be a stretch. If you're concerned about handing over your life savings to an insurer, consider buying a series of smaller annuities from different insurers over a period of years. In this way, you reduce the risk of any single insurer failing to make its payments. What's more, if interest rates rise, you won't be locked into an annuity that's tied to today's low rates.

And always remember: The single best annuity is right under your nose-Social Security. The longer you wait to claim it. the better the monthly payout, for life.

I am a 78-year-old retiree taking required distributions from a 401(k)

plan I accumulated while I was working. I am considering naming a charitable organization as the plan's beneficiary. When I die, will the funds be paid to the charity without being taxed, or is there a provision in the tax code that would tax the payment?

The answer, happily, is simple. And this question gives me the chance to remind readers about a second way to be charitable, one with its own tax advantages.

Yes, you can name a charity as the beneficiary of a retirement plan, and no, there would be no tax on the transfer to the charity after your death.

"For anyone who is charitably inclined, funds like individual retirement accounts or 401(k)s are actually the best assets to leave to a charity," says Ed Slott, an IRA expert in Rockville Centre, N.Y. "That's because they are loaded with deferred taxes that will never get collected when the funds are donated."

Still, you might decide, at some point, that you would like to see how your donations are helping others before you pass on. In that event, consider making a qualified charitable distribution, or QCD.

As we've noted in earlier columns, a QCD is a tax break for individuals age 70½ or older. It allows you to transfer money, tax-free, from an IRA to a charity. (And that presents a wrinkle for this reader: You first would have to roll the funds from your 401(k) into an IRA to take advantage of a QCD.)

Recent changes in tax laws offer additional reasons to consider using a QCD, Mr. Slott says. For instance, Congress recently ended the so-called stretch IRA, which allowed nonspouse beneficiaries (typically, children and grandchildren) to stretch withdrawals from inherited IRAs, along with the tax bite, over their lifetimes. Now, such individuals are required to withdraw all the money, and pay the associated taxes, within a decade of the original account holder's death.

Given that, QCDs could help your heirs in the long run. Let's say you begin donating funds from your IRA in the form of QCDs. When you die, your beneficiaries will inherit less of your IRA, which is taxable. But, ideally, these same beneficiaries will inherit more of assets outside your IRA that might have been used for charitable contributions, like cash, stocks, bonds or mutual funds. These, for the most part, won't be taxable and/or will get a "step up" in cost basis. (Meaning, in effect: Your heirs could save a bundle in capital-gains taxes.)

In short, Mr. Slott says, "by doing the QCDs, you are giving the taxable assets to charity—at no tax—and leaving the other, better assets to your beneficiaries."

Of course, decisions about bequests are highly personal. You might have good reasons for waiting to donate money to a charity until after you die. (Example: You might need your required distribution each year to live on.) And no single approach to gifting is necessarily better than another. Simply be aware that there are other options—options with their own tax advantages—when it comes to helping others.

Mr. Ruffenach is a former reporter and editor for The Wall Street Journal. His column looks at financial issues for those thinking about, planning and living their retirement. Send questions and comments to askencore@wsj.com.

The State of Your Municipal Bonds: It Matters Where You Live

Why differences in returns can vary greatly among the states

By Derek Horstmeyer

Many investors look at municipal bonds and make the same mistake: They think they're all the same—an investment option with tax-exempt income features, almost zero risk and the same low yield. Investors might be surprised to learn there

can be large differences in munis, both in their coupon rates and in the returns of the mutual funds that invest in them. Currently, average returns for muni funds in some states can differ by as much as a full point, which over time can add up to a tidy sum.

Because people tend to only buy munis in their home states, taking advantage of the tax-free status that states confer on homegrown issues, they often are unaware that such differences exist. But where the spreads are large, it can even be to an investor's advantage to forgo the homegrown option for a fund that buys issues in another state.

Investigating the full sample of dollar-denominated, U.S.-issued mutual funds that invest in munis, I came up with 17 states in which at least 25 mutual funds focus on their local municipal debt. What follows is a look at how the average returns for the funds in those states compare.

An interesting picture emerges when ex-

ploring the average posttax returns of muni funds across the U.S. On one end of the spectrum, municipal-bond funds investing in Colorado, Missouri and Florida muni debt have averaged a posttax return of 4.07%, 3.89% and 3.78% a year, respectively, over the past 10 years. Maryland, Virginia, Michigan and Connecticut, meanwhile, have averaged returns of 3.06%, 3.24%, 3.31% and 3.34%.

This means there is a 1.01 percentage-point spread in annual returns between the best state in terms of muni-fund returns (Colorado-4.07%) and the worst (Maryland-3.06%). Over a 10-year period, this works out to a 35% return for the average Maryland fund, while the average Colorado fund yielded 49%. On a \$10,000 investment, this amounts to a \$1,384 difference in balances at the end of a 10-year period.

Based on these returns, in some cases a taxpayer in Maryland could be better off investing in munis from Florida rather than Maryland, even with the home-state tax advantage.

It is important to note that these returns are all posttax.

Location, Location

Average posttax returns of 17 state-specific muni funds, 2010-19

STATE	ANNUALIZED	ON A \$10,000 INVESTMENT
Colorado	4.07%	\$4,900
Missouri	3.89	4,649
Florida	3.78	4,493
New Jersey	3.78	4,488
Pennsylvania	3.76	4,464
California	3.67	4,338
New York	3.62	4,267
Minnesota	3.60	4,244
Massachusetts	3.57	4,205
Arizona	3.54	4,160
Georgia	3.42	3,998
North Carolina	3.36	3,912
Ohio	3.35	3,897
Connecticut	3.34	3,886
Michigan	3.31	3,854
Virginia	3.24	3,754
Maryland	3.06	3 516

Source: Derek Horstmeyer, George Mason University

Since interest income from investing in municipal bonds is generally exempt from federal and state taxes for residents of the issuing state, looking at posttax-return numbers puts all states on an equal footing.

Why do these differences in returns persist? Well, one fac-

tor may be the wealth levels in certain states: Marvland, Virginia and Connecticut are all in the top 10 in wealth and income. Because munis are a good tool to gain tax-exempt interest, they are rightly popular for those in the upper tax brackets. Since Maryland, Virginia and Connecticut may have a great number of people in the upper brackets, this means more residents flock to munis and push down the yields/returns.

Another factor may be the relatively low levels of income tax on the upper-income levels in states like Colorado, Missouri and Florida—in fact, Florida has no state income tax at all. Because of these low rates, perhaps individuals in these states don't consider munis for their portfolios and thus drive up yields since there isn't demand. Or it may just reflect the relative risk of the municipalities in these respective states (although municipal-debt defaults are rare).

Whatever the case, if you are a resident of Florida, Colorado or Missouri, you have been far more fortunate in the returns you have taken in over the past 10 years in these securities in comparison with residents of Maryland, Virginia, Michigan and Connecticut.

Dr. Horstmeyer is an associate professor of finance at George Mason University's Business School in Fairfax, Va. He can be reached at reports@wsj.com.

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Sector Strategy

THE WALL STREET JOURNAL.

Which Sectors Will Lead the Market Next?

As investors search for the next hot sector, here's where some strategists say to look

By Simon Constable

tock-market sectors generally don't move in strict synchronization. Some will lead as others lag behind, and a key question for investors is which sector is poised to move up fastest next.

In the bull market that started in late March, the technology sector initially led the way, with companies such as Amazon.com climbing faster than the rest of the market. Technology Select Sector **SPDR** (XLK), an exchange-traded fund that tracks an index of technology stocks, surged 73% from March 20 through Aug. 31, while the S&P 500 index advanced 52% over the same period, according to Dow Jones Market Data. Because tech is such a significant part of the S&P index-accounting for onefifth to one-fourth of the weighting-that means many of the other stocks in the index performed far worse than the index itself.

Of course, nothing stays in the lead forever, and one sector rarely sustains a rallying market. Veteran investor Ralph Acampora is famous for saying "rotation is the lifeblood of bull markets."

So which sector is poised to lead the market higher next? As usual with the stock market, the answer depends on whom you ask.

1. Cheaper midcaps

Swiss bank UBS Group AG says shrewd investors should look for sectors with cheaper valuations such as midcaps to start playing a greater leadership role.

"As the global recovery gradually takes hold, the next leg up in ≜ the market may be driven by



Apple and other tech stocks have ruled, before faltering this month. Shown, Apple's store on Fifth Avenue.

cheaper sectors that have trailed behind in the rebound, such as cyclical and value stocks," a recent research report from the bank said. "As a result, we like U.S. midcap stocks, which look poised to regain lost ground as the economic recovery gains traction and broadens out."

Midcaps are often defined as stocks with a market value between \$2 billion and \$10 billion. From the start of the bull market on March 20 through August, iShares Russell Mid-Cap ETF (IWR), which tracks the Russell Midcap Index, has returned 54%, lagging behind tech stocks but

But if history is any indication, midcap stocks could start to take the lead if the economy improves.

performing a little better than the

S&P 500.

In the two decades through December 2019, the Russell Midcap Index's total annualized return of 9.1% topped that of both the S&P 500 and the Russell 2000 small-cap index, according to data from UBS.

2. Look overseas

International stocks look like a good bet for future market leadership for three reasons, according to Jack Ablin, chief investment officer and founding partner of Chicago-based wealth-management form Cresset Capital.

First, the economic situation is currently better outside the U.S. than inside, he says. While the American economy has rebounded somewhat since the crash in the second quarter, other countries have gone beyond rebound and into a real recovery, he says.

Second, foreign stocks tend to be cheaper than U.S. stocks currently. "International equities

might not be cheap, but they are cheaper on a relative basis," he says.

For example, the price of stocks as a multiple of what investors expect them to earn in the next year (the forward price/earnings ratio) is higher in the U.S. than in the other regions. The forward P/E for the MSCI index in the U.S. is 22.7, versus 18 for Japan and 17.7 for Europe, according to a report from Yardeni Research.

The third factor that favors non-U.S. stocks is a weakening U.S. dollar, says Mr. Ablin. If the dollar is going down, owning stocks that are priced in currencies that are rising in value is a better bet for investors.

There is, however, a wrinkle that investors should understand when buying non-U.S. stocks, according to Mr. Ablin. Rather than investing in funds that simply

track local country indexes, he advises adjusting non-U.S. holdings to give a greater weighting to tech companies. A little more than half of the underperformance of non-U.S. markets relative to U.S. markets over the past 10 years is due to foreign markets having less exposure to tech companies, according to an informal study conducted by Cresset.

As such, investors buying outside the U.S. might want to seek out tech stocks rather than just buy country or regional index funds. A few to consider, according to Mr. Ablin: LM Ericsson, Taiwan Semiconductor Manufacturing Co., Tencent Holdings Ltd., SAP and Alibaba Group Holding Ltd.

3. Election influence

This year features a presidential race in the U.S., and there is some useful historical data back to 1992 on which sectors tend to do well in the three months before an election.

"Energy and financials beat the market most frequently in the [three] months before the election, followed by health care and industrials," says Sam Stovall, chief investment strategist at New York-based financial analysis firm CFRA Research.

Based on the past, there is one sector that investors should consider avoiding over this period. In the three months before voting day, consumer-staples stocks, such as toothpaste manufacturers, have lagged behind the S&P 500 in five of the past seven presidential elections, according to an analysis by Mr. Stovall. The two times the sector did better than the S&P 500 were in 2000 and 2008, respectively, the years of the dot-com bust and the financial crisis that took hold in September 2008.

Mr. Constable is a writer in Edinburgh, Scotland, He can be reached at reports@wsj.com.



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CME Group A

STATE STREET GLOBAL ADVISORS.

and at least a partial rapid bounce

back." Before this year, the model

had only one other real-time test,

during the financial crisis of 2008,

when it also performed well, ac-

cording to Prof. Bloom. Based on

these two events, and other re-

JOURNAL REPORT | INVESTING IN FUNDS & ETFS



Lessons From the **Pandemic** Of 1918-20

Continued from page R1 eras has been different.

During the two-plus years of the Spanish flu pandemic, the Dow Jones Industrial Average was never more than 5% lower than its level on March 4, 1918, the date some have given for the start of the crisis. In November of that year, in fact, at the height of the pandemic's second and deadliest wave, the Dow was 11% higher.

The market in this pandemic has followed a different script. Even though stocks have roared back from their initial fall, that fall was much deeper than during the Spanish flu. At its low on March 23, the Dow was 37% below where it had stood at its February peak (which was an all-time high). Since then it has risen in a nearly straight line, and through Friday it is 5% below that high. The S&P 500 is 1% above and the Nasdag composite is 15% above their highest levels in February.

To some economists, the difference between the two markets is ട്ട significant. One big reason the stock market fell so much this S time around, according to Nicholas 💆 Bloom, an economics professor at Stanford University, was the policies pursued to slow or contain

the virus. These were far more aggressive and widespread than those introduced during the Spanish flu pandemic: People in 1918 were told to wear masks, but there weren't lockdowns

The lockdowns have led to an extraordinary increase in the uncertainty that businesses are facing an uncertainty that for the most part wasn't present in 1918—which in turn is preventing the economy from fully recovering. U.S. GDP declined at a 5% annualized pace in the first quarter of this year and 33% in the second.

In contrast, the recession of 1918 was "mild and brief," according to research conducted by François Velde, a senior economist at the Federal Reserve Bank of Chicago. Though precise numbers aren't available, since national-income accounting wasn't even invented until the 1930s, he further concludes that what decline in economic activity did take place was "likely due to the end of the war [World War I] rather than the pandemic itself."

Andrew Lo, a Massachusetts Institute of Technology finance professor, agrees with the idea that we're in a period of much greater uncertainty. He argued back in March that analogies to the century-ago pandemic were misleading, and says in an interview that what the government did this spring was to "put the economy into the equivalent of a medically induced coma."

Pointing out the economic effect of health policies isn't intended as a criticism, both Prof. Bloom and Prof. Lo emphasize. Those policies undoubtedly saved lives.

But they leave businesses facing

Performance (%)

St. Louis Red Cross Motor Corps on duty in October 1918 during the Spanish flu crisis.

Economicpolicy uncertainty

Prof. Bloom argues that this uncertainty is the key to drawing historical lessons that could help us understand our current situation. Though there has never been another pandemic quite like Covid-19, there have been many other occasions in which economic uncertainty has suddenly soared-such as after the 1987 stockmarket crash and the Sept. 11, 2001, terrorist attacks.

So, he and a number of colleagues analvzed how the economy behaved on those past occasions, focusing on factors such as manufacturing employment and industrial production.

From that, they created a forecasting model to predict how the economy would react to future surges in economic uncertainty.

Prof. Bloom presented this model at the Federal Reserve's Economic Policy Symposium, held online in late August.

Prof. Bloom and his colleagues found that the model "reasonably well" predicted how the economy has reacted so far. The model forecast an "abrupt, short-lived contraction in industrial production

search he has conducted, he declares that the model does a significantly accurate job predicting drops in economic activity. So far, so good.

Stocks are resilient, like 100 years ago. Other comparisons aren't as neat.

Unfortunately, Prof. Bloom continued, the model doesn't forecast a significant continuation of the economic recovery that has taken place over the past couple of months. An index he and his colleagues created to measure uncertainty has declined but remains well above its historical average. Until it recedes a lot further-and that depends on unpredictable factors such as when an effective vaccine becomes available—the model doesn't forecast that the economy will completely make up its losses.

Overheated stocks

Prof. Bloom therefore concludes that the stock market has gotten too far ahead of the economy, and must remain in a trading range or fall back until the economy has the chance to catch up. For this reason, he says, he has sold all the equity holdings from his pension and his "529" education-plan portfolios.

Prof. Lo agrees with Prof. Bloom that policy uncertainty is a key to understanding the future course of the economy and the stock market. And he agrees that the disconnect between the stock market and the economy needs to be narrowed, one way or the other. However, he is optimistic that the economy will grow fast enough in coming months to catch up to the stock market.

Nevertheless, Prof. Lo acknowledges, this "economically bright future on which the stock market is betting is ours to lose. We could still screw it up. For example, a contested election could cause huge and lasting damage. Leadership is crucial to this bright future. Lack of leadership can be disastrous."

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The High Road Versus the Low Road

many questions that must be an-

erase its losses. Will businesses be

allowed to reopen and when? And

might they subsequently be forced

These are a few of the known

facing the uncertainty that derives

from a large number of "unknown

to close again? How soon will a

vaccine be widely available, and

what if a major portion of the

population refuses to take it?

unknowns. Businesses are also

unknowns," Prof. Lo says.

swered before the economy can

Cumulative percent performance of Dow Jones Industrial Average since beginning of pandemic.



*Series starts on March 4, 1918, when the first Spanish flu case was reported, and ends in April 1920, when the †Series starts on Nov. 18, 2019, when the first person is thought to have contracted the Covid-19 virus. Source: HulbertRatings.com

Mutual-Fund Yardsticks: How Fund Categories Stack Up

Includes mutual funds and ETFs for periods ended Aug. 31. All data are final.

- Performance (%)-

		'errorman	ICE (70)		•		rerrorman	Ce (%)	
Investment objective	August	YTD	1-yr	5-yr*	Investment objective	August	YTD	1-yr	5-yr*
Diversified stock & sto	ck/bond	funds			World stock funds				
Large-Cap Core	6.7	7.7	18.5	12.5	Global	5.3	5.7	16.3	9.4
Large-Cap Growth	9.1	28.3	40.4	18.6	International (ex-U.S.)	4.7	-1.0	10.4	5.4
Large-Cap Value	4.4	-8.0	2.5	7.6	European Region	4.8	-2.1	10.5	4.6
Midcap Core	3.6	-6.9	1.8	6.0	Emerging Markets	2.7	1.3	14.1	8.2
Midcap Growth	4.2	19.1	26.0	14.8	Latin American	-3.5	-28.6	-18.8	4.0
Midcap Value	4.0	-14.7	-4.6	3.6	Pacific Region	5.1	12.9	25.4	10.5
Small-Cap Core	4.3	-11.6	-1.4	5.0	Gold Oriented	0.1	44.1	46.5	23.0
Small-Cap Growth	4.8	11.9	19.9	12.3	Global Equity Income	3.3	-6.6	2.2	5.6
Small-Cap Value	5.1	-17.5	-6.2	2.9	International Equity Income	3.5	-9.0	1.2	3.3
Multicap Core	5.8	5.1	15.6	10.8	Taxable-bond funds				
Multicap Growth	7.3	27.2	36.3	16.6	Short-Term	0.3	2.5	3.1	2.3
Multicap Value	4.2	-10.7	-0.6	5.9	Long-Term	-1.1	7.2	7.3	5.7
Equity Income	4.2	-5.6	3.5	8.2	Intermediate Bond	-0.5	6. 8	6.4	4.2
S&P 500 Funds	7.2	9.5	21.5	13.9	Intermediate U.S.	0.9	7.3	7.1	3.5
Specialty Divers. Equity	8.4	16.1	26.4	15.6	Short-Term U.S.	-0.5	6. 8	6.4	4.2
Balanced	3.1	4.1	10.1	7.3	Long-Term U.S.	-1.5	10.3	7.6	4.3
Stock/Bond Blend	3.4	3.6	10.2	7.3	General U.S. Taxable	-0.2	4.3	4.8	5.1
Avg. U.S. Stock Fund†	5.5	3.6	13.8	10.4	High-Yield Taxable	1.1	0.3	3.1	5.1
Sector stock funds					Mortgage	0.2	3.0	3.5	2.7
Science & Technology	7.6	32.0	46.1	23.0	World Bond	0.7	0.6	2.9	4.0
Telecommunication	4.8	14.8	21.5	9.1	Avg. Taxable-Bond Fund**	0.3	3.0	4.0	3.6
Health/Biotechnology	2.3	10.6	27.3	8.7	Municipal-bond funds				
Utility	-1.7	-7.5	-3.5	8.5	Short-Term Muni	0.1	2.8	3.1	1.5
Natural Resources	1.9	-37.4	-30.5	-13.8	Intermediate Muni	-0.2	2.4	2.1	2.8
Sector	2.0	-7.6	-4.6	4.9	General & Insured Muni	-0.3	2.4	2.1	3.7
Real Estate	0.7	-10.1	-7.9	5.5	High-Yield Muni	0.04	-0.3	-0.02	4.4

Stock & Bond Benchmark Indexes All total return unless noted

	—— Р	erfomano	e (%)—			Performance (%)			
Investment objective	August	YTD	1-yr	5-yr*	Investment objective	August	YTD	1-yr	5-yr*
Large-cap stocks					Stock indexes				
DJIA	7.9	1.3	10.3	14.2	DJ U.S. TSM Growth	9.3	26.5	40.5	18.3
S&P 500	7.2	9.7	21.9	14.5	DJ U.S. TSM Value	4.1	-9. 8	0.2	8.4
Midcap stocks					Taxable bonds				
S&P MidCap 400	3.5	-5.5	4.2	8.1	Barclays Agg. Bond	-0.8	6.9	6.5	4.3
Small-cap stocks					Municipal bonds				
Russell 2000	5.6	-5.5	6.0	7.7	Barclays Muni. Bond	-0.5	3.3	3.2	4.0
Broad stock market					International stocks				
DJ U.S. Total Stock Market	7.2	9.3	21.2	13.8	MSCI EAFE ^{††} (price return)	4.9	-6.2	3.7	1.9
Russell 3000	7.2	9.4	21.4	13.9	Dow Jones World (ex. U.S.)	4.6	-2.6	9.0	6.1
*Annualized †Diversified funds only	/ **Excludes r	noney-ma	arket fun	ds ^{††} Europe	e, Australia, Far East		Source	: Refiniti	v Lipper

How the Largest Funds Fared

Performance numbers are total returns (changes in net asset values with reinvested distributions) as of Aug. 31; assets are as of July 31. All data are final.

Stock Mutual Funds and ETFs

				Total Return (%)						
Fund	Ticker	Assets (\$ billions)	August	1-year	3-year	– Annualized – 5-year	10-year			
Vanguard TSM Idx;Adm	VTSAX	917.95	7.2	21.3	13.9	13.8	14.9			
Vanguard 500 ldx;Adm	VFIAX	559.97	7.2	21.9	14.5	14.4	15.1			
Vanguard Tot I S;Inv	VGTSX	411.21	4.3	8.6	2.5	5.8	5.4			
SPDR S&P 500 ETF	SPY	289.04	7.2	21.9	14.4	14.4	15.1			
Fidelity 500 Index Fund	FXAIX	241.47	7.2	21.9	14.5	14.5	N.A.			
Vanguard Insti Indx;InsP	VIIIX	235.17	7.2	21.9	14.5	14.5	15.2			
American Funds Gro;A	AGTHX	217.51	8.8	37.1	18.7	16.9	16.1			
iShares:Core S&P 500	IVV	206.13	7.2	21.9	14.5	14.4	15.1			
American Funds Bal;A	ABALX	166.94	2.4	11.9	8.7	9.6	10.6			
American Funds EuPc;R6	RERGX	160.24	5.5	19.1	6.8	8.7	8.0			
Fidelity Contrafund	FCNTX	128.56	9.6	39.8	20.8	18.4	17.2			
Vanguard Gro Idx;ETF	VUG	126.46	10.1	45.3	23.4	19.7	18.5			
Invesco QQQ Trust 1	QQQ	124.58	11.1	58.7	27.5	24.3	22.4			
American Funds Wash;A	AWSHX	121.90	4.6	8.0	9.7	11.5	13.0			
Vanguard Dev Mkt;ETF	VEA	115.23	5.0	7.5	2.5	5.4	6.2			
Vanguard Md-Cp I;Adm	VIMAX	112.94	3.2	11.2	9.4	9.9	13.3			
American Funds Inc;A	AMECX	108.50	2.5	5.1	5.4	7.4	8.7			
Vanguard Wellington;Adm	VWENX	107.46	3.3	11.6	9.7	10.1	10.5			
American Funds NPer;A	ANWPX	106.56	9.0	31.1	15.2	14.5	13.3			
American Funds Flnv;A	ANCFX	102.22	5.7	17.1	10.6	12.7	13.4			

Bond Mutual Funds and ETFs

			Total Return (%)						
Fund	Ticker	Assets (\$ Billions)	August	1-year	3-year	– Annualized - 5-year	10-year		
Vanguard Tot Bd;Adm	VBTLX	287.20	-1.0	6.3	5.1	4.3	3.6		
Vanguard Tot Bd II;Inv	VTBIX	198.44	-1.0	5.9	4.9	4.2	3.5		
Vanguard Tot Itl BI;Adm	VTABX	154.01	-0.7	0.9	4.7	4.3	N.A.		
PIMCO:Income;Inst	PIMIX	122.82	1.5	4.5	3.8	5.4	7.2		
MetWest:Total Rtn;I	MWTIX	87.91	-0.5	7.4	5.6	4.5	4.7		
iShares:Core US Agg Bd	AGG	79.99	-0.8	6.4	5.0	4.3	3.6		
Vanguard Int-Tm TxEx;Adm	VWIUX	77.02	-0.1	3.4	3.8	3.7	3.6		
PIMCO:Tot Rtn;Inst	PTTRX	70.56	-0.1	6.9	5.1	4.6	4.1		
Dodge & Cox Income	DODIX	66.29	-0.3	8.0	5.6	5.2	4.5		
Vanguard Sh-Tm Inv;Adm	VFSUX	63.98	0.2	4.9	3.6	3.2	2.7		
American Funds Bond;A	ABNDX	62.16	-0.7	9.1	5.5	4.6	3.8		
PGIM Tot Rtn Bond;Z	PDBZX	59.52	-0.7	5.6	5.4	5.2	5.1		
iShares:iBoxx \$IG Corp	LQD	57.83	-1.9	8.3	7.2	6.8	5.7		
Vanguard Sh-Tm B;ETF	BSV	56.24	0.01	4.6	3.3	2.6	2.0		
Fidelity US Bond Index	FXNAX	54.04	-0.9	6.5	5.1	4.3	N.A.		
Note: For funds with multiple share classes.	only the largest is show	vn. N.A.: Not applicable	: fund is too new	or data not av	ailable Source	: Refinitiv Lipper			

Investors Still Believe They Can Beat the Stock Market





I recently wrote about the benefits of diversification. Some readers don't buy it.

By MEIR STATMAN

ast month, I offered readers a paean to the virtues of diversified investing—the idea of spreading your money across different kinds of investments so as to reduce a portfolio's risk without reducing expected returns.

I presented five myths that skeptics often cite, and debunked those myths in an effort to strengthen the case for a diversified portfolio.

Well, judging from readers' reactions, it seems I still haven't convinced everybody.

So let me offer some of the common skeptical comments I received from readers, and my responses to those. I'm sure I still won't convince everybody. But I can't help but keep trying.

Average is for losers.

A reader wrote: "Diversification will of course mitigate the losses from your bad picks, but it will also strictly limit the rewards from the good picks."

What the reader says is true. Undiversified investors aspire to pick good stocks and avoid bad ones, earning above-average returns. Diversified investors

It is a folly for engineers, physicians or professors to believe that they can acquire in their free time the information and skills investment professionals acquire and deploy in their day jobs. As I often note, in every trade there is an idiot. And if you do not know who it is, you are it.

Granted, very good amateur tennis players might beat middling tennis professionals from time to time. Luck helps. The same is true with the investment game—even more so, because luck helps in investing more than it does in tennis. When that happens, though, amateur investors tend to become overconfident in their investment skills and it encourages them to continue trading.

One other point on this: As another reader noted, "Most people in the accumulation phase of their lives are also raising young children and trying to build their careers and do not have the time to perform the day-to-day study necessary for market timing. Diversification and mutual funds are boring but work for most people." Indeed.

atility of a portfolio of 3,500 stocks. The extra volatility of the 18 or 1,800 stock portfolio can be eliminated by increasing diversification to 3,500 stocks, and therefore this

Time itself is diversification.

extra volatility is not rewarded.

A reader wrote that he follows this rule: "If you can't own a stock for five years you shouldn't own it for five minutes."

This is the rule of "time diversification," the belief that the risk of stocks declines as the investment horizon increases. The claim of time diversification is that stocks are risky when held during short periods of five minutes, or even a year, but that risk is lower if held during long periods of five years, and the risk of stocks held for very long period drops to almost zero.

That belief is tempting but unfounded. The risk of a diversified portfolio of stocks does not decline as the investment horizon increases. and the risk of a single stock or an undiversified portfolio of stocks surely does not decline as the investment horizon increases.

Consider the following example. Imagine a portfolio of stocks that has a 50-50 chance to gain 20% each period or lose 10%

You begin with \$1,000.

By the end of the first period, that \$1,000 either grows to \$1,200 or diminishes to \$900. If you are fortunate to have \$1,200 by the end of the first period you will have either \$1,440 or \$1,080 by the end of the second period. If you are unfortunate to have \$900 at the end of the first period you will have either \$1,080 or \$810 by the end of the second period.

The probability of a loss decreases from 50% if held for one period to 25% if held for two periods. This decline in probability underlies the time diversification argument. But the amount of loss increases from \$100 if held for one period to \$190 if held for two periods.

Holding a single stock for long periods doesn't eliminate its risk. Its value might decline to zero along the way and never recover. Holding a diversified portfolio for long periods does not eliminate its risk either. A diversified portfolio can sustain a long series of losses and sometimes never recover, as happened in stocks in Germany and Japan in World War II.

Dollar-cost averaging is an-

A reader recommended that inves-

stocks "should invest the same amount of money the same date each month in an S&P 500 fund if they believe in the future of the U.S."

Another reader recommended choosing an investment method "where you don't put the money in at one time, but average in over 10 years."

This recommended investment method, known as dollar-cost averaging, promises the risk-reduction benefits of time.

Suppose that you inherited \$120,000 from a beloved uncle. You intend to invest it in stocks, say in an S&P 500 fund. You can choose to invest it all in the fund today, in a lump sum, or you can choose to invest it in 12 equal \$10,000 increments on the 15th of each month during the coming 12 months

Your risk by dollar-cost-averaging investing during the 12 months is indeed lower than the risk by lumpsum investing, because the risk of cash is lower than the risk of stock. But once the 12 months are past, the entire \$120,000 is in the stock fund. You are 12 months older now. Does older age make it easier for you to bear risk?

Dollar-cost averaging is like dipping your toes in the pool one at a time, followed by feet, legs and the rest of you. Lump-sum investing is like jumping into the pool head first.

The real benefit of dollar-cost averaging is in reducing regret. Regret is the painful emotion we feel when we find, too late, that another choice would have brought better outcomes. Pride is the pleasurable emotion that stands at the other end from regret.

Consider the regret potential of investing the entire \$120,000 in the stock fund today. How much regret would you feel if the stock fund plunged tomorrow? Regret would be lower if you invested only \$10,000 today, because you can contemplate the pride you will feel by investing the next \$10,000 at a lower stock price.

Just pick stocks of good companies.

A reader wrote: "Invest in a handful of only the greatest companies."

This is common advice. But it is not necessarily good advice.

Imagine that you are shopping for a car and considering the Toyota Camry and Lexus ES 300h. You face two distinct questions. First, is the Lexus a better car than the Toyota? Second, is the Lexus a better buy than the Toyota?

Even I, a Toyota driver, readily admit that the Lexus is a better car than the Toyota, and more prestigious. But are the better features of the Lexus worth the substantial difference in price? Some buyers say yes, others say no, but they all understand that they must contemplate the two distinct questions.

Somehow, many investors regularly fail to ask themselves the second question. Are great companies better than companies that are not as great? Sure. But are investments in stocks of great companies better than investments in stocks of companies that are not as great? Perhaps, but not necessarily. We must consider the prices of the stocks relative to their value before we answer this question.

Evidence indicates that, if anything, stocks of great companies have been worse investments, on average, than stocks of not-so-great companies. A study of Fortune magazine's annual list "America's Most Admired Companies" found that stocks of admired companies had lower returns, on average, than stocks of spurned companies, and that increases in admiration were followed, on average, by lower returns.

The dispersion of returns among stocks is high, however, especially in the portfolio of spurned company stocks. That high dispersion implies that investors who would like to benefit from the return advantage of spurned company stocks must diversify widely among them.

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Holding a stock for long periods doesn't eliminate its risk.

forgo such aspirations. They hold all stocks, good and bad, earning average returns.

Several readers insist they *can* be above-average investors. My question to them: Are you really an above-average investor?

The facts suggest they aren't. They just think they are. A study of the members of the American Association of Individual Investors found that they overestimated their own investment returns by an average of 3.4 percentage points a year relative to their actual returns, and they overestimated their own returns relative to those of an appropriate benchmark by 5.1 percentage points.

OK, but I know what I'm doing.

A reader advocated beating the market with undiversified portfolios by acquiring investment skills to avoid losses from bad investment picks. "It's vital to know investing's and finance's language, how to read a financial statement, have run a decent-sized biz, understand how to value a biz, are disciplined Amateurs and patient and understand the qualities that separate great businesses from good," the reader wrote.

Many amateur investors frame stock picking and trading as the equivalent of playing tennis against a training wall. But picking stocks and trading is properly framed as tennis against a professional on the other side of the tennis net, perhaps Roger Federer. Amateur investors are similarly playing the stockplaying buying game against professionals, perhaps one with inside information or better ability to combine public information into superior assessments.

> Do you really think that you gain an advantage over professional investors by knowing investing and finance language or the ability to read financial statements?

Reward requires risk.

A reader wrote: "The whole discussion about mitigating your risk seems to misunderstand the basic reality of buying stocks. There is no getting around the fact that risk and reward are connected. If you want to make real money in the market you have to be able to pick stocks."

It is true that high risk can be rewarded with high expected returns. But not all risk is rewarded.

Risk is of two kinds, diversifiable and undiversifiable. Diversifiable risk is the extra risk that an undiversified portfolio might lose value even if the stock market gains. Undiversifiable risk is the risk that even a diversified portfolio, such as a total index fund, will lose some or much of its value when the stock market loses.

Investors who hold undiversified portfolios bear both diversifiable and undiversifiable risk, but only the undiversifiable portion of the risk is rewarded. Therefore, they bear more risk than is rewarded.

Yes, a combination of undiversification and good luck can deliver fantastic returns. But a combination of undiversification and bad luck can decimate a portfolio and retirement prospects.

One way to understand this is to note that the volatility of the returns of a portfolio of 18 or even 1,800 stocks is greater than the vol-

other form of diversification.

tors lacking skills at picking winning

think

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yes, but it

can be like

JOURNAL REPORT | INVESTING IN FUNDS & ETFS

Exchange-Traded Funds

'Active' Stock ETFs Draw Billions in New Assets

It's too early to tell whether these are good investments. But investors have more choices.

By Leonard Sloane

t has been a long time coming, but investors now have access to a growing number of actively managed equity ETFs.

Exchange-traded funds typically are passive they track a major market index like the S&P 500. According to ETF.com, more than 97% of the assets in U.S.-listed funds are invested in passive ETFs. Until recently, most of the active funds were on the fixed-income side.

But because of a change last year in the way the Securities and Exchange Commission permits ETFs to be marketed, many active equity funds have been created. With these funds, investment managers can deviate from an asset allocation strictly based on the weighting of their benchmark index, in an effort to improve their returns. Many active ETFs now use the same investment strategies as their corresponding mutual funds.

"This is a good time for asset management," says Tom Lydon, chief executive of ETF Trends, an Irvine, Calif., company that studies trends in ETFs. "When times are challenging, you want to make sure you're in areas that are doing well."

Analysts say it is too soon to tell whether active management is proving to be an advantage for investors in equity ETFs. Ben Johnson, director of global ETF research at Morningstar Inc., says there "isn't a sufficient time horizon for investors to draw conclusions regarding their odds of partnering with successful active managers.'

But the number of choices certainly is growing. The issuers of active ETFs this year include big-name mutual-fund companies such as American Century Investments,

Legg Mason (recently absorbed into Franklin Templeton) and Fidelity Investments. T. Rowe Price launched four active ETFs last month.

In all, there are 15 of this new breed of active equity funds, also called semitransparent ETFs.

The surge in active equity ETFs, which already have more than \$100 billion in assets under management, had its genesis in the SEC's decision to allow some stock ETFs to operate without disclosing their holdings every day-a requirement that still applies to passive ETFs. Managers of active equity ETFs now can disclose their holdings quarterly, as mutual funds do. That allows them to pursue their investment strategies without fear that public knowledge of their every move would cause market reactions that would thwart their objectives.

While active ETFs don't have to reveal their holdings every day, they provide information daily on their own per-share value, based on their portfolios—using models approved by the SEC that allow them to do so without revealing what stocks they hold. That allows investors to compare the reported per-share value of a fund to its market price.

Nevertheless, compared with passive ETFs, there may be a greater difference between the price per share of active ETFs and the underlying net asset value per share of the fund. That's because they pose additional risks, which can increase during periods of market volatility, and investors' assessment of those risks will affect the market price.

The actively managed funds have the same advantages as other ETFs, when compared with mutual funds: lower fees, generally (though typically not as low as those of passive ETFs), the liquidity of continuous intraday trading, and tax efficiency.

Some market analysts expect demand for active equity ETFs to continue growing. "I think we're going to see more of them," says Todd Rosenbluth, head of ETF and mutual-fund research at CFRA, a research firm in New York. "For investors, it's a positive, because some prefer active management that gives them more choices from well-established active managers."

Mr. Sloane is a writer in New York. He can be reached at reports@wsj.com.

Total Return (%)-

Total Return (%)-



Category Kings in 10 Realms

Top-performing funds in each category, ranked by year-to-date total returns (changes in net asset values with reinvested distributions) as of Aug. 31; assets are as of July 31. All data are final.

Large-Cap Core

	Assets				
	(\$ millions)	Augus t	YTD	1-yr	5-yr*
HCM Defender 100 ldx ETF	112.5	14.8	31.4	N.A.	N.A.
AdvsrShs DW FSM US Core	50.8	10.1	29.0	N.A.	N.A.
Fidelity Magellan Fund	20,304.1	7.4	23.5	31.5	16.2
Centre Am Sel Eq;Inv	133.8	7.0	23.1	31.6	13.2
Invesco S&P500 Top50	1,504.8	9.8	19.9	34.4	17.5
HVIA Equity;Inst	25.4	9.1	19.9	31.6	N.A.
Category Average:	1,446.8	6.7	7.7	18.5	12.5
Fund Count	676	674	651	634	509

Large-Cap Value

	ASSECT		- ocarrece		
	(\$ millions)	Augus t	YTD	1-yr	5-yr*
Barclays iPath Shiller	196.5	6.3	6.7	17.1	16.0
DoubleLine:Sh En CAPE;I	7,084.5	8.4	4.3	14.2	15.8
Amer Cent:Inc&GroInv	2,131.1	5.6	3.8	14.3	11.0
Invesco S&P 100 Eq Wght	61.2	6.4	1.9	13.4	12.6
Vanguard Windsor II;Adm	42,652.0	5.7	0.2	13.0	9.8
Matrix Adv Value Fund	49.0	6.1	-0.4	12.9	8.7
Category Average:	1,120.4	4.4	-8.0	2.5	7.6
Fund Count	408	408	400	397	345

Large-Cap Growth

	Assets Total return (%)							
	(\$ millions)	Augus t	YTD	1-yr	5-yr*			
Transam:Large Gro;l3	995.3	9.3	53.8	69.7	N.A.			
PGIM Jenn Focused Gr;Z	918.7	12.5	49.1	62.7	23.5			
Touchstone Inst:Snd Gr	2,217.5	9.3	47.7	58.0	21.9			
Touchstone:Sel Gro;Y	2,135.2	9.3	47.4	57.7	21.6			
J Hancock II:Cap Ap;NAV	1,995.5	13.5	46.8	63.0	22.5			
JPMorgan:LgCp Gro;R6	26,004.6	10.8	46.7	55.3	23.6			
Category Average:	2,328.7	9.1	28.3	40.4	18.6			
Fund Count	689	683	666	646	546			

Midcap Core

	Assets —— Total return (%)						
	(\$millions)	Augus t	YTD	1-yr	5-yr*		
Frank Value;Inv	13.1	-0.2	11.8	12.3	2.3		
Carillon:Sct Mid Cap;l	2,662.5	4.6	6.7	13.3	11.5		
Invesco S&P MidCap Qlty	52.2	3.4	6.6	17.3	10.3		
Intrepid:Dsc Val;Inv	21.0	2.8	4.8	7.7	3.3		
JPMorgan:MdCp Eq;R6	1,720.9	3.9	4.8	14.5	10.6		
Clarkston Founders;Inst	65.8	6.4	4.6	14.3	N.A.		
Category Average:	1,163.6	3.6	-6.9	1.8	6.1		
Fund Count	355	356	347	341	252		

Midcap Value

	Assets	ets —— Total return (%,				
	(\$ millions)	Augus t	YTD	1-yr	5-yr*	
Hennessy:Crnst MdCp;Inv	287.8	7.1	2.1	11.8	1.2	
WM Blair:Sm-Md Cp Cr;I	164.0	5.1	-2.1	N.A.	N.A.	
T Rowe Price MC VI	11,378.0	4.2	-3.5	7.5	7.4	
J Hancock II:Mid Val;NAV	1,302.3	4.2	-3.6	7.4	7.1	
GoodHaven Fund	80.9	6.6	-4.4	5.1	3.6	
Gabelli Eq:Foc Five;AAA	32.1	4.0	-7.3	2.7	-0.02	
Category Average:	487.2	4.0	-14.7	-4.6	3.6	
Fund Count	162	162	158	154	126	

Small-Cap Core

	Assets		otairett	Irn (%)-	
	(\$ millions)	Augus t	YTD	1-yr	5-yr*
Needham:Sm Cap Gro;Rtl	184.8	0.6	25.6	52.7	22.1
Jacob Micro Cap Gro;Inst	16.0	14.6	24.8	40.1	15.5
WesMark:Sm Company Gro	101.4	5.1	11.7	24.3	7.5
Paradigm:Micro-Cap	66.2	1.7	7.2	26.0	11.7
Perkins Discovery	8.7	8.6	6.0	7.1	10.8
BNY Mellon:SC Mlt-St;M	449.9	6.3	6.0	16.4	10.1
Category Average:	454.2	4.3	-11.6	-1.4	5.0
Fund Count	928	927	914	905	707

Small-Cap Value

	(\$ millions)	Augus t	YTD	1-yr	5-yr*
North Star Micro Cap;I	75.7	9.0	16.1	26.5	8.4
Aegis Value;I	105.6	7.1	5.5	18.4	11.7
Brandes Inv:SC Val;I	0.7	3.8	-0.5	10.2	N.A.
Bridgeway:Ultra-Sm Co	60.1	3.1	-1.2	8.3	0.7
Royce Fd:Spec Eq;Inv	811.0	4.3	-5.5	5.0	5.2
FPA Capital	204.3	1.2	-6.1	1.5	-0.1
Category Average:	328.0	5.1	-17.5	-6.2	2.9
Fund Count	226	227	223	216	185

Small-Cap Growth

	Assets — Total return (%)—						
	(\$ millions)	Augus t	YTD	1-yr	5-yr*		
Morg Stan I:Inc;I	303.3	11.0	76.6	79.9	22.6		
Delaware Sm Cap Gro;Inst	106.7	8.4	57.5	61.1	N.A.		
Renaissance IPO ETF	88.6	8.8	55.2	58.1	17.7		
Osterweis Emerg Oppt	137.5	3.6	41.5	40.2	N.A.		
Alger Inst:Sm Cap Gr;I	239.7	3.1	38.8	37.4	19.1		
BNYM Small Cap Growth;	13.2	8.0	38.5	47.1	19.2		
Category Average:	561.9	4.8	11.9	19.9	12.3		
Fund Count	662	660	655	645	520		

Multicap Core

	Assets	— т	otal retu	ırn (%) -	
	(\$ millions)	Augus t	YTD	1-yr	5-yr*
Jackson Sel 20 Gro;IS	6.8	5.8	25.8	32.1	12.7
Schwab Cap:Lg-Cap Gro	209.8	9.7	24.8	37.8	16.1
Domini:Impct Equity;Inv	845.1	8.1	20.7	33.9	12.9
Needham:Growth;Retail	121.9	1.4	17.7	34.3	12.6
Permanent Port:Aggr Gr;I	25.7	7.0	17.4	30.8	11.6
TANAKA:Growth Fund;R	10.5	4.5	16.8	24.8	2.1
Category Average:	2,281.9	5.8	5.1	15.6	10.8
Fund Count	700	701	685	675	515

Multicap Growth

	Assets	— т			
	(\$ millions)	Augus t	YTD	1-yr	5-yr*
Bail Giff US EG;I	43.6	14.4	88.4	98.7	N.A.
Zevenbergen Genea;Inv	69.4	11.6	87.1	98.0	33.1
Morg Stan Insight;A	5,149.3	8.3	85.4	85.8	32.3
Zevenbergen Growth;Inst	71.6	8.3	83.4	94.9	28.7
Morg Stan I:Growth;I	12,986.1	8.5	82.5	82.8	29.0
Transam:Cap Growth;I	3,776.4	8.3	81.0	80.9	28.3
Category Average:	672.1	7.3	27.2	36.3	16.6
Fund Count	520	519	511	510	403

Leaders and Laggards

Performance numbers are total returns (changes in net asset values with reinvested distributions) as of Aug. 31; assets are as of July 31. All data are final.

Best-Performing Stock Funds

		Assets		Annualized—						
Fund	Ticker	(\$ millions)	August	YTD	1-year	3-year	5-year			
MS FANG+ Index 3x Lev	FNGU	430.8	74.4	292.3	575.8	N.A.	N.A.			
MS FANG+ Index 2X Lev	FNGO	108.0	45.8	187.2	317.9	N.A.	N.A.			
GMO:Spec Opptys Fd;VI	GSOFX	293.9	18.8	151.0	160.6	47.0	32.2			
VelShs 3x Long Silver		457.2	40.5	123.7	91.7	15.2	10.5			
Direxion:DJ Int Bull 3X	WEBL	32.4	24.6	106.8	N.A.	N.A.	N.A.			
iPath ETN SP500 Dy VIX A	XVZ	7.9	2.7	105.9	120.8	20.4	5.8			
ProShs II:Ult Silver	AGQ	566.7	31.3	102.3	86.4	21.0	16.2			
ARK Next Gen Int ETF	ARKW	1,920.0	12.9	94.9	124.9	53.0	46.9			
Morg Stan I:Disc;A	MACGX	2,476.2	6.0	91.0	84.3	46.5	28.6			
Am Beacon:ARK TI;Y	ADNYX	435.0	16.5	91.0	116.4	40.0	N.A.			
ARK Innovation	ARKK	6,132.3	18.4	90.0	115.5	45.0	39.6			
iPath ETN SP500 VIX MT B	VXZ	30.2	1.4	89.3	70.1	N.A.	N.A.			
ProShs II:VIX MT Fut ETF	VIXM	68.9	1.3	89.0	69.8	15.4	-9.0			

Best-Performing Bond Funds

		Assets		Annualized					
Fund	Ticker	(\$ millions)	August	YTD	1-year	3-year	5-year		
Direxion:20+Y Trs BI 3X	TMF	361.6	-14.9	51.6	17.0	21.6	16.4		
ProShares:Ult 20+ Yr Tr	UBT	76.3	-9.1	39.4	19.3	17.6	13.3		
Lord Abbett Convert;F	LBFFX	1,038.8	9.6	38.7	46.0	20.3	16.2		
iShares:Convertible Bond	ICVT	829.5	10.38	35.1	44.4	19.4	15.9		
Direxion:7-10Y Trs BI 3X	TYD	24.4	-3.1	32.3	20.3	13.9	10.5		
AllianzGI:Conv;Inst	ANNPX	1,740.5	7.5	29.8	37.9	20.7	15.1		
SPDR Bbg Barclays Cnv Sc	CWB	5,023.4	9.5	29.6	39.0	16.5	14.8		
HCM Income Plus;A	HCMEX	221.5	8.2	29.3	39.0	13.9	N.A.		
Calamos:Convertible;I	CICVX	1,050.7	6.1	29.2	36.6	17.1	13.0		
PIMCO ETF:25+ Yr US Tres	ZROZ	435.9	-7.5	28.7	15.2	15.0	11.6		
Direxion:M25+TB1.35X;Inv	DXLTX	6.8	-7.5	27.8	14.1	11.7	N.A.		
PIMCO:Extend Dur;Inst	PEDIX	2,063.0	-7.0	27.8	14.7	13.8	11.0		
Franklin Inv:Cv Sc;Adv	FCSZX	4,400.7	3.9	27.6	33.3	19.6	16.3		

Worst-Performing Stock Funds

		Assets				Annualized		
Fund	Ticker	(\$ millions)	August	YTD	1-year	3-year	5-year	
Direxion:S&P OG EP BI 2X	GUSH	456.8	-0.9	-97.8	-97.5	-83.2	-74.9	
Direxion:Jr Mnr Bear 2X	JDST	88.7	-6.7	-95.8	-96.9	-79.3	-85.9	
MS US BO ldx 3X Lvrgd	NRGU	141.7	-12.8	-94.3	-92.0	N.A.	N.A.	
Direxion:MSCI Bra Bull2X	BRZU	202.3	-16.9	-94.2	-91.2	-61.7	-37.0	
ProShs II:Ult Blm CrO	UCO	1,431.8	9.5	-93.5	-92.2	-55.9	-52.7	
MS FANG+ Idx -3X Inv Lev	FNGD	32.5	-46.4	-92.5	-96.1	N.A.	N.A.	
Direxion:EnergyBull 2X	ERX	351.8	-2.7	-92.5	-90.6	-60.7	-47.0	
VelShs 3x Invrs Silver		8.1	-51.9	-89.6	-89.8	-57.8	-52.5	
Direxion:Latin Bull 3X	LBJ	26.0	-17.4	-89.1	-85.2	-58.0	-33.4	
Direxion:Reg Bnk Bull 3X	DPST	109.5	6.0	-89.0	-83.1	-51.4	-28.8	
Direxion:Gold M ld Br 2X	DUST	128.7	-3.0	-87.9	-89.2	-68.0	-77.8	
iPath ETN S&P GSCI CTR A		25.7	19.4	-85.8	-83.6	-40.8	-36.1	
Direxion:Semicnd Bear 3X	SOXS	121.0	-17.7	-83.7	-92.0	-75.8	-74.0	

		Assets	Total Return (%)————————————————————————————————————					
Fund	Ticker	(\$ millions)	August	YTD	1-year	3-year	5-year	
Barclays Inv US TC ETN	TAPR	2.7	16.6	-62.5	-50.8	-36.9	-31.1	
ProShares:UPSh 20+ Trs	TTT	15.0	13.9	-55.8	-46.5	-33.1	-28.4	
Direxion:20+Y Trs Br 3X	TMV	80.0	15.8	-55.7	-45.7	-33.2	-29.0	
iPath ETN Trs 5Yr Bear	DFVS	1.7	3.1	-52.3	-44.9	-21.7	-16.0	
ProShares:UIS 20+ Yr Trs	TBT	369.8	9.2	-39.7	-31.1	-21.6	-18.4	
Braddock Mlt-Str Inc;Ins	BDKNX	924.6	1.9	-32.0	-31.0	-8.6	N.A.	
Direxion:7-10Y Trs Br 3X	TYO	6.5	2.7	-28.7	-22.6	-15.6	-14.1	
ProFunds:Rs Rt Opp;Inv	RRPIX	6.2	8.5	-28.6	-21.4	-15.3	-12.6	
Direxion:M25TBr1.35X;Inv	DXSTX	0.1	7.2	-26.0	-17.3	-14.9	N.A.	
UBS AG Enh Eur GI HY ETN	FIHD	35.6	6.4	-24.2	-8.0	0.9	N.A.	
Rydex:Inv Gv LB Str;Inv	RYJUX	26.1	7.0	-22.8	-16.1	-11.4	-9.3	
ProShares:Sht 20+ Treas	TBF	147.8	4.5	-20.9	-15.0	-10.2	-8.7	
Direxion:20+Y Trs Br 1X	TYBS	1.3	5.2	-20.2	-13.8	-9.7	-8.5	

N.A.: Not applicable; fund is too new * Annualized Note: For funds with multiple share classes, only the largest is shown

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Saving for College

Financial Aid, Pandemic Update

What parents and students need to know about Fafsa and CSS forms starting Oct. 1

By CHERYL WINOKUR MUNK

or many families, this year's process of applying for financial aid might be notably different than it was in the past. That is because the financial-aid forms for the 2021-22 academic year are based on income from 2019. As a result of the pandemic lockdowns wreaking havoc on their finances, more families are likely to seek professional judgment from financial-aid administrators who have the authority to adjust their awards.

This is something students were always able to do, before Covid-19, if they had a change in circumstances that could change their aid, such as a job loss or major medical issue. "But certainly now institutions are prepared for a greater influx of these requests due to the impact of the virus," says Megan Coval, vice president of policy and federal relations at the National Association of Student Financial Aid Administrators.

Here's what families experiencing changed finances should do and expect from this year's financial-aid process.

Determine each school's professional judgment process

The Free Application for Federal Student Aid (Fafsa) for federal aid and the College Board's CSS Profile, which hundreds of colleges use as part of their financialaid process, become available on Oct. 1.

It is the CSS Profile, not the Fafsa, where families have a chance to elaborate on their changed financials in a "special circumstances" section. Families this year also will be asked if they have a change of income or other financial changes related to Covid-19, a College Board spokeswoman says.

It will be especially important this year to know and follow each school's procedures for seeking professional judgment. Be sure to visit the website of your current school (or any prospective schools vou're considering) to see what process you'll need to follow if your income is significantly different from your 2019 tax return. There is no uniform process for these types of appeals. Some schools will want an email, while some want information sent through the financial-aid office's

portal, for example.

The important thing is to follow what their process is. If you submit more than what they ask for, they probably aren't going to look at it. If you don't submit what they ask for, they may not consider your appeal. You have to follow their pro-

On the CSS Profile, families have a chance to elaborate on their changed financials.

cess to a T and get everything in on time," says Ross Riskin, certified college financial consultant and associate professor of taxation at the American College of Financial Services

Families should be prepared to share what happened to cause the change in income. The financial-aid office could reguest a variety of documents, such as a statement on letterhead indicating the last date of employment, copies of paychecks, and documentation of the gross income for the person whose employment status changed, Ms. Coval says.

Don't assume you won't qualify

Some families don't fill out the financialaid forms because they think they make too much money to qualify. But it is always a good idea to fill out the forms anyway, and it is especially true if you had a job loss or a significant reduction in income, since you could now be eligible for aid that you weren't eligible for before, Ms. Coval says. For instance, even if you still make too much money to qualify for a federal Pell Grant, you may now be eligible for institutional funds, so it is worth applying, she says.

Follow up with the aid office

Once you've sent in the required documentation, it is a good idea to follow up with the aid office to check on the status of your appeal. Understand there could be delays, especially since schools are dealing with resource constraints and a potentially greater number of appeals, Dr. Riskin savs.

Families should also plan for potential delays in receiving aid packages, he says.

Ms. Winokur Munk is a writer in West Orange, N.J. She can be reached at reports@wsj.com.

Federal Student-Loan Borrowers Get Relief—but That Isn't the Whole Story

Limited options for private loans

By Cheryl Winokur Munk

Many federal student-loan borrowers will get a reprieve from loan payments through Dec. 31, thanks to the executive order from President Trump last month that extended relief that had been set to expire Sept. 30. But payments were only deferred, not forgiven, so as things now stand many federal-loan borrowers will be on the hook for eventual repayment. And private-loan borrowers may find even less relief is available.

First, consider the federal-loan borrowers. For many who have lost their jobs or had their income reduced sharply by the pandemic's impact on the economy, the latest payment deferral will only delay the day when a bill comes due that they can't pay.

Borrowers in this situation would do well to prepare now in case no further relief is forthcoming after President Trump's executive order expires at the end of this year, says Will Sealy, co-founder and chief executive of Summer, which helps student-loan borrowers track their loans and identify repayment options.

It could make sense for these borrowers to apply now for income-driven repayment and ask their loan servicer to enroll them in January when the reprieve from loan payments runs out, says Mr. Sealy. Depending on a borrower's income and family size, there may be no monthly payment at all. Borrowers then have to recertify their income and family size annually, even if there has been no change.

Income-driven repayment is also required before any borrower working in the public sector can seek loan cancellation through the Public Service Loan Forgiveness program, he says.

Private-loan troubles

Meanwhile, millions of borrowers who have private loans or commercially held Federal Family Education Loans and school-held Perkins Loans weren't granted automatic relief by the Cares Act, set to expire Sept. 30, and aren't covered by last month's executive order. Borrowers in the

FFEL program may be eligible for income-driven repayment. Perkins loan borrowers should speak to their schools about potential repayment options, including those that could allow for income-driven repayment.

There have been regulatory efforts to extend student-loan relief to private borrowers, but nothing has materialized. About 70% of private-loan borrowers who requested relief directly from their lenders received it, according to a poll in May of more than 1,000 borrowers by LendingTree's Student Loan Hero division. But many of those who were granted relief face even greater uncertainty than

federal-loan borrowers. Starting in March, many private lenders offered relief. Often these offers were for two to six months of forbearance, meaning many borrowers who took these options in the spring have run out of time, or soon will. Some lenders are offering additional forbearance periods, but there's no guarantee it will be granted or for how long the option will be extended. "Private studentloan borrowers have no protections. They are at the

mercy of the lender," says Joshua Cohen, a studentloan attorney who practices in Connecticut and Vermont.

Limited options

Private-loan borrowers who have run out of forbearance options could try to ask for a reduced-payment option, which some lenders may agree to. Borrowers could also try to refinance and get better terms, though that's unlikely to be an op-

tion unless the borrower has good credit and a steady income. Another choice could be for borrowers to take the money from savings or investments to make loan payments, so as not to damage their credit, or borrow from family.

After 90 days of nonpayment, many lenders will offer an option of interest-only payments, Mr. Cohen says.

If a payment is four to six months late, the loan is generally sent to a debt col-

lector. If this happens, the borrower might be offered a payment plan, but it's better to settle the debt outright if possible. Mr. Cohen says. Payment plans are troublesome because most debt collectors are only assigned the debt for six to 12 months. Once the debt collector changes, any payment plan is voided, and the time frame for a lender to sue will restart. Meanwhile, the borrower may have made a dent in payments but also paid collection fees.

Tracking Exchange-Traded Portfolios

Performance figures are total returns for periods ended Aug. 31; for largest exchange-traded funds and

other portrollos, ranked by asset size.		Assets	Volume	Expense	Launch	—— Per	formance	(%)——
Fund	Symbol	(\$ billions)	(000s)	ratio	date	August	YTD	1-year
SPDR S&P 500 ETF	SPY	307.22	65,245.0	0.09	01/22/93	7.2	9.8	21.9
iShares Core S&P 500 ETF	IVV	220.43	5,749.9	0.04	05/15/00	7.2	9.7	21.9
Vanguard Tot Stk Mkt ldx ETF	VTI	166.26	3,186.0	0.03	05/24/01	7.2	9.4	21.3
Vanguard 500 Index ETF	VOO	165.76	5,058.6	0.03	09/07/10	7.2	9.7	21.9
Invesco QQQ	QQQ	140.25	35,691.6	0.20	03/10/99	11.1	39.4	58.7
iShares Core US Aggregate Bond ETF	AGG	78.99	9,924.6	0.05	09/22/03	-0.8	6.8	6.4
SPDR Gold Shares	GLD	78.73	9,903.9	0.40	11/18/04	-0.4	28.2	27.6
Vanguard Developed Markets Idx ETF	VEA	76.09	18,615.2	0.05	07/20/07	5.0	-3.7	7.5
iShares Core MSCI EAFE	IEFA	72.03	7,495.7	80.0	10/18/12	5.5	-4.4	6.8
Vanguard Growth ETF	VUG	63.93	764.3	0.04	01/26/04	10.1	31.9	45.3
iShares Russell 1000 Growth ETF	IWF	62.09	1,689.0	0.19	05/22/00	10.3	30.3	44.0
Vanguard Emg Mkts Stk Idx ETF	VWO	61.92	10,682.2	0.10	03/04/05	2.3	0.3	13.2
Vanguard Total Bond Market ETF	BND	60.52	16,000.1	0.04	04/03/07	-1.0	6.9	6.3
iShares iBoxx \$ Inv Grade Cor B ETF	LQD	56.38	11,846.0	0.14	07/22/02	-1.9	7.8	8.3
iShares Core MSCI Emerging Markets	IEMG	54.62	13,934.7	0.14	10/18/12	2.4	0.3	14.0
*Expense charge is a maximum of 8 cents a share \dagger Assets are	estimated N.A.=	Not applicable, 1	fund is too new					

Note: Total returns are based on the change in the net asset values, not changes in market prices. Net asset values can vary from market prices, which Source: Refinitiv Lipper

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What closed-ends are

While ordinary open-end funds expand or shrink based on investors' purchases and sales, closed-ends maintain a more-stable asset level because they issue shares as public companies. Their shares may trade at a premium, or more often a discount, to the value of their holdings.

Closed-ends were in vogue in the 1980s, offering access to star managers like John Templeton, Martin Zweig and Mario Gabelli. In the '90s a run of "country funds" featured stocks from Taiwan or South Korea that weren't then widely available.

Since then, bond funds have dominated in closed-ends. Falling interest rates have been a tailwind for performance. Annual returns of closedend bond funds topped active open bond funds in the decade ended June 30. (Closed-end stock funds trailed active open-end stock funds.) Reasons for the higher expenses include borrowing costs, management fees based on the extra debt-financed assets, and costs of acquiring illiquid or hard-to-find assets.

A 2018 study by Diana Shao and

verage or borrowing appeals to wealthier investors "approaching or in retirement." For example, **Nuveen AMT-Free Quality Municipal Income Fund** (NEA) has common stock valued at \$4.4 billion, and borrows to boost total assets by \$2.5 billion. It had fees and expenses of 0.93% in its latest full year, versus 0.53% for a similar Nuveen open-end fund. Its distributions were 4.4%, compared with 3.6% for the open-end fund. But a drop in bond prices would hit the closed-end fund harder.

Discounts and activists

The funds started struggling around 2014, as performance weakened and the shares began trading at wider discounts of 10% or more to net-asset value. A plunge in energy funds hit closed-end stock funds' performance. That caused sales to slump and drew vulture-like "activist" investors—sharpening the need for action by fund sponsors.

In response, the fund managers have tried to boost the funds' appeal and narrow the discounts by paying the brokerage commissions themselves, and by putting time limits on the funds' lifespan.

Thanks in part to pressure from the Investment Company Institute, a fund-industry trade group, the closedend sector also has gotten help from the Securities and Exchange Commission against attacks by activist investors. The SEC in May approved closed-end funds' use of a Maryland law limiting the voting rights of activists, thus potentially reducing the activists' ability to gain control of funds or apply pressure for change.

Since 2019, new issues have rebounded, led by two BlackRock stock funds, one for health science and the other for tech companies. The two funds currently have \$5.1 billon in assets between them.

The activists typically purchase funds at discounted prices and then push for changes that could narrow the discount and thus increase the market price of their shares.

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Closed-End Funds: The Comeback Tour

A disrespected form of mutual funds might be getting a second life

By RANDALL SMITH

Iosed-end funds, the has-beens of the mutual-fund world, are getting a chance for a second life. The flood of investment dollars into low-cost index funds has challenged many of Wall Street's most ex-

funds has challenged many of Wall Street's most expensive offerings, few more so than closed-end funds. In the decade after the financial crisis, assets under management doubled in stock and bond mutual funds but remained stagnant in closed-end funds, where the total in July stood at \$254.7 billion. Annual average new-issue volume, meanwhile, fell from \$13.2 billion in the decade ended in 2013 to \$2 billion for the next five years, according to Dealogic.

But now some big-name fund managers, led by **TIAA**'s Nuveen

and **BlackRock** Inc., the top two closed-end sponsors, are making moves to revive the sector, in part by revamping their structure. These moves include having the fund sponsors, not investors, pay the sales commissions that brokerage firms charge for selling the funds. New closed-end funds also come with term limits that give investors the option of getting out at par after a certain number of years.

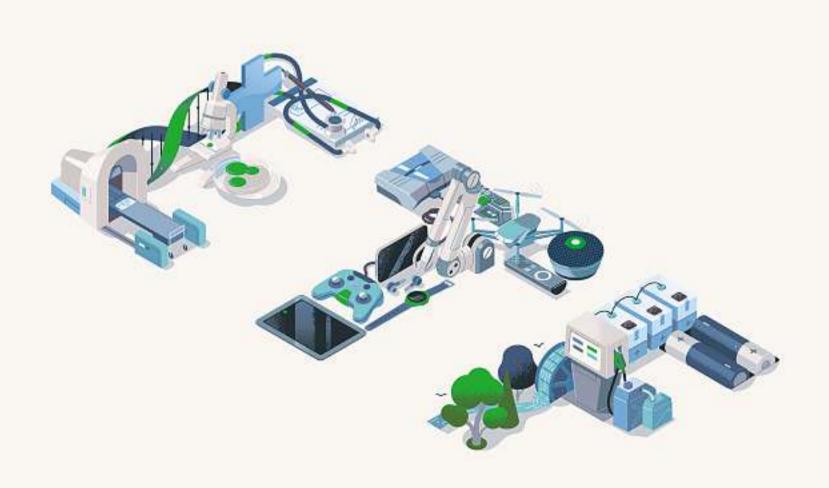
Closed-end funds generally offer higher yields than open-end, often increased by borrowing, which also adds to risk. Those yields can be tempting. But average investors shouldn't take the plunge without understanding the higher fees and risks. The average expense ratio for these funds, for example, is currently more than double the average for actively managed open-end funds, says Morningstar. And the risks were on display in this year's market plunge, when several energy funds were forced by their use of borrowing to sell assets or liquidate.

Closed-end funds generally offer higher yields, but also higher fees and risks.

Jay Ritter at the University of Florida found that closed-end funds underperformed other funds by a wide margin in their first year of existence. Yet Prof. Ritter believes such funds can be useful as sources of high-yield income, if bought at discounts in small doses to limit risk.

Mike Holland, a Wall Street executive who helped launch a closedend China fund in 1992 and remains a director of a high-yield utility closed-end fund, says, "There are pockets of this market where if you are very careful and very lucky you can do quite well." But their allure has faded as lower-cost options have proliferated, he adds.

Dave Lamb, Nuveen's head of closed-ends, says their ability to deliver higher distributions by using le-



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