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Bloomberg Businessweek

Chaos,

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Traders are pricing in volatility—after Nov. 3

The world's gone mad. Why is the market so calm?

Retailers scramble to keep Black Friday in the black

Cloud computing stocks climb into the outer atmosphere

Mass layoffs in the Magic Kingdom

Vaccine safety

Turbulent skies
The last picture shows

Boffo bank earnings
Coney Barrett heads to the Senate

Trump deals with his infection the way he's handled the

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How the cover gets made

Can you believe it's October 1st already? Where did 2020 go?"

"And what a year it's been. Nothing could shock me now."

[The next day]

"So... the president got Covid."

"Wow! Did not expect that."

[Three days later]

"So, I've got another 2020 shocker for you: The president is leaving the hospital already."

"Uh..."

"Those 'roids must make you feel real good."

> "Meanwhile, the Trump cluster is, well, a clusterf---."

"I mean, they haven't exactly been rigorous about mask-wearing. But it's the *White House*—I'm sure they'll figure it out."

[One day later]

"I'm losing track of how many staffers have tested positive— Stephen Miller is the latest—but now the Joint Chiefs are isolating, and it seems like the president's supporters don't think any of this is a big deal."

"The man is contagious in more ways than one."

Cover: Mandel Ngan/

AFP/Getty Images

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IN BRIEF

 Global coronavirus cases have passed

36m

and deaths now exceed 1.05 million. At the White House, President Trump, his wife, Melania, spokeswoman Kayleigh McEnany, and other key aides all tested positive. Trump has been given a powerful cocktail of experimental drugs and steroids. ▷ 8 In China, about 425 million people traveled domestically in the first four days of the Golden Week holiday.

It's a sign that the country where the pandemic originated is eager to move beyond the crisis after nine mostly homebound months. • U.S. air carriers have furloughed about

38k

workers since Oct. 1, including major layoffs at American Airlines and United Airlines. Southwest Airlines said it's cutting compensation to avoid letting employees go. • Cineworld Group will temporarily suspend operations at all its U.S. and U.K. theaters after blockbuster releases, including the latest

James Bond film, were pushed into next

year. The move affects 45,000 employees.

"The safety profile of a vaccine that's going to be used in millions of people has to be incredibly clean."

Peter Marks, the head of the U.S. Food and Drug Administration's vaccine division, defended his agency's policy of a two-month safety follow-up in trial patients. The White House wants to accelerate the introduction of a coronavirus vaccine. Protests
 erupted in
 Kyrgyzstan after
 contentious
 parliamentary
 elections on
 Oct. 4.

Demonstrators, angered by alleged vote-rigging, stormed the parliament chamber in the Central Asian republic, and set parts of the building on fire.

Poland's competition watchdog slapped a fine of \$7.6b

on Gazprom. The Russian company has almost completed a contentious natural gas pipeline under the Baltic Sea to Germany that Poland says will hurt competition. Wary of German dependence on Russia, the U.S. has also urged it to scrap the project. Gazprom plans to appeal.



• Japanese fashion designer Kenzo Takada died in Paris at 81 following complications from Covid-19. The Kenzo label he created in the early 1970s pioneered bright colors, street style, and animal prints on the catwalk.

• Tokyo's \$6 trillion stock exchange suffered a full-day outage on Oct. 1, the longest interruption since switching to a fully electronic trading system more than two decades ago. The hardware-driven failure was prompted by a malfunctioning data device.



• Rock legend Eddie Van Halen also passed away, at 65. With his virtuoso finger-tapping style and rapid riffs, Van Halen was celebrated as the most influential guitarist of his generation. His family said he'd been battling cancer.

BLOOMBERG OPINION

Online Schooling Isn't Ideal, But It Needn't **BeaDisaster**

The shift to remote learning during the pandemic has seriously harmed America's schoolchildren. The end of in-person instruction last spring reduced expected learning gains by an estimated 50% in math and almost one-third in reading, according to NWEA, an educational research group. With the vast majority of schools in urban districts still closed, lowincome students are losing ground they might never make up.

This underscores the need to reopen schools as quickly as possible. That, in turn, will require new funds to pay for safety measures and careful limits on activities that might spread the virus. Even if reopening moves as quickly as prudence allows, however, schools will need to rely for a while yet on some degree of remote learning. It's vital to ensure that this kind of instruction is as effective as possible.

There's been some progress. Since the start of the pandemic, school districts have increased the number of hours students working at home spend in live video classes-a marked improvement on the chaos of last spring, when teachers struggled to adapt to online instruction. In cities such as Chicago and Los Angeles, which initially didn't make synchronous learning mandatory, schools are now required to provide several hours of live classes for all students, depending on grade.

For remote classes to work, students need computers and access to broadband at home. Washington can help by allowing schools to use funds from the federal government's E-rate program to subsidize residential internet connections, as the latest Democratic stimulus bill would do. School officials should work with providers to identify and connect households that lack reliable service. Cities like Pittsburgh and Cincinnati are showing what can be done to get students online.

But getting students online is just the start. The most successful transitions to remote learning have other things in common: a consistent class schedule, tools to track attendance, regular assessments, and online assignments that are collected and graded. And younger students need new, simpler lessons focused on basic skills.

Parents should also get more help. Schools should assign advisers to meet with them virtually, solicit feedback, and ask about student needs. During regular school hours, dedicated support lines should be open so parents can quickly resolve any glitches.

All this will cost money. In addition to buying new technology, school districts need to give teachers digital training. Districts should offer incentives for teachers to develop online courses and mentor fellow teachers. Such investments can continue to pay off even as normality resumes, by allowing teachers to supplement in-person classes with high-quality virtual coursework that students can use to catch up.

Remote learning has been an ordeal for many studentsand for many parents as well. It cannot come close to replacing in-school instruction, least of all for the youngest children, who need the kind of training in social skills (for example, how to deal with distraction, work with others, wait your turn) that only a schoolroom setting can provide. Let's be clear: The sooner children return to the classroom, the better.

Still, for the time being, millions will need to keep learning from home. For as long as that lasts, it's essential to make this second-best education as good as it can be. **B** For more commentary, go to bloomberg.com/opinion

AGENDA

A Profitable Crisis

JPMorgan and Citigroup kick off the third-quarter earnings season on Oct. 13, followed by Bank of America and Goldman Sachs the next day. Market volatility has helped the banks generate big trading gains this year.

► The U.S. Senate Committee on the Judiciary opens its confirmation hearing for Supreme Court nominee Amy Coney Barrett on Oct. 12, seeking to seat her before the election.

► The Milken Institute Global Conference, starting on Oct. 12, is being held virtually for the first time: it brings together leaders from politics, finance, and academia.

In her annual policy address on Oct. 14, Hong Kong Chief Executive Carrie Lam will discuss the economy and public health. The speech will likely draw pro-

Bank Indonesia unveils its interest rate decision on Oct. 13. The central bank has been one of the more aggressive in Asia, cutting rates four times so far this year.

The second of three U.S. presidential debates is slated for Oct. 15 in Miami. The first Trump-Biden encounter was criticized as overly acrimonious, chaotic, and possibly infectious.

democracy protests. A Bonhams auction on Oct. 11 includes two royal

vehicles: a 1959 BMW

507 first owned by Kina

Constantine II of Greece

and a 1955 Aston Martin

DB2/4 ordered by King

Baudouin of Belgium.

6



Introducing ATEM Mini The compact television studio that lets you create presentation videos and live streams!

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Create Training and Educational Videos

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ATEM Mini is really a professional broadcast switcher used by television stations. This means it has professional effects such as a DVE for picture in picture effects commonly used for commentating over a computer slide show. There are titles for presenter names, wipe effects for transitioning between sources and a green screen keyer for replacing backgrounds with graphics.

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The ATEM Mini Pro model has a built in hardware streaming engine for live streaming via its ethernet connection. This means you can live stream to YouTube, Facebook and Teams in much better quality and with perfectly smooth motion. You can even connect a hard disk or flash storage to the USB connection and record your stream for upload later!

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REMARKS

How the Virus Trum

• The Covid outbreak in the president's inner circle is America's pandemic failure in microcosm

By Robert Langreth and Michelle Fay Cortez

SARS-CoV-2 doesn't pay attention to party affiliation. Nor does it listen to spin that the nation is turning a corner in the pandemic or promises that a vaccine to solve everything is imminent. All it does is spread, silently and efficiently, wherever and whenever it can, taking advantage of people who let their guard down to find more throats and noses to infect.

The coronavirus apparently found plenty of throats to colonize at the White House. At least 12 people who attended a Rose Garden ceremony for Supreme Court nominee Amy Coney Barrett on Sept. 26, or other indoor events associated with it, have now tested positive, including the president and the first lady, two Republican senators, the president of the University of Notre Dame, former aide Kellyanne Conway, and press secretary Kayleigh McEnany. Numerous others in Trump's orbit who aren't known to have attended the Rose Garden event, including top aides Hope Hicks and Stephen Miller and campaign manager Bill Stepien, have also contracted the virus.

The White House outbreak, consuming the highest levels of the U.S. government, is a superspreader event with geopolitical shock waves. It's driven several of the country's top military leaders into quarantine and could ultimately put thousands of ordinary people, including staff at the White House and Trump's Bedminster, N.J., golf club and their families, in danger. And it's a microcosm of the Trump administration's handling of the pandemic from the beginning: All along, it has bet on quick fixes over unglamorous preventive measures like masks, social distancing, and contact tracing.

Even now, the White House is focused on moving on. "The president is conveying confidence and resilience and demonstrating to the American people that we must not live in fear, that we must reopen in a safe way and go back to school, go back to work, go back to church, because to do otherwise would be un-American," deputy press secretary Brian Morgenstern said on Oct. 6.

Trump announced on Twitter that he'd tested positive for the virus soon after midnight on Friday, Oct. 2, hours after Bloomberg News's Jennifer Jacobs broke the news that Hicks, one of his closest aides, had tested positive. He spent three days in the hospital before returning to the White House on Monday night. Exactly how serious his condition was isn't clear. But physicians were worried enough to administer an experimental

ed the White House

▲ Some of the Republican Party members who've tested positive for Covid: Donald Trump, Hope Hicks, Thom Tillis, Kellyanne Conway, Kayleigh McEnany, Mike Lee, Chris Christie, and Ronna McDaniel

antibody cocktail from Regeneron Pharmaceuticals Inc., and then, when his blood-oxygen level dipped for a second time, they started him on a steroid treatment that's usually reserved for severe Covid cases. On his release, Trump's doctors said he wasn't out of the woods yet; the illness can take a severe turn 7 to 10 days after symptoms appear. By Oct. 7, Trump had been symptom-free for over 24 hours, his doctor said.

Given how many crowded events the president attended the week he got sick, including rallies in two states and a fundraiser in a third—as well as hours of apparently mask-free prep for his Sept. 29 debate with Democratic presidential nominee Joe Biden—it's not clear exactly how or when the virus spread through the White House, and it may never be. What is clear is that the White House, for months, has been ignoring basic public-health precautions urged by the Centers for Disease Control and Prevention, such as limiting large gatherings, wearing masks, and practicing social distancing.

At the Rose Garden event, rows were packed, people were hugging and shaking hands, and few wore masks. But that wasn't anomalous: This summer, Trump held a rally inside a Tulsa arena and gave a convention speech to 2,500 people on the South Lawn of the White House. As his reelection campaign gained steam, de facto political rallies became full outdoor rallies, which soon turned into indoor ones. All featured Trump supporters largely maskless and packed together. "Anytime you are increasing contact between people, you're increasing opportunity to become infected," says Kate Grabowski, an epidemiologist at Johns Hopkins University. Trump may have been lucky not to have been infected earlier, she says.

Instead of social distancing, the White House has relied on technology to fend off the virus. Its main line of defense has been a rapid test from Abbott Laboratories. But tests like these, as useful as they are in spotting cases early so people can be isolated, were never intended to be the sole safeguard against Covid and may have given a false sense of security. While some White House staffers wore masks early on in the pandemic, most stopped in the weeks after the president ended his regular coronavirus briefings. "There are a lot of important lessons from this, and one of them is that testing in and of itself is not enough to keep the virus out," says Tom Frieden, a former director of the CDC.

That's because patients become contagious before they develop symptoms, and rapid tests won't catch all of these early cases until it's too late. If just one patient with a false-negative result slips through, a superspreader event can quickly ensue. "It's almost impossible to test often enough" to catch all cases before they become contagious, says Graham Snyder, medical director of infection prevention and hospital epidemiology at the University of Pittsburgh Medical Center. "That is why masking and distancing are so important."

The reliance on testing alone within the White House is \blacktriangleright

• emblematic of the silver-bullet approach the president has taken from the beginning of the pandemic. In January, Trump promised he could keep the virus out of the U.S. by restricting passengers arriving from China. When that didn't work, and deaths started to soar, he championed hydroxychloroquine, an old malaria drug that had meager data showing it might help against Covid. The Food and Drug Administration cleared it for emergency use, but had to retract the authorization after evidence showed it didn't work and could even cause heart rhythm problems.

In tweets, the president undermined the reopening guidelines of his own White House Coronavirus Task Force, encouraging states to accelerate the process. And after scientific evidence mounted that masks can prevent spread, Trump still didn't embrace them. He didn't wear one in public until July 11 and has done so only sporadically since then. At the first presidential debate, two days before he tested positive, his family didn't wear masks while seated inside the event hall, and Trump mocked Biden for wearing "the biggest mask I've ever seen."

Inconsistency and magical thinking at the top, public-health experts say, are among the main reasons the U.S. never got the pandemic under control. "One day, it's like a miracle, it will disappear," Trump said of the virus back in February. There has been no nationwide mask requirement and no testing strategy, leaving state governments to set their own policies while they scrambled for everything from personal protective gear to diagnostics. Large gatherings continued, sowing the pathogen widely.

Despite the expanding cluster inside, the White House has no plans to track exposures from the Rose Garden ceremony. (An administration official says that the Coney Barrett event was held too long ago for that—and it would be the responsibility of the local health authority anyway—but that the White House is tracing contacts of those who test positive or show symptoms on-site going back 48 hours.) This is consistent with the larger indifference to ramping up contact tracing, which has flopped in the U.S. because of lagging test results, weakened public-health services, and a broad lack of support.

Additional money Congress set aside for the CDC's testing and contact tracing has been delayed or redirected to other priorities. Trump is focused instead on accelerating the development of promising drugs and vaccines—sometimes at the expense of other measures that could slow transmission. While Congress directed about \$10 billion to Operation Warp Speed, the administration expanded the funds available to that vaccine-focused program to as much as \$18 billion, Bloomberg News reported in September. Some \$6 billion was transferred from the Strategic National Stockpile, part of an allocation meant to replenish reserves of medical protective gear, ventilators, and testing supplies, all of which have seen shortages this year. The administration also steered \$700 million of the CDC's funding to Warp Speed.

One drug Warp Speed has funded is the antibody cocktail from Regeneron that Trump received. Anthony Fauci, the government's top infectious disease doctor, views it and other anti-Covid antibodies being developed at Eli Lilly & Co. as a bridge to vaccines. Lilly said on Oct. 7 that it's asked regulators to authorize emergency use of its antibody based on promising preliminary trial results. But even assuming they are approved, antibodies by themselves won't magically solve the pandemic. Antibodies are even harder and more costly to manufacture than vaccines, and they're likely to be in short supply initially. It may be a while before most people, unlike the president, can get them.

Then there are vaccines. By all accounts, testing is proceeding at an unprecedented speed, with immunizations from Moderna, Pfizer, and Johnson & Johnson in giant final-stage trials in the U.S. A fourth big U.S. trial of an AstraZeneca shot is on hold while regulators conduct safety checks. The first of these trial results could come this fall, leading to an emergency authorization for some vaccines by year's end. But it's just not the case that vaccines will be widely available "momentarily," as the president suggested in a video on the night he left the hospital, vaccine experts say. On Oct. 6, the FDA issued strict requirements for vaccine applications that will likely slow down the timeline. Trump called this a "political hit job."

Even if they were ready, the shots wouldn't immediately eradicate the virus. Supplies may be limited at first, and authorization will likely be restricted to a select group of healthcare workers and others at high risk. It will take months to get vaccines to the broader public. They may be only partially effective, and some people may refuse to take them, notes Vanderbilt University infectious disease specialist William Schaffner. That means, he says, some social distancing will likely be needed even after a vaccine becomes available.

There is no silver bullet when it comes to taming the coronavirus, just the hard, grinding work of putting together basic interventions, from mask-wearing to contact tracing, on a massive scale. So far, the virus has killed more than 210,000 Americans–six times as many as die in motor vehicle accidents annually–and infected more than 7.5 million. As the weather turns colder, sending people indoors, Covid is on the upswing again. Thirty-four states are seeing more cases than they were a month ago, and hot spots like Wisconsin and the Dakotas are hitting new peaks. "It is just mind-blowing to me, when we have the ability to control further spread of the infection, we are not doing it," says Leana Wen, a public-health professor at George Washington University and former Baltimore health commissioner.

President Trump downplayed the virus again during his hospitalization at Walter Reed National Military Medical Center. "Don't be afraid of Covid," he tweeted. That night, standing before news cameras after returning to the White House, he triumphantly removed his mask. But SARS-CoV-2 is still out there, ready to infect new victims at any opportunity. It's established itself around the world and is settling down for the long haul. Far from being a quick fight, the battle with the virus will be fought for many months, and possibly years, to come. *—With John Tozzi and Josh Wingrove*





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Disney's Not the Happiest Place On Earth These Days

As it fires 28,000 workers, its Covid-slammed theme park business could lose \$1.5 billion this year

Edited by James E. Ellis Caitlin Busscher, a nearly 10-year Walt Disney Co. employee, had been looking forward to returning to work after maternity leave. Busscher, who started out taking customer surveys on Main Street of the Magic Kingdom Park, worked her way up to designing custom tours for families coming to Orlando. Last week was supposed to be her first back. It didn't turn out that way. Busscher was notified on Oct. 1 that her job was being eliminated—along with about 28,000 others at Disney's pandemic-slammed U.S. resorts and consumer products division.

"I think people understand it's a business decision, it's not personal," says Busscher, 34, who's looking for another job, possibly one that isn't travel-related. "I don't know what's around the corner."

Theme parks, purveyors of family fun and good times, are looking like anything but the happiest places on Earth these days. In addition to Disney's firing of about a quarter of the employees in its U.S. resorts business, other operators, including Comcast Corp.'s Universal Studios and SeaWorld Entertainment Inc., have idled or let go thousands of workers. That's because attendance by domestic guests has been limited, both by social distancing requirements and the unwillingness of Americans to get on airplanes for vacations. International visitors are almost nonexistent because of travel bans. In California, home to Disneyland, state officials have been reluctant to even let parks reopen.

"People are just not ready to come back yet, and we're experiencing that in every segment of the industry-theme parks, water parks, family entertainment centers," says Dennis Speigel, a theme park consultant in Cincinnati. "It has been catastrophic."

The pain at the parks mirrors what other businesses dependent on travel and big crowds are experiencing, from casinos in Las Vegas to your local movie theater. With the virus still a significant risk, a feeling likely reinforced by President Trump's diagnosis, it's possible many tourist-dependent cities will see a second wave of economic damage this year, brought by the new rounds of job losses. "The Disney layoffs signal the leisure industry won't be the same, not anytime soon," says Mark Zandi, an economist at Moody's Analytics. "It's going to take two to three years to fully catch up. This is not coming back fast."

After shutting its parks in March, Disney kept paying its employees. A month later, it shifted to furloughs, meaning employees continued to receive benefits but didn't get paid. When summer came and its Florida parks reopened to disappointing traffic, Disney began telling workers many wouldn't be coming back. But the size of the cuts has shocked them nonetheless.

Workers United Local 50, which represents food-service staff at the still-shuttered Disneyland in Anaheim, Calif., stands to lose more than a third of its 7,800 members in the layoffs, says Chris Duarte, its president. The union has spent the past few months running food banks, helping members apply for unemployment benefits, and preparing meals for those who've gotten the coronavirus. Negotiations have begun with Disney over what role seniority will play in who gets cut, Duarte says. "What we know right now is how many," he says. "The who is still yet to be determined."

Some of California's unions pushed back on reopening earlier in the year, writing a letter to Governor Gavin Newsom in June urging him to make sure the parks were doing so in a way that protects employee safety. Soon after, Disney indefinitely postponed a planned July reopening for its California parks. More recently, Disney's unions turned to the governor again, asking him to sign legislation requiring companies to give priority to workers they laid off when they do rehire. Newsom vetoed the bill on Sept. 30, saying it was too broad.

Relations between the company and the state's leadership have grown frosty, with Disney Executive Chairman Bob Iger stepping down from a state reopening task force and Disney's theme parks chief saying in the memo announcing the layoffs that the company's predicament has been "exacerbated in California by the state's unwillingness to lift restrictions that would allow Disneyland to reopen." Besides strict distancing requirements, the state was proposing that the county where a park is located must be in the lower tier of Covid-19 cases statewide before it could reopen–potentially keeping Disney's properties closed indefinitely.

The governor's veto of the worker-rehiring bill was another disappointment in a year of them for Glynndana Shevlin, 60, a 32-year Disney employee who served as a concierge at the E-Ticket Club at the Disneyland Hotel in Anaheim. She's waiting to hear if she's among the workers to be let go.

Shevlin was among the last employees locking up when the hotel closed in March and has been on unemployment for much of the year. She's been able to keep up with her rent and other payments but worries that if she permanently loses her \$18-an-hour job she'll also be without health-care coverage. "We all thought we'd be back sooner," she says. "We didn't see the future being the way it was."

For workers at Disney's Florida attractions, there's similar uncertainty. About 14% of workers in the Orlando/Kissimmee area are employed in accommodation and food service, making it the



nation's second most tourist-dependent city (after Las Vegas), according to data researcher SeoClarity. With travel so hard hit, that doesn't bode well for laid-off workers trying to find new jobs quickly.

Maxine Wild, a wedding planner and 23-year veteran at Disney World, started a Facebook group in August to help furloughed workers find side gigs. Called Ear For Each Other, the group has swelled to almost 12,000 members, with Disney chefs offering to deliver meals and others mowing lawns or washing cars. Seamstresses are selling Halloween costumes, bakers are baking cookies. "We're getting all these wonderfully talented people in the room," Wild says. "It's become a place of how-to."

Disney is also taking a financial hit. Its theme park division could swing from a \$4.9 billion pretax profit last year to a \$1.5 billion loss in 2020, says researcher MoffettNathanson LLC. Earnings might not return to last year's levels until 2024, the firm says.

For all hotels in the Orlando and Anaheim areas, revenue per available room in August—normally one of the year's strongest months—was down almost 70% from a year earlier, according to market researcher STR. Richard Maladecki, president of the Central Florida Hotel & Lodging Association, estimates that as many as a third of the region's 125,000 hotel rooms are closed and will remain so through the end of October. The hotels that are open have been averaging occupancy of less than 30%.

Charles Schnaars, who runs the Destiny Palms Hotel near the Disney World complex, says just 12% of his rooms are full, when that figure would normally be as high as 70%. The Christmas season isn't looking any better, with December bookings less than 10% of normal levels. "It's horrible," he says.

Lance Boyer, who with his wife, Karin, has for 24 years run Florida Dream Homes, a vacation home rental business, says he's had almost no bookings for the past five months. The 59-year-old has survived on government stimulus funds, but they recently ran out and last week he sold his company truck for \$11,000 to help pay bills. He's hoping the federal government passes another relief bill soon. "We don't need tax cuts for billionaires," he says. "We need help for average Americans."

After reopening its Florida parks in July and seeing weak visitation from faraway guests, Disney said it switched to focusing on local visitors. Len Testa, who follows theme park attendance for the site TouringPlans.com, says it's now much easier for season-pass holders to get a spot on the parks' reservation system. He estimates attendance at Magic Kingdom has been at about 19,000 guests a day on weekends, well below the capacity of 90,000.

Park patrons are definitely experiencing a

very different Magic Kingdom in the Covid-19 era, though a dozen visitors on Oct. 2 told a Bloomberg reporter the new precautions don't significantly detract from the fun. Roving Disney customerservice workers chided patrons for letting their face coverings fall below their noses, and even families huddling together for photos in front of Cinderella Castle had to mask up. Lines for the rides appeared discouraging at first, as Disney spaced parties 6 feet apart for social distancing. The queue for the Seven Dwarfs Mine Train, for example, stretched the length of three football fields from the ride's entrance. The wait time, though, was relatively short by Disney standards: 70 minutes on Oct. 2 vs. $2\frac{1}{2}$ hours on some pre-pandemic peak days.

Jacob Irwin, 44, had flown from Connecticut to be among 11 family members celebrating his parents' 47th wedding anniversary. His brother and



sister-in-law had visited Disney earlier in the summer and gave the family the thumbs-up after judging it clean. "Honestly, the airport and the flights were more of a concern than the park," Irwin says.

Busscher, the former Disney parks employee, thinks it's just a matter of time before people feel comfortable visiting the attractions again. She hit the Magic Kingdom resort the day after Disney announced its big layoffs, going with a friend to her favorite ride and one of the parks' scariest: Big Thunder Mountain Railroad. "I hadn't been on a roller coaster for months," she says. "I just wanted to forget everything else for a little bit and feel like a child again." —*Michael Sasso and Christopher Palmeri*, *with Saijel Kishan*

THE BOTTOM LINE The pandemic is taking a financial toll at Disney. Earnings might not return to last year's levels until 2024, says researcher MoffettNathanson.

▲ Shuttered ticket windows at Disneyland

October 12, 2020

Why Black Friday Could Bebue • Pandemic fears, social distancing, and job losses may damp shoppers' holiday madness

Most years, Cassandra Davis wakes up at the crack of dawn on Black Friday armed with a battle plan formed with circled newspaper ads and some online research. She warms up her car in the Minneapolis winter for half an hour before driving to Target, Walmart, or J.C. Penney to cash in on the deals they're offering. Her biggest prize in the past decade: a large flatscreen TV she scored for \$700.

In 2020 she's not sure her tradition will survive. "I have to think about all of the what-ifs," 50-year-old Davis says. "I'm really just watching the dollar even if things are inexpensive. We still have to be careful, because we don't know what happens day to day with this pandemic."

Shoppers like Davis may be wary, but American malls and stores are desperate to make Black Friday happen. Traditional brick-and-mortar holiday shopping has been declining for a decade as consumers flock to e-commerce, and the Covid-19 outbreak and recession will only hasten its fall. The U.S. retail sector has been devastated after monthslong shutdowns and dozens of bankruptcies, battering the survivors' hopes that shopping patterns would get back to normal by retail's busiest day. With barely seven weeks left, merchants are scrambling to prepare stores and websites to make up for lost time.

The holiday playbook of opening stores right after family Thanksgiving feasts, lining the weekend with doorbuster sales, and cramming shops with inventory and workers has been thrown out the window. Stores will be reconfigured, with fewer racks on the floor and registers spread farther apart. Online sales will take center stage. Supply chains will be strained like never before as businesses try to keep up with record e-commerce purchases.

What's more, the pandemic has made shoppers dubious of going to crowded stores and left many tight on cash after mass layoffs in most industries. Unemployment—at 7.9% in September, more than double what it was this time last year—remains high, and another round of stimulus checks hasn't come. "This will go down as the most difficult holiday season to prepare for, whether you're a retailer, a vendor, or anything in between," says Joel Bines, co-head of retail consulting at AlixPartners LLP. Covid has already cost the U.S. retail industry billions of dollars. In a normal year, department stores and apparel sellers get a quarter of their annual sales in November and December, according to Fitch Ratings. This year's fourth-quarter shopping spree will be even more crucial; many sales were missed when stores were closed, and consumers refrained from buying gold necklaces, designer bags, and other discretionary items. Almost \$122 billion in U.S. retail sales has evaporated since the pandemic caused store shutdowns in March. Sales at clothing and accessories stores plunged 34.9% in the first eight months of 2020 from the same period in 2019, according to the U.S. Census Bureau.

▼ Black Friday frenzy at Macy's flagship in 2018



Many stores that have reopened still have limited capacity because of distancing restrictions and are likely to bring in only a fraction of their typical holiday season haul. Take Macy's Inc., whose Manhattan flagship is one of the busiest stores in the U.S. Chief Executive Officer Jeff Gennette says crowds are bound to be an issue on Thanksgiving weekend and the final days before Christmas. The company will continue following the guidelines it created when it reopened its famous Herald Square outpost in June. Some entrances will remain shut, shoppers will be required to wear face masks, and hand sanitizer and sneeze barriers will be everywhere. Security guards and signs will remind them to keep a safe distance, putting a damper on the typical holiday frenzy.

Lululemon Athletica Inc., an athleisure giant that's benefited from the pandemic's cozy-at-home trend, will set up about 20 smaller hubs within malls where it already operates a store to help reduce long lines. The leggings company will also open 50 seasonal pop-up shops around the country as it has in years past. "We're confident in the demand behind our product," says CEO Calvin McDonald.

At Neiman Marcus Group, the big change will be how shoppers maneuver inside the store: Clientele who don't feel comfortable wandering the aisles can book private rooms where associates will bring them Louboutin pumps and Ferragamo ties. "We don't know what's going to happen, but we want to have options," says CEO Geoffroy van Raemdonck.

So far, customers don't have specifics about what to expect when they enter Black Friday mainstays including Best Buy, Target, and Walmart. But the stores are saying they'll continue to stick to the guidelines they've been using–masks are mandatory, stand 6 feet apart, don't touch things you're not going to buy–which could deter some of the frenzy the shopping holiday is known for.

One big change is that merchants are trying to encourage earlier spending. Retail veteran Deborah Weinswig, CEO of Coresight Research Inc., has persuaded two dozen large retailers—including Guess? and JoS. A Bank—to inaugurate "10.10," a shopping holiday that will offer discounts for several days around Oct. 10, as a way to get shoppers to purchase gifts earlier and make shipping easier.

Amazon.com Inc.'s Prime Day will begin on Oct. 13. Home Depot Inc. is offering Black Fridayesque sales right after Halloween. And the National Retail Federation, which represents America's largest stores, is running ads that tell shoppers "there's no reason to wait until Thanksgiving."

It might work. Almost half of U.S. consumers said they planned on beginning their holiday shopping before November, up 7% from last year, according to a survey from AlixPartners. A kick-start might help retailers with another challenge: the piles of unsold goods that have stacked up since last winter.

Once the holiday season is in full swing, some shelves may be left bare on purpose. Levi Strauss & Co. CEO Chip Bergh says he's willing to forgo a sale rather than get stuck holding excess merchandise that may require extensive markdowns to get rid of.

Online deal seekers had already been chipping away at Black Friday sales in recent years, and now

Where the Holidays Happen

Fourth-quarter sales as a share of annual sales*



consumers have grown more comfortable with shopping on the web. More than 90% said they will choose online Black Friday discounts over in-store doorbusters, according to a recent survey by digital coupon provider RetailMeNot Inc. That could stifle the impulse purchases stores typically get when holiday shoppers walk past, say, a display of \$35 air fryers on the way to the checkout.

Still, it's uncertain whether consumers are ready to shop until they drop so soon after living through a pandemic. So expectations remain modest: Total holiday spending on average is expected to be up 1.5%, according to consultant Deloitte LP, far less than the 4.1% growth seen in 2019. But that spending will be concentrated among the wealthy and middle class who still have income flowing. Millions of Americans, including Davis, who was out of work for three months, haven't been so fortunate. "We could get to the holidays, and there could be a spike," Davis says about Covid. "I could clearly be back out of work again, just sitting at home." It's that prospect that has retailers worried. —Jordyn Holman, Kim Bhasin, and Katherine Doherty

THE BOTTOM LINE Department stores and apparel merchants typically do a quarter of their business in November and December. But this year, Covid has brought uncertainty to their holiday haul.

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Watching for a Cloudburst

• Cloud computing stock values and IPOs are soaring in the Covid-era economy

This year will be remembered as a terrible time for the economy, with a few exceptions. Cloud computing is one.

The blockbuster \$3.4 billion stock market debut of Snowflake Inc. stands out as a prime example of the industry's success despite a bleak economy. The cloud-data company more than doubled its share price in its first day of trading, on Sept. 16. The same day, another cloud computing company, JFrog Ltd., raised more than \$500 million in its initial public offering. A global exchange-traded fund of cloud computing stocks has risen 11 times more than the broader stock market this year.

All the hype has observers making comparisons to the dot-com days, when investors pushed the share prices of profitless internet companies into the stratosphere, only to watch it end horribly. This time there's also a reasonable-sounding rationale for the exuberance: Today's global pandemic has increased the importance of cloud companies in a work-from-home world.

There's "a confluence of factors that's aiding cloud adoption—remote work, the move away from on-premise data centers with Covid-19, and fast internet connectivity," says Mandeep Singh, a senior technology analyst with Bloomberg ►



ILLUSTRATION BY NADIA HAFID

 Intelligence. "The IPO market is booming for companies exposed to secular trends such as cloud and e-commerce."

Still, for professionals who witnessed the froth of the late 1990s firsthand, it's hard to shake the feeling that a bubble could be forming once again. The S&P 500 software and services industry group is sizzling hot, trading at 38 times reported earnings—the same valuation as in late 1998, when the dot-com bubble was starting to inflate. "All they have to say is 'We're in the cloud, we've got cloud solutions,' and all of a sudden they get a bazillion valuation on it," says Paul Nolte, portfolio manager at Kingsview Investment Management. "Similar to 'I'm on the internet, I have dot-com after my name' in '99."

The Global X Cloud Computing ETF is up 58% this year and has almost doubled since its lows in March, when the pandemic forced governments to start locking down the economy. Of the 36 stocks in the fund, only four have posted negative returns in 2020. Five of the stocks have climbed 170% or more. The bulls hold there's a method to the madness. The world was already becoming more digitized; the pandemic and stay-at-home economy it's created only accelerated that process. That's benefited the stocks of cloud computing companies, as more people take up the technology in what looks like a lasting shift toward remote working. "They're in a unique situation," says JJ Kinahan, chief market strategist at TD Ameritrade. "They have not only added clients, but they're going to be able to add sticky clients."

Take Zoom Video Communications Inc., whose cloud-enabled video services have become the go-to platform for many people working from home. In the fiscal second quarter, Zoom saw revenue more than quadruple from a year earlier, to about \$663 million. The company has suggested in its forecasts that stellar growth will continue. Its shares are up more than 600% this year. Or consider Twilio Inc., whose shares have tripled in 2020. Retailers have used the company's tools for curbside pickups, and health-care providers have leaned on the platform for telehealth services. While not profitable, Twilio reported sales in the second quarter that were 46% above levels a year ago.

To Erika Karp, founder and chief executive officer of Cornerstone Capital Group, that's the key difference between the internet bubble and today. Cloud companies are demonstrating real growth, while the 1990s dot-com boom was based on hopes for the future. "Back then we were making up metrics for performance. We were making stuff up that was not real, it was not fundamental," she says. "Now I think we're talking about actual fundamental growth, actual earnings growth."

On top of everything else, with brokerages cutting fees to zero and many people stuck at home in the lockdown, individual investors have flooded into the market. Data show they've been extremely active in the market for options—financial instruments that give a trader the right, but not the obligation, to buy or sell a stock at a specified price in the future. To offset those bets, the firms selling the options buy the underlying stock, fueling further price gains. "There's a bit of overexuberance," says Donald Selkin, at Newbridge Securities Corp. "Definitely, it reminds me of 1999." —*Sarah Ponczek, with Claire Ballentine and Vildana Hajric*



THE BOTTOM LINE The shift to remote working during the pandemic has led to a boom for cloud computing stocks, which has echoes, some observers say, of the 1990s dot-com craze.

Supersonic Flight's Comeback

 Almost 20 years after the Concorde's retirement, Boom Technology is resurrecting superfast air travel

Blake Scholl just kept turning up. For months he would rent a plane in Silicon Valley, fly himself to California's Mojave Air and Space Port, and get a table at the Voyager restaurant, a well-known hangout for modern-day aviation mavens.

Scholl would sit for hours, listening to conversations and introducing himself to pilots and engineers from aeronautics pioneers such as Virgin Galactic Holdings Inc. and Scaled Composites LLC. Visit by visit, Scholl, an aerospace outsider, began to figure out the kinds of people and skills needed to bring a revolutionary new aircraft to life. "I've not seen such a practical approach before or since," says Elliot Seguin, a test pilot who knows Scholl.

On Oct. 7 the results of Scholl's scouting missions and subsequent years of hard work were revealed to the public. His startup, Boom Technology Inc., founded in 2014, unveiled the completed version of its XB-1 supersonic jet. While only a demonstrator prototype designed for a single rider—the test pilot—the plane represents a milestone in the pursuit of superfast air travel.



Scholl

For the first time, an independent company has built a supersonic jet and plotted a reasonable path toward a not-so-distant future full of overseas routes to many of the world's major cities. Even still, it will take at least until the end of this decade to move plans from the drawing board to the commercial production line—and that's without any major mishaps. The hope is that, by then, demand for air travel will have long rebounded after this year's steep declines because of the coronavirus pandemic. "Six years ago, I didn't think we had great odds of ever getting here," says Scholl, 39. "It took longer than I thought it would, but it actually happened."

Built out of carbon fiber, the sleek white and black craft resembles a fighter jet more than a passenger transport. The 71-foot XB-1 will start making its first flights early next year, reaching a speed of Mach 1.3 before going even faster as testing progresses. If all goes well, Boom will turn its focus in late 2021 to completing the design of its first commercial plane, dubbed Overture.

The 199-foot Overture will get the blood of businesspeople and travel enthusiasts pumping as they picture a thrombosis-free future. The jet will carry 65 to 88 passengers, with roomy seats on either side of the plane separated by a walkway, meaning everyone gets a window and an aisle seat, ideally at business-class prices.

But the jet's best feature is speed: It will fly twice as fast as today's typical commercial planes. The time to go from New York to London will fall from 6½ hours to 3½ hours. San Francisco to Tokyo will drop from 10 hours and 15 minutes to 6 hours. Where the Concorde had only a few routes, Overture should be able to fly to and from most major cities, with an early focus on coastal hubs. (U.S. regulations prevent Boom from flying at supersonic speed over land largely because of the sonic boom created by the craft, though lawmakers and regulators in the past couple of years have been considering loosening the rules.)

The biggest downside to Overture is that it won't begin carrying paying customers until at least 2029, as Boom faces years more of engineering, testing, and regulatory hurdles. That said, the company has already made it further than most people expected, outpacing such competitors as Aerion Supersonic, Spike Aerospace, and Virgin Galactic on a number of fronts. Boom appears poised to inject new life into an industry that consumers have grown to despise. And, while it's tough to pitch a new plane during a pandemic that's grounded so many, the idea of spending less time on a more comfortable aircraft has as much appeal now as ever.



Based just outside Denver, Boom, which has raised \$160 million, has made a flurry of announcements before the XB-1 unveiling. In July it said it will work with Rolls-Royce Holdings Plc on the engines for Overture. And in September, Boom said a contract with the U.S. Air Force will go toward creating a custom version of Overture for "Air Force executive transport." In other words, the U.S. president may one day be blasting around the country and world in a Boom-built Air Force One. And Japan Airlines Co. and Virgin Group have placed preorders for dozens of Overtures.

The only thing holding Boom back at this point is, well, reality. The Concorde, which stopped flying in 2003, suffered from numerous issues, including a crash and dwindling passenger numbers, which made it too expensive to operate. The failure of the Concorde left so much emotional scarring on the aerospace industry that insiders shied away from even contemplating a new commercial supersonic plane. Bringing such a craft to market would cost hundreds of millions of dollars, if not billions. And who would take such a risk, given that a previous experiment went wrong?

The answer has ended up being Scholl and his backers, who include John Collison, co-founder of financial technology startup Stripe Inc.; philanthropist Laurene Powell Jobs's Emerson Collective;

A and Y Combinator Continuity. Their shared bet is that software, materials, and engines have advanced enough over the past 20 years to cancel out most of the Concorde's shortcomings. "When you put a bunch of these improvements together, you get on the happy side of a tipping point," Scholl says. "Supersonic no longer has to be only available to a tiny number of people on a small number of routes."

Scholl, who's from Cincinnati, is a computer science graduate, amateur pilot, and longtime aviation buff, but the early parts of his career don't arc toward aerospace. He previously worked on advertising and social networking technology at Amazon .com Inc. and founded a mobile tech startup called Kima Labs, which was acquired by Groupon Inc. Most people don't think of going from the business of online coupons to bending metal, but Scholl followed his curiosity after leaving Groupon in 2014.

Then in his mid-30s, he wondered why no one had tried to build a commercial supersonic aircraft in decades. He spent weeks researching the field, thinking he would stumble upon obvious answers that would talk him out of starting something like Boom. He took an airplane design class. He studied physics via Khan Academy. He cold-called people in the industry. As time went on, Scholl found himself only more encouraged, and he began compiling a spreadsheet model of the specs he wanted for a plane. He showed it to a Stanford professor, who, instead of laughing him out of the room, told Scholl many of the technical assumptions were too conservative. He was encouraged to keep going.

Over the next year, Scholl made his trips to Mojave and marched through his LinkedIn contacts looking for anyone who knew someone at a place like SpaceX or NASA or Lockheed Martin. Slowly, he began assembling a list of smart people to talk to and good people to hire. "When I told people I was building a supersonic jet, their first question was 'Are you crazy?' But their second question was 'How can I help?'" Scholl says.

By 2015 he'd hired about a dozen people and set them up in singer John Denver's old hangar at the Centennial Airport in Colorado, which caters to private planes. Scholl had tapped deep into his voluminous stores of enthusiasm to talk a small team of people into believing they could build a supersonic plane from these humble digs. Brimming with optimism, he expected Boom to build and fly its first jet by late 2017. Aren't dreams wonderful things?

Their original plan for the plane has held true today. It would be built out of carbon fiber instead of aluminum, making it lighter and faster than an aircraft like the Concorde. It would run on readily available engines, which are now much more fuel-efficient than what the Concorde's designers could access. And Boom would use modern software to perform millions of simulations on its designs instead of trying new approaches bit by bit in wind tunnels. "The Concorde did a dozen wind tunnel tests," Scholl says. "It would take six months and millions of dollars for each test. Today we test designs in simulations that take minutes to hours."

Each engineering choice came with knock-on benefits. Designers of planes, for example, don't like straight lines. They want to taper them into perfectly aerodynamic works of art. It's much easier to achieve these sultry shapes with carbon fiber that can be molded, and then hardened in an oven, than it is with aluminum, which prefers to remain in a linear form. The more efficient engines will save on fuel costs and allow Boom to fly much longer routes than the Concorde. Modern software and electronics help, too. A supersonic plane needs to be two airplanes at once: one that's maneuverable at low speeds for takeoffs and landings, and another that's an unleashed beast, traveling as fast as it can in a straight line while using the least amount of fuel possible.

To deal with this split personality, the Concorde had a heavy, complicated movable nose cone that would tilt down so pilots could see the runway, and then raise up in the air for speed. Boom's planes have the same angled, pointy nose, which shapes the air into a low-pressure vortex ideal





▼ Boom's chief test pilot, Bill "Doc" Shoemaker, operates a simulator in the company's hangar outside Denver



PHOTOGRAPH BY BENJAMIN RASMUSSEN FOR BLOOMBERG BUSINESSWEEK

October 12, 2020

for the wings, but the nose stays in place. Pilots use cameras affixed to the bottom of the plane to see the runway, and software to guide them.

While this all sounds highly sophisticated, the truth is that building a private supersonic plane comes with its share of mundane challenges. With the XB-1, Boom wanted to acquire three J85-15 engines, which were older machines used on military planes and would give the plane enough muscle to go supersonic without costing a fortune. The engines had been widely used on the F-5A fighter jet that the U.S. military sold to other countries. Used versions turned up in places like Brazil and Taiwan. Boom, however, struggled to get clearance to import the engines. Scholl's team thought it was going to have to give up and possibly redesign the plane. Thankfully, however, a guy knew a guy who knew a guy who had four J85-15s sitting in a warehouse in Florida. Boom sent a couple of people to the collector, who had never-used engines that had been stored dutifully for 30 years with nitrogen inside to prevent decay. "I think we got the set of four for about \$1 million," Scholl says. "It felt way too much like trying to conduct a drug deal."

With the unveiling completed, the XB-1 will now be put through a series of ground tests. The plane will gradually be pushed harder and faster, and data will be gathered and analyzed. Eventually, the moment of truth will arrive, and someone will have to put it in the air. In this case, that someone



is Boom's chief test pilot, Bill "Doc" Shoemaker, who has a doctorate in aeronautics and astronautics from Stanford and years of flying fighter jets for the U.S. Navy behind him. "You reach a point of belief," he says. "You fundamentally believe you know what the outcome will be. Ultimately, the airplane just wants to fly."

Like many a test pilot, Shoemaker was casual when describing the risk involved and the process of flying the plane. During a visit in January to Boom's new and expanded factory, still right at Centennial Airport, Shoemaker hopped into a flight simulator to show me how the camera system will be used to see the runway. He took off, flew for a bit, and then came in for a landing, lining up a cross and other objects on the screen with targets superimposed on the runway. "You put the thing on the thing," he explained.

Some of Boom's earliest hires have left the company and been replaced by veterans of heavy industry. Julie Valk, vice president for programs and operations, spent a decade at General Electric Co. Part of her job has been to make sure Boom gets better at sticking to schedules, which has meant creating a software model that tracks 30,000 line items. Boom also hired Brian Durrence, who spent the previous 30 years at Gulfstream Aerospace Corp., as its senior vice president in charge of Overture's development. "I felt like I had one more big program left in me and wanted to do something special with it," he says. "I do believe Overture is the next supersonic aircraft."

Overture isn't expected to be ready for test flights until 2026 at the earliest. It will then take about four years to make tweaks to the aircraft and prove it's safe enough to carry people, according to the company's work plan. "At Stripe we had our first customers within three months of writing code, and you get that quick validation that things are making progress," says investor Collison, president of Stripe. "Here, Boom is already five years in. I don't know if I could do it."

Scholl is aware that perceptions of air travel seem to be changing because of Covid in the short term and climate change in the longer term. To the latter point, he's pledged to make Boom's flights carbon neutral. Mostly, though, he thinks people will always want to fly–the faster, the better–and we all benefit from the experience of making the world a smaller place. "We have not had a world war since the jet age," he says. "When you meet people face to face, their humanity comes through." —*Ashlee Vance*

THE BOTTOM LINE Boom Technology is building a jetliner that could shave hours off flight times, but it's still years away from paying customers.

"I do believe Overture is the next supersonic aircraft"

For more on supersonic

technologies, visit

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Bloomberg Businessweek

What's Baked Into the Market?

 The news is wild heading into the U.S. elections, but investment pros think they have a grip on that. (Sure)

Pundits who wouldn't know baking soda from baking powder love to talk about what's "baked into" the market. Is a Biden victory baked in? Is a second wave of Covid-19 cases baked in? In one recent week, Bloomberg News and Bloomberg Intelligence used "baked in" in stories about a Rhode Island construction company's 401(k) plan, the Reserve Bank of India's monetary policy, and the earnings forecasts of United Internet AG.

"Baked in" is just traders' lingo for "expected." If the stock market collectively expects former Vice President Joe Biden to win the election, then prices of stocks have already adjusted to reflect that expectation. You, the clueless latecomer, can't make any money by betting on a Biden victory, because others have beaten you to it. Markets are, in a word, efficient. In baking terms, the hypothetical Biden victory isn't a new ingredient. It's already in there with the eggs and flour and baking powder (or is that baking soda?).

"Priced in" and "discounted" are synonyms that also appear liberally in financial news stories and Wall Street analysis. The idea behind all of them is that to make money, it's not enough to know what will happen. You also have to know whether other investors already expect it. Making things more complicated is that the market may be stirring in competing scenarios—at the same time traders seem to expect a Biden win, there are also signs they're hedging against a contested election.

"As an investor, the most important thing at any moment in time is not the issues, it's how much the consensus has discounted those issues," says James Paulsen, chief investment strategist for Leuthold Weeden Capital Management LLC in Minneapolis. "I spend a good deal of my time looking into whether there's under- or overreaction to issues." Today's low interest rates are far more important for the financial markets than Trump's intensely publicized hospitalization for Covid-19, Paulsen says.

Sam Stovall, chief investment strategist at CFRA Research, says "a sharp second round of the Covid virus and the adverse effects that it might have" aren't baked into the stock market right now. If there is a second wave, he predicts, stocks would probably sell off. And judging from Wall Street's negative reaction, Trump's apparent suspension of coronavirus-relief negotiations on Oct. 6 wasn't baked into prices, either. (Stocks climbed back the next day after subsequent Trump tweets muddied the waters.)

How can anyone be sure what the vast global network of investors is actually considering when arriving at a price for stocks? The truth is that detecting the conventional wisdom, i.e., what's baked into stock prices, "is as much an art form as it is a science, despite what many say," says Quincy Krosby, chief market strategist at Prudential Financial Inc. What makes the task even harder, she adds, is that the market can change its collective mind in a hurry. The initial reaction of



the markets to Donald Trump's surprise victory in the 2016 election was negative, but within hours, she says, "the market had a change in attitude and hasn't looked back since." —*Peter Coy*

THE BOTTOM LINE If markets seem strangely calm in the face of earth-shaking events, it might mean the news was already "baked in." Or it could just mean the market is focused on something else.

Traders Are Still Braced for Chaos

 Hedges against volatility have grown, particularly for the period just after Election Day

The news that President Trump contracted Covid-19, followed a few days later by his confusing series of tweets about stimulus negotiations, left investors wondering what could possibly happen next. But many traders had already set up defensive hedges against sudden bouts of volatility, using options and futures. They'd prepped not only for an October surprise, but a November one, too.

"The Covid-19 election is a unicorn," says Michael Arone, chief investment strategist for the U.S. SPDR exchange-traded fund business at State Street Global Advisors. "The range of outcomes has gotten a lot wider." One possibility markets are worried about: Trump refusing to accept a loss. That anxiety is most observable in VIX futures, a way to bet on volatility. They tend to serve as a sort of insurance policy against losses in the S&P 500. Hedging activity against outsize swings near the election has been visible all year in these contracts. Normally, prices of **>** ✓ VIX contracts rise as they cover dates further into the future. When plotted on a graph, this produces a gently rising curve. There's a simple logic to explain why: If you're buying insurance on your house, you would expect to pay more for a policy that covers six months than for one that covers only one month.

Yet these aren't normal times. Now, the VIX curve has been signaling something else. Investors are increasingly skittish about the 2½ months from the Nov. 3 election to inauguration, so they're paying up to protect themselves during that period. November futures, designed to protect against expected volatility through late December, are the most expensive.

"I've been describing these things as well-known risks," Arone says. "Nonetheless, I think that the market will continue to have these kinds of bouts of volatility." He sees demand being high for haven assets such as Treasuries and gold until the outcome is settled.

Still, Joe Biden's recent strength in the polls is starting to change some investors' calculations. Hedge fund EIA All Weather Alpha Partners recently unwound some trades made to protect against market swings due to a contested election, says the firm's chief macro strategist Naufal Sanaullah. "The onetwo punch of debate, plus Covid diagnosis, makes that risk lower," he says, pointing to the fundraising boost Democrats got after the debate on Sept. 29.

A more conventional question is who would be better for stocks: the tax-cutting, regulation-shredding Trump or Biden, who wants to raise the corporate tax rate and has been more cautious about reopening the economy while the pandemic still rages? James McDonald, chief executive officer of Hercules Investments, thinks the prospect of higher taxes and other elements of Biden's platform may cause institutional investors to start moving out of riskier assets. Others, such as Sanaullah, believe a Biden win and a Democratic sweep of both houses of Congress would be the most bullish outcome because it would produce the largest stimulus bill as concerns grow about a second Covid wave.

The market may continue to bet on a more resounding victory by Biden, which would lessen the chance of a contested election, according to Christopher Smart, global chief strategist and head of the Barings Institute. "Having said that, we are in truly uncharted territory," he says. And if a week is a lifetime in politics, he adds, we have a few lifetimes to go between now and Election Day. —*Michael P. Regan*

THE BOTTOM LINE Investors may not love everything about Joe Biden, but his recent strength as a candidate is making them less worried about a contested election.

Fast Loans, Fraud, And Fintech • Scammers who tapped PPP funds liked using online lenders

In April the Paycheck Protection Program was under fire for moving too slowly and leaving too many people out. Part of the \$2 trillion Cares Act, it was set up to offer forgivable loans to small businesses such as restaurants and hair salons that would help keep them afloat through the Covid-19 lockdowns in the U.S. Banks were initially in charge of administering the government-backed payments. In an effort to distribute the desperately needed money faster, web-based companies were later allowed into the program. Grateful businesses praised their speed.

It turns out scammers found them useful, too.

Financial technology companies handled 75% of the approved PPP loans that have been connected to fraud by the U.S. Department of Justice, a Bloomberg analysis of more than 100 loans at the center of the cases shows. The fintech companies arranged just 15% of PPP loans overall. They include Kabbage and BlueVine Capital, as well as banks and nonbank lenders that work with such companies, including

Cross River Bank, Celtic Bank, and Ready Capital. In many cases, a simple Google or state records search would have suggested an applicant's business didn't exist or was dormant. One borrower facing charges allegedly got approval for \$3 million from Ready Capital Corp. for a business in Beaumont, Texas, even though the company had no website or presence on social media and the business address provided, according to Google Maps, was for a singlefamily residence. (Investigators intervened before the loan was funded.) Another borrower in Little Rock, Ark., received almost \$2 million from Kabbage Inc. and BlueVine Capital Inc. for businesses that weren't in good standing with the secretary of state.

Borrower fraud doesn't mean lenders broke the rules of the program, and they haven't been

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accused of wrongdoing. The U.S. let them rely on self-certifications by applicants attesting that they were eligible for the loans. A spokesperson for Ready Capital says it "implemented due diligence measures and complied with SBA directives to expeditiously provide relief to small businesses." Kabbage and BlueVine also say they took steps to scrutinize applications.

But the need for speed may have had unintended consequences. "The fraud checks didn't really occur upfront," says Bill Phelan, senior vice president at PayNet, a unit of Equifax Inc. that helps lenders assess the risk of business loans. "The impetus was to get the money out the door and help businesses survive."

Bloomberg examined hundreds of pages of filings and cross-referenced them with public records to identify the lenders involved in the criminal cases. The analysis focused on instances in which loans had been funded or approved and the type of lender could be identified.

The cases brought by the Justice Department represent about \$175 million in alleged fraud, which is a small fraction of the \$525 billion in loans approved through one of the biggest government relief programs in history. But PayNet says that among loans for \$150,000 or more, about \$20 billion worth—or up to 5%—raise some red flags.

At the start of the PPP, run jointly by the Department of the Treasury and the Small Business Administration, many of the largest banks prioritized existing customers to avoid fraud or money-laundering risk. That left small businesses without a banking relationship scrambling to get money before it ran out.

Emissaries from the fintech sector appealed to authorities, saying they could reach vulnerable businesses. They got the green light on April 14, by which point almost two-thirds of the first round of \$349 billion in funding had been allocated. Lawmakers later made an additional \$320 billion available. Fintechs dominated that second round, which ended in August. Kabbage, which had never before processed an SBA loan, surpassed megabanks to become the second-biggest PPP lender by application volume, approving funds for almost 300,000 businesses. More than 75% of applications that flowed through Kabbage were approved "without human intervention or manual review," according to a report from the company. The median approval time: four hours.

A Kabbage spokesperson says data and technology allowed it to conduct "rigorous verification checks" that "go well beyond the minimum requirements issued by the SBA." Kabbage conducts additional verification analyses after loans are approved but before they're disbursed.

All over the internet, anxious business owners

swapped tips about which lenders had the easiest application processes and which were taking on new clients. Borrowers talked about online lenders approving their loans in as little as an hour. One whose application was processed by BlueVine received SBA approval so fast the person wondered if something had gone wrong.

A representative for BlueVine says that the servicer rejected as many as 9% of the applications it received because of suspected fraud and that fewer than 2% of the loans receiving funding have raised concerns. BlueVine "conducted advanced fraud-prevention techniques" and tried to "safely support" as many business owners as it could. That "included taking on a potentially larger risk of fraud" than faced by lenders prioritizing only existing customers, a spokesperson says in response to questions.

The SBA declined to comment, while a spokesperson from the office of the inspector general for the agency called the tilt toward fintech "unsurprising." Share of Paycheck Protection Program loans handled by a fintech*





Representatives for Cross River Bank and Celtic Bank didn't respond to multiple requests for comment.

Normally, firms attempting to automate underwriting are on the hook for losses. But because the loans are 100% guaranteed by the SBA, taxpayers could bear the cost for fraudulent loans. "The SBA said, 'We want this thing to be out there, and as long as they stick with the forms, we're not holding the lenders or the banks accountable,'" says Wendy Cai-Lee, chief executive officer of Piermont Bank in New York. The PPP was the "perfect program" for fintechs, she says. "It was about volume and getting it done in a very short period of time, where it could be formulaic." —*Michelle F. Davis*

THE BOTTOM LINE The federal program to help small businesses survive the pandemic was under pressure to get money out fast, and it turned to online lenders. Scammers tried to game that.

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When Hawks Cry

Has there ever been a less inflation-fearing Fed?

Federal Reserve Chair Jerome Powell has done everything to demonstrate his desire for higher inflation short of dressing up as a dove and cooing in front of Fed headquarters. In August he unveiled a policy that not just tolerates but seeks periods of inflation above the Fed's 2% target. "The labor market is recovering, but it's a long way–a long way–from maximum employment," Powell said at a Federal Open Market Committee press conference in September. Asked whether the Fed wants to get unemployment back down to 3.5% or below–a degree of labor market tightness that previous Fed chairs feared would set off spiraling inflation–he said, "Yes, absolutely."

Powell's pro-inflation message isn't having the intended effect, though. The Fed's low rates have pumped up the stock market. But if the financial markets were taking him at his word, long-term interest rates would be leaping to compensate investors for higher inflation's impact on the purchasing power of their bonds' coupon payments. Not yet: The yield on the 30-year Treasury bond is still just 1.6%, up from 1.4% the day before Powell's Aug. 27 speech at this year's virtual version of the annual central banking conference held in Jackson Hole, Wyo. A yield that low implies that either investors don't think Powell can achieve 2% inflation, or they're resigned to 30 years of negative inflation-adjusted returns. Either possibility is depressing.

Inflation that's chronically too low remains a perplexing challenge for central banks, which have an easier time fighting inflation that's too high. If Powell can't convince consumers, companies, and investors that the Fed can raise inflation, bad things could happen. A Japan-like deflationary psychology could set in as households and businesses put off buying big-ticket items—whether cars or machine tools—in the expectation that prices will fall. What's more, low inflation and soft demand for loans have combined to push interest rates to the floor, which robs the Fed of its No.1 tool for fighting recessions. It can't cut interest rates significantly because they're already about as low as they can go.

October 12, 2020

To avoid the vortex of outright deflation—falling prices—the European Central Bank cut its key short-term interest rate below zero in 2014. The Bank of Japan followed in 2016. Powell's Fed has resisted going subzero, but it's ahead of its peers in one respect: It's the first to embrace overshooting its inflation target to compensate for periods of undershooting.

Economist Paul Krugman wrote in 1998 that to stir growth when interest rates are near zero, the central bank must "credibly promise to be irresponsible—to make a persuasive case that it will permit inflation to occur, thereby producing the negative real interest rates the economy needs." "Irresponsible" is not a word one would apply to Powell and his sober peers on the ratesetting Federal Open Market Committee. He's aware of the perception problem: "This is all about credibility. We understand perfectly that we have to earn credibility," he told reporters after the meeting of the FOMC on Sept. 16.

A reputation for probity at the Fed that's so good it's bad isn't the only thing keeping inflation undesirably low. The pandemic, by suppressing demand for goods and services, has knocked down the measure of inflation that the Fed watches—the year-over-year change in the price index for personal consumption expenditures—to just 1.4% in August. Meanwhile, the economic recovery is faltering because coronavirus relief programs have expired. In a speech on Oct. 6, Powell warned of "tragic consequences" for racial and wealth disparities if relief isn't extended. But hours later, President Trump cut off negotiations with congressional Democrats until after the election.

Even before Covid-19 struck, U.S. economic growth depended on ultralow interest rates, big federal budget deficits, and an unsustainable rate of business borrowing. (And while growth helped the poor by creating jobs, it helped the rich even more by swelling their portfolios.) In September the Congressional Budget Office projected that the U.S. economy would grow only 1.6% annually for the next 30 years, well below the 2.5% rate of the past 30. Harvard economist Lawrence Summers, who was President Clinton's Treasury secretary and headed President Obama's National Economic Council, argues that cutting interest rates alone can't cure what he calls secular stagnation, so Congress needs to do more deficit spending, encourage investment, and discourage saving. "I sort of suspect that we're past peak central banking," he said in May in a Princeton webinar.

The Fed's new inflation policy is in part an admission that the old rules no longer apply.

Policymakers used to assert with confidence that an unemployment rate below 6% would lead to high inflation. Yet even when unemployment hit a low of 3.5% in February, inflation remained below the 2% target. Neel Kashkari, the dovish president of the Federal Reserve Bank of Minneapolis, has disparaged theories tying low unemployment to inflation as "ghost stories."

The policy unveiled by Powell at the end of August removes the long-standing promise to react to very low unemployment. From now on the Fed will react only to high unemployment. And instead of focusing on a single number—the national unemployment rate—it's promising to consider low- and moderate-income Americans, some of whom need unemployment to be very low before employers will consider hiring them.

These are unusually dovish policies for the world's most powerful central bank. If inflation has been running "persistently" below 2%, the Fed "will likely aim to achieve inflation moderately above 2 percent for some time," the new policy says. The FOMC got more specific at its Sept. 15-16 meeting, saying it won't raise rates until inflation has reached 2% and is "on track" to moderately exceed it for some time. With these changes, U.S. monetary policy "is as easy as it's ever been in modern times, or even in nonmodern times," says Padhraic Garvey, head of research for the Americas at ING Bank NV.

But will it work? David Wilcox, a former Fed official who's a senior nonresident fellow at the Peterson Institute for International Economics, calls it "a very substantial step forward." Allison Boxer and Joachim Fels, both of Pimco, a big bond investor, are skeptical. "We wonder if the Fed leadership is using surprises and emphatic language to try to compensate" for an FOMC "that may not be fully on board with a more significant regime shift," they wrote in a note to clients.

Investors would have been more impressed if the Fed had supplemented its promises with actions, such as an increase in purchases of medium- and long-term Treasury securities to stimulate economic growth, says Aneta Markowska, chief financial economist at Jefferies & Co. "They didn't seem to see the urgency. They think what they're buying now is a lot. And it is a lot. But they could have done a little bit more," she says. "I feel it was a wasted opportunity."

For the Fed, promises are easy to make but could be hard to keep. When it comes time to let inflation run above 2%, there are likely to be shrieks of pain from the bond market and people living on fixed incomes. Willfully allowing inflation to go ►



Powell



Clarida



Kashkari



Kaplan



▲ above target will seem reckless; why, inflation hawks are sure to ask, should the Fed risk igniting high inflation after it's already achieved its purpose of eradicating deflationary psychology?

Members of the FOMC may be tempted to raise interest rates quickly after inflation has gone above 2%, rather than let the rate average 2% over any meaningful period. The consensus on deliberate overshooting already shows signs of cracking. Robert Kaplan, president of the Federal Reserve Bank of Dallas, dissented at the September meeting of the FOMC from the promise to keep rates low at least until inflation hits 2%, preferring "greater policy flexibility."

> It's hard to credibly promise to do something that will seem wrong to you when the time comes to act—an insight that helped win a Nobel Prize in economics in 2004 for

Finn Kydland, now at the University of California at Santa Barbara, and Edward Prescott, now at Arizona State University. (For a political analogy, consider Republican Senator Lindsey Graham of South Carolina, who promised not to fill a Supreme Court vacancy in a presidential election year, then thought better of his pledge when the time came.)

Still, Powell and the rest of the FOMC need to convince the markets and consumers that they really, really mean it this time. A firm rule can help by tying bankers' hands. When high inflation was the concern, University of Chicago economist Milton Friedman advocated a "k-percent" rule that said that if the Fed committed to increasing the money supply by the same low percentage each year, inflation would be mild and predictable. Fed Chair Paul Volcker, the giant who broke the back of inflation in the early 1980s, professed to follow a money-growth rule, though in practice there were dramatic fluctuations in the money supply.

Alan Greenspan, who succeeded Volcker, was not a rules guy. He cultivated the image of an inscrutable maestro and said in a 1988 speech, "I guess I should warn you, if I turn out to be particularly clear, you've probably misunderstood what I said." Ben Bernanke and Janet Yellen, the next two Fed chiefs, were economic scholars from Princeton and the University of California at Berkeley, respectively, who believed rules enhanced credibility. They targeted consumer prices rather than money growth. The Fed, which had informally aimed for 2% annual inflation since the Greenspan era, made itself strictly accountable for achieving 2% by publicly adopting it as a target in January 2012.

To the consternation of Fed officials, the central bank's favored measure of inflation has come in below 2% in all but 15 of the 103 months since the 2012 pronouncement. Low interest rates are part of the problem. The Fed can't keep inflation from falling when the economy is weak because there's no room to cut rates to rev up growth. In contrast, it can keep inflation from getting too high by raising rates to cool growth. Because of that asymmetry, inflation readings below 2% have been far more common than readings above it.

Powell, a former investment banker, Treasury Department official, and private equity investor, telegraphed his dissatisfaction with the status quo in August 2018 at the Jackson Hole conference. It was six months into his term as chair after six years as a board member. He questioned the usefulness of two key inputs into the Fed's interest-rate-setting formula: "r-star," the neutral rate of interest that neither accelerates nor retards growth, and "u-star," the lowest the unemployment rate can go without igniting excessive inflation. Unlike the stars that navigators once steered their ships by, Powell said, r-star and u-star move around, making them unreliable guides. He expressed admiration for how Greenspan trusted his own hunches about the U.S. economy rather than the "shifting stars."

"I don't think people understand how different a worldview" Powell brought to the chairmanship, says Adam Posen, president of the Peterson Institute for International Economics. "Bernanke and Yellen wanted to make monetary policy scientific," says Vince Reinhart, chief economist of



Mellon, an investment affiliate of Bank of New York Mellon Corp. "Powell wants to build the Fed's constituency with the American public and politicians and to do so by backing away from the image of central bankers in white lab coats."

Powell wanted to make monetary policy less reliant on unobservable characteristics of the economy such as r-star and u-star, and to finally deliver on the promise of durable 2% inflation. Figuring out how was a key motivation for "Fed Listens," a 2019 tour of the system's 12 regions in which Fed officials sought out the opinions of economists, business owners, union members, retirees, and others.

The approach policymakers settled on involves more discretion than the Fed has exercised since the Greenspan era. Powell and others are refusing to say how long or how much they will allow inflation to overshoot 2%. Consider this: Inflation would have to average 3% from now until April 2026 for the price level to reach where it would have been if inflation had been 2% since 2012. It's unlikely the Fed would let that happen because it doesn't want shoppers to start thinking of 3% inflation as the new normal. On the other hand, just a month or two of, say, 2.1% inflation wouldn't be much of a makeup.

Vagueness about the strategy likely helped Powell and Vice Chair Richard Clarida, who was in charge of the policy rethink, achieve consensus between the hawks and the doves on the FOMC. It also gives the Fed some flexibility in case of the unexpected—a sharp drop in oil prices that lowers inflation or a widespread crop failure that raises it.

But fuzzying up the objective guarantees that the Fed will be incessantly badgered to be more specific in the years ahead. And the lawyerly Powell doesn't appear to enjoy sparring with questioners the way Greenspan did. Asked at the FOMC press conference what the Fed means by "moderate," Powell said, with perhaps a hint of frustration, "It means not large. It means not very high above 2%. It means moderate. I think that's a fairly well-understood word." He then added, "You know, we're resisting the urge to try to create some sort of a rule or a formula here."

For many, that's unsatisfying. "I wish it was a little more specific," says John Taylor, the economist at Stanford and the Hoover Institution whose own rule for setting monetary policy has informed the Fed and other central banks. Kydland, who's watched the Fed's convolutions from Santa Barbara, says, "I do hope they know what they're doing." He says he's inclined to give Powell the benefit of the doubt: "He seems to have his head on right."

The dream scenario for the Fed is that its messaging works, the economy strengthens, workers earn much-needed raises, consumers open their wallets, and companies are able to raise prices and get back to profitability. Easy monetary policy lubricates the rise in prices. "I actually think they have a much better shot with this new framework," says Jefferies's Markowska.

There's also a darker scenario that could produce rising prices. In that one, easy fiscal and monetary policies are politically difficult to scale back despite rising inflation caused by worker shortages, trade barriers that cut off vital imports, and other factors. In March, Charles Goodhart of the London School of Economics and Manoj Pradhan of Talking Heads Economics wrote in a column for the Center for Economic Policy Research's VoxEU site, "The coronavirus pandemic, and the supply shock that it has induced, will mark the dividing line between the deflationary forces of the last 30 to 40 years, and the resurgent inflation of the next two decades."

Resurgent? Perhaps. At the moment, though, Powell & Co. are thinking more about **lifting** inflation than worrying it will get too high. "It will take some time," Powell said at the Sept. 16 press conference. "It's a slow process, but there is a process there." Spoken like a thoroughly modern, prudently irresponsible central banker. —*Peter Coy, with Rich Miller*

THE BOTTOM LINE The Federal Reserve has pledged to tolerate inflation above its 2% target. Less clear is how it can get it to run that high.

"You know, we're resisting the urge to try to create some sort of a rule or a formula here"
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'Jacinda-mania' Is Back In New Zealand

• After beating back Covid-19, the popular prime minister is cruising toward a second term

On an Oct. 1 campaign visit to Nelson, a small city at the top of New Zealand's South Island, Prime Minister Jacinda Ardern was mobbed by supporters as she walked through the streets. Cries of "We love you, Jacinda!" were common as she moved through the maskless throng, mostly women and children clamoring for selfies. The prime minister declined to shake hands, but she happily bumped elbows.

Ardern's greatest strength as a politician is her authenticity and ability to relate to others. It has served her well during her first term, when the nation has faced some of its darkest moments—a terrorist attack by a white supremacist that left 51 dead, a volcanic eruption that killed 21, and most recently the Covid-19 pandemic. National elections are being held on Oct. 17, and polls predict a resounding victory for Ardern's left-leaning Labour Party, despite a slumping economy and Ardern's failure to deliver on key pledges such as fixing a housing crisis and lifting children out of poverty. There's even a chance Labour could win an outright majority, which no party in New Zealand has done since the 1990s.

The opposition National Party is wooing voters with tax cuts and attacking Ardern for not making good on her promises. But so far, it hasn't dented the prime minister's popularity.

Ardern, 40, gained fame outside New Zealand as the world's then-youngest female head of government, at 37, and as the first world leader to bring her baby to the UN General Assembly. Her rise to political stardom was rapid. As a member of parliament, she was thrust into the Labour Party's top job just two months before the last election, in 2017. The party was at risk of a crushing defeat, so leader Andrew Little stepped down and handed Ardern the reins. In what became known as "Jacinda-mania," she ignited the campaign and led Labour to an upset victory over National with the backing of two smaller parties.

Ardern's talent for connecting with others is grounded in her humility, says James Shaw, ►

C S 34

 co-leader of the Green Party, which supports her administration. "She didn't want the job—Andrew Little had to twist her arm," says Shaw. "If you look at some of these other world leaders, it's all about them. For her, it's all about everybody else."

The daughter of a police officer, Ardern grew up in provincial New Zealand, including a small, run-down forestry town where she witnessed child poverty firsthand. She credits this with sparking an interest in politics. Brought up Mormon, she left the church in her early 20s because its views on gay rights clashed with hers. She has described herself as "socially liberal" and in a recent political debate admitted to smoking cannabis in her youth.

In 2018, Ardern became just the second elected world leader to give birth in office, after Pakistan's Benazir Bhutto. Her partner, Clarke Gayford, juggled his career as host of a TV fishing show to be a stayat-home father to their daughter, Neve.

Since then, Ardern's steady, empathetic handling of crises has distinguished her as more than a trailblazer. On March 15 last year, a gunman went on a rampage at two mosques in the South Island city of Christchurch, killing 51 worshippers and livestreaming the atrocity on social media. It was the worst mass shooting in New Zealand's modern history. Ardern immediately reformed gun laws, banning the weapons used in the attack. An image of her wearing a hijab in solidarity with those affected helped tamp down outrage toward New Zealand that was brewing in Muslim nations.

When the coronavirus struck in February and March, Ardern responded by imposing one of the



strictest lockdowns in the world, effectively closing down the economy even as the country had notched barely 200 cases. This was bold. But at daily press conferences, she calmly explained the reasoning behind it and other government decisions and urged New Zealanders—the "team of five million"—to observe the rules and "be kind." She would often follow up at night with Facebook Live posts from home, wearing a casual sweater and looking directly into her phone as she reiterated key messages. It was a master class in communication, and it worked: The public broadly supported the restrictions, and the pandemic was kept at bay.

It helped that New Zealand has natural advantages in the fight against Covid-19, as a small island nation at the bottom of the world. A second outbreak in its largest city, Auckland–seized on by U.S. President Donald Trump as a "big surge"–was quickly brought under control with a regional lockdown. To date, the nation has tallied just over 1,500 confirmed cases of Covid-19 and only 25 deaths.

New Zealand's daily life is mostly back to normal, with no pandemic restrictions. Now, as voters look at the carnage the virus is still causing elsewhere, Ardern's success against Covid-19 is shielding her from criticism, says Lara Greaves, who teaches New Zealand politics at the University of Auckland. "She's been an excellent leader through crisis, has displayed great communication and the right amount of empathy," Greaves says. "If it weren't for Covid, the election would definitely be a lot more about her policy failings."

Ardern came to power promising to address growing inequalities and close the gap between rich and poor. But her governing coalition ditched plans for a capital gains tax over concerns it was too politically risky, and a program to build tens of thousands of affordable homes fell well short of goals. House prices have continued to rise as demand outstrips supply, climbing 10% in the past two years alone. Government policies to cut greenhouse gas emissions and clean up rivers were criticized by environmental groups as too weak. Perhaps most galling for Ardern, her administration has made little progress on reducing child poverty.

"It's all very well to have grand plans, but there's no point if you can't actually put it into practice," National Party leader Judith Collins, 61, said in a recent interview. "I would be someone people can rely on. And that's the difference. I won't say I can do something if I can't do it."

Speaking to *Bloomberg Businessweek* on the sidelines of her Oct. 1 campaign event, Ardern defended her administration, saying it has laid the



▼ Monthly electronic card transaction activity, seasonally adjusted, New Zealand dollars



 Ardern was the youngest female head

took office in 2017

of state, at 37, when she

foundations for change. "Ruth Bader Ginsburg said that change, real change, comes a step at a time," she said, paraphrasing the recently deceased U.S. Supreme Court justice.

As the pandemic keeps its borders closed, decimating a tourism industry that was once its biggest foreign exchange earner, New Zealand faces immense challenges. But in guiding her country so competently through a string of unprecedented crises, Ardern has won voters' trust.

"She's a mother and she's led the country through disaster after disaster," said Bronwyn Eriksson, the owner of a bakery in Nelson who offered Ardern a pastry during her walkabout there. "She's such a bright light. Why wouldn't we want her for another term?" —*Matthew Brockett*

THE BOTTOM LINE Ardern's capable handling of a series of crises points to a Labour Party victory on Oct. 17, even though her government hasn't delivered on some key policy goals.

An Imperiled Blue Dog in Trumpland

• Pro-life, pro-gun Democrat Collin Peterson faces a challenge from Michelle Fischbach

Representative Collin Peterson's reelection campaign got a call this summer about some trouble downstate in Minnesota's 7th Congressional District. Farmers supporting the 15-term Democratic congressman, who chairs the U.S. House Agriculture Committee, had put Peterson placards up along a stretch of highway. The problem, according to the worried campaign volunteer, was that they were sitting next to signs for President Donald Trump.

"What do you mean, a problem?" an aide asked the volunteer, according to Peterson's retelling of the conversation. "How do you think he gets elected?"

The exchange sums up the question at the core of this closely watched race. Peterson may be a Democrat. But he's pro-gun rights and pro-life, and a founding member of the centrist Blue Dog Coalition. "At one time there were a lot of people like me" in Congress, he says. "I'm the only pro-life Democrat left. I'm the only NRA A+ Democrat left."

So far, his social and fiscal conservatism has helped him fend off Republican challengers as his largely rural district in Minnesota has gone deep red. Trump swept the district by 31 points four years ago, making this the most Republican House district in America still represented by a Democrat. Will enough Trump voters split their tickets this time around and send Peterson back to Washington? Republicans are betting no. They see 2020 as their moment to flip the seat.

Peterson has his most formidable competitor in 30 years in Michelle Fischbach, a former Minnesota lieutenant governor and the first woman president of the state senate, who's been endorsed by Trump. She's hoping that endorsement and her emphasis on low taxes, border security, law and order, and other conservative issues will help her overcome the challenge of going up against a veteran House Agriculture Committee member in a farmheavy district.



Peterson

"She's raising money. She knows how to run a campaign, and she's viewed as a better financial investment by outside donors than previous challengers have been," says Kathryn Pearson, an associate professor of political science at the University of Minnesota in Minneapolis. Campaign analysts at the nonpartisan *Cook Political Report* rate the race a toss-up.

Fischbach, 54, is touting a "fresh outlook." She says voters "are tired of Collin Peterson. They are tired of Nancy Pelosi." And she says Peterson "only votes with Republicans when it makes him look good in the district." She's also sought to tie the 76-year-old congressman to a "socialist" Democratic agenda. Peterson, who voted against impeaching Trump and who enjoys hunting bears and deer on his farm when not on Capitol Hill, says attempts to portray him as aligned with progressives such as Ilhan Omar and Alexandria Ocasio-Cortez show that Republicans "have nothing else than to make up stuff."

The two candidates aren't far apart on fundraising, with Peterson taking in \$1.23 million from January 2019 through July 22, according to the Center for Responsive Politics. Fischbach brought in \$1 million over the same period. She has significantly outspent Peterson, however.

But Peterson has far outraised Fischbach when it comes to money from corporate political action committees. A pro-Peterson SuperPAC backed in part by sugar beet growers, the Committee for Stronger Rural Communities, started last ► • Total USDA subsidies for Minnesota's 7th Congressional District, 1995-2020



year hoping to raising more than \$1 million by Election Day. It reached that goal last month, according to Kevin Price, vice president of government affairs at American Crystal Sugar Co.

The district is the biggest sugar beet producer in the U.S. "Collin is sugar, and sugar is Collin," Price says. Kelly Erickson, a farmer and chair of the CSRC steering committee, says losing Peterson as agriculture chairman would be a blow. "You have the chairman of House Agriculture, and you know what kind of power that yields, not only for agriculture in the 7th District but agriculture all over the U.S.," he says. "Fischbach would be a freshman and sitting in the back of the room. How much good do you think she could do for agriculture?"

Supporters of Peterson also point to his centrist politics, ability to work with Republicans, and success in securing funding for rural hospitals. "He is practical. He is tough. He understands his district extremely well," says Tom Vilsack, former agriculture secretary under President Obama.

Republicans contend it's time "to bring in a different perspective," in the words of Minnesota

state lawmaker Tim Miller, a U.S. House candidate in 2018. Voters, he says, "don't want someone who is going to come in and be a radical change, and that's why I think Fischbach is a really good fit."

If Peterson loses, it will be another member down for congressional Democrats' Blue Dog Coalition, which he helped found in the 1990s. The caucus had more than 54 members in 2009 but was decimated in the 2010 and 2012 elections. It rebounded in 2016 and 2018, and membership now stands at 26. The Blue Dogs' strong 2018 results alongside the emergence of Ocasio-Cortez's progressive "squad" shows the ideological split within the Democratic Party.

Peterson says his campaign is doing what it's always done. If he's reelected, he will immediately be busy with work on the 2023 farm bill. "They are spending a lot more money than I have, and they did that in 2014, too," he says of Republicans. "We'll just see what happens." —*Kim Chipman and Derek Wallbank*

THE BOTTOM LINE Minnesota Representative Collin Peterson, a conservative Democrat in a heavily Republican district, is depending on farmers' support to keep his seat on Nov. 3.



Pack the Supreme Court, Or Strip Its Powers?

• A proposal to restrict the court's authority over certain laws stirs interest on the left

In 1982 a young lawyer at the U.S. Department of Justice wrote a series of memos defending an unorthodox proposal to limit the power of the Supreme Court. It was nine years after the court's landmark *Roe v. Wade* decision, which granted women a constitutional right to abortion, and Republicans in Congress had recently introduced more than 20 bills seeking to divest the court of its authority over abortion and other contentious social issues, including desegregation and school prayer. Academics have a term for this kind of legislation: jurisdiction stripping.

None of those bills passed. But the DOJ memos offered a sophisticated legal defense of jurisdiction stripping, arguing that "clear and unequivocal language" in Article 3 of the Constitution gives Congress the authority to shield certain laws from Supreme Court review.

The author of the memos was John Roberts. Forty years later, Roberts is the Supreme Court's chief justice and the leading defender of its institutional legitimacy, and the push for judicial reform has migrated from the Right to the Left, with an array of reforms under discussion, including jurisdiction stripping.

Facing the prospect of a 6-3 conservative majority on the high court following the death of Justice Ruth Bader Ginsburg, progressive lawmakers and left-wing activists are calling for Democrats to impose term limits or expand the size of the Supreme Court and pack it with liberal justices. On Sept. 29, House Democrats introduced a bill proposing 18-year term limits for new justices. And though President Franklin D. Roosevelt famously failed in his effort to pack the court in 1937, scholars generally consider court expansion to be legal because the Constitution doesn't specify the number of justices.

But those aren't the only reforms under consideration. A handful of academics and liberal thinkers are arguing for drastic structural changes that would strip power away from the judiciary, embracing the approach conservatives championed in the 1980s. In recent weeks professors at top-tier law

"It's almost a certainty of any Supreme Court reform that we would be inviting the Supreme Court to push back"

schools have published articles advocating for jurisdiction stripping or other reforms that would chip away at the court's power rather than simply alter its ideological makeup.

"If we got to the point where Congress was really seriously thinking about" Supreme Court reform, says Daniel Epps, a law professor at Washington University in St. Louis who's studied it, "you'd see a lot of stuff be considered. You could end up with something that looks different from all of the proposals we've gotten so far, or some new option that no one has ever thought of."

Some liberal proponents believe jurisdiction stripping could help Democrats shield bold future legislation from damaging court battles. In theory a Democratic Congress could pass a health-care plan or a Green New Deal with a provision stipulating that the legislation lies outside the bounds of Supreme Court review.

Under variations of the jurisdiction-stripping proposal, Democratic lawmakers could also limit the ability of lower courts to review legislation, or they could confine legal challenges to geographic regions where courts are generally sympathetic. As Roberts noted in his memo, Article 3 gives the Supreme Court jurisdiction over constitutional issues with "such Exceptions, and under such Regulations as the Congress shall make."

Still, the chances of jurisdiction stripping becoming enshrined in law anytime soon are slim. First, Democrats would have to win the presidency and gain control of both chambers of Congress. Even if they do so in November, potential reforms such as court expansion and term limits have attracted much more support.

Not to mention that any proposal limiting the court's power would itself face constitutional challenges. If Congress passed one, lawsuits and a court battle would be inevitable. "It's almost a certainty of any Supreme Court reform that we would be inviting the Supreme Court to push back at that limitation of its own powers," says Samuel Moyn, a law professor at Yale. "That's part of the ballgame."

In July, Moyn and University of Chicago law professor Ryan Doerfler published a paper arguing that liberals should explore "disempowering reforms" that dilute the power of the judicial branch, as well as more mainstream "personnel reforms" such as court expansion. They argued that taking power away from the Supreme Court would be less nakedly political than court packing and less likely to devolve into a tit-for-tat cycle of partisan fighting.

They're under no illusions about the likelihood that any of this will happen imminently. But this month, Moyn is co-hosting a conference at Yale to raise awareness about the broad menu of reform options. And Christopher Sprigman, a law professor at New York University who recently published his own paper endorsing jurisdiction stripping, says he's discussed the proposal with Democratic congressional staffers.

Carrie Severino, president of the conservative Judicial Crisis Network, says Democrats are threatening to politicize the court through legally dubious means. "They're willing to float any kind of extreme idea that comes up," Severino says. "And if they were given the actual opportunity to pass any of these kinds of laws, I don't think they'd hesitate."



If Democratic legislators were to include a jurisdiction-stripping provision in a Green New Deal, that would be a remarkable reversal of recent history. When Republican lawmakers tried to use the measure in the 1980s, it was for socially conservative aims. In 2005, when Roberts was nominated to the Supreme Court, the Center for American Progress, a liberal think tank, criticized him for defending such "radical legislative proposals."

Liberal critics have pointed out that Republicans could use the same tactic to protect restrictions on abortion or gay and transgender rights. But Sprigman says such anxiety is misplaced, given long-term demographic trends that favor Democratic majorities in Congress. "Part of the reason the Republicans are packing the courts is they realize that democracy is slipping away from their control," he says. "If you're a liberal, you should put your chips on democracy, not on courts." —David Yaffe-Bellany

THE BOTTOM LINE Some academics think jurisdiction stripping would give legislation such as a Green New Deal a path around the conservative Supreme Court, but the idea is far from mainstream. WHYSOMANYPARENTSARETAKINGTHEIRCUESFROMAHYPER-RATIONAL,DATA-OBSESSEDECONOMIST



WHAT WOULD EMILY

BY ESMÉ E. DEPREZ

ILLUSTRATION BY ROZALINA BURKOVA



OSTER DO?

OVER THE COURSE OF A FEW DAYS in mid-May in Providence, in between homeschooling her 5- and 9-year-olds, grading undergrad research papers, baking bread, revising her first book, and co-chairing Brown University's Healthy Fall 2020 Task Force over Zoom, Emily Oster sat down in front of her laptop with a steady supply of coffee. A few months earlier she'd started writing a newsletter called ParentData, aimed at the following of pregnant women and new parents she's amassed over the years. It started as a guide to making data-driven decisions about such things as side sleeping and sippy cups. But as with everything else, the pandemic had taken over. She'd wake up each day to an inbox full of frantic questions: Was it safe to visit the grandparents? Are play dates off the table? What about sending kids back to school?

Oster, an economics professor, has built a thriving career applying the tools of her discipline to everyday life. Her first book, 2013's *Expecting Better: Why the Conventional Pregnancy Wisdom Is Wrong—and What You Really Need to Know*, shot her from academic obscurity to household name. It dug into data to bat down blanket bans issued by obstetricians (including hers during her pregnancies) on deli meats, sushi, and alcohol. "Economists' core decision-making principles are applicable everywhere," she wrote. "And that includes the womb."

Now Oster is using those principles to help people think about two of the most vexing issues of the Covid-19 era: how to stay safe, and how and when to reopen day care and schools so America's 74 million children, their parents, and the economy can reclaim some semblance of normalcy and productivity. Although her analyses on school reopenings have been criticized as too cavalier (and aligned her more closely with President Trump than she'd like), she's become a go-to authority amid the anxiety, with bylines in the Atlantic, the New York Times, the Washington Post, and Bloomberg Opinion, and appearances on an array of podcasts.

As for those questions piling up \blacktriangleright

◄ in her inbox in May, Oster couldn't possibly respond to or decide what was best for each newsletter reader's unique situation. But she could share the economic framework she uses when faced with uncertainty. So she got to typing:

1. Frame the question. (Clearly define two or three options, instead of trying to evaluate infinite or indistinct possibilities.)

2. Mitigate risk. (What's the safest way to execute those options?)

3. Evaluate risk.

4. Evaluate benefits. (Don't overlook these.)

5. Decide.

The point of the exercise, Oster says, isn't to feel sure, necessarily, that the decision you reach is the right one. That may be possible sometimes, but it's very difficult now, as research into the virus yields new and changing information and much of the data we'd like to have is unavailable or incomplete. The goal is to feel good about the process you used to arrive at a decision, so you can move on to the next fire you need to put out.

The message wouldn't have felt unfamiliar to anyone who's taken Econ 101 or replicated Benjamin Franklin's habit of stacking pros against cons. But it struck a chord, and the post soon became Oster's most popular, with more than a half-million views. As she

"Covid ponytail" after tiring of looking at herself on Zoom calls all day. In addition to Expecting Better, she's the author of 2019's Cribsheet: A Data-Driven Guide to Better, More Relaxed Parenting, From Birth to Preschool, an instant Times bestseller. The books have made her a celebrity among a generation of women and new parents like me, arming us with the ability to make informed, confident decisions. Her writing is accessible, authoritative, and empathic, infused with a self-deprecating wit. "Last week is when I started to crack a bit," she wrote in ParentData on April 27. "Was that me crying in the Whole Foods parking lot last Thursday? Yes, yes it was."

OSTER MADE HER CLASSROOM debut as an infant in 1980, when her father, Ray Fair, held her up Lion Kingstyle in a Yale lecture hall. "I figured that since we've been talking about production functions all semester, you'd like to see the output," he told his students, as one of them recalled in the school's alumni magazine. Fair, a macroeconomist known for his presidential predictions (he foresaw a Trump victory in 2016; he hasn't made a 2020 call because the pandemic has messed up the economy and hence his model), still teaches there. Oster's mother, Sharon Oster, was also a Yale economist until

The couple alternated nights fixing dinner, despite Sharon's being a better cook, to show it wasn't solely a woman's job. Sharon didn't change her last name upon marrying, and she and her husband flipped a coin to decide whose Emily would take, Sharon told me, "to let children reflect upon the nature of patriarchal culture and society." (For Emily's two younger brothers, they alternated last names.) Emily was a bright, driven, and bossy child, the sort who created an algorithm to solve quadratic formula problems for sixth grade math. The teacher made her redo the work by hand.

After graduating from boarding school, Oster entered Harvard, thinking she'd major in biochemistry. That changed after a summer working two jobs: one in a biology lab dissecting fruit flies and the other assisting Christopher Avery, an economist at Harvard's Kennedy School, on a book about college admissions. The purview of economics felt broader. "I liked the idea of being able to answer big-picture questions about what's going on in the world," she says. Avery would prove instrumental in her personal life, too-he introduced Oster to her now-husband, Jesse Shapiro, also a Brown economist.

As she began her doctorate at Harvard in 2003, Oster turned to the intersection

"SOMEBODY SAID TO ME RECENTLY, 'YOU'RE THE ONLY PERSON I LISTEN TO.' AND I WAS, LIKE, 'OH, MY GOD'"

often does, Oster shared the decisions she and her husband had made regarding the topic at hand—"Even though I know I will be crucified, I will tell you," she wrote. They paid a young nanny who lives alone to watch their kids in the afternoons when schools closed in March so they could continue working, and arranged visits with the grandparents via socially distanced, masked walks in the woods.

Oster is 40 and has bright eyes, a wide smile, and straight chocolate-brown hair that she wore for years in a bob but now pulls back into a retiring in 2018. She was the first woman to gain tenure at and become dean of the university's School of Management.

The Oster-Fairs brought economics instruction home. Food shopping was a lesson in opportunity cost: Time was valuable, so Sharon faxed the grocer a list instead of walking the aisles. Fair would dismiss his children's pleas to switch to a shorter toll booth lane by citing the "no arbitrage condition," which assumes that because everyone is optimizing all the time, the possibility to improve is marginal. Feminism was demonstrated, not simply discussed. of economics and health. She saw an opportunity to shed new light on the HIV/AIDS epidemic ravaging Africa. Oster argued that the prevalence of other sexually transmitted diseases there played a larger role in HIV transmission than researchers previously thought and that treatment wasn't cost-effective. (The World Health Organization pushed back: "Narrow cost-effectiveness arguments sow confusion and legitimize further delays in providing care to the millions now living with HIV.") She used mortality data to posit that the United Nations was overestimating HIV infection rates by as OSTER'S TWO KIDS ARE IN SCHOOL. SHE ARGUES THAT YOUNGER CHILDREN CAN RETURN TO THE CLASSROOM EARLIER THAN OLDER KIDS CAN

much as three times. By age 27, she'd delivered a TED talk on the topic, consulted for the President's Commission on AIDS, and been named the "future of economics," alongside Shapiro and a few others, by the *Times*.

It was also during these years that Oster had one of her biggest fumbles. Part of her dissertation challenged Nobel Prize-winning economist Amartya Sen's idea that Asia suffered from a 100 million "missing women" problem as a result of gender discrimination and misogyny. Oster posited that almost half the problem could be explained by pregnant women having hepatitis B, which correlated to birthing boys. The Journal of Political Economy, co-edited at the time by University of Chicago economist Steven Levitt, published it in 2005. Levitt and co-author Stephen Dubner lauded it in Slate just as they were rocketing to fame with the release of Freakonomics, a blockbuster that's been praised for bringing economics to the masses and

panned for debasing the discipline with cleverness. The paper raised eyebrows throughout the field: Who did this young woman think she was?

In this case, the critics were right. The following year researchers in Taiwan contradicted her findings using a larger data sample. She ended up traveling throughout China to collect better data and correcting herself in a follow-up paper. When the *Wall Street Journal* wrote a feature on the about-face, she said it was the responsible thing to do. "This is the way science works," she said.

Oster left Cambridge in 2006 to do a postdoc and teach at the University of Chicago, where Shapiro had begun his postdoc the year prior. The two married that year, bonded by a shared love of efficiency and structure. They hash out big decisions mostly over email and track family to-dos using projectmanagement software. Upon learning she was pregnant with their second child, Oster alerted Shapiro via a Google Calendar invite to the due date. She became a regular contributor to *Slate* and wrote a short-lived advice column for the *Journal*, explaining how to apply concepts such as diminishing marginal utility and comparative vs. absolute advantage to child care and marital chore-splitting.

The idea for Oster's first book was born in 2010 during her first pregnancy, with daughter Penelope, when her obstetrician's dictates about what to eat and how to sleep felt patronizing and didn't come with data. She scoured the research to weigh risks and benefits for herself and distilled it into *Expecting* Better, triggering the ire of doctors everywhere. The book has become a wild success: It sells more copies each year than the last. Yet Oster's decision to write a book for the massesanalyzing and synthesizing other people's research, instead of originating her own-isn't necessarily currency in the world of academia. In 2014 the ▶

University of Chicago invited her to apply early for tenure, then rejected her. "It was the worst," she says, "like, really, really terrible," and threw into question her worth and identity.

Oster and Shapiro soon landed at Brown. Its economics department didn't have the cachet of Chicago's but brought with it the benefits of tenure for both and proximity to their families. She's since given birth to their son, Finn, been promoted to chair of Brown's tenure and promotions committee, and been named the Royce Family Professor of Teaching Excellence.

In 2019 she published *Cribsheet*, which explores what evidence says about sleep training, language development, and vaccinations. It made waves for its stance on breastfeeding: If you do it, great, but if not, don't feel bad, because the benefits are overblown. Her critics were now speaking more loudly. Lori Feldman-Winter, chair of the American Academy of Pediatrics Section on Breastfeeding, faulted Oster in the pages of the *New Yorker* for not being an epidemiologist, accused her of misinterpreting research, and compared her to anti-vaxxers.

Over many hours of Zoom interviews with Oster, it became clear to me that though criticism doesn't shake her confidence, her failure to publish a significant amount of original research, the standard metric by which her field measures success, does. (It probably doesn't help that Shapiro is considered one of the country's top economists as measured by said metric.) But people everywhere look to her for answers, I said one day as she fixed her kids lunch. What's that feel like? "It is cool, kind of weird, and a little scary," she replied. "Somebody said to me recently, 'You're the only person I listen to.' And I was, like, 'Oh, my God.'"

BY EARLY APRIL, OSTER'S followers knew the pandemic had led her to update her family's emergency food kit with a 5-pound jar of peanut butter, alternate between "frantic obsession with the mundane" and "existential dread," and begin cutting her kids' hair. ("It's bad. Really bad.") The number of young people out of school worldwide peaked around this time at 1.6 billion, or more than 91% of the global student population, according to Unesco. About half have since returned to class. But particularly in the U.S., which has failed to contain the virus, the questions of when and how to reopen schools continue to trouble and polarize.

With no national reopening plan, the situation varies vastly depending on geography. The hedge fund Brevan Howard set out in August to compile data on the 100 largest U.S. school districts and found that 75 had opted for virtual instruction, 16 for in-person, and 9 for a hybrid. The economic implications are staggering. Brevan Howard estimated that 4.3 million working parents (read: mostly women) will be forced to reduce work hours or quit their jobs altogether, an outcome that "may be as disruptive to the labor market as a small-to-medium-sized recession," it says. "Investors need to add schools to their usual dashboard of economic indicators."

Oster has broadly argued for reopening schools in person. The circumstances under which she says that can happen safely are far more nuanced than those backed by the Trump administration, which has pushed for an open-no-matterwhat approach. But for parents desperate for their kids to return to class, the important thing is that she's a yes.

When it comes to reopening society

4.3m

ESTIMATE OF WORKING PARENTS (MOSTLY WOMEN) WHO WILL BE FORCED TO REDUCE WORK HOURS OR QUIT THEIR JOBS IF SCHOOLS DON'T REOPEN broadly, the WHO draws a line at 5% of Covid tests yielding positive results. Oster defers to this threshold: Places with infection rates higher than that shouldn't reopen schools–or bars or gyms or water parks. Places with infections below that rate can reopen schools if they implement proven safety protocols, such as mask wearing, social distancing, and adequate ventilation. The ability to test and contact trace should be robust and timely.

Such measures require money. Oster argues they're worthy, cost-efficient investments, because reopening schools brings critical benefits to the economy and society: Parents can work. At-risk kids will have a safe place to go and get fed. The learning losses documented when schools went online in the spring, hitting low-income and students of color the hardest, can be addressed. Oster has also used her platform to highlight the unequal reality of the U.S. education system. "Without more resources, there are many places where it simply will not be safe to open," Oster said in a Brown webinar in August.

Oster's views land her somewhere in the mainstream middle–closer to the National Institutes of Health's Anthony Fauci than to people taking a hard line against reopening until the virus is effectively eliminated. The American Academy of Pediatrics also favors resuming in-person learning, where safely possible, noting the risks of not doing so include social isolation and missed signs of physical abuse and depression.

As vast swaths of the U.S. experienced summer infection spikes and Washington refused to provide schools with extra funding, many teachers and their unions lobbied districts to adopt distance learning. Brad Marianno, an assistant professor at the University of Nevada at Las Vegas, who's been tracking union negotiations, says Oster's work enables parents, antsy to get their kids back into the classroom, to press their case using data and not only feelings. "When you can begin to bring evidence to the conversation, that allows you to also have influence," he says.

One issue Oster has held up to

argue in favor of reopenings is child transmission. Data collected early in the pandemic indicated kids weren't efficient vectors of the virus. But recent studies increasingly suggest otherwise, says Zoë Hyde, senior research officer at the University of Western Australia. She urges more caution as a result, saying schools shouldn't reopen until an area's case counts fall below what contact tracing can rapidly handle. "It's true that school closures are associated with harm," she told me. "However, I would argue that such infection data from child-care settings. So Oster and her team at another of her projects, the website Covid Explained, began collecting their own data. "Part of it is, honestly, I'm looking to shame the world, the CDC, states, whoever, who are telling us it's impossible to learn from this," she says. "I'm a lady with a newsletter. You should improve your datacollection efforts."

OSTER WAS AWAKENED AT 5 A.M. on a recent Monday, as she is every day, by a vibrating band strapped around her mass outbreaks and stay open. Many other places haven't been as lucky.

I'd been talking with Robert Weyant, an epidemiologist at the University of Pittsburgh. "I tend to be a cautious person," he wrote in an email on Sept. 23. "It seems like waiting to reopen is the more prudent thing to do. But we do have a great natural experiment ongoing with some districts open and some not—so we shall see in the rather near future if opening is a good idea."

That same day, Oster unveiled,

"WE DO ALL KINDS OF THINGS THAT SUGGEST THAT WE ALLOW FOR THE POSSIBLITY THAT PEOPLE COULD DIE AS A RESULT. THAT'S A VERY CALLOUS, ECONOMICS-Y SOUNDING ARGUMENT"

harm is far outweighed by the harm of an unmitigated epidemic." Oster remains unswayed. She continues to argue that younger children could safely return to school earlier than older kids, even in communities where test positivity rates exceed the 5% WHO threshold, as long as safety protocols are in place. Evidence shows that children rarely fall severely ill and are often asymptomatic. They also benefit most from face-to-face instruction.

Some people are taken aback by Oster's calculations. Asymptomatic kids, Hyde points out, "have the potential to be silent spreaders." As one teacher wrote to Oster in July, "I resent my life being played with as if it doesn't matter and all that matters is the children."

The way Oster sees it, "we do all kinds of things that suggest that we allow for the possibility that people could die as a result." Kids attend school during flu season, and people drive cars and have pools—all of that comes with a risk of mortality. "But that's a very hard argument to make. It's a very callous, economics-y sounding argument about the value of life," she says. "Perhaps a more positive response is that there are some really large benefits."

The ability to do a true cost-benefit analysis—for Oster or any of us—is hamstrung by the lack of comprehensive ankle. (A regular alarm would disturb Shapiro, who sleeps for another hour.) She sent some emails, set out a plate of fruit for the kids, and set off for her running club's twice-weekly track workout. She rediscovered the sport during the pandemic—"It's like being back in high school cross-country except with more joint pain"—and now runs every day at 6 a.m., using it as her time to think.

After a morning spent juggling the kids and work and tweeting a screenshot showing that Reese Witherspoon had started following her, Oster installed herself in front of her laptop in her bedroom-turned-office at 1 p.m. Rhode Island Governor Gina Raimondo was delivering an update on the status of fall schooling. Oster's children kept barging in. "You don't understand," she told them. "It's very, very important that I watch what the governor is saying!"

Oster let out an actual cheer as Raimondo spoke: Most public schools in the state could reopen in person on Sept. 14, and private schools, such as the one Penelope and Finn attend, could do so immediately.

When I caught up with Oster two days later, she was beaming. "Today is amazing," she said. "Finn went to kindergarten."

As this story went to print, Rhode Island's schools had managed to avoid with a software company and several national education groups, an expansion of the data-collection effort she'd begun over the summer. The National Covid-19 School Response Dashboard so far covers 1,006 schools across 48 states with 528,000 students and 54,000 staff. During the second half of September, the confirmed infection rate among kids attending in-person (full time or hybrid) was 0.13%. Among staff it was 0.24%. In a school of 1,000 students and 100 staff, that translates to 1.3 student cases every two weeks and one staff case every eight weeks. Oster is now working to identify patterns-are schools that don't require masks seeing more infections?and plans to alert districts so they can change behavior.

Oster knows she'll get blamed if the reopening experiment ends in disaster. In that case, "the best I can do is say that I did something I felt was productive and helpful," she told me. "If the result of having done that is that the policy direction I pushed was not right, at least I got the data to show that."

It would be ironic, I responded, if her own dataset proved her wrong. "It's true!" she said. "I think this data will be useful no matter what we show. But, yes, it would be ironic if I once again show myself to be wrong. That could be my thing! But I'm hoping not." ⁽³⁾

SUBURBAN DAD, CITIGROUP SVP,

44

AND HIGHPRIEST OFQ

Jason Gelinas lived a normal suburban life with a plum Wall Street gig. He also ran the news hub for a pro-Trump conspiracy theory

> By William Turton and Joshua Brustein Illustration by Rebekka Dunlap

Like many future Donald Trump voters, Jason Gelinas felt something shift inside him during the presidency of Barack Obama. Things were going OK for him generally. He had a degree from Fordham University and had held a series of jobs at big financial-services firms, eventually becoming a senior vice president at Citigroup in the company's technology department, where he led an AI project and oversaw a team of software developers. He was married with kids and had a comfortable house in a New Jersey suburb. According to those who know him, Gelinas was a pleasant guy who was into normal stuff: *Game of Thrones*, recreational soccer, and so on. Things did get weird, though, when politics came up.

Gelinas had registered as a Democrat in the runup to the 2008 election, but then seemed to drift to the right, and not in an "I'm going to vote for Romney this time" sort of way, according to two friends, who spoke to *Bloomberg Businessweek* on the condition of anonymity because they didn't want to be associated with what came next in his political journey. "He hated the idea of Obama," says one. "He thought that it was a setup and that he was elected to satisfy the Black population." Gelinas would become agitated when the topic of the president came up, sometimes referring to Obama as "the Antichrist."

He was increasingly immersed in right-wing internet conspiracies, telling a friend that Hillary Clinton was at the center of a global cabal of sex traffickers. This was about the time that online trolls were starting to promote a theory known as Pizzagate, which claimed that Clinton and others were holding children hostage in the basement of Comet Ping Pong, a restaurant and concert venue in Washington, D.C. Shortly after Trump was elected president, a follower burst into the restaurant and fired an AR-15 rifle, standing down only after discovering that the building didn't actually have a basement. (Nobody was hurt. The shooter, who said he'd been misled by what he'd read on the internet, pleaded guilty to firearms charges and was sentenced to four years in prison.)

Some might have taken that incident as a sign to cool down. Gelinas appears to have gone deeper down the rabbit hole, finding his way to an even stranger movement, QAnon. Like Pizzagate believers, QAnon's are focused on a supposed cabal of pedophiliac liberals, mostly politicians and celebrities. The twist is that QAnon has an apocalyptic component—it holds that, at some point, President Trump will unleash "the Storm," a military coup that will expose and punish this cabal. QAnon has spurred enough violence that the FBI has labeled it a domestic terrorism threat. Supporters have been implicated in the death of a Staten Island mob boss and in the derailment of a train in California.

Even so, the movement had been contained mostly to the internet's trollish fringes until around the time Gelinas came along. In 2018, while doing his job at Citi, he created, as an anonymous side project, a website dedicated to bringing QAnon to a wider audience–soccer moms, white-collar workers, and other "normies," as he boasted. By mid-2020, the site, QMap.pub, was drawing 10 million visitors each month, according to the traffic-tracking firm SimilarWeb, and was credited by researchers with playing a key role in what might be the most unlikely political story in a year full of unlikely political stories: A Citigroup executive helped turn an obscure and incoherent cult into an incoherent cult with mainstream political implications.

In January the House of Representatives will almost certainly welcome its first QAnon supporter, Republican Marjorie Taylor Greene, who's running without serious competition in a district in northwest Georgia, and many other candidates for public office have professed support for aspects of the movement. The Trump campaign has sometimes asked people not to display QAnon signs at rallies, but they show up all the time anyway. QAnon supporters were also ready with an easy spin on the biggest threat to the president's hold on power: his own Covid-19 diagnosis. Trump wasn't sick, the theory goes, he merely retreated from the public eye so that the Storm could begin.

Because it's so much more involved than a typical conspiracy theory, QAnon has often been described as a religious movement—and, like many religions, the core of the belief system stems from revelations in a foundational text. In this case, that text didn't appear on stone tablets handed from a mountaintop or on golden plates buried in the ground in upstate New York, but through a series of cryptic postings on a website best known for racist memes and the manifestos of mass shooters. Ironically, for a movement obsessed with the evils of pedophilia, the site, 4chan, was also known as a place to download child pornography.

The revelation was delivered on Oct. 28, 2017, and came from a user calling him or herself QAnon. This person, who claimed to be a government employee with top-secret "q-level" clearance (a real thing in the Department of Energy), said Clinton would be arrested in two days and that the event would set off massive organized riots. At the time, 4chan was full of similar nonsense attributed to highly placed government officials. But QAnon–or simply Q–caught on in a way that competing accounts such as FBIAnon and CIAAnon didn't. The user became the narrator of a tale that cast Trump as the central hero in an epic global struggle, doling out the story in thousands of posts known as "Q drops," first on 4chan, then on the even more outre 8chan and its successor site, 8kun.

The identity of Q has been a subject of speculation since the beginning. The theories are all over the place, variously suggesting that Q is Edward Snowden, or former national security adviser Michael Flynn, or the conspiracy-minded radio host Alex Jones, or even Trump himself. One selfpublished book, which Amazon.com Inc. includes for free as part of its Kindle Unlimited subscription, claims to have used a mathematical model to determine that Q is former National Security Agency official Thomas Drake. Drake has denied this–but Q would do that, wouldn't he?

If Q's drops are the new movement's divine revelations, its rites involve the production and consumption of videos and social media posts—often screenshots annotated with ►

QAnon supporters in Portland, Ore., in September

Bloomberg Businessweek

October 12 2020

▲ arrows and circles revealing hidden connections—designed to interpret them. "Digging deeper," Q's followers often call it. Just a few minutes before 1 p.m. on Father's Day 2018, for instance, Q and Trump each posted a Happy Father's Day message. Coincidence? Or how about this August, when Trump visited a

Whirlpool Corp. plant in Ohio and posed in front of 17 washing machines? Q is the 17th letter of the alphabet. Surely this was the president signaling that Q was going to clean things up. Or maybe it had something to do with money laundering?

At first, the primary documents for Q were available only to the bravest of web surfers. Most regular people don't spend much time on 8kun, which is awful in terms of content and interface design. The need to spread the word beyond core users led to the creation of aggregator sites, which would scrape the Q drops and repost them in friendlier environs after determining authenticity. (The ability to post as Q has repeatedly been compromised, and some posts have had to be culled from the canon.) This task, Gelinas once told a friend, could be his calling from God.

On April 5, 2018, Q posted a short message—drop No. 1,030 insinuating that a recent spate of military aircraft crashes was part of a "silent war." Later that night, Gelinas registered QMap.pub. His intention, as he later explained on Patreon, the crowdfunding website widely used by musicians, podcasters, and other artists, was to make memes, which are harder to police than tweets or Facebook text posts. "Memes are awesome," Gelinas wrote. "They also bypass big tech censorship." (Social media companies are, at least in theory, opposed to disinformation, and QAnon posts sometimes get removed. On Oct. 6, Facebook banned QAnon-affiliated groups and pages from the service.)

Gelinas raised thousands of dollars on Patreon each month, posting updates using his pseudonym, QAppAnon. "Like many of you, I felt that something wasn't right in the world, that our country was headed in the wrong direction," he wrote. "Then something magical happened in 2016 that defied expectations—a complete outsider to the political establishment, Donald J Trump, won the presidential election! Amazing. A glimmer of light in the darkness." A few months into the Trump administration, Gelinas changed his party affiliation to Republican, and this spring he contributed \$200 to Trump's reelection efforts—his first-ever political contribution, according to federal disclosures.

QMap developed into a central place for fans to read the drops, to plot, and to commiserate on the site's "Where We Go One We Go All Prayer Wall." The site wasn't just a repository of QAnon posts; Gelinas served as an active co-author in the movement's growing mythology. The clean, minimalist site was designed around tiles dedicated to each Q drop, which Gelinas titled to make them easier to understand. Tabs across the top enabled users to sort by theme or tags, and



the hidden players and themes were explicated along the left side with a series of icons–a few chess pieces, a globe, a skull. Brief descriptions sorted "players" by category. (French President Emmanuel Macron and *New York Times* reporter Maggie Haberman are in the "Traitor/Pawn" category; Senator Ted Cruz is a "Patriot.")

QMap also had a tab for suspicious deaths. John McCain didn't die from brain cancer, according to QMap. "One theory is that he was secretly tried [by] military tribunal and sentenced to death," the site said. Q had never made these claims explicitly; they were insinuated by his posts, then interpreted by QMap. "It was all laid out in a way where someone could easily start to believe it's all true," says Joe Ondrak, a researcher for Logically.ai, a fact-checking website that follows the movement. "It was like a redpill factory." ("Redpill" is a reference to the movie *The Matrix*, in which characters who want to see the world as it actually is take a tablet of that color. It's been adopted by right-wing activists to connote the conversion of new believers.)

One young QAnon supporter encouraged QMap to annotate posts with supporting evidence and links to additional reading materials, providing "background info for the uninformed so that even his grandma could understand what's going on," Gelinas wrote approvingly on Patreon in the summer of 2018. "What a great idea. It's hard to jump into Q if you haven't been following it closely."

On Patreon, he laid out a plan to add a team, which he hoped would be staffed by disaffected software developers. "Facebook devs: how mad are you. You've been lied to," Gelinas wrote on Twitter in March 2019. "Your talents have been used/abused for evil purposes. Let's build a new platform for the GOOD of Humanity."

By this point, Gelinas claimed he was the No. 2 figure in the movement, behind only Q, according to a friend, and began to dream about turning his QAnon hobby into his main gig. "Who knows, maybe QMAP becomes the media platform of the future one day? :-)" he mused in early September.

By now, QMap's growth had attracted an enemy. Frederick Brennan, a 26-year-old polymath with a rare bone disease, had decided to unmask the person behind QMap. Brennan was a reformed troll. He'd created 8chan, but he had a change of heart after the man responsible for the 2019 mass shootings at two mosques in Christchurch, New Zealand, posted his manifesto on the forum in advance and inscribed 8chan memes on the weapons he used to kill 56 people.

Brennan had come to believe that Jim Watkins, an American entrepreneur who'd taken over 8chan and its successor site, 8kun, was somehow involved in QAnon. The mixture of regret over what the sites he'd started had become and the grudge against Watkins, who runs 8kun from his Brennan

reporter had left the property, two

social media profiles of Gelinas and his wife disappeared from the inter-

net. Within days, Citi had put him on

administrative leave and his name was

removed from the company's internal

That afternoon, QMap.pub and the

police SUVs showed up.

pig farm in the Philippines, had sent Brennan on a mission to bring down the site and QAnon. Watkins did not respond to a request for comment.

Brennan started by trying to figure out which companies were operating servers that hosted 8chan's content. Then he would post public messages, on Twitter and elsewhere, urging the

companies to cut ties with the site. After 8chan was dropped by the cybersecurity company Cloudflare Inc., which protected it from denial of service, or DDoS, attacks, it found safe harbor in a new U.S.-based DDoS protection company, VanwaTech LLC, which had taken an extremely permissive attitude toward controversial content. "If it's legal, I don't care," says 23-year-old chief executive officer Nick Lim.

This summer, Gelinas also moved his site to VanwaTech. This made him a target of Brennan, who also began pressuring Patreon to block Gelinas's site. He referred to QMap in a tweet as "the main vector for Q radicalization." QMap, Brennan explains in an interview, helped "turn this anonymous format into a way people can be notified immediately."

Patreon never banned QMap, and Gelinas took down all his posts on the crowdfunding site after he was identified as QMap's owner. In messages exchanged over WhatsApp, he told *Bloomberg Businessweek* that he has no connection to Watkins and has never met him. He said he began using VanwaTech because it protected Qmap from frequent DDoS attacks.

Ondrak, the fact-checker, and Nick Backovic, another Logically.ai researcher, joined Brennan's hunt. It took Ondrak and Backovic only a few days to trace an email address associated with Patriot Platforms LLC, which had been listed as the publisher of a QMap mobile app in Google's Android app store, to a post office box in Berkeley Heights, N.J. The next day, the pair published a story outing Gelinas as the operator of QMap. Public records show that Gelinas is the sole employee associated with Patriot Platforms, and New Jersey business records obtained by *Bloomberg Businessweek* list the company's address as a house in the same town, a few miles from the P.O. box.

On the morning of Sept. 10, a reporter drove to the house. It was a beautiful day in suburban New Jersey. Gelinas, in shorts and an American flag cap, was in the front yard, filling up a wheelbarrow with cut-up tree stumps.

Gelinas is tall and fit at age 43. He clearly didn't want to talk. He paced around his yard, mostly evading questions, while the reporter stood in the grass. He first said he wasn't Q, though he did allow that he was familiar with QAnon, which he described as "a patriotic movement to save the country." Finally, his wife opened the front door and rescued him with a vague request for technical assistance. "I don't want to get involved, I want to stay out of it," Gelinas said before he disappeared into the house and, rather than asking the reporter to leave, called the authorities. A few minutes later, after the



"Mr. Gelinas is no longer employed by Citi," the company says in a statement. "Our code of conduct includes specific policies that employees are required to adhere to, and when breaches are identified, the firm takes action."

In the weeks after he was outed, Gelinas mostly ignored reporters' calls and text messages, though he did acknowledge he was the only developer for QMap and clarified several other points. "I'm not going to talk about my own story right now," he said. "When the time is right, it will come out."

QMap's disappearance has been a significant but temporary setback for the QAnon movement. "It's not going to be a death blow to the QAnon community, but it is a disruption," says Travis View, a conspiracy theory researcher who hosts a podcast dedicated to QAnon. QMap popped back online a few days later, but it now consists entirely of links to other QAnon aggregator websites.

Google has tried to make it harder to find such QAnon sites by keeping them from showing up in searches, and Facebook and Twitter have blocked links to them, though posts about Q are easy to find on Facebook and other social networks such as Telegram. Followers also sometimes spread the word about Q-related sites by writing their URLs on signs and holding them up at Trump rallies.

Meanwhile, Gelinas's project of bringing the gospel of Q to the mainstream is alive and well. Late this summer and early this fall, Q supporters organized a wave of in-person rallies, ostensibly to combat human trafficking, many of them under the social media hashtag #SaveTheChildren. Some established anti-trafficking groups, including the real Save the Children, a 101-year-old British nonprofit, complained they were being co-opted in dangerous ways.

Janja Lalich, a professor emerita of sociology at California State University at Chico who's studied cults for decades, says internet movements such as QAnon have grown at an alarming rate, because of a political debate that's become increasingly unmoored from a set of universally agreed-upon facts. "It's times like these that cults can thrive," she says. "We have leadership that has tried very hard to change our relationship with reality, and people are grasping at straws. The last four years have been precedent-setting in creating an atmosphere of disbelief."

Returning from that collective delusion, Lalich insists, won't be easy. "It's very daunting," she says. "You have to give up everything you believed in and decide what to believe again." (B) — *With Jennifer Surane*



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Alternative tearnants for ingest



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By Lindsay Gellman

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inolicated in serious injuries and deaths

Dejay Cartwright had ^{visited} more than 4⁰⁰ lighthouses, and she was setting out to see another. She was an aficionado,

so drawn to the charm of these quaint relics that she'd joined the Lighthouse Preservation Society. The home she shared with her adult daughter, Tiffany Cartwright, in Townsend, Del., was teeming with miniature replicas.

She'd invited Tiffany to join her that summer evening in 2015. The trail was longer than anticipated, though, and Cartwright's walker kept catching in the path. After about a half-hour, she was too tired to continue, and they headed home.

Even so, Tiffany was delighted. It was the first time in years her 62-year-old mother had felt well enough for a substantial walk. Cartwright had been diagnosed with Lyme disease in 2003, and she'd suffered persistent symptoms ever since: coughing, runny nose, joint aches, poor sleep, low energy. She'd been forced to retire from running the family's childcare business and now spent much of her time playing games online. Over the years she'd tried all sorts of treatments. Nothing helped. But she'd recently started seeing a new specialist, Henry Childers IV, in Georgetown, a 90-minute drive to the south, and felt encouraged. Childers had strawberry-blond hair, a strong jaw, and an authoritative manner, and he came recommended by Cartwright's primary-care doctor.

Childers was licensed to practice medicine in Delaware, but he largely eschewed traditional treatments. During an initial consultation in July, he proposed starting Cartwright on a nine-week program. Four times a week she would drive to his private clinic, Delaware Integrative Medicine LLC, for infusion procedures, typically involving the mixture of ozone gas or vitamins with her blood. Cartwright called her mother, Dee, from Childers's office, sounding optimistic. The cost would be around \$9,700, all out-of-pocket. Dee volunteered her credit card number so Cartwright could start that same day.

Not long into the treatments, to prevent the frequent venous draws from becoming uncomfortable, Childers sent Cartwright to Christiana Hospital in Newark, Del., to have a port surgically inserted in her chest. This would allow the infusions to be done via a central line, as is done for chemotherapy. After a couple of weeks, Cartwright was feeling hale enough to scout for lighthouses.

On Thursday, Sept. 24, Childers sent her back to the hospital to have the port replaced because it had become clogged. Over the next several days, the skin surrounding the new port became inflamed and hot to the touch. When Cartwright returned to Childers's practice on Monday, according to assertions contained in court filings, she reported flulike symptoms. Clinic staff carried on with her treatment, and again the following day. (Childers says there was no inflammation at the clinic, calling the site "unremarkable.")

The next morning, Cartwright collapsed in her bathroom. She recovered and continued going in for her next infusions, during which clinic records indicate she had an elevated, irregular heartbeat. On Oct. 1, Cartwright said she was in pain, so the clinic sent a blood sample to a lab.

The following morning, Tiffany found Cartwright lying

on her kitchen floor. As Tiffany went to help, Cartwright lost consciousness. Tiffany called an ambulance to bring Cartwright to the emergency room at Christiana Hospital. Physicians there removed the port, which was infected, and began treating Cartwright with antibiotics, transferring her to intensive care.

When the bloodwork came back, it showed that Cartwright had MRSA, an aggressive staph infection resistant to many antibiotics. It had spread throughout her bloodstream and was too advanced for effective treatment. (The sample taken by Childers's clinic later confirmed the diagnosis.) She spent the weekend on life support, drifting in and out of consciousness, surrounded by family. On Monday, Oct. 5, Tiffany and Dee instructed doctors to discontinue life support, in keeping with Cartwright's wishes. She died within minutes.

That Cartwright's original symptoms were commonplace had made their cause difficult to pinpoint. The affliction she thought they traced to, Lyme disease, is most often caused in North America by bacteria from the species *Borrelia burgdorferi*, typically transmitted via bites from infected ticks. Roughly 30,000 cases are reported each year to the U.S. Centers for Disease Control and Prevention, though the agency estimates that the true prevalence is closer to 300,000 cases. Symptoms include fever, headache, fatigue, and a bull's-eye-shaped rash; left untreated, the infection can spread to joints, the heart, and the nervous system. The recommended remedy is a course of antibiotics lasting two to four weeks. If treated right away, most patients make a quick and full recovery.

In some cases, though, Lyme patients continue reporting symptoms for months or even years after treatment. The CDC recognizes these cases, describing them collectively as post-treatment Lyme disease syndrome, but says there are no proven treatments for them and they're not likely the result of an active infection. Some patient communities have adopted the term "chronic Lyme disease" to describe their symptoms. Many say their concerns often aren't taken seriously by traditional doctors, which has created an opportunity for hundreds of alternative practitioners—some licensed medical doctors such as Childers, some not—who call themselves "Lyme-literate medical doctors," or LLMDs.

These practitioners have proliferated in recent years, with officials and industry watchers estimating their ranks at more than 500. Many of them join the International Lyme and Associated Diseases Society (ILADS), an advocacy organization that offers conferences and training programs. They tend to rely on nonstandard diagnostic criteria and scientifically unproven treatments, including ozone therapy, longterm antibiotics, and vitamin supplements. Insurers rarely cover these treatments, and doctors typically require payment upfront. Nevertheless, the treatments are compelling to many patients, in part because the practitioners offering them tap into a strain of American culture that will be familiar to anyone paying attention during the coronavirus pandemic: surging skepticism of scientific expertise and regulation. They also trade on the notion that wellness can be purchased.

The results include a pattern of harm. Patients, family members, physicians, and government officials describe LLMDs routinely misdiagnosing Lyme disease instead of other, treatable conditions and injuring patients. Many of these stories have effectively been buried-quashed by confidentiality agreements struck during litigation, papered over by bureaucratic procedure, stuck in limbo between agencies, or redacted as they pass through layers of compliance. But internal government documents obtained by Bloomberg Businessweek through a Freedom of Information Act request show that physicians at the CDC are aware of malpractice allegations at a constellation of private clinics. Since around 2013 they've tracked dozens of reports of significant harm, including several deaths, that were the direct consequence of procedures ordered or administered by LLMDs. And yet, even those who've been reprimanded have tended to face few professional repercussions. Often, they've continued to practice.

In ²017 the C_{DC} published a collection of anonymized

reports about practitioners whose Lyme treatments had led to a patient's hospitalization. The cases followed a pattern: A patient received a Lyme diagnosis, sometimes without evidence, from an alternative doctor who recommended unproven IV treatments via a central-line catheter. The catheter then became a site of life-threatening infection. Long-term use of these devices, which include chest ports and peripherally inserted central catheters (PICCs), requires ongoing care by trained professionals. Even then, problems can occur.

Dr. Christina Nelson, a medical epidemiologist at the CDC Division of Vector-Borne Diseases and an author of the publication, says it was intended to raise awareness in the absence of a robust surveillance system for alternative Lyme treatments. "A lot of these patients have had symptoms for years, and they're desperate for answers," she says. But with alternative therapies delivered through indwelling lines or ports, "the risk-benefit balance is completely skewed to the risk side. And there's no proof that there's benefit." After receiving multiple reports of complications related to such treatments and to misdiagnoses, Nelson says, she became concerned. Her alarm grew as she researched the practitioners and turned up scathing reviews on public sites such as Yelp.

Among the reviews she found was one from a patient in San Diego who described being diagnosed with Lyme and high levels of toxic heavy metals. Following treatments with chemicals the doctor said would remove heavy metals, the patient began to experience severe pain, for which the doctor prescribed fentanyl patches and at-home blood-thinning injections. The pain persisted, landing her in an emergency room, where she learned that the real issue was leaking silicone implants. The alternative doctor, she wrote, "acted in a way that was both dangerous, and reckless in his treatment. I feel very fortunate that I survived."

Most prospective patients researching alternative

treatments or doctors online will swiftly land on a clinic homepage. Childers's website features video clips of people who say they improved under his care. In one, a patient wearing an olive-green T-shirt and seated in front of a ship replica introduces herself as a 26-year-old with Lyme disease undergoing ozone therapy and other infusions through a chest port. She describes symptoms such as brain fog, joint pain, and inflammation. Since beginning treatment with Childers, she says, she's had more energy. "I'm definitely able to not have those days of feeling bedridden."

Nelson had heard that beyond the testimonials were negative experiences with various doctors that might have been obscured by patient privacy concerns or legal settlements. She started compiling records of misdiagnoses and adverse events, first drawing from reports to the CDC and online reviews, then by writing to infectious-disease physicians in search of case reports. Dozens rolled in: patients who'd experienced complications from treatment with intravenous garlic or with intravenous silver compounds. One who'd been diagnosed in Connecticut with Lyme but in fact had leukemia. A 37-yearold woman in Maryland who developed sepsis and died after being fitted with a PICC line to receive antibiotics.

Time and again, Nelson found that practitioners had previously been reprimanded for malpractice. Time and again, they'd been allowed to go on treating patients, resulting in casualties that might have been prevented. "We continue to hear of concerning situations that patients are put in and concerning treatments that they're undergoing," she says.

In the early 2010s, Marvin "Rick" Sp^{ona}ugle was ruⁿⁿing an opiate-detox practice in Florida when his teenage daughter was diagnosed with Lyme disease. In an online account published around 2016 and since removed from his website, Sponaugle, an anesthesiologist by training, detailed how– counter to the guidance of the American Medical Association, which discourages physicians from treating immediate family members—he'd taken over his daughter's care from a Florida LLMD whose antibiotic regimen was making her "sickly." Because he lacked experience treating tick-borne diseases, he read up on naturopathic medicine.

Eventually, he and his wife "designed an Integrative Treatment for Lyme Disease," he wrote. "The initial version saved Alexa's life." He began to market himself as a Lyme disease expert and to advertise his private clinic as the Sponaugle Wellness Institute, a destination for pricey, unconventional treatments for Lyme and chronic illnesses.

Previously, Sponaugle had trained at West Virginia University School of Medicine, completed residencies at the University of Florida, and served as chief of anesthesiology at Helen Ellis Memorial Hospital outside Tampa from 1986 to 2005, practicing there until 2010. He'd also worked as an addiction-recovery specialist starting around 1998 and in 2001 opened Florida Detox Inc., a clinic offering an unproven treatment called anesthesia-assisted rapid opiate detoxification.

Outcomes were uneven. Insurance records show that **>**

▲ in 2004, a detox patient in Sponaugle's care allegedly experienced inflamed blood vessels after being given Adderall unnecessarily, leading his insurer's risk-management division to say it had counseled Sponaugle on safety. The same year, according to court filings, a patient suffered a permanent brain injury following detox treatment with Sponaugle; the doctor won the resulting malpractice lawsuit. In 2006 a patient sustained nerve damage during a detox infusion with Sponaugle at Helen Ellis, leading to a malpractice lawsuit and a subsequent \$95,000 settlement payment. (Sponaugle didn't respond to an emailed request for comment on these cases.) In 2013, Sponaugle sued a dissatisfied detox patient for defamation and won.

The same year, the CDC published guidance warning that anesthesia-assisted detox treatments could have adverse effects. Sponaugle had by then left Helen Ellis, pivoting to focus on alternative treatments for Lyme and for ailments posited, without scientific proof, to be related to mold and chemical toxicity. His star rose: Reality-TV personality Yolanda Hadid shelled out \$30,000 to be treated by him, and he spoke at an ILADS conference in 2016.

Sponaugle offered hope to families such as the Burgesses. Growing up in Jena, La., Anna Burgess listened to classic rock, wrote poetry, and fashioned dream catchers by hand. Over time, though, fatigue, aches, and other symptoms damped her bubbly nature. Her struggles made attending high school difficult and her ambition of becoming a physician seem unattainable. After a Mayo Clinic doctor diagnosed Burgess with POTS, an autonomic nervous system disorder, she and her parents, Gawan and Sherrie, a former school administrator and a nurse, respectively, found Sponaugle online.

When they visited his clinic in Oldsmar, Fla., in the fall of 2016, he told Burgess she suffered from a variety of conditions, including Lyme (for which she'd previously tested negative) and toxicity caused by mold and chemicals. He recommended she enroll in his 12-week treatment program. Clinic staff fitted her for a catheter so they could administer antibiotics and other compounds through her arm. In the following weeks, she developed severe new symptoms, including stomach pain, a burning sensation in her head, and tremors. She started coughing up dark fluid. "The tremors and head pressure are returning," she wrote on Facebook on Nov. 25. "Unsure what the next course of action is."

Sponaugle continued to increase Burgess's antibiotics dosage and prescribed sedatives, explaining that she was experiencing a "biofilm burst" as toxins left her body. Each visit to her bedside cost her family \$1,000, on top of a sum in the low six figures for the treatments and affiliated accommodations. To defray the costs, Sherrie started a crowdfunding campaign.

In court filings, Burgess's parents say her condition continued to worsen until, in the early morning hours of Nov. 29, emergency medical services transported her to a local hospital, where diagnostic tests indicated she was suffering from pancreatitis. Sponaugle arrived with a nurse. Lacking privileges to practice at the hospital, he instructed the nurse to rotate the security cameras so they wouldn't capture him administering eight vials of the antioxidant compound glutathione to Burgess's IV drip, according to allegations made by Burgess's parents in court filings. She died in the hospital the following day, her 19th birthday, with her fiancé, Ben Ketchens, still en route to her bedside. "I just felt like my whole body was tearing up," he says. "It was gut-wrenching." Gawan and Sherrie sued over Burgess's death in 2017.

After court proceedings began, the Florida Department of Health issued a public complaint against Sponaugle for malpractice in a different Lyme-related case involving a 27-year-old man treated in 2014. The complaint, signed by the state's surgeon general in February 2018, requested that the state licensure board revoke, suspend, or restrict Sponaugle's license or take other corrective action such as a fine. No action has been taken, though Sponaugle has requested a hearing on the matter, according to the health department. His license remains active, as does his practice. Sponaugle denies wrongdoing in this case and the Burgesses' but declined to comment further for this story, citing ongoing litigation.

When regulators have tried to publicly intervene in cases involving alternative Lyme treatments, they've struggled to make their judgments stick. State boards can investigate complaints, issue warnings, and suspend or revoke professional licenses, but their decisions tend to be enforced only upon referral to state prosecutors. Some LLMDs continue to helm lucrative practices despite a record of sanctions.

In 2017, for example, David Cameron, of Mount Kisco, was charged by the New York State Department of Health Office of Professional Medical Conduct with violations including gross incompetence, gross negligence, and failure to keep appropriate patient records. Cameron disputed the allegations but ultimately signed a consent order subjecting him to three years of probation. That year the board also charged Bernard Raxlen, who ran the clinic Lyme Resource Medical of New York, with a similar set of violations; he, too, signed a consent order submitting to three years of probation. Cameron continues to practice in New York, while last summer New Jersey granted Raxlen a license, and he now sees patients in Guttenberg.

One of the best-known Lyme-focused practitioners, Joseph Jemsek, who began his career in AIDS research, was able to set up shop in Washington, D.C., despite having had his license restricted by North Carolina in 2006 and having been subsequently denied one in Maryland. (He fought the North Carolina judgment and later had the conditions lifted.)

Henry Childers didn't set out to be an alternative Lyme specialist, either. He trained at elite institutions, graduating from Tufts University School of Medicine and serving as a resident and then a fellow in cardiothoracic surgery at the University of Pennsylvania. In 2008 he became chief of cardiothoracic surgery at Southern Ohio Medical Center, a hospital in Portsmouth, and in 2011 he joined Beebe Medical Center in Lewes, Del., in the same role.

The following year, Childers left Beebe and veered away

from cardiothoracic surgery–and conventional medical practice altogether–ultimately founding Delaware Integrative Medicine. In a recorded talk, he attributed the decision to having benefited himself from ozone therapy for shoulder injuries. "That changed the rest of my life and how I practice medicine," he said. He began to market himself as a Lyme-literate doctor specializing in ozone treatments. He spoke at an ILADS conference in October 2015, just days after Dejay Cartwright's death.

Desperation

In 2017, Tiffany Cartwright sued Childers and his rati clinic for negligence. In a pretrial order, the court stated that in his deposition, Childers testified he'd left Beebe because of a finger injury and "had never been subject to any attempts to suspend or revoke his medical license." But, according to that order, Tiffany's lawyers later learned that, in 2012, the Delaware Board of Medical Licensure and Discipline and the state attorney general's office had jointly filed a complaint and moved for an emergency suspension of his license "due to the clear and immediate danger he poses to the public health." The complaint said Beebe had suspended Childers's privileges in 2012. (Childers says personal animosity on the part of hospital co-workers drove them to build an inflated case for his ouster.) The complaint didn't trigger disciplinary action from the Delaware board, and Childers says it was subsequently dismissed. That left scant public record of the accusations.

Jeffrey Ford, investigative supervisor at the Delaware Division of Professional Regulation, which vets complaints for the medical board, says Childers has received three complaints related to malpractice in the state. Two were found to be unsubstantiated and were closed. The division referred the third, which it received in March 2019, to the office of the state's attorney general last October, even as its own investigation into Childers's conduct continues. A spokesman for the attorney general's office confirmed the case is still pending; because of privacy rules, it's unclear whether it's related to Cartwright's death. Says Childers: "We've never, ever had a problem like this with any patient. One's too many."

In addition to disputing that Cartwright's port was noticeably infected, Childers recalls urging her to seek emergency care since she felt unwell. "She was a great lady, and she was really doing well," he says. "It was so unfortunate." As Tiffany's lawsuit headed toward a jury trial early last year, the parties agreed to settle. She received a payment in the low six figures.

The controversy around how to characterize and treat

apparent Lyme symptoms has lately become a front in the larger war on science, reminiscent of the fights over vaccines or using hydroxychloroquine on Covid-19 patients. Infectiousdisease specialists who've raised concerns about unproven Lyme protocols have sometimes faced coordinated harassment and threats. In some cases, even clinicians who've harmed patients end up being defended by vocal, organized, and well-funded networks. Groups such as the Global Lyme Alliance and the Bay Area Lyme Foundation are flush with cash; the hedge fund manager Steven Cohen, whose wife, Alexandra, has persistent Lyme symptoms, has given more than \$50 million toward related groups since 2015. They also boast celebrity allies such as Justin Bieber and Avril Lavigne, both of whom received Lyme diagnoses and have shared details of their alternative treatment protocols.

Advocates have pushed for legislation that would shield doctors from medical board discipline and liability for unorthodox practices. In 2012, Mitt Romney, during his campaign as the Republican candidate for president, distributed materials promising to protect alternative Lyme practitioners from lawsuits related to aggressive antibiotic regimes. Elected officials, including Senators Richard Blumenthal (D-Conn.)

nal choice"

and Kirsten Gillibrand (D-N.Y.), have been involved in fundraising and advocacy that undermine established CDC

guidelines for Lyme. Blumenthal, Gillibrand, and others pushed for a provision in a 2016 package of drug-development laws, the 21st Century Cures Act, that established a Tick-Borne Disease Working Group under the U.S. Department of Health and Human Services. The group is populated by activists who oppose the primacy of evidence-based treatments, according to current and former members, and its reports to Congress include their rebuttals alongside scientific findings.

"We have this notion that if you're desperate, you're your own judge of what risks you want to take," says Arthur Caplan, head of the Division of Medical Ethics at NYU Grossman School of Medicine. "But you can be so easily exploited. And desperation doesn't make for a rational choice."

The uncertainty surrounding the causes of people's suffering has left tens of thousands of them-some with past Lyme diagnoses, some not-to gather in private Lyme-focused Facebook groups, sharing a steady stream of anti-science propaganda, self-diagnoses, and questionable home remedies that they inject, ingest, or feed to children and pets. Some group rules stipulate that practitioners' names may be shared only in private messages so they don't become targets for regulators or media. On Instagram, patients promote products such as an unproven treatment with bee venom and clothing designed to accommodate port or PICC devices. And a search for "Lyme disease" on GoFundMe turns up more than 4,300 crowdfunding campaigns, some with five- or six-figure fundraising goals. Absent a strong regulatory system, officials express fears that desperate patients will continue to be exploited.

At his clinic, Henry Childers has lately expanded his offerings to include a menu of stem-cell treatments, some of which are derived from a patient's own cells and which aren't FDAapproved. The clinic's website markets these as remedies for a swath of conditions, including rheumatoid arthritis and chronic obstructive pulmonary disease. The typical stem-cell protocol runs about \$8,000 and isn't covered by insurance, but in a video posted online in April, Childers offers a discount. "Anyone who's watching," he says, "if you come in for a consultation, we're gonna reduce the price by another \$1,000."



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2020 SKI SPECIAL

Edited by Nikki Ekstein

Get to The Chopper!

In this topsy-turvy year, remind yourself what it really means to zoom *By Jen Murphy*

Heli-skiing might be a once-in-a-lifetime adventure, but if there were ever a year to take the plunge, this is it. As long as you can confidently tackle blues, consider yourself ready for the ultimate in private downhill thrill-seeking. Whether you're looking for extreme steeps or mellow cruisers, here's where to take flight around the world.

Intermediate

Intermediate-advanced

Advanced
Expert
James Bond on skis

CHUGACH MOUNTAINS, ALASKA

When: A short season limits you to freezing-but-snowy March or sunnier April.

Why: The sparkling Mount Diamond, 150 miles east of Anchorage, serves up 6,200 feet in a single drop, and it's not even the tallest among this range. Runs average 3,500 vertical feet with 40F temps in a coastal location; moist snow means more stability underfoot. Who: Originally founded by extreme-skiing legend Doug Coombs in 1993, Valdez Heli-Ski Guides counts some of the most experienced instructors in the business. Seven-day packages from \$5,900 per person; valdezheliskiguides.com



COAST RANGE, BRITISH COLUMBIA When: Late March and early April offer long and frequent bluebird days.

Why: This region is known for quad-burning runs stretching as long as 6,000 vertical feet through old-growth forests, all on fluffy Pacific powder. Who: With exclusive access to 3.25 million acres of terrain, Bella Coola Heli Sports' permit area is as vast as the entire Swiss Alps. This year it also offers yacht-based heli trips that blend fjord cruising with kayaking and fresh tracks. Eight-day packages from \$239,875 for as many as eight people; bellacoolaheliskiing.com

LA PARVA, CHILE

When: August, when cold smoke powder—a light and dry snow is prevalent. Why: Bowls filled with stomachdropping cornices and seemingly endless gullies have made this small but mighty resort a regular stop on the Freeskiing World Tour. Strong intermediates can test their

mettle on demanding runs

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averaging 4,300 feet down. **Who:** Veteran guide Greg Harms, owner of Third Edge Heli, skied the world before dubbing La Parva his Shangri-La. His trips include lodging at Casa Farellones, an intimate hideaway with panoramic mountain views. Seven days from \$29,000 per person; thirdedgeheli.com

REVIOUS PAGE: PHOTOGRAPH BY DAVID CARLIER. THIS SPREAD: COURTESY BELLA COOLA HELI SPORTS

SAN JUAN MOUNTAINS, COLORADO

When: The snowpack is most reliable in March and April. Why: The contiguous U.S. has few options for heli-skiing. Not only does this exception claim some of the highest and steepest skiable elevations in North America, but it's also great for snowcat skiing, which is more accessible and less dependent on pristine weather. The San Juan's varied runs sit largely above the tree line and average 1,000 to 3,000 vertical feet.

Who: Silverton Powdercats can access 6,000-plus acres of

terrain. For experts, Silverton Mountain resort has a wide range of single or multiday options. Single heli drops from \$179; silvertonmountain.com

HOKKAIDO, JAPAN

When: January—or "Japanuary" as powder hounds say—is usually the snowiest month of the year. Why: Unfathomably deep, superlight fluff tops slopes that are often less steep than your typical resort black. The thrills are visual, with birch forests offsetting open glades. Who: Hokkaido Backcountry Club offers six top-to-bottom runs of the dormant Shiribetsu-Dake volcano, totaling 21,786 vertical feet. Single days from \$1,530 per person; hokkaidobackcountryclub.com

SOUTHERN ALPS, NEW ZEALAND When: Prime conditions are

in August.

Why: This area's treeless terrain also stands out for its coveted spring corn—soft, forgiving snow that's not too wet or slushy.

Who: Harris Mountains Heli-Ski is the largest operator in Queenstown, which improves the likelihood of being grouped with skiers and snowboarders of the same ability. *Single days from* \$800 per person; heliski.co.nz

EUROPEAN ALPS

When: February and March provide better snow depth on the glaciers.

Why: A single intermediatefriendly glacier run can last the whole day—a rare treat in the skiing world. Use it as an excuse to link from valley to valley, stopping midway for a leisurely outdoor lunch in true European style. You can find yourself under the Matterhorn in Switzerland on one day and below Mont Blanc in France the next. **Who:** SwisSkiSafari owner Danielle Stynes skis and snowboards every line to uncover the best hotels and restaurants across a region that spans Italy, France, and Switzerland. *From \$1,500 per person per day; swisskisafari.com*

GREENLAND

When: May brings the possibility of skiing under the midnight sun. Why: Summit-to-sea runs span 4,000 vertical feet or more, plus the chance of a polar bear sighting. The variety of wide-open, low-angled glacier runs makes it accessible (and less intimidating) for first-time heli-skiers as well. Who: Hearty meals and a

taste of local culture at Hotel Kulusuk on the eastern side of Greenland round out trips from the local trailblazer, Arctic Heli Skiing. Seven-day packages from \$13,930 per person; arcticheliskiing.com



A Virus Hot Spot Faces Cold, Hard Facts

After seeding Covid outbreaks across Europe this past spring, the "Ibiza of the Alps" is planning for a more subdued winter in '21 *By David Rocks and Boris Groendahl*

Every winter afternoon, the Austrian village of Ischgl resounds with the heavy clump of boots as its dozens of après-ski joints fill with sweaty visitors. Dedicated skiers from Germany, the Netherlands, the U.K., and farther afield come for reliable snow, pulse-pumping expert terrain, and 45 lifts serving 150 miles of slopes. But for many visitors, the appeal is more about partying than pistes.

Ischgl's slogan, "Relax—if you can," gives it a reputation as the Ibiza of the Alps. There's the Insider "table dance" bar and Schatzi, where women in revealing dresses modeled on traditional Alpine attire shimmy and shake. The Kuhstall (Cowshed) calls itself the "Home of *Wahnsinn*," German for "craziness." Amply lubricated with beer, schnapps, and *glühwein*, the dancing stretches into the wee hours, when the hardiest of revelers stagger back to their hotels just as the sun reaches the rocky peaks above town.

Bernhard Zangerl, a scion of the family that owns the Kuhstall, says things will be different this winter. "There will be no wahnsinn," he says, surveying his empty bar on a late summer day. "I guess we're going to have to be the 'Home of Easygoing.'"

In March, Ischgl's wahnsinn helped make it one massive superspreader event. As Covid-19 wove its way through the town, health authorities, hotels, and restaurants were slow to react, unsure whether to quarantine vacationers and employees or send them home. Outbreaks across Europe have been

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traced to the area, and some 4,500 people have indicated they might join lawsuits alleging that the Austrian government– reluctant to sacrifice the final months of the season–allowed the resort to keep lifts open for at least a week after it became clear the coronavirus was spreading fast. (The government declined to comment on the lawsuits.) A study by the Medical University of Innsbruck found that 42% of Ischgl's 1,500 permanent residents had been infected by April.

The virus slammed many ski towns, not just Ischgl. The Swiss resort of Verbier and France's Les Contamines both seeded wide outbreaks, and in Colorado, Aspen and Vail were early hot spots. That shaky track record has forced ski areas worldwide to reassess operations for the weirdest season ever.

Ensuring the safety of the downhill part of the sport–at least in terms of coronavirus–is easy: It's outside, and skis provide a natural social distance buffer. More troublesome will be getting skiers back uphill, feeding them on the mountain, and keeping them entertained when the sun sets. The specifics are a work in progress. "This season there's no clear plan for when tests are positive," says Peter Kolba, a Vienna attorney leading the lawsuits. "Some hotels seem to be saying, 'Maybe I don't want to know.' If that's the attitude, then I have to say we didn't learn anything."

Riding the gondola from his office in town to Vider Alp, a popular Austrian restaurant halfway up the mountain, Günther Zangerl is stressed. The managing director of Ischgl's lift company, Silvrettaseilbahn AG, is doing his best to virus-proof the area, which on an average day attracts 13,000 skiers and on a busy one can top 20,000. Over the summer, the resort had about three-quarters as many visitors as it does in a normal year. It would be a "great success" to reach that level during the busier winter season, says Zangerl, who's of no known relation to the bar owner. "You expect to deal with snow, wind, avalanches," he says, looking out at the rugged Alpine terrain. "But there's never been anything like this."

Some of Ischgl's trams can squeeze more than 150 people into each car. Its gondolas are designed to hold dozens. And most of the chairlifts ferry six or eight and have bubbles that can be closed—protecting riders from the elements, but trapping their potentially virus-laden breath.

Rides on the trams and gondolas are shorter than 15 minutes, so if the cabin windows remain open, Zangerl says, there's enough air circulation to take skiers up the mountain without infection. Although nearby St. Anton and Germany's Zugspitze cut cable-car capacity to about two-thirds the maximum over the summer, Zangerl says he doesn't plan to do so unless the government orders it. "If you limit the number of people on the gondolas," he says, "people will spend more time packed close together in queues at the bottom." Austria classifies ski lifts, gondolas, and trams as public transportation, so passengers will be required to wear masks and maintain a 1-meter distance from one another, but the government hasn't yet issued any specific capacity restraints or instructions on how exactly social distancing might be enforced.

Restaurants are especially problematic. They have

wide-open terraces for sun-drenched days, but inclement weather makes their wood-paneled interiors grow as steamy as saunas. Capacity in dining rooms will be cut, with extra space or barriers between tables. Employees in public-facing jobs must wear masks, and Silvretta plans to liberally douse everyone and everything in disinfectant. Hand sanitizer will be available at entrances to restaurants and lifts, and the gondola and tram cabins will be frequently sprayed with a virus-killing mist. Lift tickets will include a faux silk neck gaiter—with an Ischgl logo, of course—that can be pulled over the mouth and nose. The Ischgl app that many visitors load on their phone to track where they've skied will have a contact-tracing feature that alerts users if they've been in close proximity with people who later test positive.

The town is planning its own measures such as frequent testing of workers at hotels, restaurants, and the lift-operating company. Guests will be offered Covid tests with results overnight; these were doled out for free over the summer, but they may cost something during ski season when visitors multiply tenfold. And Ischgl says it will monitor sewage–yes, the virus shows up there—to identify outbreaks before they spread.

It remains uncertain what will happen in the event of a sustained outbreak such as the one that shut down the resort in March. So far, Ischgl hasn't announced detailed plans to deal with another lockdown and simply seems to be counting on an outbreak-free season. "With the precautions we're taking, I don't think we'll get into that situation again," says Andreas Steibl, managing director of the local tourism board.

Given the role nightlife played in last season's difficulties, that's where the most visible changes will take place. Three times per year, the area stages outdoor shows by the likes of Bob Dylan, Elton John, and Alicia Keys, where thousands of Bogner- and Moncler-clad fans cram together to sip Moët and rock out. This year the event scheduled for opening day– Nov. 26–has been called off, and a pair of springtime concerts on a vast stage in a gentle bowl at the mountain's midstation may not happen either.

Après-ski is likely to be less raucous thanks to capacity limits and a 10 p.m. curfew for bars, which proprietors are hoping the town will extend to 1 a.m. On a typical winter evening, the Kuhstall teems with as many as 800 people, but this year that will be capped at a little more than 100, as guests will have to find a seat to be served. Across the street at Fire & Ice, a DJ normally pumps tunes into the night and guests spin around a pole on the dance floor. This year the music will be turned down, tables will fill the parquet, and a new menu will focus more on tapas than tequila, says co-owner Anna Kurz, 29, whose family has run the nearby Goldener Adler hotel for five generations.

Kurz adds that it will be tough to comply with safety measures—and make sure guests follow the rules—without coming off as an enforcer. But she's determined to make things as fun as possible given the circumstances. "We're supposed to say no all the time," she says with a sigh. "But our business is to let people have a good time." ⁽³⁾

October 12, 2020

VE-AGED

RUPERT RESERVE CHEESE

\$40 per pound; murrayscheese.com

EKOBO GO PICNIC SERVING SET \$65 for a set of 10; burkedecor.com

> TEAKWOOD EATS TWO-IN-ONE FOOD BOWL \$50; swell.com

> > AAHLE WORSCHT PORK SALAMI \$25; zingermans.com

MRS. LONDON'S BAKERY CREAMY TOMATO SOUP \$64 for 2½ quarts; goldbelly.com

WEATHERPROOF TECH ROLL-TOP BACKPACK \$179; timbuk2.com

A Movable Mountain Feast

Of all the things Covid is changing about our winter vacations, cramming into a base lodge cafeteria for self-serve burgers and chicken fingers is what we'll miss the least. Here's a more memorable alternative, ideal for hosting a slopeside picnic or bringing the alpine experience indoors. We chose the finest mail-order products around, but consider it inspiration for your local grocer, too. *By Nikki Ekstein and Kate Krader Photograph by Justin J. Wee* GOLD CHEESE KNIVES \$45 for a set of three; whisknyc.com

SOWDEN INSULATED BOTTLE \$35; us.hay.com

LA PARISIENNE DRINKING CHOCOLATE \$18 for 8 ounces; vosgeschocolate.com

SCOTCH EGGS \$24 for a pack of four; ackroydsbakery.com

> PECAN CRISPS \$9 for 6 ounces; tonyascookies.com

SOFT COMPOSTABLE BAMBOO NAPKINS From \$32; food52.com

> ROSEMARY AND THYME TORTAS DE ACEITE CRACKERS \$16.95 for a pack of 12; tienda.com

WATER-RESISTANT ROLL-UP BLANKET \$149; pendleton-usa.com 61

Snoho House

A membership club aims to democratize mountain access in Colorado and beyond *By Jen Murphy*



Walk into the lobby of Breck Haus, a seven-month-old hotel and membership club in Breckenridge, Colo., and it can feel at first like a nature lover's Soho House.

Instead of fashion-conscious creative types, fresh-eyed, fit thirty- and fortysomethings dressed head-to-toe in Gore-Tex sip craft beers by the fireplace with Aussie shepherds curled at their feet. The velvet midcentury modern couches and benches made from fur-covered lift seats are filled with just as many locals as out-of-towners.

When I went in February, its first month of operation, the crowd included plenty of skiers heading out to score first tracks. By early September it had shifted to remote workers hunkered down at Unravel, a buzzy coffee shop anchored by a Bellwether zero-emissions roaster. The weekly events calendar, naturally Covid-safe, touted complimentary guided hikes up Grays Peak and free workshops on compass reading, not airy artist talks and gut-thumping DJ sets.

If Soho House was intended as a gathering place for urban busybodies, then Gravity Haus Inc., Breck Haus's parent brand, aims to be a magnet for outdoor enthusiasts. A co-working space called StarterHaus allows the work-hard, play-hard crowd to bounce seamlessly between conference calls and trail runs, and Dryland Fitness & Spa offers a state-ofthe-art gym and Japanese-inspired hot tubs. The on-site hotel has 60 simple rooms plus an expansive locker room for gear storage and a supertramp to practice snowboarding moves. The concept was the brainchild of local entrepreneur Jim Deters, and it brings several of his existing ventures—the co-working facility, the gym, a mountain-guiding company under a single roof. He sees the brand as being eco-conscious, adventure-driven, and democratic rather than exclusive.

An entry-level membership to Gravity Haus, for \$40 a month with a 12-month minimum, offers application-free access to the club and the ability to book classes and rent gear. Big-city equivalents such as the Battery in San Francisco or the Fitler Club in Philadelphia require initiation fees of about \$5,000 and can cost \$600 a month for those whose social clout makes the cut.

Until recently, the brand's most popular membership, the Weekender, had been \$60 a month, which includes four gym classes, four events, and four nights of deeply discounted hotel stays every 30 days. Add-ons such as the Haus Quiver, which offers unlimited demo rentals of high-end ski equipment across 12 U.S. Epic Pass locations, run \$25 a month. Members from other states can use the benefit at, say, Vermont's Stowe resort, where demos cost as much as \$60 a day.

These low prices are what make it work. They create value for those who may visit only sparingly, and keep the club accessible to locals who may have to juggle multiple jobs to afford their mountain-resort rent. And in a locale where the only interactions residents have with tourists are as bartender, ski guide, or valet, a culture of commingling is a win-win.

The downside to democratization, however, is overcrowding. Gravity Haus currently counts about 500 members, with 20 more joining each week—mostly Colorado residents and people with second homes there. Group workouts, limited in size because of Covid-19, fill up a week in advance. And with a slopeside location at the base of Peak 9, Breck Haus's hotel rooms—starting at \$135—are already hard to book. It's naive to think people will naturally spread out according to different interests, whether weekend trips, co-working, or the gym.

Building out an all-seasons offering could potentially disperse the masses beyond the busy winter period. A 2019 study conducted by market-research consultants Longwoods International showed that summer has consistently been the peak season for vacationers in Colorado. The pandemic, meanwhile, has lured former vacationers to take up permanent residence.

Rising costs, too, might thin the herd: Gravity Haus raised the price of the Weekender package to \$80 on Oct. 1. "A steady increase in membership fees will likely take place on an annual or a biannual basis, based on demand or an increase in member benefits," Deters says.

Adding more properties would be another potential reason to raise prices, he says. And sure enough, five more locations are in the works, including Vail in December and Winter Park next year. The other three, some international, will be operating by 2024. Balancing the scales of profitability and pragmatism will be Gravity Haus's long-term challenge. Getting it right may be as tricky–and satisfying–as a devilish double black.

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Boot Lugger

A transformative design reinvents an overlooked mountain staple *Photograph by Frank Frances*

Boot bags have traditionally suffered from two problems: Their bulky shape is difficult to pack or travel with; and, in general, they lack the stylish flair that's otherwise pervaded accessories meant for the mountain. The Switch Designs Coyote ski boot bag (\$239) solves both. Instead of a conventional shoulder strap or hand-carry, a magnetic buckle can convert the slim tote into a backpack-a boon when you're

jostling gear or other luggage. A semirigid foam liner adds comfort and prevents the bag from collapsing when you're loading it up. Made of durable nylon and Wyoming elk leather that's been tanned using traditional methods, no two look exactly alike.

THE COMPETITION

• Designed more with function than form in mind, Kulkea's nylon Thermal Trekker (\$240) has a handy plug-in feature that can heat up your boots in the car

before you get to the mountain. • The Dakine boot locker (\$85) also can be a backpack and holds an impressive 4,270 cubic inches, or 70 liters, of storage. A tarp lining in the boot compartment gives you a spot to stand on to keep your feet clean and dry while changing. For a couple or family, the L.L.Bean extra-large Rolling Adventure duffel (\$139) can fit at least two sets of gear in its watertight main compartment.

THE CASE

Like most boot bags, the Coyote has separate sections for each boot so everything else stays dry. The roomy main compartment can hold a helmet, goggles, gloves, and both a puffy jacket and a shell with room to spare. Inside, two elastic pouches offer space for a 13-inch

space for a 13-inch laptop and a stash of Clif bars. Grommets on the bottom of the side compartments provide drainage and air circulation—a big help if your boots are still wet. But the bag's best feature may be the magnetic buckle that allows it to easily convert from backpack to tote and back again. Storage is a cinch, too: The snazzy carryall tucks effortlessly into an overhead bin or the back of your closet at season's end. \$239; switchdesigns.com

Miles Away From Peak Driving

By Justin Fox

The early days of the Covid pandemic brought an unprecedented decline in driving in the U.S., with vehicle miles traveled down 41% from February to April on a seasonally adjusted basis. By July, the most recent month for which the Federal Highway Administration has released data, vehicle miles were still down 13% (seasonally adjusted) from February.

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*AGE 16 AND OLDER. DATA: FEDERAL HIGHWAY ADMINISTRATION, BUREAU OF LABOR STATISTICS

ILLUSTRATION BY GEORGE WYLESOL

LAST THING

Driving will surely creep closer to its pre-pandemic level as Americans return to their offices this year and next. But it may never quite get there. A study this summer by accounting and consulting firm KPMG forecast that vehicle miles traveled will settle at about 90% of pre-2020 levels in coming years. On a per capita basis, they were down 5% from their all-time high in the mid-2000s even before the pandemic. Driving in the U.S. would seem to have peaked.

The reasons for this decline are straightforward. More and more people have been doing their jobs from homeand getting their entertainment and buying things there as well. (Yes, the goods people buy online are delivered in vehicles, but on balance this still results in fewer miles traveled than if everybody shopped in person.) These trends, which began with the arrival of widespread broadband internet access in the early 2000s, had been gaining strength in recent years. The pandemic has accelerated them.

This doesn't mean the end of cars; the vast majority of American adults will still need them. Car-dependent suburbs have been growing faster than cities since 2016, and the pandemic certainly hasn't slowed that trend. But they won't need as many, and they won't need to replace them as often. **B** — Fox is a columnist for Bloomberg Opinion



DRIVE TIME Americans working at home this summer were saving

commuter hours a day, according to a University of Chicago study.

FEWER TRIPS TO THE MALL Electronic commerce and mail orders accounted for 14.2% of U.S. retail sales in July. according to the Census Bureau. up from 11.7% in February and 3.3% in early 2000.

In September,

• Vehicle miles traveled per capita* in the U.S. in

Vehicle miles traveled in July were down 14.1%

from a year earlier in heavily Democratic states,

and 7.6% in heavily Republican ones, according

to transportation researcher Michael Sivak.

June 2005

14k

8

7/2020

the trailing 12 months

12/1970

PARTY LINES

22.7% of employed Americans reported working from home because of the pandemic, according to the Bureau of Labor Statistics. Among those in management and professional occupations, the figure was 40.5%.





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