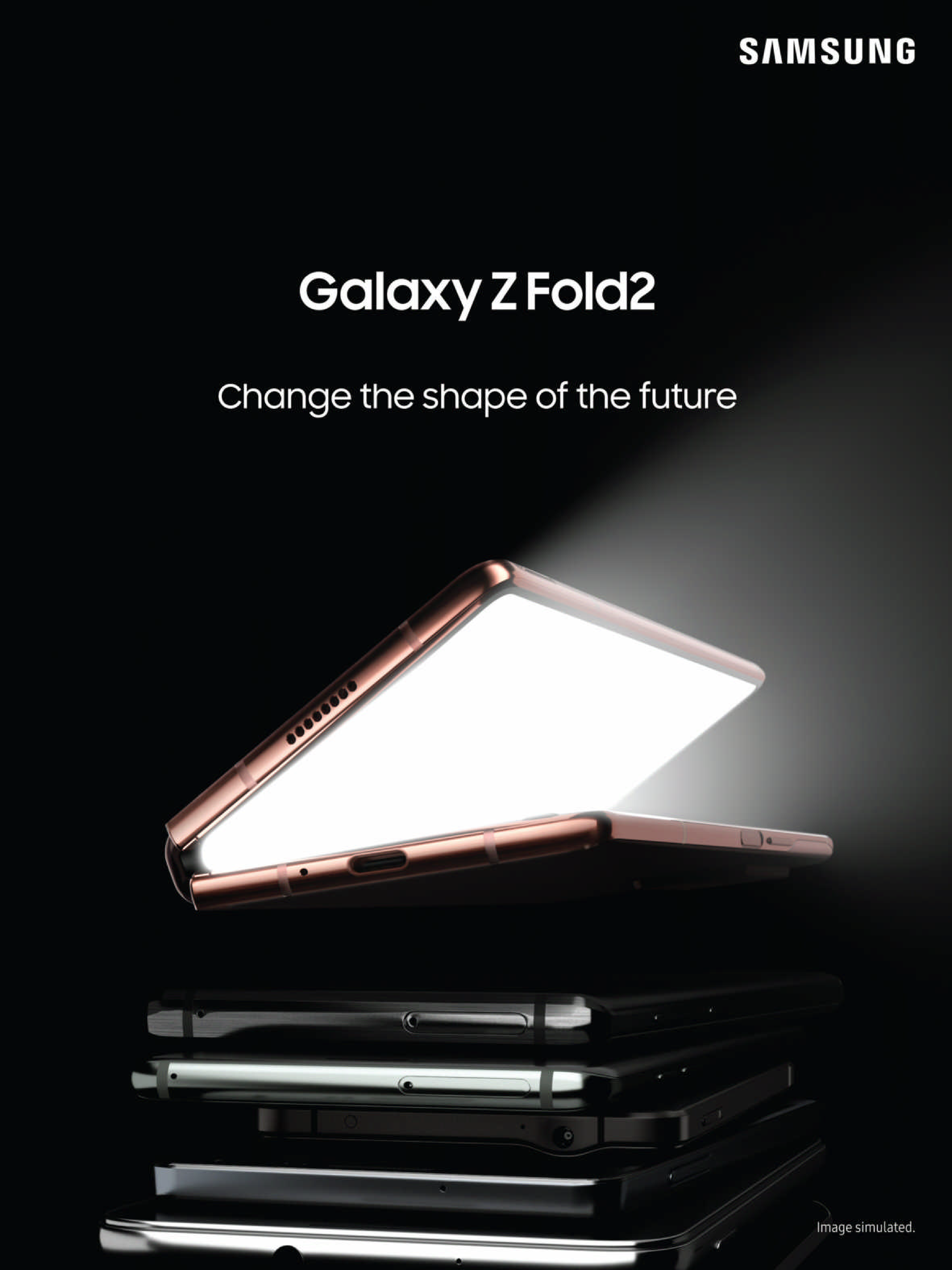
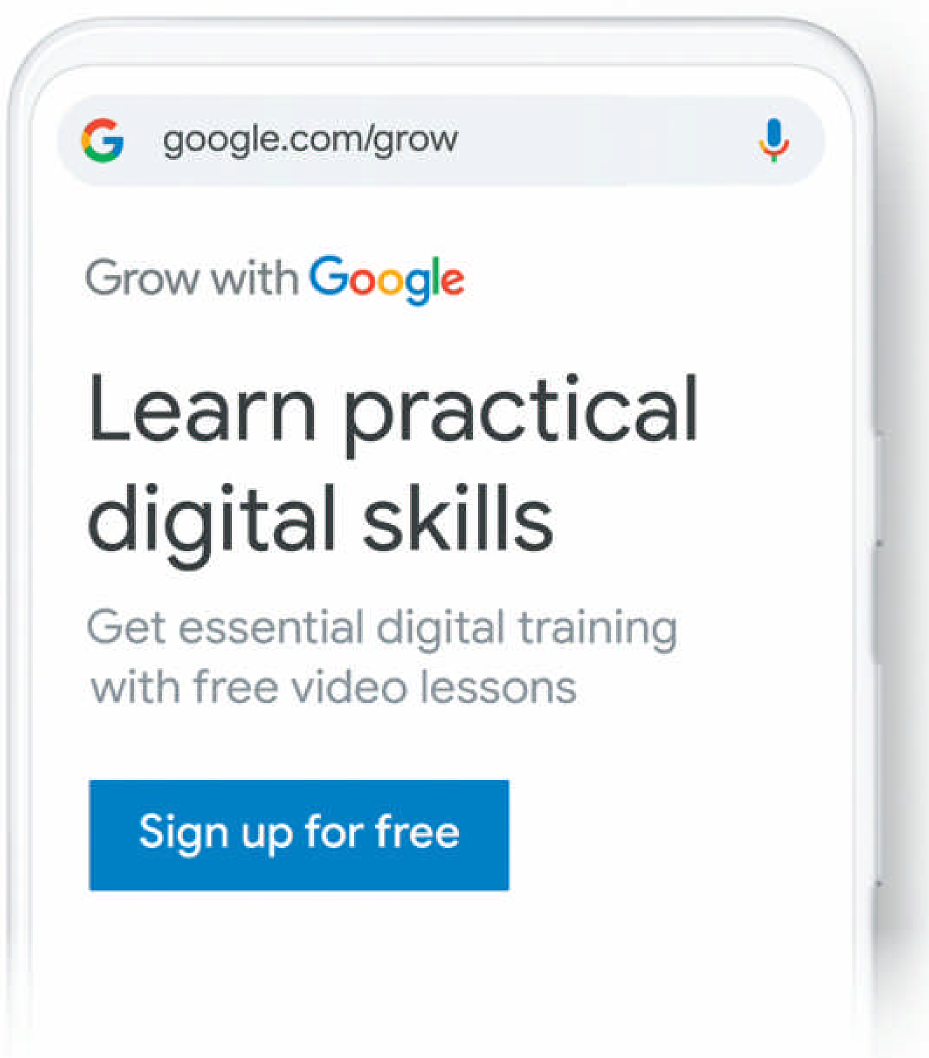

SAMSUNG
Galaxy Z Fold2
Change the shape of the future
Image simulated.

Bloomberg Businessweek
September 28, 2020

EQUALITY, HERE WE COME

Can corporate "progress" get any slower? 39

Helping job seekers with free digital skills training



Find free tools and resources to grow your career at **google.com/grow**

After being laid off, Danette Matthews wanted to make herself more marketable. As she began her search for a new job, she turned to the Applied Digital Skills program from Google.

By taking the Applied Digital Skills lessons, Danette learned essential digital skills ranging from data analysis to research and communication.

Now that she's finished the program, Danette feels ready to compete.

Bloomberg Businessweek

September 28, 2020

◀ HIV-positive soldiers including this one are suing the U.S. Department of Defense

PHOTOGRAPH BY RUSSEL DANIELS FOR BLOOMBERG BUSINESSWEEK

SPECIAL ISSUE

How to Contact *Bloomberg Businessweek*
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■ COVER TRAIL

How the cover gets made

❶

"So this week's issue is all about EQUALITY! In business, of course."

"You mean like that cover we did a few months ago with a few hundred White CEOs?"

"Right. The business world has been a little slow. But the times they are a-changing."

"Changing like holding a match to a glacier?"

"Quicker!"

❷

"Better snail than sloth. And Adagio is a pretty great name. It's slow, but not too slow."

"What would be slower?"

"Well, Lento, Larghetto, Largo, Larghissimo..."

[Closes eyes and hums Beethoven's Piano Concerto No. 3.*]*

"Larghissimo is way too long for the ID card, so capitalism gets a break this time."

Cover:
Photo illustration by 731; photos: Getty Images (2)

BEAUTY: PHOTOGRAPH BY MYESHA EVON GARDNER FOR BLOOMBERG BUSINESSWEEK

● The global tally of coronavirus infections is approaching

32m

The U.K. has tightened restrictions on public life again, urging people to work from home and setting a 10 p.m. curfew on bars and restaurants starting on Sept. 24 to try to stem a surge in cases.

● Volunteers with the Covid Memorial Project place flags on the National Mall in Washington on Sept. 21. More than 201,000 Americans have died of the disease.

● China jailed outspoken property tycoon Ren Zhiqiang for 18 years on graft charges.

The businessman had been under investigation since March, when he was linked to an anonymous article blaming a "crisis of governance" for early efforts to cover up the coronavirus outbreak in Wuhan.

● U.K. hotel operator Whitbread will cut as many as

6,000

jobs. It's part of a broader crisis in Europe's tourism industry, which has been hit hard by the pandemic.

● Washington announced new sanctions against Iran.

The move intensifies the standoff between the U.S. and its European allies, who stuck to the 2015 nuclear deal. The Trump administration quit the multinational accord in 2018.

● Harvard has suffered a

20%

drop in undergraduate enrollment for the fall semester as the pandemic deters some families. More than 200 students who were accepted by the Ivy League school have decided to postpone attendance.

● HSBC's shares dropped to their lowest price in 25 years.

China may brand the bank as unreliable because of its role in the U.S.'s Huawei ban. HSBC was also among the lenders named in an investigation into money laundering and other criminal activity.

● "The president is playing cheap political games with congressionally directed funds."

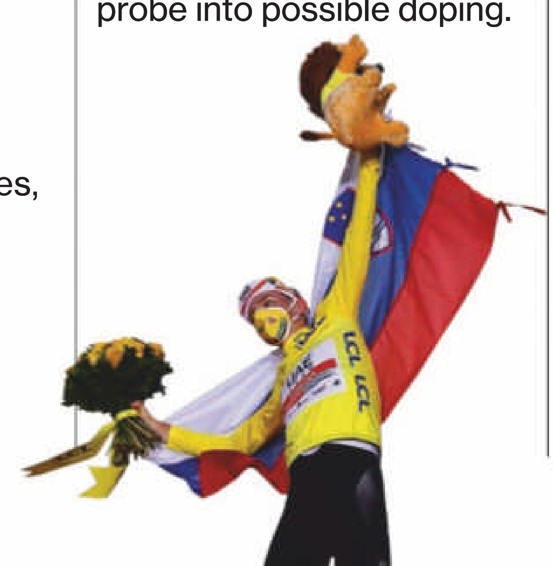
The mayors of New York, Seattle, and Portland, Ore., decried a threat from the Trump administration to withhold federal funds they receive, saying they haven't done enough to keep people safe during recent protests.

● Microsoft agreed to buy ZeniMax Media for

$7.5b

The purchase gives the company Bethesda Softworks, the popular publishing label behind some of the world's bestselling games, such as the *Elder Scrolls* series, *Doom*, and *Fallout*.

● Tadej Pogačar, 21, won the Tour de France, becoming its youngest champion in a century. A day later, police detained two people associated with another team as part of a probe into possible doping.



MALL: JOSHUA ROBERTS/BLOOMBERG. POGAČAR: MICHAEL STEELE/GETTY IMAGES

A Better Way To End America's 'Endless Wars'

President Trump aims to bring home thousands of U.S. troops from Iraq and Afghanistan ahead of the November elections, to show he's fulfilling his pledge to end America's wars in the Islamic world. In fact, the best way to minimize the chances of getting dragged back into such conflicts is to leave some troops in place but to clarify and rationalize their mission.

The truth is that the "endless wars" Trump constantly decries have, for all practical purposes, already ended. The U.S. footprint in both Iraq and Afghanistan has shrunk radically—from 170,000 troops at the peak in Iraq to 5,200 now, and from 100,000 to 8,600 in Afghanistan. Along with troops from NATO and other partner countries, those residual forces are performing critical missions at minimal cost. In Afghanistan, they train and support beleaguered Afghan troops while gathering intelligence and conducting targeted counterterrorism missions. They also provide key leverage to the Kabul government, which has recently begun peace talks with the Taliban.

In Iraq, working closely with effective local units, U.S. troops keep the threat of a resurgent Islamic State in check. The well-developed partnership insulates Iraqi commandos from the sectarianism pervading much of the country's politics and helps limit Iranian influence within their ranks. A continued U.S. presence also bolsters reform-minded Prime Minister Mustafa al-Kadhimi, who lacks his own political power base.

A partial withdrawal shouldn't entirely jeopardize those missions. (The Pentagon is looking at coming down to roughly 3,000 troops in Iraq and 4,500 in Afghanistan.) Contractors and other resources could fill some gaps. To hear Secretary of State Mike Pompeo say that a full withdrawal in Afghanistan remains contingent on the Taliban cutting all ties to terrorist groups is welcome. And the U.S., after a clash with Russian forces in Syria, is sending 100 more soldiers there.

Nevertheless, Trump would clearly prefer to get troop levels to zero. That's the wrong goal. The U.S. still has important interests in the region, including preventing terrorist attacks, keeping oil flowing, and limiting Iran's sway. Pulling out without a plan for safeguarding those interests would only ensure the U.S. is forced to return when threats re-emerge.

A small number of American troops, backed by U.S. air power and drones, working with international partners and local forces—much as they did in the successful campaign to roll back Islamic State—could dramatically reduce that risk. To make their continued presence sustainable, U.S. policymakers and military commanders need to be more transparent with the public about how many troops are being deployed, what they're expected to do, and why. Congress should repeal the overly vague war authorizations that continue to govern fighting in Afghanistan, Iraq, and elsewhere, and enact narrower measures that are limited in time and geography. Future presidents should regularly be forced to account for the effectiveness of even reduced troop deployments.

The U.S. also needs to wield diplomatic and financial tools more ably, rather than ask the Pentagon to solve problems no number of troops can fix. The Afghan government and military, for instance, will require as much if not more aid as U.S. troops are drawn down, in part to encourage other donors to keep giving as well. Restoring the requirements placed on Iran by the 2015 nuclear deal and negotiating a broader agreement to end its destabilizing regional activities would be less costly than trying to beat back its militant proxies everywhere.

What will prevent future forever wars is greater stability in the region. There's a better chance of achieving it with U.S. troops on the ground than without them. Ⓑ *For more commentary, go to bloomberg.com/opinion*

■ AGENDA

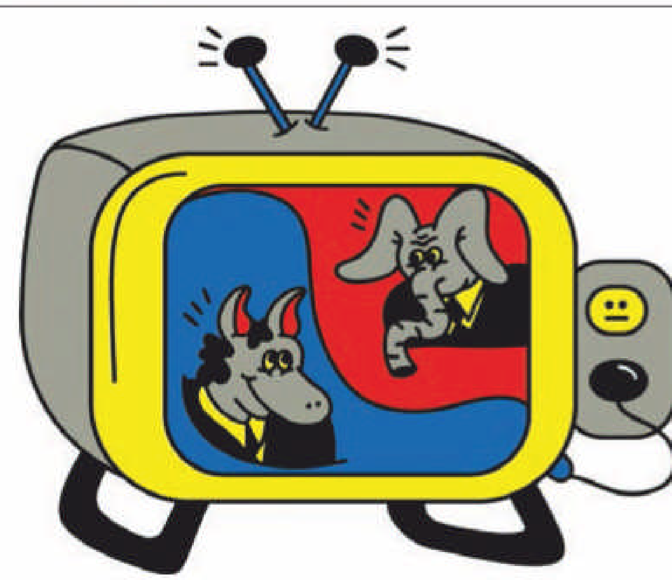


ILLUSTRATION BY ASHLEY DREYFUS

▶ Cordial or Contentious?

President Trump and his Democratic challenger, Joe Biden, meet on Sept. 30 for the first of three presidential debates. Among the hot topics: the pandemic response, the economy, and the Supreme Court vacancy.

▶ The Reserve Bank of India sets interest rates on Oct. 1. Economists do not foresee a change in policy, though the country has been among the hardest hit by the pandemic.

▶ Paris Fashion Week runs from Sept. 28 to Oct. 6. Most houses are doing only digital displays, but some of the biggest, including Chanel and Dior, will host physical presentations.

▶ Siemens Energy starts trading on Sept. 28 in Frankfurt. Siemens AG, the German engineering giant, split off its power business last year to simplify its company structure.

▶ Micron, the biggest U.S. maker of computer memory chips, reports earnings on Sept. 29. The company has warned it may not meet its revenue goal for the fiscal first quarter.

▶ On Sept. 30, New York restaurants can reopen for indoor dining at a quarter capacity. Daily new infections in the city have dropped from more than 5,000 in mid-April to about 300.

▶ Google hosts a product event on Sept. 30. The search giant is set to unveil a fresh Pixel phone, upgraded Nest Mini audio speakers, and other devices.

Becoming the Notorious RBG

● Ginsburg found pop superstardom late in life—and that may ensure that her dissents echo into the future

● By Julie Cohen and Paul M. Barrett

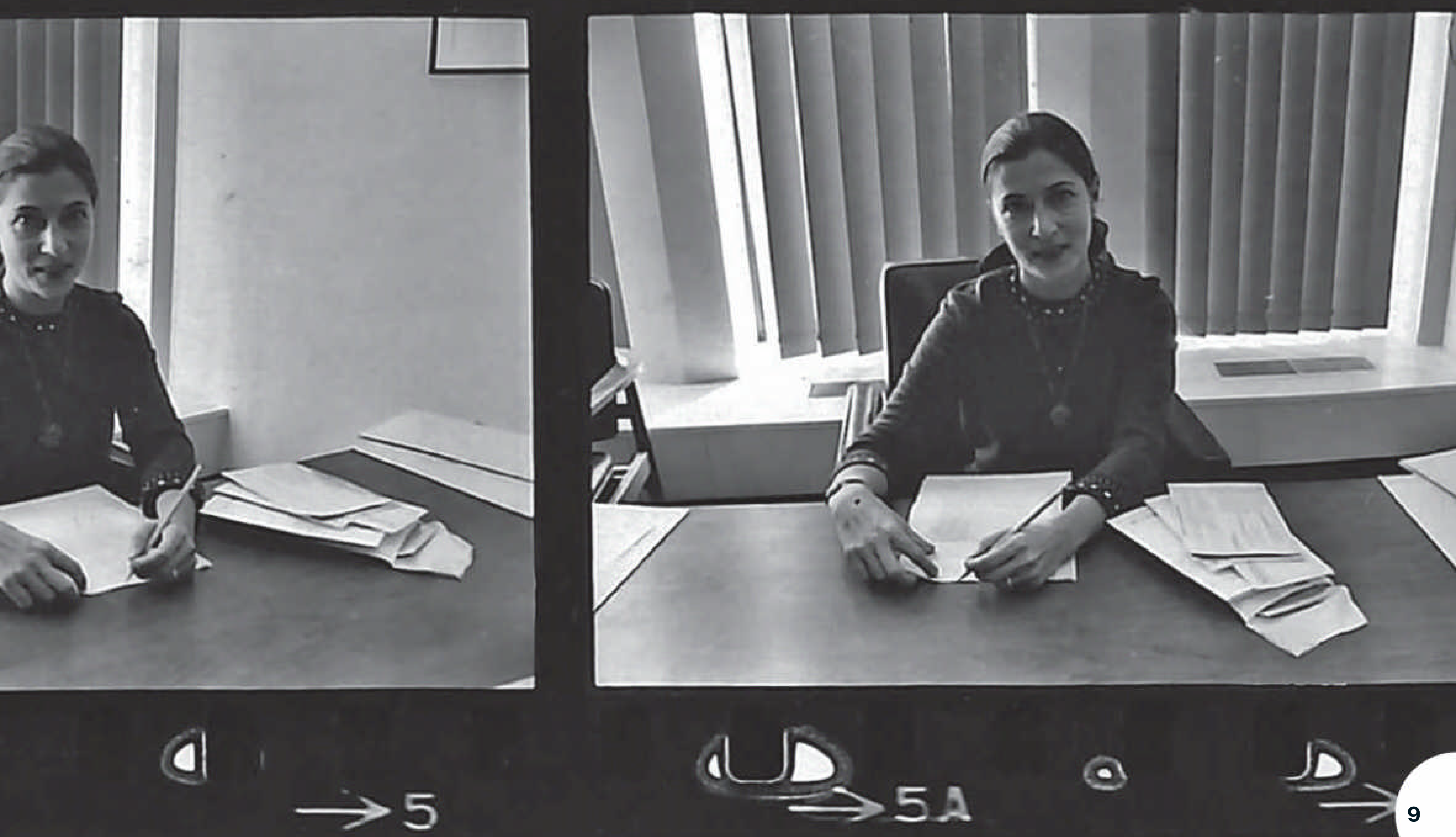
When Ruth Bader Ginsburg began making the case for gender equality in the 1970s, she was anything but notorious. The page 10 *New York Times* story announcing her victory in the first case she argued before the Supreme Court didn't even mention her name. It wasn't until four decades later that she morphed into "the Notorious RBG," a rock star in black robes, a role model for women and girls, and a cultural icon. How this happened says something about celebrity in the internet era, but it also underscores some essential aspects of a remarkable career devoted to promoting equality—one that ended on Sept. 18 when Ginsburg died at the age of 87.

Already in her ninth decade when fame found her, Ginsburg went viral. Little girls dressed up like the justice on Halloween. Young women got RBG tattoos. Her public appearances drew cheering standing-room-only crowds. *RBG*, an Academy Award-nominated 2018 documentary co-directed by one of us (Julie), and *On the Basis of Sex*, a 2018 feature film starring Felicity Jones, offered examinations of her life. Comic actress Kate McKinnon performed her own amped-up take on Ginsburg as a trash-talking, sexy-dancing motormouth in a recurring skit on *Saturday Night Live*.

All of this marked a big change for Ginsburg, who, even after joining the Supreme Court in 1993, remained relatively obscure outside legal circles. One of us (Paul), a former Supreme Court correspondent for the *Wall Street Journal*, can recall a dinner in 1995 with Ginsburg and her late husband, Martin Ginsburg, during which the justice spoke of the importance of the court's doing its business out of the public's eye.

The celebrification of a jurist who in reality was soft-spoken and deliberate in manner can be traced to her role in an important 2013 voting rights case called *Shelby County v. Holder*. By a 5-4 vote, the Supreme Court's conservative majority struck down as unconstitutional a part of the Voting Rights Act that required federal "preclearance" of changes to

COURTESY COLUMBIA LAW SCHOOL



Ginsburg in her Columbia Law School office at Jerome L. Greene Hall, 1959

election procedures in certain states and counties—including Shelby County, Ala.—with a history of denying racial minorities the right to vote.

Ginsburg, the most senior member of the high court's outnumbered liberal wing, dissented with an unmistakable vehemence, particularly to the majority's premise that preclearance was no longer justifiable because the jurisdictions in question don't discriminate as they once had. She wrote: "Throwing away preclearance when it has worked and is continuing to work to stop discriminatory changes is like throwing away your umbrella in a rainstorm because you are not getting wet."

"She was angry, and I was feeling that anger with her," Shana Knizhnik, then a law student at New York University, recalled in an interview for the documentary *RBG*. A classmate came up with the hashtag #NotoriousRBG, a play on the stage name of rapper Notorious B.I.G. Knizhnik set up a Tumblr account called Notorious RBG, filled it with images of the justice and best-of passages from her legal writings, and watched it take off. "I just thought it was an amazing sort of juxtaposition between this quiet, demure, traditionally feminine woman who at the same time packed such a punch with her words," Knizhnik said.

Ginsburg, it turned out, was in the midst of writing a series of dissents from conservative rulings in cases involving such topics as affirmative action and reproductive rights—issues that continue to reverberate in the debate over the progress (or lack of it) in America's pursuit of equality. These dissents fired liberal imaginations and inspired a profusion of heavily trafficked internet memes, including one featuring a portrait of Ginsburg with a Jean-Michel Basquiat crown on her head and the words, "You can't spell truth without Ruth."

As her visage and reputation spread online, Ginsburg surfaced in February 2015 on *Saturday Night Live* via McKinnon's affectionate antics. Later that year, HarperCollins published a playful but substantive book by Knizhnik and fellow millennial Irin Carmon, a journalist. *Notorious RBG: The Life and Times of Ruth Bader Ginsburg* became a *New York Times* bestseller. Ginsburg-themed merchandise proliferated, ranging from bobblehead dolls to knockoffs of her "dissent collar," a spiky necklacelike accessory she wore on the bench on days she was releasing a dissent.

The justice began to overcome her reticence, making more public appearances, especially at colleges and law schools. A former law professor at Rutgers University and Columbia, she saw this engagement in educational terms. Ginsburg discussed the role of the Constitution in American life, the struggles of 19th century women seeking admission to the bar, and the importance of the 14th Amendment's guarantee of "equal protection of the laws"—not topics ▶

◀ known to provoke a frenzy among young listeners. She also entertained her audiences with what became a series of well-polished applause lines, including that she'd reached her mid-80s only to find that "everyone wants to take a picture with me."

In July 2016, in the midst of a bitterly fought presidential campaign, Ginsburg violated judicial custom to criticize then-candidate Donald Trump in press interviews. In one, she called him "a faker" who'd "gotten away" with refusing to release his tax returns. In another, she said she couldn't imagine the country with Trump as president.

Her on-the-record candor brought sharp criticism from lawyers, judges, and scholars. Ginsburg herself soon apologized. "On reflection, my recent remarks in response to press inquiries were ill-advised, and I regret making them," she said in a written statement. "In the future, I will be more circumspect."

Ginsburg may have misstepped in terms of judicial etiquette, but the episode only fueled more fervent devotion from her liberal, Trump-loathing fans. That devotion intensified when Trump defeated Hillary Clinton in November 2016, winning not just the White House but also the authority to nominate members of the Supreme Court. Trump has used his authority twice so far—and now is in a position to do so again to fill Ginsburg's empty seat.

At the risk of immodesty, we'll observe that the documentary *RBG*, which Julie directed and produced with her filmmaking partner, Betsy West, helped amplify Ginsburg mania when the movie became a surprise box office hit in 2018 and was nominated for two Oscars, including Best Documentary Feature. *RBG* looked at the justice's tenure on the bench, of course, but also focused on less-well-known aspects of her life. These included her years as a pioneering courtroom advocate for women's rights in the 1970s and her unusually equitable marriage to Marty, whom she met while they were college students at Cornell in the '50s.

A sizable chunk of the RBG T-shirt wearers and meme sharers were unaware of the pivotal role Ginsburg had played, in her pre-justice days, in securing gender equality under the law. In the 1973 Supreme Court case for which she wasn't name-checked by the *Times*, she won government benefits for Sharron Frontiero, a married female Air Force lieutenant, equivalent to what a married man would have received. In a series of cases in that tumultuous decade, Ginsburg made a forceful argument that women and men are guaranteed

R. MICHAEL JENKINS/CONGRESSIONAL QUARTERLY/LIBRARY OF CONGRESS

Ginsburg hearing, July 20, 1993

RBG became a hero to women not in spite of being soft-spoken, diminutive, and elderly, but because of these characteristics

equality by the U.S. Constitution, most notably by the Equal Protection Clause of the 14th Amendment. She won five of those six cases, although she didn't achieve her larger goal of obtaining a broad ruling that gender-based classifications are inherently suspect and therefore subject to "strict scrutiny," meaning they're almost certain to be struck down by the courts.

This was mostly quiet, precise, behind-the-scenes work, modeled on the incremental strategy Thurgood Marshall used pursuing racial equality in the 1940s and '50s. When Ginsburg, again following in Marshall's footsteps, was confirmed to the Supreme Court bench, she had the opportunity to advance her quest for gender equality under the law. In the 1996 case *United States v. Virginia*, which mandated that women be admitted to the Virginia Military Institute, Justice Ginsburg commanded a majority for the proposition that any classification by gender was subject to "heightened" judicial scrutiny—still not quite reaching her goal, but significant progress nonetheless.

Even if it had never come to pass that young women had likenesses of Ginsburg tattooed onto their shoulders, this line of case law, which Ginsburg pursued as a lawyer and capped off as a justice, would have left an indelible mark on Equal Protection jurisprudence.

On the homefront down through the decades, Ginsburg collaborated with a husband who embodied the equality principle she was fighting for. Marty, himself a noted tax attorney, did all of the cooking and much of the rearing of the two Ginsburg children. Well-connected in Democratic circles, he lobbied effectively behind the scenes to help make his wife a top candidate for the high court early in the administration of President Bill Clinton. Without Marty's assistance, Ruth may never have been in a position to become so notorious.

It was after Marty's death in 2010 that Ginsburg achieved icon status, subverting every cliché about women of a certain age. Understand, though, that RBG became a hero to women—including young women—not in spite of being soft-spoken, diminutive, and elderly, but because of these characteristics. If conventional wisdom holds that power comes in the form of a big, loud man, women and girls seemed to take visceral pleasure seeing someone who was the opposite of those things speaking her mind and standing her ground. The sight of an octogenarian widowed grandmother pulling a TRX band or holding a plank, wasn't just amusing; it was empowering.

Ginsburg disappointed some liberals when she didn't retire during the Obama administration to ensure that a Democratic president would choose her replacement. Her reaction to questions about how long she planned to serve was defiant and consistent: "I will remain a member of the court as long as I can do the job full steam." Her confidence that Hillary Clinton would succeed Obama proved misplaced and could result in a conservative majority locking in control of the court for years to come. But that hasn't dented Ginsburg's reputation in the eyes of most of her fans, who perhaps respect her all the more for refusing to step down in the face of political pressure. The truly notorious, after all, are seldom swayed by the whims of public opinion.

A final factor in Ruth Bader Ginsburg's rise to notoriety was her long struggle against cancer of both the pancreas and colon. She was a tiny, rail-thin woman stoically fighting an often lethal disease. Once Trump took office, the justice's determination to beat cancer endeared her all the more to fans who hoped he wouldn't have the opportunity to replace her. As reports of Ginsburg's hospital visits increased, demand for her to appear in person only grew. In September 2019, having lately survived three fractured ribs from a fall, surgery to remove cancerous nodes on her lung, and a course of radiation treatment aimed at a new tumor on her pancreas, the justice sold out the 18,000-seat Verizon Arena in Little Rock, a venue usually booked for college basketball games and literal rock stars.

The justice's determination to outlast Trump became the subject of countless Twitter and Facebook posts, with many fans offering to donate organs—even while they were still alive. Her surprisingly vigorous three-times-a-week workout became a focus of attention, leading to her personal trainer, Bryant Johnson, accruing his own social media following. In 2018, the McKinnon-*Saturday Night Live* version of Ginsburg held up a calendar with her future plans. "DON'T DIE," it said in bold letters.

When she passed away, Ginsburg left behind a final message indicating that her thoughts were on the question of her successor, not that of her unlikely celebrity. She told her granddaughter, Clara Spera, also an attorney: "My most fervent wish is that I will not be replaced until a new president is installed." Those were the words of a jurist concerned about her legacy—whether her stinging dissents might someday become the foundation for majority opinions—not one fixated on her pop profile. Ⓑ

Cohen is a documentary filmmaker. Her husband, Barrett, a former Bloomberg reporter, is deputy director of the New York University Center for Business and Human Rights.

1

BUSINESS

12

Facing an Empty Future

● As the pandemic turns into a prolonged siege, airlines are increasingly desperate to cut costs and raise financing

Edited by James E. Ellis

ILLUSTRATION BY INKEE WANG; DATA: INTERNATIONAL AIR TRANSPORT ASSOCIATION

Airlines have felt the pain of the coronavirus pandemic more than other companies. Almost overnight the bulk of their business ceased. But in mid-2020 there was at least hope that Covid-19 might not be as virulent as first thought; that warmer months would bring some respite; that travel corridors—agreements allowing passengers to fly between two countries without quarantine—might get people back in the air.

Now, almost eight months into the pandemic, with cities reentering lockdown and a vaccine likely months away, it's apparent there will be no quick comeback. International air traffic in July was 92% below 2019 levels, International Air Transport Association (IATA) figures show. More than 400,000 airline jobs have been cut since February, according to data compiled by Bloomberg. "This is lasting longer and is deeper than most people thought," says Scott Kirby, chief executive officer of United Airlines Holdings Inc. "And our view is demand is not coming back. People are not going to get back and travel like they did before until there's a vaccine that's been widely distributed."

British Airways CEO Alex Cruz says the airline is "fighting for survival." Cathay Pacific Airways Ltd. has said it's restructure or die. And Singapore Airlines Ltd. boss Goh Choon Phong called the decision to slash 4,300 jobs—about 20% of his workforce—the "hardest and most agonizing" he's had to make in 30 years with the company.

Airlines in the U.S. are expected to lay off thousands of additional workers when the Coronavirus Aid, Relief, and Economic Security Act, or Cares Act, expires on Oct. 1. United Airlines is burning through $25 million a day, and "you just can't go forever on that," Kirby says.

In Europe a pickup in air traffic in July and August, as vacationers sought to escape monthslong lockdowns, has abruptly gone into reverse as virus flare-ups send people scurrying home before borders close and new quarantine restrictions kick in. Carsten Spohr, CEO of Deutsche Lufthansa AG, is preparing for deeper job and fleet cuts, saying it will "take a marathon to get through the crisis, not a sprint." Europe's biggest airline, which accepted a €9 billion ($10.5 billion) German bailout in early June, doesn't expect to see a full recovery in traffic until the middle of the decade.

According to IATA, 25 million jobs are at risk in airlines and associated businesses such as travel and tourism. That's more than the 22 million the International Labour Organization estimates were lost globally as a result of the 2008 financial crisis.

More staff reductions are coming. American Airlines Group Inc. plans to dismiss 19,000 workers on Oct. 1 following the expiration of job guarantees tied to $25 billion of federal payroll aid under the Cares Act. United Airlines is expected to eliminate at least 13,000 posts. Delta Air Lines Inc. is trying to avoid large-scale layoffs until next summer now that thousands of employees have left voluntarily or taken unpaid leave.

Losses in the Asia-Pacific region, meanwhile, seem implausibly small, researcher Five Aero says. That would indicate Asia may be on the cusp of a torrent of cuts. Cathay is working on a restructuring that should be announced in the fourth quarter, and analysts at Jefferies Hong Kong Ltd. have said more staff reductions at the airline are inevitable.

Government aid has helped, but there may not be much more. Carriers in Europe alone received €29 billion of aid, state-backed loans, and other forms of support through Aug. 27, excluding furlough money, with a further €3.4 billion in the pipeline, according to Greenpeace's European airline bailout tracker. Airlines in India, until recently the world's fastest-growing aviation market, are seeking at least $1.5 billion as an interest-free credit line from the government, Civil Aviation Minister Hardeep Singh Puri said on Sept. 17.

With airline stock prices plunging, attracting fresh investment is getting harder. Warren Buffett has completely exited his stakes in the four major U.S. airlines, and carriers that are for sale haven't found any buyers. Malaysia's AirAsia Group Bhd., once the leader of a low-cost revolution in Asia, may borrow as much as 2.5 billion ringgit ($605 million), and Thai Airways International Pcl, which has about $11 billion of debt, recently got court approval for a restructuring. Richard Branson's Virgin Atlantic Airways Ltd. is undergoing a £1.2 billion ($1.5 billion) rescue built around a loan from a hedge fund. The pandemic is pushing airline Virgin Australia into the hands of private equity in a deal approved in September.

In the U.S., Delta was able to raise $9 billion in the industry's largest debt sale ever, offering yields as high as 4.5% to lure investors. Delta's bonds are secured by its frequent-flyer program, and this is one part of airlines' business that's holding its value. American Airlines' loyalty program is worth as much as $30 billion, and United Airlines sold $6.8 billion of debt in June backed by its program.

Aircraft are in a crisis of their own. A third of the world's 26,000 passenger jets remain grounded, parked in deserts or lined up in rows along the tarmac, aviation data provider Cirium says. Those in the skies are only about half full, according to IATA.

The fleet reductions are squeezing plane makers. Airbus received only one order in August, ▶

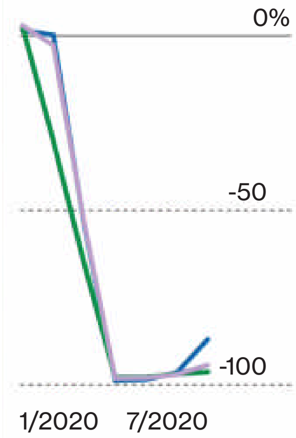
▼ Revenue passenger kilometers, 12-month change

International flights

North America

Asia-Pacific

Europe

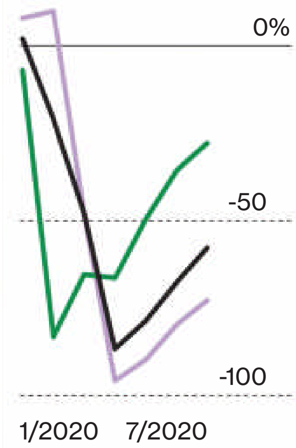


Domestic flights

Global

U.S.

China



● Number of jobs cut by airlines since February

400k+

◀ and Boeing is fighting to stop cancellations of its 737 Max, which was grounded after two fatal crashes. Airlines are also seeking to defer previously ordered planes. "An aircraft manufacturer has to oblige their customer in difficult times," Qatar Airways CEO Akbar Al Baker said on Sept. 2. "People who do not oblige and stand with us at this particular time will not see us again."

Corporate travel may never recover, as businesspeople everywhere realize they can close deals and get the job done over Zoom and from home even. Leisure travel is expected to spring back once there's an effective vaccine, but tourists will probably be more cautious. Jaunts to far-flung places where medical help is remote may hold less appeal.

Wizz Air Holdings Plc relaunched services more aggressively than any other European carrier but has since hit the brakes, freezing capacity plans for the fourth quarter at current levels. Norwegian Air Shuttle ASA has dumped its signature model of low-cost trans-Atlantic flights until at least next year—if it can survive the winter.

Others are introducing new destinations. United is adding nonstop flights to places such as Lagos in Nigeria and Bangalore in India to serve the large diasporas living in American cities. Traffic from trips to see family and friends is withstanding the pandemic better than other segments, says Patrick Quayle, United's vice president for international network and alliances.

After cutting planes, pilots, and crew, airlines are tearing into ground services such as baggage handling as well as fixed costs like property, cleaning, and electricity. Qantas has said it may shift its Sydney headquarters to another city as part of an Australia-wide property review. It's already trying to sublet 25,000 square meters (269,000 square feet) of real estate. *—Anurag Kotoky and Angus Whitley, with Christopher Jasper*

THE BOTTOM LINE Airlines had hoped for a quick end to the coronavirus crisis, but 2020 continues to provide a litany of woes, and the pain may go on well into next year and beyond.

Black Beauty Brands' Mixed Blessing

● Big retailers such as Sephora say they'll put more products from Black-owned companies on their shelves. But the expense is too much for many minority businesses

Six years ago, Lauren Napier founded her namesake beauty company with her tax refund check and American Express card after she was denied a $50,000 bank loan. Today, Napier is suddenly fielding hundreds of emails and Instagram DMs from venture capitalists and retailers who once wouldn't take her calls. The financiers want to hear about her line of makeup wipes, and the retailers want to stock it; it's a rapid reversal triggered by the violent murder of George Floyd in May that ushered in widespread global calls to "Buy Black."

Beauty retailers, long the arbiters of a feminine ideal that skewed skinny, rich, and White, have leaned into the cultural moment. Sephora has signed onto the fledgling 15 Percent Pledge to reserve that share of shelf space for products from Black-owned businesses, and Estée Lauder Cos. plans to more than double sourcing from Black suppliers over the next three years. Clothing chains and department stores are also reaching out to Black-owned beauty brands as they try to capitalize on the current public interest in equality.

But for Black business owners—the least likely to receive bank loans and VC funding—the cost to be in retail is a heavy burden, and a deal to supply a national chain can either make their business or tank it.

According to several Black business owners who say they've been approached this summer about selling their beauty brands at a major retailer, getting into the store itself sometimes means handing the retailer a 50%-to-60% cut of their sales. That quick blow to profit margins leaves little wiggle room going forward. And there's still product to supply. Covid-19 disruptions aside, it's rarely acceptable to not have inventory available upon request by a major merchant. That means manufacturing more product, which needs to be packaged, shipped, and delivered to the stores carrying the items, adding up to tens of thousands of dollars in out-of-pocket costs. Once in the store, the price for a display to showcase the brand can run several thousand dollars, which can quickly multiply if a chain decides to stock the products in many locations. And the retailer isn't paying for that, either.

"My concern is…we'll look at the opportunity without understanding the gravity of a commitment that size"

If smaller brands "can't cover it, and you fail and don't succeed in their doors, you're out and you may never get back in again," says Ron Robinson, founder of skin-care brand BeautyStat Cosmetics. Still, Robinson, who sells BeautyStat in some smaller mass retailers including Macy's Inc.-owned cosmetics chain Bluemercury, says he'd be willing to dedicate a "significant" portion of his own budget to fund digital marketing to get his brand into a larger chain. "I want to win there," he says.

Marketing isn't cheap, either. It's common to pay more than $500,000 in a given year, especially because major beauty merchants Ulta Beauty Inc. and Sephora prefer signing brands that will sell their products both online and in-store, meaning two separate places to spend on marketing. Then, if a brand wants to expand its audience through the retailer's website or social media channels, promotions can run a few thousand dollars a day, brand founders say. A retailer could also arrange to run a full-page ad in a glossy magazine promoting the minority brand's product—and send the brand owner the bill of $10,000 to $15,000.

"You're looking at millions of dollars," Napier says, tallying up the potential costs to Black-owned businesses trying to break into a big-name retailer and stay there long term. Napier, who sells primarily through her own website and luxury retailer Net-a-Porter, says she fears some businesses will sign on without fully understanding the risks. "My concern is that we won't take the time, that we'll look at the opportunity without understanding the gravity of a commitment that size because we've wanted it for so long."

Sephora, a unit of French luxury giant LVMH SE, was one of the first beauty merchants to agree to the 15 Percent Pledge, a campaign started by Canadian fashion designer Aurora James. Sephora said it will also work to improve Black-owned brands' access to venture capital and focus on women of color through its incubator program. The commitment stood out to beauty brand founders who've spent years vying for the chain's attention, let alone a spot in any of its 400-plus U.S. stores.

Ulta's own effort to diversify the roster of brands it carries is under way, though it didn't formally sign the 15 Percent Pledge, a spokeswoman said.

But these first steps aren't yet translating into tangible gains for the beauty brands vying for shelf space. In addition to this challenge, founders are not yet sure whether the renewed interest in their brands has staying power. Their businesses have always been in plain sight, and the calls from retailers started coming in only after Floyd's killing in Minneapolis sparked public outrage, forcing corporate America to take notice.

Although some retailers demand an expensive in-store presence, Macy's let Kitiya King, founder of Mischo Beauty, sell her nontoxic nail polishes only online at her insistence. And it's working out for her, she says, especially given pandemic-related store closures and slower in-person foot traffic. "I don't even care about being in the store too much," she says. "People can shop 24/7 online. That's where it is right now."

In fact, in-store might not be as good a fit for some brand founders as it may have been even a few years ago. Covid-19 hasn't only cratered physical stores; it's also accelerated an e-commerce boom that isn't slowing down, casting greater doubt on the future of brick-and-mortar.

It's all about meeting customers wherever their shopping habits lie, says Desiree Verdejo, founder of Hyper Skin, a brand to treat skin blemishes and acne scars. "You can be performing incredibly well with your direct-to-consumer business and not give up more than half of your sales to a retailer," she says. "Retail is a path. But it's not *the* path."
—*Gerald Porter Jr.*

THE BOTTOM LINE Some beauty chains will allot 15% of shelf space to Black brands. But inventory and marketing costs, plus the hefty cut of sales retailers charge, could hurt many small companies.

▲ Napier, who started her company with her tax refund and credit card, is now hearing from VCs

PHOTOGRAPH BY MYESHA EVON GARDNER FOR BLOOMBERG BUSINESSWEEK

The Big ByteDance-Off

After threatening to ban the Chinese-owned app TikTok, Trump blessed a deal that likely benefits Beijing

In the monthslong standoff between the U.S. and Beijing over TikTok, China has emerged as the clear winner.

If the proposal President Trump blessed holds, he'll get almost none of what he demanded last month when he threatened to ban the popular Chinese-owned video app over national security concerns if it wasn't sold to an American owner. In short: There likely won't be a sale. No U.S. government cut of the transaction. And, according to security and privacy advocates, no satisfying resolution to address the risk that TikTok could funnel American data to the Chinese government or use the social media platform to project propaganda worldwide.

Instead, the deal being negotiated by TikTok parent ByteDance Ltd. and founder Zhang Yiming avoids a sale altogether. Successfully calling Trump's bluff to shut down China's most prized tech companies, ByteDance says its proposal leaves it with 80% ownership over what's now being dubbed TikTok Global. New minority investors Walmart Inc. and Oracle Corp. will take a stake of as much as 20%, the companies said in a joint statement.

ByteDance also stands to scoop up billions of dollars through a planned initial public offering next year for TikTok, which has pledged to create 25,000 U.S. jobs, set up an education fund, and generate $5 billion in U.S. tax dollars. More important in the battle for global tech supremacy, the TikTok

Edited by
Sarah McGregor

proposal would allow China to maintain its grip on the powerful technology and algorithms that decide which videos are shown to the 100 million American users of the app, which has been downloaded more than 2 billion times globally.

"It's hard to see how the biggest winner out of all of this isn't Beijing, because Trump effectively got nothing that he asked for," says Fergus Ryan, an analyst at the Australian Strategic Policy Institute who co-authored a report documenting censorship and information controls at TikTok, claims the company denies.

Experts say the U.S. government's handling of the TikTok saga plays right into the ethos of cyber sovereignty that China has been pushing for decades and normalizes the authoritarian notion of a divided internet subject to the changing whims and political priorities of the country's rulers. Trump's "meddling in private business just validates the way China does business and weakens the U.S. hand in the rest of the world," says Kirsten Martin, a technology ethics professor at the University of Notre Dame. "It makes it that much harder for the U.S. to take a stand against China and Russia in the future, while leaving real privacy and national security issues unresolved."

For decades, U.S. technology policy embraced a more idealistic view of the internet as a way to tear down geopolitical barriers and champion freedom among oppressive governments. American lawmakers and tech entrepreneurs have lamented Beijing's refusal to allow Facebook Inc., Google, and other tech giants to operate in China, says retired Brigadier General Greg Touhill, as well as President Xi Jinping's use of homegrown businesses such as Tencent Holdings Ltd. as extensions of surveillance and propaganda operations. The TikTok deal could add legitimacy to China's isolationist behavior, says Touhill, who was the first federal chief information security officer in the Obama administration and served under six presidents.

But even with a deal approved in concept by Trump, the U.S. and China remain at odds over who would control TikTok Global. Trump has said he won't sign off on an agreement in which TikTok isn't under U.S. control, a stipulation that proponents of the deal tried to satisfy by including existing American shareholders' passive stakes in TikTok's parent company in the proposal's ownership tallies, according to people familiar with the negotiations. Meanwhile, ByteDance released a statement in Chinese on its local news reader saying it wanted to dispel any rumors and reassure stakeholders that the company would retain an 80% stake in TikTok.

"Something's gotta give, because you can't have 80% and 0% at the same time," says Mark Shmulik, an analyst at AB Bernstein. Concerns over privacy and security remain in a proposal that gives Oracle access to source code and algorithms but allows ByteDance to maintain control over the technology. Critics also question what incentive Oracle has to report wrongdoing at a company in which it owns a 12.5% stake and from which it benefits financially.

TikTok's fate is anything but sealed given the propensity of Trump to change his mind and deliberations among stakeholders. China's state media is already casting doubt about the deal getting government approval. And it's unclear if any resolution will come before the U.S. presidential election on Nov. 3. But the damage to America's tech policy and global standing has been done, says Jennifer Daskal, a professor in the Tech, Law & Security Program at American University Washington College of Law.

"Unilaterally threatening the ability for a particular app to work in the U.S. based on broad, sweeping claims of national security without offering a solution that deals with the purported claims in any meaningful way creates a dangerous precedent for the U.S. and globally," Daskal says. "Now any country will be able to justify kicking out apps or companies based on assertions of national security concerns without providing real meaningful basis for those concerns." —*Shelly Banjo*

THE BOTTOM LINE Amid the battle for global tech domination, Beijing has come out on top of the U.S. in a proposed deal to create TikTok Global, which would give China's ByteDance an 80% stake.

Pesky Weed or Climate Hero?

● Biologists are developing greenery they say has super carbon-removing powers

Perched atop a bluff overlooking the Pacific in La Jolla, Calif., the greenhouses where Joanne Chory's plants are growing seem a touch extravagant for *Arabidopsis thaliana*, a small flowering piece of greenery that often blooms by the roadside. Technically, it's a weed.

But Chory, 65, a plant biologist with a halo of snowy white hair, has big ambitions for these ▶

ILLUSTRATION BY MAX GUTHER

◀ scrawny creations. By genetically engineering these weeds to grow unusually deep with hefty root structures, rich in an impermeable corklike polymer called suberin, Chory and her team at the Salk Institute for Biological Studies are attempting to vastly increase the amount of carbon dioxide each of these plants sucks out of the air and buries underground.

If they can replicate these qualities in wheat, corn, soy, rice, cotton, and canola—which together occupy more than half of Earth's arable land—Chory and her colleagues believe they might just save the world. "Our ecosystems are collapsing," she says. "Our action or inaction in the next 10 years will determine our fate on this planet."

The urgency was on display as smoke from California's worst wildfire season darkened the sky just north from where Chory is growing the bionic plants. She and her colleagues have begun selling their plan to some of the world's leading seed distributors, dispatching researchers to deliver talks at companies such as Monsanto Co., and launching informal discussions. They're currently finalizing their first collaboration with a partner (Chory wouldn't identify it, since contracts aren't yet signed) to begin engineering carbon-sucking superpowers into strains of corn, soybean, and canola. New modifications will be added as the scientists identify them.

It's a bold vision. The Salk Crops (Carbon Removal on a Planetary Scale) project itself is funded in part with a $35 million grant from TED's Audacious Project, a philanthropic effort backed by organizations including the Bill & Melinda Gates and MacArthur foundations as well as private donations.

Climate scientists have quietly begun to converge on a stark conclusion: The window in which cutting emissions by reducing the use of fossil fuels alone can reverse climate change has essentially closed. To keep temperatures on the planet from rising 2C above preindustrial levels, the stated goal of the 2016 Paris Agreement, humanity will also have to swiftly develop ways to remove carbon from the atmosphere. Chory says her plants may be one of the best hopes for doing so. "Ten years ago, I would have said this is a complete distraction from cutting emissions," Rob Jackson, a professor of earth sciences at Stanford, says of the Salk effort. "Now, after another decade of emissions, I can no longer say that."

◀ Chory at a Salk greenhouse in La Jolla

Still, getting to mass adoption of CO_2-trapping crops will require a sea change in attitudes as well as a major expansion of government incentives. It will also require an array of new technologies that allow farmers to better measure and document the amount of carbon their crops are removing from the atmosphere so they can claim these credits and sell them on the open market.

Chory spent more than 30 years decoding the molecular mechanisms that allow plants to grow and thrive—and demonstrating how it might be possible to hack into these structures and bend nature to human will. But it wasn't until she was asked to prepare a talk on climate change in 2014 that she began to consider how she might apply her expertise to solving global warming. "Plants are really good at sucking up CO_2," she says. "So why are we building all these fancy machines? And where are we going to put them all?"

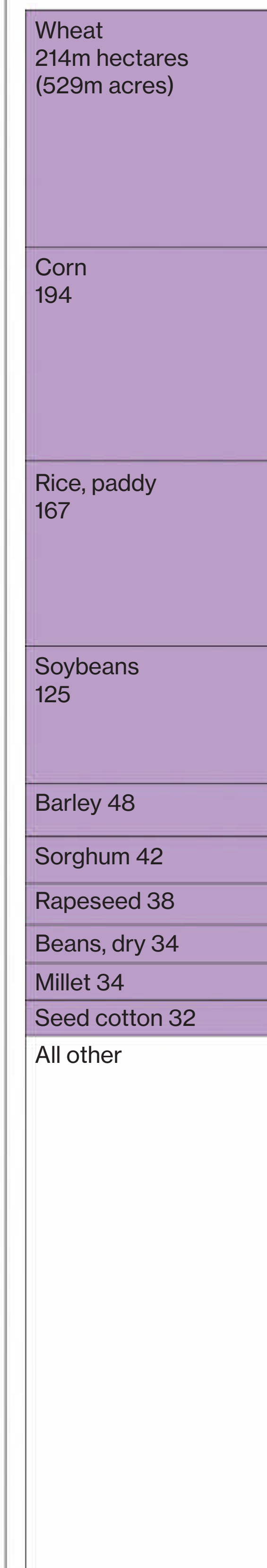
To find genetic variants to breed into crops, Chory and her team are using widely studied plants such as Arabidopsis thaliana. They can then work backward to identify the genes responsible for different qualities and use technologies like Crispr-Cas9, a revolutionary gene-editing system, to insert them into the crops of their choice.

A key to the Salk effort is the decision to home in on traits that increase the presence of suberin in parts of the roots that are not needed to absorb water or nutrients. A major constituent of cork, suberin is impermeable to water and far harder for microbes to break down than the rest of the biomass. It will hold the sequestered carbon in the soil for decades, possibly even centuries. They've also identified a handful of genetic variants that increase root mass—to boost the amount of carbon sequestered underground—and the ability of the roots to grow deeper where there's less oxygen and few microbes are present to break the roots down.

"We know the Earth has the capacity to suck up more CO_2 and bury it down in the soil," Chory says. "The infrastructure is already all there. All we have to do is convince farmers to plant our seeds."
—Adam Piore

THE BOTTOM LINE Tackling climate change will take more than ditching fossil fuels. Biologists in California are developing carbon-sucking weeds they hope can be adapted for cropland plantings.

▼ Crops by area harvested globally



Amazon's Secrets Are Up for Sale

● An alleged ring bribed workers to control the world's biggest web store

It sounds like the plot of a made-for-Netflix crime drama. A Brooklyn businessman stuffs $8,000 in cash in a suitcase and calls an Uber to send it to accomplices. Hundreds of thousands of dollars crisscross the globe via MoneyGram, PayPal, and foreign bank accounts in a plot to swindle more than $100 million from the world's most valuable internet retailer and its customers.

But it's the real-life story of a small ring of e-commerce consultants and former Amazon .com Inc. employees who federal prosecutors say bribed Amazon workers for more than three years to gain access to the company's most sensitive secrets, according to a 38-page indictment released on Sept. 18. The accused allegedly rigged in their favor its web store, where shoppers around the world spend hundreds of billions of dollars a year. Six people have been charged with allegedly conspiring to pay bribes, according to the Department of Justice.

The length and scope of the scheme are a statement about Amazon's size, that a scam can flourish for years without detection. (The company released a statement saying that it cooperated with the investigation and that it hopes the actions of a few bad actors don't detract from the honest efforts of all the good ones.)

Amazon became the world's largest online retailer with a search engine that lets shoppers sift through millions of products to find what they want at the best price and have it delivered to their home. Its algorithm considers factors such as the reputation of the seller and customer reviews of a product.

Amazon loves to broadcast heartwarming tales of small-business people being propelled to new heights, like the security guard who launched his own barbecue sauce and the mom who sells hand-dipped candles. But the indictment reveals a much darker picture of a Wild West atmosphere rife with cutthroat tactics.

The ring stole terabytes of confidential company data and devised ways to game the system so some merchants would get more business while their competitors got shut down, according to the Justice Department. Some scammers got products Amazon had removed for safety reasons put back on the site. Shoppers were unaware that their purchasing decisions were being influenced by bribes and kickbacks. For a few hundred dollars you could get an Amazon insider to erase negative customer reviews about your products. And $5,000 would buy a "takedown," in which company consultants conspired to eliminate a competitor from the site by buying its products and leaving negative feedback that they knew would trigger a suspension of the product. The enterprise scammed more than $100 million from Amazon and its customers by way of these and other "competitive benefits," according to prosecutors.

The list of defendants is a who's who of the e-commerce consulting world, a close-knit group that hosts live events and virtual forums on LinkedIn and Facebook to swap tips and attract clients. One of them is Ephraim Rosenberg, a Brooklyn, N.Y.-based e-commerce consultant. Prosecutors allege he used an Uber to send a cash-filled suitcase to accomplices as payment for confidential Amazon information. Rosenberg has said he will continue to run his business: "I cannot comment on the allegations but when I can things will be clear to all," he wrote in a LinkedIn post.

Two of the defendants are former employees who worked in seller support positions in India and now run their own consulting businesses. Rohit Kadimisetty, who now lives in Northridge, Calif., allegedly sent the first bribe to an Amazon worker in 2017. Nishad Kunju, based in Hyderabad, is accused of cultivating Amazon employees and contractors willing to infiltrate company networks in exchange for bribes. Kadimisetty didn't respond to requests for comment. Kunju, who has no attorney listed in court documents, couldn't be reached for comment.

In 2018 another defendant—Joseph Nilsen—and Kunju allegedly plotted an attack on a client who hadn't paid for their services. They obtained access to the client's Amazon account and uploaded an image of a smiley face giving the middle finger on a page that should have featured a $50 fleece blanket. "NO PAY - NO PLAY," Nilsen told a colleague in a WhatsApp message. He didn't respond to LinkedIn and emailed requests for comment.

The indictment also suggests the investigation is continuing to seek other perpetrators. "Amazon is showing an ability to track down bad behavior and take action, but the big question is what's the next step," says Chris McCabe, a former Amazon employee who's now an e-commerce consultant. *—Spencer Soper and Isabelle Lee*

THE BOTTOM LINE A federal investigation into an alleged Amazon bribery scheme gives a behind-the-scenes look at fraudulent practices hurting consumers.

Shoppers were unaware that their purchasing decisions were being influenced by bribes and kickbacks

● Amount swindled in alleged Amazon bribery scheme

$100m

COURTESY SALK INSTITUTE. DATA: FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. ILLUSTRATION BY TOMI UM

Got Insurance?

● A decade of low rates for Florida homeowners comes to an abrupt end

Every year since 2010, Florida has gained about 300,000 residents. The consistent stream has become the state's lifeblood, keeping taxes low while injecting billions into new-home construction and associated businesses. When Covid-19 hit, there was concern the migration would stop.

The reverse happened. "We've never written more [sales] contracts in our 94-year history than we did in June this year," says Mike Pappas, president of the Keyes Co., a privately held real estate, mortgage, and insurance company based in Miami. "You're definitely getting, from the Northeast, a surge of people looking for housing."

Many of these newcomers may not know what they're getting into. They've calculated the cost of their house, their mortgage, their car payments, their property taxes, and their home insurance. What they almost certainly haven't taken into account is the reinsurance market—where insurance companies go to share risk. The peculiar dynamics of reinsurance and climate have inched the state of Florida toward the precipice of an insurance disaster. Simply put, homeowners' premiums are set to become very, very expensive.

Floridians are subject to forces that extend far beyond their local insurance companies and date to the 2008 financial crisis. It was then, as interest rates were plummeting along with the stock market, that large hedge funds and pension funds began to look for places to earn higher yields and diversify their risk.

In the 18 months through June 2013, pension funds alone poured $10 billion into insurance-linked investments such as catastrophe bonds and catastrophe futures. All this money competing with that of traditional reinsurance companies helped drive down prices. As a result, primary insurers could keep their prices low, too, lulling Floridians into thinking the carrying costs of their houses would stay relatively stable.

Edited by
Pat Regnier and
Eric Gelman

And, for a while, they were. Then "we got hit with a bunch more catastrophic events across the globe," and insurance-linked securities started to lose money, says Paul Handerhan, president of the nonprofit Federal Association for Insurance Reform (FAIR). "Then the stock market starts improving, and funds whose capital was tied up in these securities are like, 'I wish I had my capital back,' so these vehicles lost a little bit of their attraction." Alternative capital in the reinsurance market peaked in 2018 at $97 billion and has since slipped to $91 billion, according to a report by insurer Aon Plc.

Despite the state's uniquely vulnerable coastline, national insurance companies were happy to write homeowners' policies up and down the state for decades. In 1992, Hurricane Andrew's $15.5 billion of damage put a severe dent in their goodwill; 12 years later, when four hurricanes hit, major insurers began to leave the state for good.

"Most of the large national bellwether insurance companies that you see commercials for, that an average American would recognize, don't write homeowners insurance policies anymore in Florida," says Garrett Mitchell, director for sales and marketing at Insurance Express, an agency based in West Palm Beach. "When they pulled out between 2004 and 2006, there was a major void in the marketplace."

That void was quickly filled with smaller, Florida-specific insurance companies, which represented 22% of the market in 2004 and 45% by 2011. These mom and pop insurers had the spectacular good fortune to begin writing policies on the cusp of what turned out to be the longest unbroken stretch of hurricane-free weather in decades: Not a single named hurricane hit the state from 2006 through 2015. "It was a record-breaker," says Karen Clark, founder of a Boston-based natural risk modeling company. There were no previous 10-year stretches like it, she says.

Then Hurricane Irma hit in 2017. Depending which side of the lawsuit you were on, Irma's $17.4 billion of claims either ushered in a golden age of consumer activism or left an indelible stain on the industry through a mechanism called assignment of benefits claims.

AOBs have been part of Florida law for decades; they allow homeowners to transfer their claims to third parties such as building contractors and lawyers. These third parties then sue the insurance companies on behalf of the homeowner, which often results in a larger settlement. "Even if [insurers] fight, they'll just lose, so many make the decision to pay the claims," FAIR's Handerhan says. "That's driving the frequency and severity of claims in Florida." After Irma, AOB claims skyrocketed: There were 153,000 in 2018, up from 79,000 five years before, according to the Insurance Information Institute.

It got so bad that a law was passed in 2019 restricting AOBs, and now "those lawsuits are down," Handerhan says, but "first-party property lawsuits are way up," meaning, he speculates, that the same litigation is happening, but it's homeowners, not contractors, bringing the suit.

The deluge of AOBs came at the precise moment that insurance-linked securities were leaving the market. Traditional reinsurers, newly empowered by a lack of competition, were free to pass the added costs of AOBs on to insurance companies. In 2019 the average cost of reinsurance coverage rose 15%, according to a report by Hyperion X Analytics. This year it climbed an average 26.1%. Insurers shoveled their added costs onto consumers.

Insurers are required to go before state regulators if they want to raise their rates more than 15%, and company after company has made its way to Tallahassee, the state capital, to successfully argue for big hikes. "We asked for 22%," says Roger Desjadon, chief executive officer of Edison Insurance, whose request was approved and will affect about 50,000 households. But since that time "there have been companies that have filed for 30%, 36% increases, and received them," he says.

Premiums have gone up across Florida, but competition has gone down. Even as the total number of policies in the state has risen 12% over the past decade, the number of companies offering homeowners insurance has slipped from 199 to 180 during the same period.

Homeowners who can't find or can't afford insurance can take out a policy with Citizens Property Insurance Corp., Florida's state-funded carrier, which was created in 2002 as an insurer of last resort. But Citizens has some downsides. The state is as reluctant as private insurers to underwrite billions of dollars' worth of property in a flood plain or hurricane zone. As a consequence, it covers a limited amount of policyholders' private property, "and the paperwork is atrocious," says Tom Gallagher, the former Florida insurance commissioner who created the program; he's now chief operating officer of the private People's Trust Insurance Co.

Homeowners can also sell their houses and leave, a phenomenon that "happens every day," Gallagher says. "I think there's people that are tight on money–they bought a home years ago, and their real estate taxes have gone up." Soon, he adds, "their homeowners insurance has started ▶

"We got hit with a bunch more catastrophic events across the globe"

▼ Named hurricanes that made landfall with Florida as a Category 1 or higher storm, by category

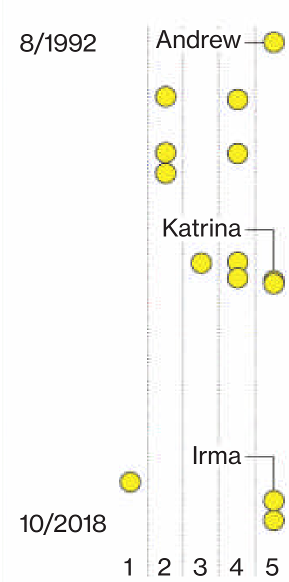


PHOTO ILLUSTRATION BY 731; STORM: CHIP SOMODEVILLA/GETTY IMAGES. DATA: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

◀ to go up as much as 10, 15, 20% year after year. Pretty soon that becomes a huge number." So they sell their house and go where it's cheaper.

For now, with record-low mortgage interest rates and a steady stream of people moving to the state, there are new buyers willing to shoulder a house's carrying costs. Should enthusiasm wane, whether from an economic downturn or a devastating hurricane, homeowners could be saddled with a home that's too expensive to keep and impossible to sell.

Stephen Smith, a semiretired marketing executive in Key West, has lived in a 3,200-square-foot house across the street from the ocean for 21 years. He and his husband's homeowners insurance premiums are about $4,600 per year; their supplemental flood insurance is $2,600 a year; and on top of that, they have an annual wind damage policy that costs $9,000, meaning altogether the couple pays more than $16,000 every year simply to insure their home. "I'd say we were paying half that 10 years ago," Smith says, adding that he's not ready to move yet, but "there will come a time when we sit back and say, 'This is ridiculous.'" *—James Tarmy*

THE BOTTOM LINE Thanks to the vagaries of the reinsurance market and a 10-year no-hurricane streak, Floridians enjoyed artificially cheap homeowners insurance. No more.

Enjoying Bitcoin's Wild Ride

● Former FX traders relive the glory days of manic currency markets

Rob Catalanello could have sworn he'd seen everything in his more than two decades on various foreign-exchange desks in New York, from the unpegging of Brazil's and Argentina's currencies from the dollar to the Russian debt crisis.

Then he started trading Bitcoin. In March, when the cryptocurrency plunged more than 30%, "it was more busy than any day I saw in 20-odd years in FX," Catalanello says. "Just the amount of deals, the violence of the move, the unpredictability of the move, and the amount of risk that we had to hedge."

Catalanello, 56, who's headed the U.S. unit of London-based electronic trading firm B2C2 for about a year and a half, is part of a wave of former currency traders who've joined the crypto world. Forget all the arguments about Bitcoin's intrinsic value, its technological merits, or whether it will ever be widely adopted as a way to pay for a cup of coffee. For many FX traders, what matters is that they can make money on its volatility. Others were drawn by the market's infancy, hoping they could help chart its path forward. Once inside, many veteran foreign-exchange traders have found that they're in familiar territory, reminiscent of a time when currency markets were more manic.

In the early 1990s the FX world was highly fragmented, liquidity was thin, and large block trades could push prices around. It was a market ripe for manipulation. This led to a number of scandals, some even involving the world's largest banks. But most important for daring traders, bid-ask spreads—the difference between what a buyer is willing to pay and what a seller is willing to accept—were wide. A quick trader could step into the middle and grab a profit.

"It's very similar to what you'd see in crypto these days," says Brad Bechtel, global head of foreign exchange at Jefferies LLC, who got his start in the business in the mid-'90s. "It wasn't for everybody, it was a very difficult market to trade. You could lose a lot of money very quickly."

Volatility in currency has waned since then, and the market has matured, thanks largely to electronification and heavy central bank involvement following the 2008 financial crisis. This is life for FX traders now: The euro trades in a very tight range relative to the dollar, so even if you're really good at guessing the direction, you're not going to be able to make much money, says Marc Chandler, chief market strategist at Bannockburn Global, who in the '90s spent time with various hedge funds and big banks. FX's low volatility limits profits. But "because cryptos move, that's what appeals to some market participants," Chandler says.

There's been a lot of action in the past year for those who've heard the crypto market calling. Bitcoin, the largest digital coin, dropped from about $13,800 June 2019 to below $4,000 in

March. It's currently hovering around $10,000. The monthly price change for Bitcoin so far this year averages 8%.

Ture Johnson lived through the changes in FX markets in the '90s. He remembers having to call in orders via a squawk box in the early part of the decade at Bank of America Corp., before electronic trading existed. Last year he made the leap to Floating Point Group, a crypto trading platform, where he runs the trading desk. "There's definitely a lot of systematic, hedge-fund-trend-following guys sitting on the sidelines right now watching and going, 'Hey, I really want to get involved with this because there's an opportunity to trade here and make money,'" Johnson says, describing the crypto-curious. "People love volatility."

Well, professional trading people do. Retail crypto trading has waxed and waned since Bitcoin's frenzied surge in 2017—and subsequent crash. But institutional interest has picked up, especially in derivatives such as cryptocurrency options. Ownership of cryptocurrency has also consolidated. At the end of August about 2.1% of accounts controlled 95% of all Bitcoin supply, according to Flipside Crypto. At the same time almost 29% of Bitcoin was in wallets that held from 1,000 to 10,000 tokens, according to Coin Metrics data.

This isn't to say everything about the crypto world feels familiar to FX veterans. Unlike any other corner of the financial world, it's a decentralized market, thanks to blockchain technology. It's also small. The foreign-exchange market is the largest in the world, with more than $6.5 trillion traded daily, according to the Bank for International Settlements. Cryptocurrency exchanges on average have seen about $130 billion in trading per day over the past month.

Yet the market's youth is one reason Catherine Coley was drawn to it. She left Wall Street in 2016 after spending five years with Morgan Stanley at its Hong Kong and London FX desks. The experience was thrilling, she says, but after a while the "sparkle and luster of big risk, big reward" waned in the banking industry. She's now chief executive officer at the crypto trading platform Binance US. Over the years, Coley has seen a number of former colleagues make the move into crypto—"almost to the extent we could resurrect the whole desk," she says.

"It really is a nimble enough industry for us to get some things right," Coley says. —*Vildana Hajric*

THE BOTTOM LINE Currency trading has become more liquid and less risky, which makes it harder for daring traders to find an edge. So some have moved on to cryptocurrency.

PHOTO ILLUSTRATION BY 731; RODEO: JOHNNY GREIG/GETTY IMAGES; BITCOIN: SHUTTERSTOCK. ILLUSTRATIONS BY KHYLIN WOODROW

Chatroom Snowflake

Cloud software company Snowflake Inc. had its initial public offering at $120 a share and on Sept. 16 promptly shot above $300. It's now trading at about $235. Here's a peek at how Bloomberg's editors and reporters responded to the news.

● PAT REGNIER
New York ● Finance editor, *Bloomberg Businessweek*

Let's talk about Snowflake. I managed to get blissfully through my life until Monday not knowing this company existed, and now—boom—biggest-ever software IPO. That's a tactically embarrassing admission: It feels like there's a lot of this going around these days. There's so much froth in so many parts of the market—giant new things keep emerging out of investors' peripheral vision. While you were trying to get your head around the fad for blank-check companies, the boom in call options, and hedge funds tracking the chatter on Reddit, Snowflake investors including Jack Dorsey and Warren Buffett were quietly working out ways to make money on a company with zero consumer footprint that competes with businesses such as Amazon.com—which you were told could justify their high valuations because they were near-monopolies. And IPOs are suddenly hotter than ever after looking like they might be challenged by blank checks and direct listings as the way to go public.

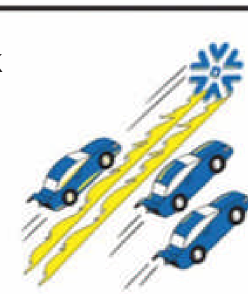
● SONALI BASAK
New York ● Wall Street reporter

The pricing—the company got $120 a share when investors in the market were clearly willing to pay much more—did bring to mind the persistent Silicon Valley complaint that the IPO model is broken.

● CRYSTAL TSE
New York ● Deals reporter

That's definitely a common complaint. But even at the IPO price, Snowflake's valuation relative to expected forward sales actually is very high. So one can argue that the initial pricing was correct but the market is ahead of itself.

● SARAH PONCZEK
New York ● Markets reporter



Not a main point, but I was also thinking about how we all just spent all this time fretting about what it would look like if Tesla Inc. was in the S&P 500. Well, Snowflake isn't even in the Nasdaq 100 index—and a $70 billion valuation would place it in the top third of companies in the Nasdaq. Which is quite crazy considering Pat definitely wasn't alone in never hearing of it.

● NICO GRANT
San Francisco ● Enterprise technology reporter

Tech giants have never been larger or more powerful, and there's an assumption in some corners that the winners have been set and only regulation can disrupt that. But smaller ones such as Snowflake can still win by focusing on solving a particular issue—in this case, analyzing data on cloud platforms. Chief Executive Officer Frank Slootman said to me on the day of the IPO: "Industries get attacked from the most unpredictable places. You never see them coming because they're under the radar."

● DINA BASS
Seattle ● Technology reporter

Folks in Silicon Valley have been on to this one for a bit—which is why you saw Salesforce.com invest in it earlier this year. And last December, adding features to catch up with Snowflake was a big part of Amazon Web Services' announcements at its annual conference.

● PAT REGNIER

Nico, another interesting thing from your interview with Slootman is that the IPO was also good publicity: "We needed to do this for a number of reasons, especially to raise the stature of the company in the marketplace."

● CRYSTAL TSE

This text convo I had with a friend probably captures the story with retail investors and IPOs right now.
Friend: "SNOW. BUY BUY BUY"
Me: "Lol"
Friend: "I don't know what this company does really except cloud computing. But everyone says it's free money. And I like free money."

The Fed's Disaster Junkie

Andreas Lehnert reads up on airline crashes, plagues, and nuclear disasters to figure out where the next crisis could come from

Edited by
Cristina Lindblad

A red alert sounded at the Federal Reserve in mid-March when Americans began pulling out of prime money-market funds, one of the safest places to park cash. As policymakers cut interest rates to near zero, it quickly became clear that they'd need to get creative, and fast, to prevent a shutdown in the flow of credit.

Fed Chair Jerome Powell and his board called on Andreas Lehnert and his 50-person team at the Division of Financial Stability. Known as FS inside the Fed system, the division started in 2010 with a staff of just four. The division spent much of the ensuing decade looking at fragilities in the financial system that could lead to a full-scale breakdown in moments of stress. So when Covid-19 hit and widespread lockdowns of every type of business threatened a sudden halt in the flow of money, Lehnert and his colleagues were prepared.

"Chair Powell's instructions to us were that the system is going through a world historical crisis," so the response needed to be commensurate, says Lehnert. The marching orders were "pretty crisp and clear," he says: Try to avert permanent job losses as the economy went through a slide in activity, before the eventual rebound. "We sketched out what is every job that is out there," he says, "and what would be a facility that would address those employers."

Just two days after the Fed cut its benchmark rate in a hastily convened Sunday meeting on March 15, it rolled out the first of several lending programs that Lehnert and his colleagues had developed, drawing on blueprints from the 2008 crisis. By the end of the month, most of what would eventually total nine separate facilities had been unveiled, providing backstops for everything from the corporate bond market to money-market mutual funds to companies selling short-term securities to manage their cash flow. While some of the programs have had a slow start, nobody is suggesting that they're no longer needed.

The plans were coordinated from a makeshift office Lehnert set up in his suburban Virginia home. Often fueled with oatmeal and almond butter and kept alert by means of caffeine, pushups, and hilly runs, the 51-year-old starts his workday around 7 a.m. and ends it late at night. The soundtrack from the musical *Hamilton* is usually playing somewhere in his house as he works. His wife reminds him to air out his room, which he likes to keep toasty.

Lehnert's home bookshelf betrays his professional obsession with "what could go wrong." He's read about why planes crash, why nuclear plant accidents run out of control, and why the space shuttle *Challenger* blew up. There's *Why Buildings Fall Down* and *Plagues and Peoples*, perhaps especially pertinent for 2020. *Lying for Money* seems another useful read for someone in Lehnert's line of work.

He says a common thread in disasters is that even experts can miss the totality of what's happening. "They don't understand where they are" when something goes wrong, he says. "They had a bad process for understanding the behavior of the system as a whole."

While Powell highlighted in a Sept. 16 press briefing that the U.S. job market faces a long road to recovery, with 11 million Americans yet to regain jobs lost during the pandemic, the threat of a financial collapse has receded with the central bank's broad safety net. Now some observers are looking for the seeds of the next crisis—all the more so since the Fed in August adopted a long-run strategy of letting inflation exceed its 2% target to make up for earlier undershooting, which implies that the central bank would allow the economy to run "hot" for a while. Fed officials on Sept. 16 projected they won't boost rates through 2023.

Cheap money has a way of fueling speculation, excessive borrowing, and soaring stock prices, along with amnesia about risks. The last expansion witnessed a Bitcoin bubble, a buildup of leveraged bets in the Treasury market, and a surge in high-risk corporate loans. Powell and the other members of the decision-making Federal Open Market Committee (FOMC) are relying on Lehnert and the FS team to keep on top of potential dangers.

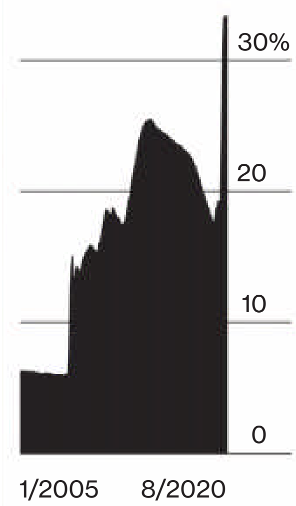
"Of course we monitor financial conditions very carefully," Powell said in his Sept. 16 remarks. "We look at it through every perspective. The FOMC gets briefed on a quarterly basis."

That briefing, known internally as the Quantitative Surveillance, or QS, report, comes from Lehnert and his team. It often focuses on special topics, such as particular hedge fund strategies, potential weaknesses among mortgage-servicing companies, vulnerabilities in structured loans—securities made up of repackaged debt—and the risk of disruption in bond trading. Because FS is relatively small, Lehnert relies on specialists from across the Fed system to help produce the QS.

"They are always looking to identify that transmission channel or amplification mechanism that we just haven't thought about," says Lael Brainard, the Fed governor who oversees Lehnert and the FS crew and who spends 90 minutes each day on calls with them. While the staff evaluations are "never going to forecast the risks exactly right," the analysis is focused on that possible amplification of problems, she says.

Lehnert draws on his voracious reading to help imagine what could happen. When he was a grammar school boy in Oklahoma, his parents inspected ▶

▼ Federal Reserve balance sheet as a share of GDP



"We have spent many years thinking about events that were unlikely, improbable, and, frankly, weird"

DATA: COMPILED BY BLOOMBERG

◀ his backpack in the morning for books he might be sneaking out of the house that could distract him from his classwork. When that didn't work, they started locking up the books. One day they came home and found young Andreas reading the phone book.

It was a magazine, and its title, that inspired his choice of career. His parents brought home an issue of the *Economist* when he was about 15. After reading it from cover to cover, he decided that's exactly what he wanted to become. He went on to earn a doctorate in economics at the University of Chicago, a school known for its faith in markets. He took classes from some of the world's most influential economic thinkers, including Nobel laureates Robert Lucas Jr., James Heckman, and Thomas Sargent.

Lehnert also draws on his experience in the runup to the last financial crisis—the unprecedented explosion in high-risk mortgage lending of the mid-2000s that almost brought down the global financial system. Seven years into his career at the Fed, Lehnert in June 2005 was tapped to make a presentation to the FOMC on the housing market. One gauge of home prices had just risen 16% from the year before even as the Fed started raising rates from historic lows. As many others concluded at the time, there was little systemic risk, he argued.

"Institutions with large amounts of mortgage credit risk on their portfolios are well-positioned to handle severe losses," Lehnert said then. "Neither borrowers nor lenders appear particularly shaky. Indeed, the evidence points in the opposite direction: Borrowers have large equity cushions, interest-only mortgages are not an especially sinister development, and financial institutions are quite healthy."

After a caveat, his bottom line was: "The national mortgage system might bend, but will likely not break, in the face of a large drop in house prices."

That proved to be a failure to extrapolate the implications of a rapid evolution of the mortgage market and how securitization of low-quality loans could go on to threaten the financial system itself. "We didn't understand the amplification mechanisms," Lehnert says now, noting that he often thinks of that 2005 episode. "It is a muscle that we are exercising all the time now."

He encourages his group—including Michael Kiley, who previously led the Fed's economic modeling team; Elizabeth Klee, an expert in the payments system; and chief of staff Nami Mukasa, an investment banking veteran—to think beyond the standard framework of analysis. He calls the FS division a "home for people that don't think just about what is in front of them." And he values "thinking creatively about risks that we haven't seen or haven't worked in," rather than chasing the market move of the day or getting trapped into debates over whether there's a bubble in some asset.

"We have spent many years thinking about events that were unlikely, improbable, and, frankly, weird," says Lehnert. There was even a brief consideration of how a short, sharp recession caused by a pandemic would affect the U.S. financial system.

"Ninety-nine percent of them never came to pass," he says. Until one of them did. —*Craig Torres*

THE BOTTOM LINE The 50-person staff at the Federal Reserve's Division of Financial Stability played a leading role in crafting the central bank's response to the Covid-19 crisis.

Taiwan's Pork and Chips Diplomacy

● Taipei is working to boost economic ties with the U.S. to build a bulwark against Beijing

It's hard to find a world leader who's had a better 2020 than Taiwanese President Tsai Ing-wen.

She won reelection in January in a landslide, oversaw one of the world's best responses to the Covid-19 pandemic, and steered an economic recovery that's boosted Taiwan's stock exchange to record heights. The central bank recently made an upward revision to its 2020 growth target, to 1.6%, making Taiwan an outlier in a year when most major economies are expected to shrink.

Tsai does have one major problem: The Chinese Communist Party is threatening her life. On Sept. 19, the *Global Times* newspaper, a CCP mouthpiece, warned in a tweet that she would be "wiped out" in a war if she violated China's anti-secession law.

The stern message was in response to a dinner Tsai hosted the night before for Keith Krach, the most senior U.S. Department of State official to visit Taiwan since 1979. People's Liberation Army aircraft repeatedly breached the median line between Taiwan and China in the days before the event, and the PLA air force released a video purportedly showing H-6 bombers making a simulated strike on what appear to be U.S. military bases in the region. The clip was later discovered to include scenes from Hollywood movies, including *Transformers* and *The Rock*.

While China's military dwarfs Taiwan's, an amphibious invasion across the 100-mile-wide strait separating

● Planned investment by a Taiwanese maker of semiconductors in a new Arizona plant

$12b

them carries risks and could easily backfire. Although many observers see the U.S. coming to Taiwan's aid if China were to launch an attack, Tsai's government is actively taking steps to increase economic ties between the unofficial allies to provide more incentives for American policymakers to intervene. "If we lessen our economic reliance on China, it won't be able to politically blackmail us," says Kolas Yotaka, the spokeswoman at the Taiwan presidential office. "By establishing closer economic ties with other countries, we'll be able to uphold regional peace through shared prosperity."

Right now, the economic relationship is heavily tilted toward Beijing. Exports to China accounted for 42.3% of Taiwan's total in the first half of this year, with only 14.7% going to the U.S. Taiwanese investment in China in the first eight months of this year was up 50% from the same period last year, totaling $3.9 billion, according to Taiwan's Ministry of Economic Affairs.

Tsai's government, however, has sought to reverse those trends by encouraging companies to shift their supply chains away from China and add production capacity in Taiwan. In late August it also lifted a ban on certain U.S. pork and beef imports—removing a sizable obstacle to a possible trade agreement with the U.S. "We must accelerate our linkage to economies around the world, in particular strengthening our ties with our most steadfast partner," Tsai said at the time.

The moves appear to be bearing fruit. U.S. government trade data for the January-through-July period show Taiwan as the country's ninth-largest trade partner, up from 11th last year.

Krach's visit marked another milestone in that effort. The guest list at the dinner included Morris Chang, founder of Taiwan Semiconductor Manufacturing Co., a supplier of chips to Apple Inc., which recently announced plans to build a $12 billion plant in Arizona. Chang's presence at the dinner highlighted the importance of Taiwan's cutting-edge semiconductor industry, which the U.S. would like to wall off from Chinese companies such as Huawei Technologies Co.

On Sept. 20, Taiwan's economic affairs minister, Wang Mei-hua, announced she'd met with Krach's delegation for talks that could pave the way for the formal start of trade negotiations. While it's unclear whether Taiwan is a high priority for U.S. Trade Representative Robert Lighthizer, a bilateral trade agreement would go a long way toward bringing Taiwan out of its diplomatic isolation, according to Tiffany Ma, senior director at consulting firm BowerGroupAsia. It "would further benefit Taiwan's security by giving momentum and political cover for other countries to pursue similar arrangements with Taiwan," she says.

The U.S. formally cut ties with Taiwan's government in 1979 to establish relations with Beijing. But U.S.-China relations have become more contentious under the Trump administration's trade war with the country. And in Congress there's rare bipartisan support for pushing back against China's human-rights violations in Xinjiang and Hong Kong. Trade and official exchanges with Taiwan, meanwhile, are on the rise.

Shortly before Krach arrived in Taipei, Representative Tom Tiffany, a Wisconsin Republican, introduced a bill to establish formal diplomatic relations with Taiwan and to negotiate a free-trade agreement. While the bill is unlikely to pass, the fact that a member of Congress is calling for recognition of Taiwan shows how much sentiment in Washington has swung in its favor.

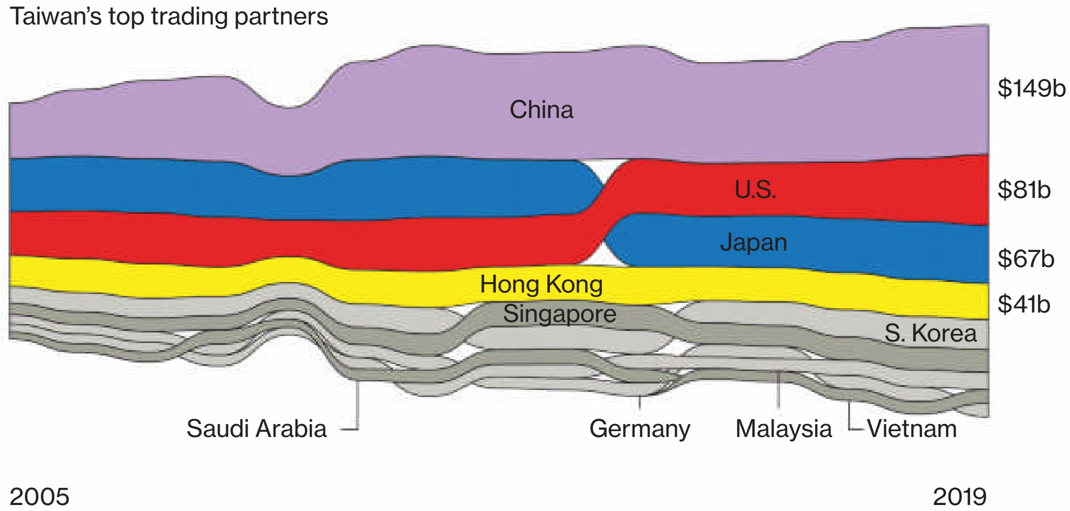
Despite the recent saber rattling, China doesn't appear ready to give up on economic engagement with Taiwan. Wang Yang, the Communist Party's No. 4 official, pledged on Sept. 19 to "further improve policy measures and arrangements" that benefit Taiwanese people.

Even so, China's recent military maneuvers near Taiwan signal that it's watching carefully and is possibly willing to initiate conflict. While polls show the vast majority of Taiwanese citizens oppose being ruled by Beijing, Chinese leader Xi Jinping has vowed to unify Taiwan and China, which would likely require going to war. "Beijing fears a slippery slope," says Bonnie Glaser, director of the China Power Project at the Center for Strategic and International Studies in Washington. "It worries that the U.S. has abandoned its 'One China' policy and won't respect China's red lines." —*Chris Horton, with Jing Li*

THE BOTTOM LINE Taiwan is laying the groundwork for a bilateral trade deal with the U.S. to lessen its economic exposure to China and bolster its security.

Friends and Neighbors

Taiwan's top trading partners



DATA: BUREAU OF FOREIGN TRADE

LEHNERT: PHOTOGRAPH BY GABRIELLA DEMCZUK FOR BLOOMBERG BUSINESSWEEK

The New Republican Hard-Liners

● Dispelling their moderate image, GOP women candidates keep tacking rightward

There were obvious reasons to doubt Republican Lisa McClain's path to Washington during Michigan's primary season: She'd never held elected office. Her top competitor had the support of the outgoing congressman she hoped to replace. State lawmakers, district Republican leaders, and Americans for Prosperity—an advocacy group linked to billionaire Charles Koch—all opposed her.

But McClain thought that in Michigan's 10th District, which Donald Trump won in 2016 by 32 points, she could campaign as a conservative maverick, much like the president himself. A mother of four and a wealthy businesswoman, McClain grew up in the rural community of Stockbridge, Mich. After climbing the corporate ladder at American Express Co., in 1998 she helped found the Hantz Group, a financial-services firm in Michigan.

"What the president has taught us is we need some true conservative outsiders, and those people can do very well in politics," she says. Her top issues include repealing the Affordable Care Act, building a wall along the Mexican border, and ensuring parents in Michigan have the right to choose whether or not to vaccinate their children. On her website, she calls herself "100% pro-life" and "a strong defender of the 2nd Amendment."

McClain funneled more than $1.4 million of her own money into her campaign coffers and portrayed herself as a zealous defender of Trump and the values of everyday conservatives. On Aug. 4 she won the Republican primary, becoming a shoo-in for the district's congressional seat.

After an abysmal showing for Republican women in the 2018 midterms—Democrats sent 105 women to Congress, while Republicans sent only 21—McClain is part of a wave seeking office this year. A record 227 GOP women have campaigned for seats in the House of Representatives, almost 100 more than during the party's previous record-breaking year of 2010.

Some didn't advance in their primaries, and others will fail to flip blue seats. But come January, it's almost certain that there will be more Republican women in the House, and many will sound like McClain. On the whole, these politicians no longer fit the image long imposed on Republican women—that of the moderate consensus builder. These days, Republican women seeking office are warriors for hard-right politics. The shift predates Trump, but his style of conservative, populist rhetoric has turbocharged it.

If enough are elected, the new cohort of Republican women will bring a modicum of diversity to a party run largely by White men. But they aren't likely to win over the more moderate women voters who polls indicate are fleeing the party under Trump. And once they get to Congress, don't expect them to work with their sisters across the aisle, says Michele Swers, a political scientist at Georgetown University: "They're going to want to be confrontational."

Even 20 years ago, many conservative women in Congress were moderates who compromised with Democrats on such issues as abortion, health care, and education. They included Connie Morella, the Republican representative from the D.C. suburbs who throughout the 1990s opposed her party's positions on abortion, gun control, and gay rights, and worked to expand the Violence Against Women Act in 2000. Maine Senator Susan Collins, elected in 1996, has been rated the most bipartisan senator for seven years running by Georgetown University.

But the archetype of the Republican female politician changed in 2008 with former Alaska Governor Sarah Palin's entrance onto the national stage, political analysts say. When presidential candidate John McCain tapped Palin as his running mate, conservative women saw a pro-life, pro-gun, anti-establishment candidate in the spotlight.

"It is hard to overstate how impactful Sarah Palin's vice presidential candidacy was for many conservative women," says Melissa Deckman, a professor of government at Washington College who wrote *Tea Party Women: Mama Grizzlies, Grassroots Leaders, and the Changing Face of the American*

Edited by Amanda Kolson Hurley

Right. Palin inspired a generation of women to get into grassroots politics and "rebrand the party," Deckman says.

Palin's legacy is on full display in 2020. This year's female candidates are more likely than before to describe themselves as "fighters" and use gun imagery in their campaign materials, while also making it clear that they are pro-life, pro-religion, and pro-Trump, according to an analysis by Kelly Dittmar, a political scientist at Rutgers University at Camden and research director of Rutgers's Center for American Women and Politics. "If you look at most all of the Republican women running this year, they are very, very conservative," she says. "That very much fits with the party as it is today."

They're women like Tiffany Shedd of Arizona, a youth pistol instructor who's running on a border protection platform. Or Beth Van Duyne of Texas, a former Trump administration official and one of four Republican women candidates who last year proclaimed themselves "the conservative squad," a rebuttal to Alexandria Ocasio-Cortez and her "squad" of progressive House Democrats. Or Marjorie Taylor Greene of Georgia, who has promoted the QAnon conspiracy theory and warned of an "Islamic invasion of our government." President Trump has called Greene a "future Republican star."

To win primaries this year, most Republican candidates tried to prove their conservative and pro-Trump bona fides—but especially women, whom voters tend to stereotype as more moderate than their male colleagues.

"The Republican Party overall is less welcoming to women candidates to begin with," says Kathleen Dolan, a professor at the University of Wisconsin at Milwaukee who studies gender in politics. "I think they feel like they have to be really true believers to be noticed." The National Republican Congressional Committee says it prioritized recruiting a diverse field this cycle, but there's nothing on the right on the scale of the Democrats' Emily's List.

The moderate Republican woman isn't quite extinct. Candidates in purple districts, such as Young Kim in Orange County, Calif., and Mariannette Miller-Meeks in Iowa, are running more traditional campaigns. Miller-Meeks, a doctor and Army veteran who's focusing her message on health care, handily won her primary, but now she's competing in one of the tightest races in Iowa. Kim, who has criticized the president for calling Covid-19 "kung flu," is slightly trailing the Democratic incumbent, Representative Gil Cisneros, in polls.

▲ McClain

PHOTOGRAPH BY RACHEL ELISE THOMAS FOR BLOOMBERG BUSINESSWEEK

Michigan's deep-red 10th is different: The race is won and lost in the primary. When Paul Mitchell, the sitting congressman, announced he wouldn't seek reelection, State Representative Shane Hernandez announced his candidacy. Hernandez embraced the promise of the American dream through his personal story of being a migrant worker's son who became an architect. Later, Doug Slocum, a retired Air Force brigadier general, jumped into the race.

McClain saw an opening for someone with roots in the district and a background in business. Her strategy was to stake out a claim to the conservative-outsider mantle early and often. At a June roadside rally promoting President Trump, she gave a fiery speech about how she didn't need a job as a career politician but wanted to go to Washington to stand up for her community's values. "The beauty about me, ladies and gentlemen, is: I'm not beholden to anybody. Nobody. You know who I am beholden to? You, you, and you," she said as she pointed to people in a crowd waving American flags and sporting MAGA hats. "That's what you should demand from your politicians." ▶

"If you look at most all of the Republican women running this year, they are very, very conservative"

◀ The Republican establishment favored the conservative it knew over one it didn't. Representative Mitchell endorsed Hernandez to take his place; so did Texas Senator Ted Cruz and House Minority Leader Kevin McCarthy of California. McClain received an endorsement from former Trump campaign manager Corey Lewandowski and very little in the way of contributions from Washington and outside groups. That meant she had to pour her own money into her campaign.

She spent it on TV ads that portrayed Hernandez as cozy with Democratic Governor Gretchen Whitmer because he negotiated with her over the state budget. Club for Growth Action, a super PAC that supported Hernandez, punched back with ads that questioned McClain's true support for Republicans. The super PAC spent almost $1.6 million to help Hernandez, but McClain won the primary with 42% of the vote.

Republican women candidates often talk about their families but are less likely to discuss obstacles they may face because of their gender. (When *Bloomberg Businessweek* asked a handful of female GOP House candidates why there were fewer women Republicans running than Democrats, few offered concrete answers.) Research shows Republicans are less likely than Democrats to attribute the gender gap among public officeholders—women make up 24% of the current Congress—to discrimination or systemic barriers. Both groups may have a point: Evidence suggests women are less likely to run for office, but when they do, they win at similar rates to their male counterparts.

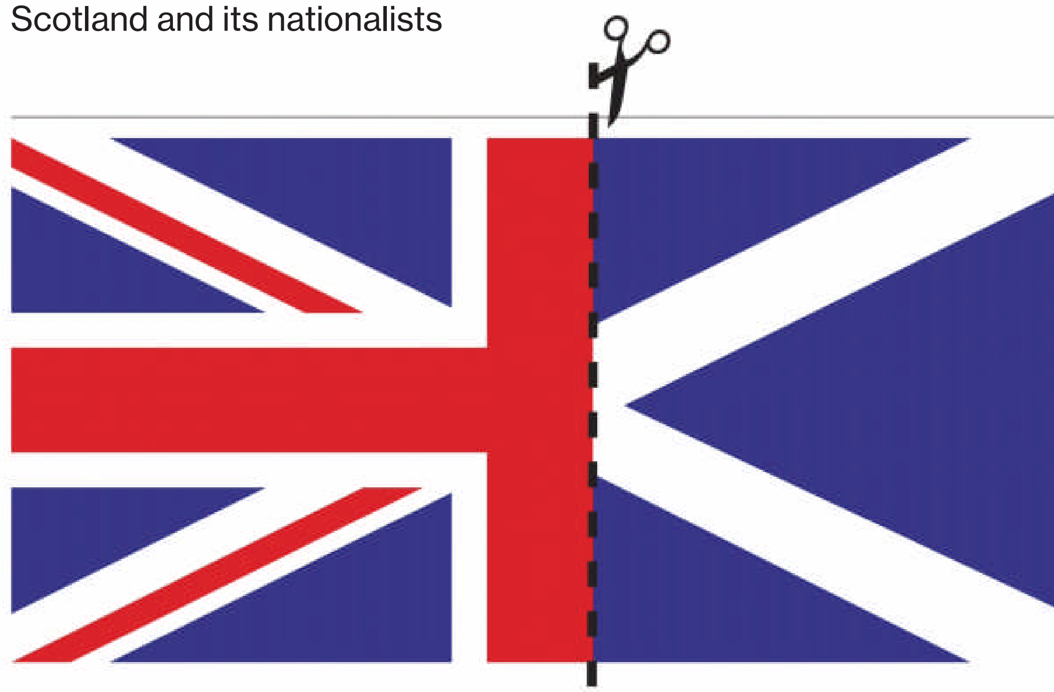
Michigan politics watchers say the 10th District was primed for a woman to win. Back in 2002 it elected Candice Miller as its representative in the House, and voters kept reelecting her until she stepped down in 2016. "It's a district that has shown repeatedly that it values women in office," says John Sellek, a Republican public-relations consultant.

The impact of McClain's win could extend well beyond her district: No Republican holds a major statewide office in Michigan, leaving an opening for a symbolic leader and unofficial spokesperson, according to Sellek. "There has been a lot of talk and buzz about the new fresh face and her being the only GOP woman in Congress right now for Michigan," he says. "She is going to be able to potentially step up into that role." *—Naomi Nix and Rebecca Greenfield, with Bill Allison*

THE BOTTOM LINE The GOP women running for the House of Representatives are mostly hard-line conservatives stressing their pro-Trump bona fides, rather than their appeal to moderate voters.

The Place Where England Ends

● Boris Johnson's policies have only further alienated Scotland and its nationalists



Crossing into Scotland on the A1 highway after passing the English town of Berwick-upon-Tweed is a blink-and-you'd-miss-it moment. A sign says "Welcome to Scotland" in both English and Gaelic, and a couple of blue-and-white Scottish flags flap in the wind off the North Sea. A dilapidated burger van caters to anyone who decides to stop. While the 96-mile border may be largely invisible, this is a different country, where the legal and educational systems, health service, some taxation, and—most prominently as infections spread again—the handling of coronavirus all diverge from England's. The two nations that joined together politically in 1707 to form Great Britain feel more like a socially distant couple still cohabiting in the same household.

Divisions over the approach to the pandemic have compounded four years of acrimony over leaving the European Union, which voters in Scotland opposed. The administration in Edinburgh, run by the pro-independence and anti-Brexit Scottish National Party, is agitating for another vote on breaking away from the rest of the U.K., something British Prime Minister Boris Johnson won't countenance.

The SNP has dominated Scottish politics for more than a decade, and polls show it on course to win big again in May elections for the Scottish Parliament. Popular support for forming Europe's newest nation-state, meanwhile, now has a clear majority among the population of 5.5 million. The latest polling—with undecideds stripped out—puts it as high as 55%, vs. 45% for remaining in the U.K., the reverse of the referendum result six years ago.

ILLUSTRATION BY 731

Nicola Sturgeon, the SNP leader who also heads Scotland's semi-autonomous government, seemed to handle the coronavirus crisis better than the beleaguered Johnson as the U.K. recorded the highest death toll in Europe. The rates of infection in more sparsely populated Scotland aren't much better than in England, but the perception is that she's more in control and her message is clearer.

Compared with England, there's been scant debate over wearing face masks. A U-turn on grading high school students caused an uproar that was over in days; in England the same decision to abandon a controversial algorithm and revert to assessments by teachers is still playing out. Sturgeon's government published a road map out of lockdown in April, and Scotland maintained working-from-home as the default position while England had been keener to get people back into offices. Sturgeon and Johnson unveiled new lockdown measures on Sept. 22 after scientists warned that cases could spike to as many as 50,000 a day in the U.K. by mid-October. They agreed to a broadly united approach, though Scotland restricted visits between households while England didn't.

Indeed, Sturgeon has increased her popularity, while Johnson's Conservatives are polling at their worst since before he became leader last year. As a bumper sticker on a car in a quiet Edinburgh suburb declares: "Ignore Boris. Listen to Sturgeon. Stay Safe." "I don't think it's a coronavirus bounce, it's a leadership bounce," says Nicola McEwen, professor of politics at the Centre on Constitutional Change at Edinburgh University, of Sturgeon's popularity. "There are some policy differences, but there are very contrasting views on the performance of the leaders."

Johnson's problem is that even as he ignores the disquiet in Scotland, he's a big part of why it won't go away. Every dire economic statistic or twist in the Brexit saga becomes material for the message that Sturgeon and her party want to send: Things would be different if Scotland had full control of its affairs.

Johnson says Scotland's powers will be enhanced after the U.K. leaves the EU, but a U.K. trade deal that might boost the unionist cause seems to be slipping away since the British government said it would break international law by reneging on part of its Brexit withdrawal pact. Meanwhile, a bill to create a single internal market also means Scotland would lose control over standards on such things as food and the environment. Sturgeon called the legislation a "full-frontal, no-holds-barred assault on devolution" on Sept. 17.

There's little Scotland can do about it. A crowdfunded lawsuit by independence campaigners that's due to start in Edinburgh on Sept. 30 will ask a court to rule that the Scottish Parliament already has power to hold a referendum without London's permission. It's a long shot and isn't backed by the Scottish government, but the action would force the U.K. to prove in court that Scotland doesn't have the remit. The group hired the Scottish lawyer who successfully argued the case to overturn Johnson's suspension of the U.K. Parliament last year.

After London rebuffed her demands for another independence vote, Sturgeon is playing the long game. Next spring's Scottish election will effectively be a plebiscite on the right to hold a referendum. "They certainly have a better than 50% chance of being able to get an overall majority," John Curtice, professor of politics at the University of Strathclyde in Glasgow, told BBC's *Newsnight* show on Sept. 3. "And if that does happen, then I think it will be difficult to avoid another referendum within a two- or three-year time period."

After that comes the question of a campaign. Warnings over the economy, currency, and staying in the EU helped shore up the union last time. Now the EU is on the other side of the argument. But the economy will still be a factor if a vote comes. North Sea oil was a cash cow years ago, but its best days are behind it. Funding such things as university tuition and medical prescriptions—free for Scots, while the English have to pay—could become painful.

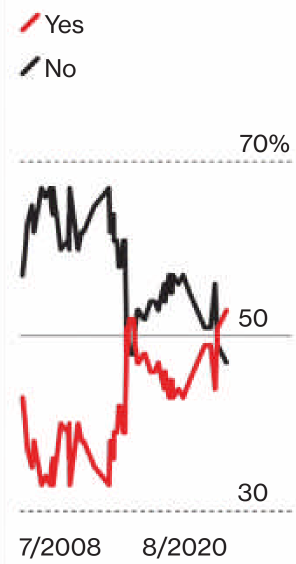
The leader of the Conservative Party in Scotland, Douglas Ross, says the havoc caused by the coronavirus shows it's time to end the politics of "us vs. them" and what he calls "the grievance culture that so dominates Scotland's national life." Johnson has tried to play up the union, promising Scotland will get its fair share of post-Brexit investment and a revitalized fishing industry. However, fostering unity with the Scots will be a tough task.

Over the summer, Sturgeon said she'd quarantine English visitors if cases spiked because England had eased its lockdown too quickly. The threat would have been difficult to carry out. Yet Johnson only served to rile the nationalists up north, declaring: "There is no such thing as a border between England and Scotland."

On the A1 and other routes running north to south, that might seem the case. What's already clear, however, is that the dotted line is looking more indelible in the minds of Scots. The British government, current or future, may have no choice but to confront the issue of a referendum. —*Rodney Jefferson and Alastair Reed*

THE BOTTOM LINE Brexit and Covid-19 have combined to move Scots ever more toward exiting the United Kingdom. The problem is that, for now, London decides whether there'll be a new referendum.

▼ How Scottish adults would vote on independence



EXCLUDES ANSWERS OF "DON'T KNOW." DATA: YOU GOV

The Power of Prussian Blue

The pigment is a key part of an emerging, low-cost battery technology

A material that gave a vibrant blue to the foaming breaks of the famous Japanese print *The Great Wave off Kanagawa* and instilled the same color in works by Picasso and Monet is being used today for an entirely different but equally creative task: keeping energy-hungry U.S. data centers running.

Prussian blue, the pigment developed by a Berlin color maker in the early 18th century, is a key component in batteries made with sodium rather than lithium, which are intended for industries other than electric vehicles.

“It’s been used as a pigment, as a dyestuff, and has been a consumer product for centuries,” says Colin Wessells, chief executive officer of Natron Energy Inc., in Santa Clara, Calif., the battery maker behind the technology. “It also turns out to be excellent at storing sodium ions,” he says, resulting in a battery with high power and long cycle life.

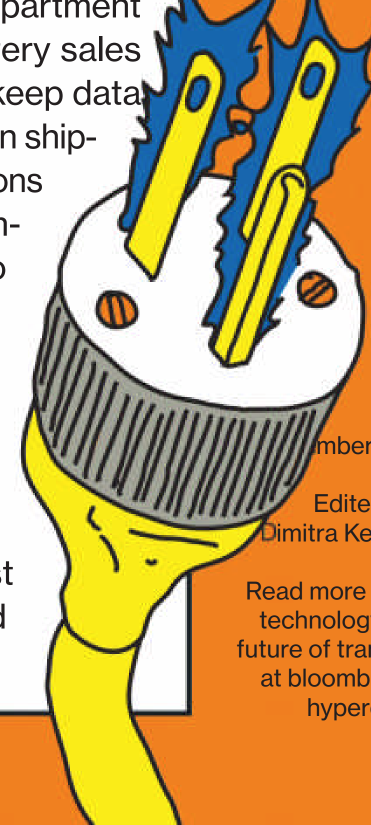
Lithium-ion batteries have become ubiquitous in the past three decades, used in smartphones and electric vehicles—including autos from the likes of Tesla and Volkswagen and buses from BYD—and to store renewable energy from solar or wind plants. Even so, they’re not the best option for all potential applications, because they prioritize energy density, which helps cars travel farther, over longevity or stability. That leaves room for alternative technologies to meet some of the world’s rising battery demand.

“Lithium-ion is not a one-size-fits-all solution,” says Mitalee Gupta, a senior energy storage analyst in Boston for Wood Mackenzie. “Different technologies are starting to make their way in and will start to gain market share.”

Alternatives to lithium-ion using materials such as zinc, vanadium, or sodium are proving themselves well-suited for many tasks, especially stationary storage used by utilities to capture renewable energy and deliver electricity to consumers hours later or to power telecommunications towers and remote industrial sites such as mines. The sector is poised for surging growth, with annual installations projected to rise from 6 gigawatt-hours last year to about 155 gigawatt-hours in 2030, according to data from BloombergNEF, Bloomberg LP’s primary research service on energy transition.

Natron, spun out of Stanford University in 2012, has raised about $70 million from investors including oil and gas giant Chevron Corp. and this month won $19 million in Department of Energy funding. It’s targeting battery sales for the backup power systems that keep data centers online in outages and will begin shipments this quarter to telecommunications and internet service provider customers, says Wessells, who declined to name the clients. The startup also is testing the technology’s use in EV charging at a site at the University of California at San Diego.

Prussian blue powder, produced by combining iron salt and hexacyanoferrate salt—which in the earliest recipes dating to the 1720s involved igniting and boiling mixtures ▶



mber 28, 2020

Edited by Dimitra Kessenides

Read more on battery technology and the future of transportation at bloomberg.com/hyperdrive

ILLUSTRATION BY 731

◀ of dried cattle blood and chemicals—offers battery producers key advantages. It's cheap and widely available. Most important, its chemical structure is ideal for battery electrodes, the components that store and release energy. All electrodes act like sponges, Wessells says, soaking up ions and then releasing them when charged and discharged. Prussian blue, however, allows ions to pass back and forth more easily than other materials. That quality makes its electrodes much longer-lasting than lithium-ion batteries' carbon and metal-based electrodes, which fall apart over time.

The low-cost sodium-ion battery is fast to recharge, often within minutes, and can quickly deliver short bursts of energy. It's a different set of strengths than that of lithium-ion batteries, prized for their ability to cram in large amounts of energy in small volumes. "Our technology is not appropriate for EVs, for electric airplanes, for consumer electronics," Wessells says.

There's also a cost advantage from using more plentiful, and cheaper, raw materials. Natron sells battery systems to data center customers at a similar price to both existing lead-acid packs and lithium-ion products, but it says its technology winds up being three times cheaper over the long term because of the life span of the battery.

"Sodium is the sixth-most-abundant element on Earth, it's essentially unlimited, and it's sustainable. You harvest it—you don't mine it so much," says James Quinn, CEO of Faradion Ltd., a developer of sodium-ion batteries in Sheffield, England, that's recently struck agreements to supply Australia's residential energy storage market and to produce batteries for commercial vehicles in India.

In lithium-ion products, combinations of expensive metals such as nickel and cobalt mean raw materials can account for about 60% of the entire cost of the battery cell, according to BNEF. Cobalt's murky supply chain also continues to unsettle some end users. Still, prices of lithium-ion packs have fallen almost 90% since 2010, as manufacturing volumes have risen and the technology has advanced. Even if competitors squeeze them out of some markets, they'll remain the dominant battery tech.

But as batteries are added to an array of products—potentially even inside clothing to power cooling systems—accelerating demand will spur a need for a broader range of battery types, using a suite of raw materials, says Venkat Viswanathan, associate professor of mechanical engineering at Carnegie Mellon. "Eventually, basically every device you interact with will probably have a battery inside it," he says. "And once you get to that scale, you'll need a vast variety of cells." —*David Stringer, with Akshat Rathi*

THE BOTTOM LINE As ubiquitous as lithium-ion batteries are, they're not a one-size-fits-all solution to growing energy storage needs. Sodium-ion batteries are emerging as a cheaper alternative.

The $25K Tesla

At his first Battery Day event, Elon Musk said the lower-priced car will come in the next three years

Reducing—specifically halving—manufacturing costs of lithium-ion batteries was the overarching theme of the event. That reduction will enable a cheaper model—a "dream from the very beginning," Musk said. Tesla aims to eventually produce 20 million of these fully autonomous vehicles per year, but he didn't give a clear time frame for achieving this goal. The battery innovations include the following:

❶ MORE SILICON, LESS COBALT

Musk focused on the two materials used in a battery's electrodes (the anode and the cathode, where the cell gets its energy). Silicon, the most abundant material on Earth, is increasingly being used in the anode. At the same time, Tesla is reducing—and ultimately removing—cobalt, a costly metal that's also controversial because of the often unethical way it's mined.

❷ DRY ELECTRODES

Changes to the manufacturing process also are aimed at increasing energy density. To achieve this, Tesla has improved its electrode coating, the process by which the two electrodes are made. The current method is a wet coating process that is energy-intensive and requires a large plant footprint. Tesla has moved to a dry process to minimize energy use and equipment costs at its facilities.

❸ CATHODE PRODUCTION

The batteries powering Tesla's cars use lithium, nickel, cobalt, aluminum, and other materials, which its suppliers—Panasonic, LG Chem, and CATL—manufacture into cells. These represent about 45% of the manufacturing cost of a battery cell. To lower that, Musk says the company will become more involved in cathode production, from raw materials to finished product. (He used the event in Fremont, Calif., to announce that Tesla has the rights to a Nevada lithium deposit.) The cathode approach also aims to decrease the amount of wastewater resulting from manufacturing. —*James Frith, BloombergNEF*

ILLUSTRATION BY 731

Cities

Electrifying Hanoi

Vietnamese billionaire Pham Nhat Vuong wants to help his nation's 96 million motorbike riders go green, replacing their noisy gas guzzlers with electric scooters. VinFast, a subsidiary of Vuong's Vingroup JSC, has a new $3.5 billion, 36.1 million-square-foot factory in Haiphong, where it's building e-scooters, electric buses, and electric cars. Vuong is betting Vietnam's growing middle class, increasingly concerned about pollution, will embrace his electric revolution.

► Motorbikes are vital to Vietnam's economy and culture. In Hanoi and Ho Chi Minh City, the density of bikes at rush hour makes the street barely visible. Even sidewalks overflow with mopeds, which often transport more than one person and goods including slaughtered hogs and refrigerators.

5

Years it might take VinFast to be profitable, Vuong says. The unit started offering e-motorbikes in late 2018 and sold 50,000 last year. It's aiming for 112,000 in 2020.

80%

Share of Vietnam's motorbike sales expected to be electric by 2040, according to BloombergNEF—ahead of Southeast Asian peer countries.

$557

(12.9 million dong) The price of VinFast's low-end e-scooter, one of three models; a fourth is on the way.

▲ Vingroup also is building charging infrastructure, adding stations at malls and apartment complexes. In Hanoi it employs a team of technicians, who help riders in need of an emergency charge.

Takeaway

Vietnam was ranked the 15th most polluted country in the world in 2019, according to IQAir, an air quality technology company. Worsening air quality has cost the country as much as $13.6 billion. "The biggest challenge is to convince consumers to change their habits of driving gasoline bikes," says Nguyen Thi Van Anh, the VinFast executive overseeing electric motorbike production. She adds, "We want people to understand that using electric vehicles will help reduce pollution emissions and thereby improve people's health."
—*John Boudreau and Giang Nguyen*

LINH PHAM/BLOOMBERG

Powering Propellers With Hydrogen

Universal Hydrogen and Plug Power will develop a plane with a minimal carbon footprint

Airlines have a huge carbon footprint and few good options for shrinking it. The big batteries that Tesla Inc. uses to power climate-friendly cars, after all, weigh too much for a passenger plane.

A team of aerospace veterans has another idea: hydrogen. Universal Hydrogen Co., founded by Airbus alumni, and Plug Power Inc. will work together to retrofit a regional airplane with hydrogen fuel cells to power its two propellers. Together the companies aim to have a plane ready and government-certified to fly by 2024.

The retrofit will try to prove to the airline industry that hydrogen can work for regional aircraft traveling several hundred miles, even if fuel cells remain a stretch for long-haul flights. The technology's backers say it's safer than jet fuel on several fronts. In an accident, for example, hydrogen vents upward, because it's lighter than air, while jet fuel pools on the ground and burns there.

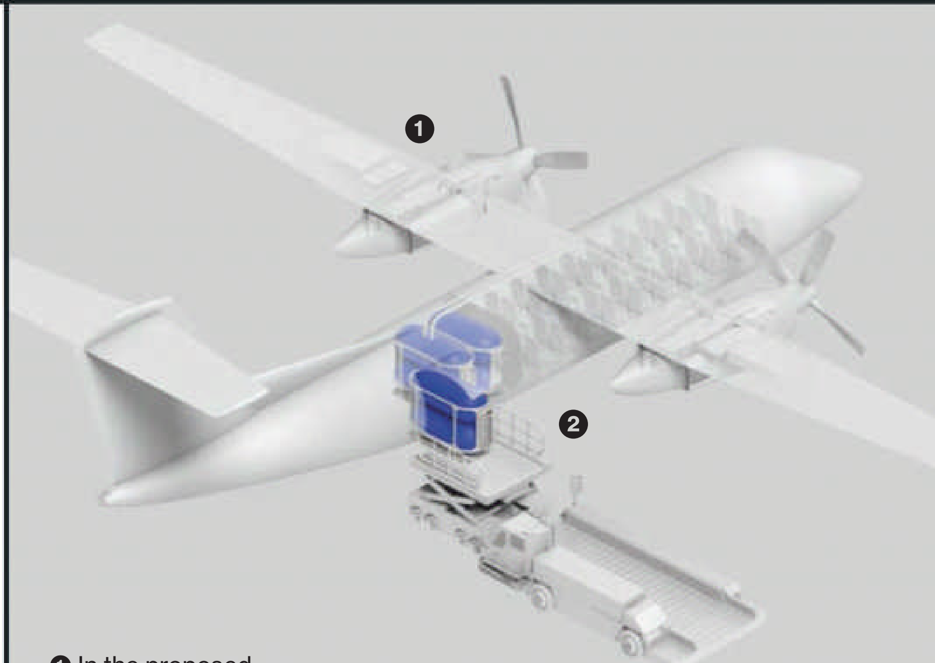
If the hydrogen is produced from water using hydrolysis that's powered by renewable energy, it offers a realistic way to "decarbonize the skies," says Keith Schmid, Plug Power's chief operating officer. Fuel cells generate electricity through an electrochemical reaction rather than combustion. When powered with hydrogen, their only exhaust is water. "Hydrogen fuel cells essentially make zero-emission flight possible at ranges that are commercially viable," Schmid says.

Universal was co-founded by Paul Eremenko, a former chief technology officer for Airbus SE and United Technologies Corp. Rather than build planes, his startup wants to supply the hardware for moving and using the fuel.

Universal has developed Kevlar-coated, pill-shaped pods, about 7 feet in length by 3 feet in diameter, that can serve as both a storage container for transporting the hydrogen and a gas tank when loaded into a plane. They can be stacked in racks so 54 of them would fit inside a standard freight shipping container, eliminating the need for airports to have pipelines or storage tanks. The lack of fueling infrastructure that's held back fuel-cell cars wouldn't be a problem for planes. "We want to basically turn hydrogen into dry freight," Eremenko says.

Plug Power has spent more than 20 years losing money in an effort to find profitable applications for hydrogen fuel cells. It's best known for offering fuel cells that run forklifts and other freight-handling gear. But it's also expanded into stationary fuel cells to run data centers and mobile ones for delivery vans.

"The aerospace market is a little bit further out than some of the other sectors, but we do see the value proposition for hydrogen fuel cells in aerospace to be particularly strong," Schmid says.



❶ In the proposed retrofit, the propellers are driven by electric motors and a hydrogen fuel-cell powertrain

❷ Existing airport cargo handling equipment is used to load fuel modules into the aircraft

❸ A Universal Hydrogen module; the blue capsules can contain either pressurized hydrogen gas or liquid hydrogen

Plug Power will provide a fuel cell generating 1.5 to 2 megawatts for each propeller on the plane, while another company, MagniX, will supply the electric motors.

Air travel accounts for about 2.5% of global greenhouse gas emissions. While some engineers are developing small electrified aircraft, current batteries are too heavy to power commercial planes on their own.

Hydrogen storage could one day be used in other industries, Eremenko says. Cargo ship builders, for example, are exploring fuel cells as a power source. But he prefers to start with planes. "Ultimately we think aviation is the killer app, because aviation doesn't have an alternative."
—*David R. Baker*

THE BOTTOM LINE Electric airplanes are a tough proposition, given the size and weight of the batteries needed. Some aviation experts see hydrogen fuel cells as a more effective way to reduce greenhouse gas emissions.

PHOTO ILLUSTRATION BY 731. RENDERINGS: UNIVERSAL HYDROGEN


WE WILL
NEVER
STOP
INNOVATING FOR A
HEALTHIER WORLD
There is much to be done in healthcare, and when it comes to COVID-19, we are leveraging our resources and expertise in ways that can make a real difference. For example, we're equipping front-line workers with our state-of-the-art, mobile X-ray and point-of-care ultrasound systems to facilitate diagnoses and help prevent spread of infection. In our further contribution to ending the pandemic, we're accelerating clinical trials of our antiviral drug. We are also expanding our contract bioprocessing facilities and strategically making partnerships to help ensure, through our manufacturing capabilities, a steady supply of vital medications and vaccines are available for people around the world. As long as there are healthcare needs to be met, we will NEVER STOP.
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WHEN CAPITALISM ISN'T ENOUGH

Business was counting on market forces to eliminate inequality. They haven't, and society is tired of waiting

By Rebecca Greenfield

Illustration by Joonbug

In 2017, Denise Young Smith summed up the modern approach to Diversity and Inclusion while speaking at a conference in Bogotá, Colombia. “There can be 12 white, blue-eyed, blond men in a room and they’re going to be diverse, too,” Apple Inc.’s vice president of D&I at the time said. “They’re going to bring a different life experience and life perspective to the conversation.” She apologized for the remarks a few days later and left her post not long after that, but her comments were revealing. Diversity initiatives had drifted far from their original mission to get more women and minorities up and down the corporate ladder.

At the heart of Smith’s thinking was a mantra that had been driving human resources departments for the previous decades: the business case for diversity of thought. After the civil rights movement, affirmative action—laws and practices that give special consideration in hiring to groups that experience discrimination—had been the driving force behind workplace equality initiatives. But in an influential 1990 *Harvard Business Review* article, a former organizational behavior professor named R. Roosevelt Thomas Jr. introduced corporate leaders to a new approach that, frankly, they found more palatable.

Thomas argued that policies forcing companies to remedy centuries of slavery and racism by hiring more Black people had done their job, and it was time to move on. White men no longer entirely make up the U.S. business mainstream, he wrote, and widespread prejudice no longer kept minorities out of jobs. “The realities facing us are no longer the realities that affirmative action was designed to fix,” he said.

Instead, he urged leaders to learn to manage their increasingly diverse workforces so people of all races, genders, and ethnicities could flourish. And why should organizations do this? Because it’s in their financial interest. “I believe only business reasons will supply the necessary long-term motivation,” he wrote.

The theory is simple: Capitalism can solve workplace inequality all by itself. Employers that discriminate based on race, gender, or anything else are losing out on productive workers, and therefore potential profits. But, it’s not only that. Diverse teams comprised of individuals from a range of backgrounds and experiences perform better than those driven by groupthink, giving companies an incentive to diversify their ranks. It would be stupid to pass up the competitive advantage, and shareholders shouldn’t let them.

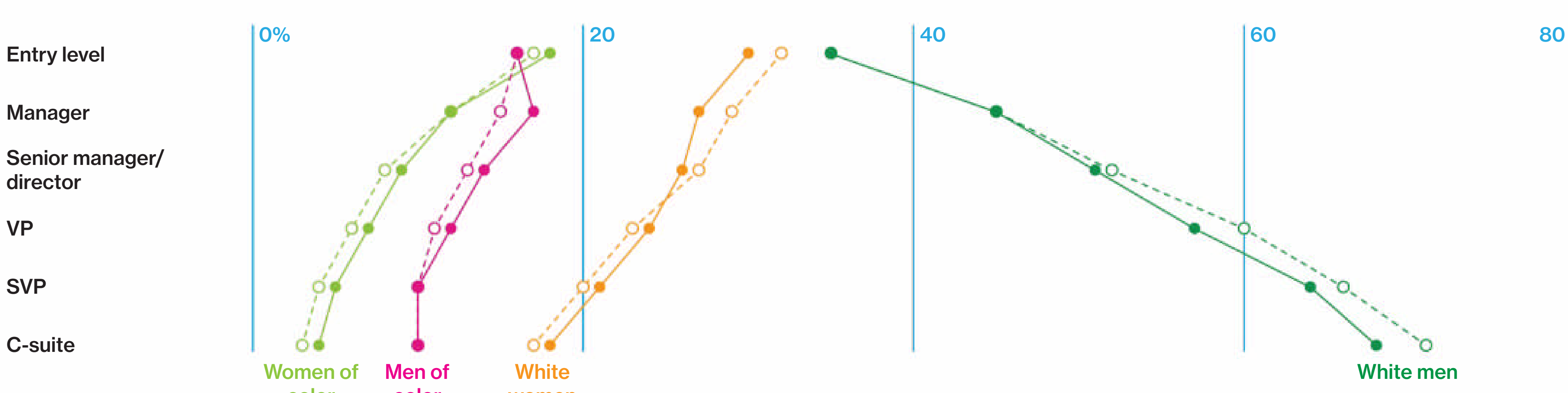
It’s hard to overstate this essay’s influence. After Thomas’s death in 2013, obituaries referred to him as the “founding father” and “pioneer” of the modern D&I movement. His words spawned a multibillion-dollar industry that’s driven policies at hundreds of companies. Diversity of thought, not inequality, became the focus of corporate human resource departments, and over time that grew to include things like ideological, geographic, and socioeconomic differences. “It became about everything except racial injustice,” says Pamela Newkirk, author of *Diversity, Inc.: The Failed Promise of a Billion-Dollar Business*. “That’s why we haven’t seen much progress.”

Indeed, capitalism’s invisible hand hasn’t made the market more efficient when it comes to eliminating racial barriers. Anyone who’d been paying attention was well aware that progress over the past few decades had been scant. White men still dominated the top jobs and made the most money, and Black workers in particular had been left behind (page 62). Still, the D&I machine kept chugging along. Then, the police killing of George Floyd and worldwide protests sent a sudden jolt to businesses. Companies had to answer for why their workforces remained so White at the top and why they weren’t doing more to address systemic racism. “It certainly changed the rhetoric around diversity,” Newkirk says. “We’re beginning to return to a sense of reality around race and how we have not solved that problem.”

What we’re seeing now isn’t exactly a return to affirmative action but rather a swing back in that direction. First, companies are admitting that racism persists and needs its own set of specific solutions. “Recent events in America are a sobering reminder of our country’s long and troubled history of racial inequality and injustice,” Capital One Financial Corp. said in one of many statements like it released by the biggest U.S. businesses in the weeks following Floyd’s killing. In other words, Thomas was too hasty: The realities facing us are still those affirmative action was designed to fix.

WHITE MEN STILL RULE THE WORKPLACE

Demographic share of corporate workforce at each level ○2016 ●2019



PEOPLE OF COLOR INCLUDE BLACK, LATINO, ASIAN, AMERICAN INDIAN, OR ALASKAN NATIVE, NATIVE HAWAIIAN, PACIFIC ISLANDER, OR MIXED-RACE PEOPLE. DATA: MCKINSEY & COMPANY

That mindset shift has already led to different approaches. In years past, companies might have set hiring targets where they would aim to increase the percentage of new Black or Latinx hires—a strategy that, at best, would change overall workforce composition incredibly slowly. Anything more aggressive than that was too close to a quota, an unpopular and, in some cases, illegal policy. Private employers in the U.S. have a little more legal leeway than universities, though, and are allowed to have temporary targets to eliminate conspicuous racial imbalances in segregated job categories. In the last few months, at least half a dozen of the biggest U.S. companies have done just that, adopting concrete targets for adding more Black people to top jobs. Ralph Lauren Corp. aims to have Black, Asian, and Latinx workers make up 20% of its global leaders; Delta Air Lines Inc. said it will double, to 14%, the percentage of Black directors and officers by 2025. BlackRock, PepsiCo, and Wells Fargo all have similar plans.

These goals are self-imposed, so businesses won't face consequences or sanctions from the government or any official body for failing to fulfill their promises. But there are other sources of pressure that could keep the heat on them to live up to their new, and very public, commitments: consumers, investors, employees, and public opinion. "It's not cute to be racist anymore," says Anna Gifty Opoku-Agyeman, co-founder of the Sadie Collective, a nonprofit working to get more Black women in economics. "If anybody catches any wind of you being anti-Black racist, they will lay you out. You don't want to be the next organization trending on Twitter."

"THIS CONVERSATION THAT WE SHOULD JUST HIRE A BLACK PERSON AND, POOF, WE'RE DONE—IT'S NOT ENOUGH"

Still, it's questionable if even that's enough to motivate change, says Victor Ray, a sociologist of race at the University of Iowa. "I wonder what companies think will be different this time if it's all voluntary," he says. "I'm not saying these things won't necessarily work, but it's not clear what the consequences are." Some of the most successful diversity initiatives have penalties for those who fail to comply. After passage of a state law in 2018 that would impose a $100,000 fine on California-based companies with all-male boards, female representation shot up. The program was so successful, the state expanded the mandate this summer, passing a bill requiring every board to have at least one person of color on it by 2022. "I would adopt that rule more broadly," says Lisa Cook, an economist at Michigan State University, who's studied segregation in patenting and the innovation economy.

That's not likely to happen anytime soon. Government-mandated affirmative action policies tend to invite backlash. "Not everyone is going to be happy with this," says Ray, the sociologist. "Pushing for greater racial equality is going to lead to real pushback and real anger." It already has. The Academy of Motion Picture Arts & Sciences announced a new rule this month requiring that films competing for its best picture award starting in 2024 have to have more diverse casts and crews. (Yes, another quota.) *Cheers* alum Kirstie Alley called it "dictatorial" and actor James Woods said the rule was "madness." But many people of color in Hollywood are hopeful the industry is serious about becoming more welcoming (page 56).

Among the many criticisms of affirmative action is that it's just another kind of discrimination that unfairly penalizes White people. Even when that's not true, people feel that way. Zachary Bleemer, a researcher at the University of California at Berkeley, received a monsoon of hate mail from people who thought he had done "something evil," he says, by publishing a paper on the labor market effects of California's 1998 ban on affirmative action in public university admissions. Bleemer's research found that affirmative action provided greater benefit to the Black and Hispanic students than it cost White and Asian students whose place they took. Once the ban went into effect, Black and Hispanic students overall saw their post-graduate income drop around 5%. The newly admitted White and Asian students to the University of California's most selective school didn't see an earnings bump. People who dislike affirmative action didn't like the findings. "For a lot of people, it's not empirical," he says. "It's a question about fairness and the role of government."

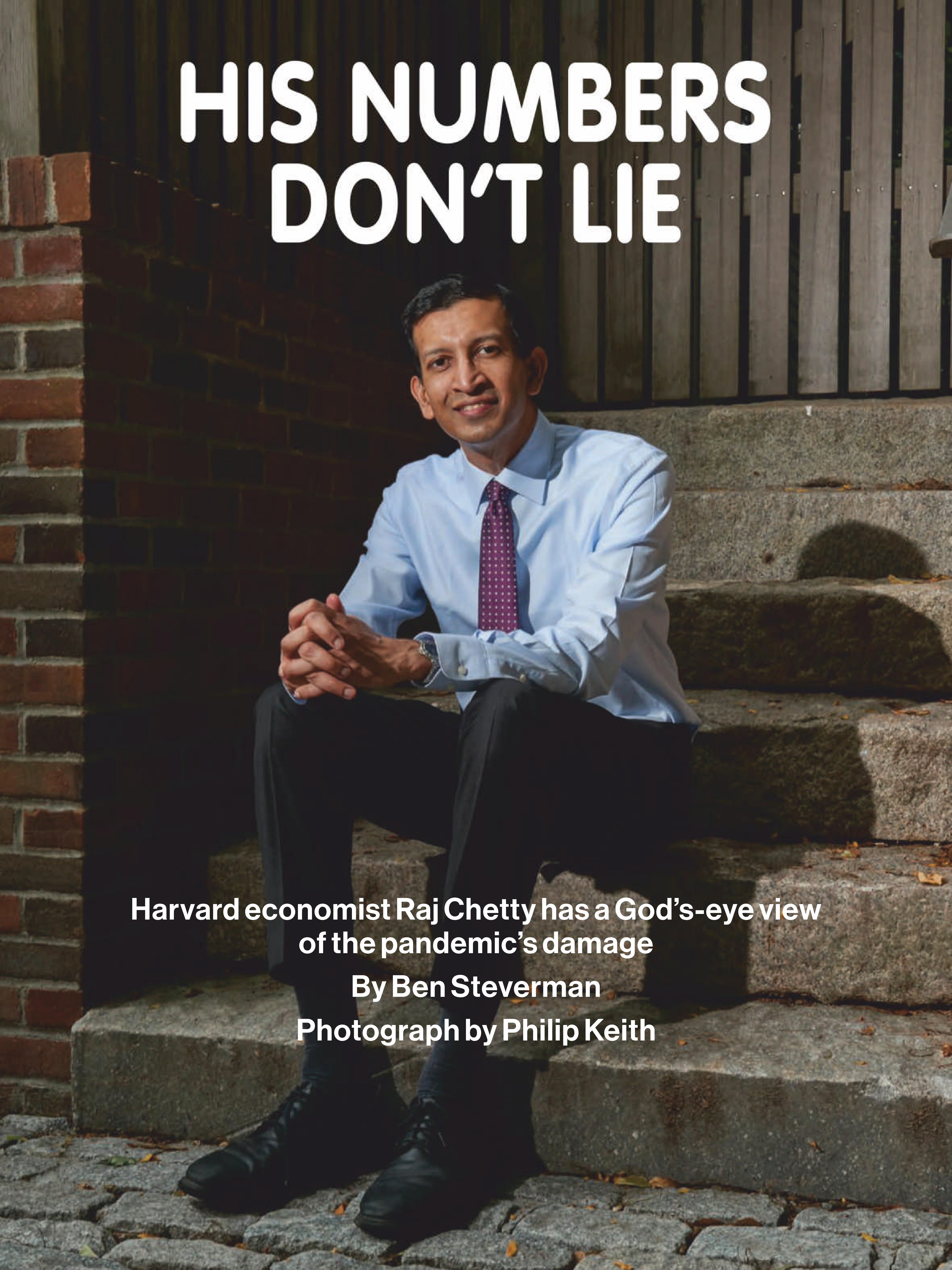
Moreover, there's still plenty of resistance from many in corporate America to even basic diversity initiatives. Most companies still won't publicly share workforce demographics, making it difficult to track progress. Even some of those who made public statements in support of Black Lives Matter or gave money to social justice causes have no plans to change their hiring practices. Others pointed to their existing diversity efforts as proof of their dedication to overcoming systemic racism.

Another issue with quotas in particular is that they're a blunt, imperfect tool. Getting people in the door is just step one, Opoku-Agyeman says. "This conversation that we should just hire a Black person and, poof, we're done—it's not enough." In June she wrote an open letter to economic institutions, such as the Federal Reserve banks and the American Economic Association, with nine demands for how the profession should tackle racism. The list included funding undergraduate programs that target Black admissions to improve the pipeline, recruiting and hiring from historically Black colleges and universities, and establishing inclusive work environments by offering subsidized mental health care and professional development for Black workers. Elsewhere, particularly in the media industry, leaders who didn't properly address racism in their workplaces have been pressured to step down.

That's a new demand on businesses and the executives who run them—one that many aren't eager to assume. Nonetheless, they'll likely be pulled into the fray as protests continue in the streets and once-controversial actions like trumpeting Black Lives Matter or actively implementing programs to lessen income inequality become mainstream (page 48). "It's more so about how do we dissect these systems that have been built on the foundation of White supremacy and break them down and then rebuild something better," Opoku-Agyeman says. "What I'm saying is: Change is not going to happen overnight." Ⓑ

ILLUSTRATION BY JOONBUG

HIS NUMBERS DON'T LIE



Harvard economist Raj Chetty has a God's-eye view of the pandemic's damage

By Ben Steverman

Photograph by Philip Keith

Raj Chetty hasn't eaten at a restaurant in months. In fact, he's barely left his home near Harvard, where he is an economics professor. The MacArthur genius grant recipient has been getting his haircuts from a stem cell biologist—his wife.

If you want to understand what's really wrong with the economy, this is a telling symptom: Chetty used to travel widely sharing insights from his work, which mines data to paint a vividly detailed picture of inequality in the U.S. Now he, like millions of other affluent Americans, is at home. That might seem harmless—Chetty and his wife enjoy cooking together and spending time with their 5-year-old daughter—until you confront the effects on the already-precarious livelihoods of the people who fed, clothed, and pampered this professional class.

When Covid-19 hit, Chetty and his team of about 40 researchers and policy specialists dropped everything—including work on inequality in housing, higher education, and longevity—to document the pandemic's lopsided impact. The result is a data tracker that gives a day-by-day, state-by-state, and even neighborhood-by-neighborhood view of the coronavirus economy. First uploaded in May and frequently expanded since, it relies on nonpublic, proprietary data supplied by some of America's largest corporations to give a level of detail, in real time, that traditional economic indicators can't match.

Last month, a couple days after former Vice President Joe Biden selected California Senator Kamala Harris as his running mate, Chetty briefed the pair over video, presenting data that demonstrated lower-income workers were bearing the brunt of the Covid recession. His chart showed that by April, the bottom quarter of wage earners, those making less than $27,000 a year, had lost almost 11 million jobs, more than three times the number lost by the top quarter, which earn more than $60,000 annually.

By late June the gap had widened further, even though many businesses had reopened. In fact, the segment of Americans who are paid best had recovered almost all the jobs lost since the start of the pandemic. "The recession has essentially ended for high-income individuals," Chetty told Biden and Harris. Meanwhile, the bottom half of American workers represented almost 80% of the jobs still missing.

Even as the better-off watched employment rebound and the stock market surge, the virus's economic devastation was all around them, in shuttered restaurants, hair salons, and gyms. It was no longer possible to ignore the economic chasms that separated people who used to live and work alongside one another. "That creates this very local feel to the recession," Chetty says.

The mapping tool on his tracker allows you to visualize the divergence as it's played out in prosperous places from Manhattan's Upper East Side to San Francisco's Pacific Heights. "The shock is most severe actually in the richest parts of the country and the richest neighborhoods in the country," he says. "It's literally the people you were interacting with who I think are suffering the most."

Chetty has been described as "arguably the best applied microeconomist of his generation" by the American Economic Association, which awarded him the Clark Medal, often called the second-most prestigious prize in the profession after the Nobel, in 2013. Like many of his contemporaries, Chetty largely eschews theory and ideology in favor of data—the more the better. His goal in diagnosing the source of the economic pain is to help find ways to cure it. "It's really done from the perspective of science," says Heather Boushey, a Biden adviser who heads the Washington Center for Equitable Growth.

Chetty and his team have been talking about their newest project to any politician who will listen. On video calls with dozens of Democrats and Republicans in Congress, as well as Treasury officials and state and local policymakers, his message has been consistent: Get the virus under control at all costs—a task the U.S. has so far failed at pitifully. No matter how many businesses are allowed to reopen, normal economic life will not resume until their customers feel they're no longer at risk of contagion. In the meantime, he tells them, target assistance to the people, businesses, and places that need it. There's no use sending stimulus checks to households making $150,000 a year or cutting their payroll taxes. They have plenty of money; what they lack is places to safely spend it.

In the weeks before the U.S. government's first jolt of stimulus ran out, Chetty was optimistic that both parties in Washington seemed to be getting the message. "I've consistently found an appreciation for what the data have to say, even in these polarized times," he said then. But with infection rates spiking in a dozen states and Congress and the White House at an impasse over what should take the place of the now lapsed $600-a-week pandemic unemployment benefit and other assistance furnished through the Cares Act, Chetty has become alarmed by what his trove of data is telling him: The recovery has stalled.

Until recently, the Covid crisis of 2020 looked nothing like the Great Recession of 2008—or any other slump. With American businesses and workers held aloft by trillions of dollars in stimulus, the worst damage had been limited to certain sectors and had even started to heal. Now the economy's woes could metastasize, taking down industries and workers that were untouched before.

All this threatens to make Chetty's work much more difficult. The American dream is dead, as he'd proved with exhaustive government data showing today's workers can no longer expect to earn more than their parents did. Now those left behind by the economic changes of the past few decades could be robbed of any remaining opportunities to get ahead.

One of Chetty's most stunning findings was rendered in 2018 by the *New York Times*' website in blue and yellow pixels that swarmed across the screen. It's beautiful, almost soothing, if you can forget you're watching a tragedy unfold. Each tiny square represents the life trajectory of one of 10,000 American men born into a family at the top 20% of the income spectrum. They fall or rise based on the extent to which ▶

ILLUSTRATION BY JOONBUG

◀ they were able to match their parents' comfortable incomes in adulthood. Those yellow pixels that keep bouncing up at the top of the screen are White men in the sample. The blue ones that keep tumbling to the bottom? They're Black men. The animation is a simple, elegant illustration of the pernicious effects of racism on even the most privileged Black Americans.

Many of Chetty's slides and charts tell similarly grim stories, even if the mild-mannered 41-year-old himself rarely shows much emotion. "He presents the data in the most detached and remote way," says Ford Foundation President Darren Walker. Yet "he visualizes suffering in this country in really profound ways. As a Black man, when I see that data, I am emotionally disturbed and profoundly impacted."

Chetty's base of operations is Opportunity Insights, a venture based at Harvard that is part think tank, part research lab. Started in 2018 with $36 million, including $15 million each from Facebook founder Mark Zuckerberg and the Bill & Melinda Gates Foundation, OI was co-founded by Chetty, Harvard colleague Nathaniel Hendren, and Brown University professor John Friedman. Its mission, as spelled out on its website, "is to identify barriers to economic opportunity and develop scalable solutions that will empower people throughout the United States to rise out of poverty and achieve better life outcomes." Translation: to improve economic mobility in the U.S.

The center's staff includes more than a dozen recent college graduates trained in the art of sifting through data, with some sets so large they can take a computer a day or more to analyze. Chetty and his colleagues don't just identify problems, they suggest ways to fix them. A 2014 study found that the best teachers can help each student earn an additional $50,000 over their careers, which works out to $1.4 million per homeroom. Chetty has suggested school districts hold on to skilled teachers by tying pay or bonuses to performance.

Improving education for poor kids wouldn't just help them personally, Chetty's research suggests. It should also boost the economy overall. An analysis of the patents filed by 1.2 million Americans found children of the top 1% are 10 times more likely to be inventors than equally smart kids from other backgrounds. If talented women, minorities, and children from low-income families could invent at the same rate as well-off White men, Chetty and his co-authors estimated, these "lost Einsteins" could quadruple innovation in the U.S.

An "Opportunity Atlas" on the center's website maps income mobility across the U.S. down to the city, neighborhood, and even block. The interactive tool, built using anonymized data from the Census Bureau and the Internal Revenue Service, also pulls statistics on factors like teen-pregnancy, incarceration rates, education levels, and commute times. The atlas, which went live in 2018, revealed that moving a child from a neighborhood with below-average mobility to one with above-average mobility could boost his or her lifetime earnings by about $200,000.

The project became the foundation for a Seattle-area experiment in which families eligible for federal housing assistance received relocation advice and support. U.S. Senator Todd Young, a Republican, has co-sponsored a bipartisan bill to take the Seattle program nationwide. Back home in Indiana, he borrows Chetty's charts to explain the issue to rooms full of constituents. Chetty "goes to great lengths to make his research accessible. He's not just speaking to other researchers," Young says. "He's presenting information in plain language, in a visual format that one can understand within seconds."

Wealthy donors have also embraced Chetty's research. When he was lured back to Harvard two years ago from Stanford, billionaire hedge fund manager Bill Ackman endowed a chair in the economics department for him. Gates, Zuckerberg, and other donors (including Bloomberg LP founder Mike Bloomberg) have given OI resources that few academic labs can match. The center can hire not just research assistants to crunch data but also experienced policy experts who turn findings into advice for decision-makers at all levels of government and web designers who create ambitious data visualizations. "He created a new business model for how to do economics," says Princeton professor Markus Brunnermeier.

Even for Chetty, whose work has documented in damning detail the many obstacles Black Americans face in this country, the murder of George Floyd by Minneapolis police in May inspired a reaction of "horror about how different people's lives can be, given just the color of their skin," he says. Those differences are on full display on OI's new tracker, which shows that as their jobs have disappeared and their children's educations stalled, minorities and low-income Americans have been bearing a disproportionate burden from the virus itself. It also won't help these groups that the disease is depriving governments of tax revenue and putting extreme strains on nonprofits and educational institutions. Many of the policies Chetty and his colleagues have suggested to battle inequality, such as more inclusive college admissions and housing desegregation, will require money to move forward. "All of this is going to get tougher," says Friedman, Chetty's frequent collaborator.

Ford's Walker is more optimistic. "For the first time in my lifetime, we are reckoning with the issues of race and class in America," he says. "Americans have deluded ourselves for years that we are a meritocracy." Now they're waking up to the often-insurmountable barriers to equal opportunity Chetty has spent his career identifying. That makes him "the economist for this moment of reckoning," Walker says. "He understands that growing inequality asphyxiates hope and makes it impossible for people to dream and believe that their children will have better lives."

When Covid-19 first reached the U.S., no one, Chetty included, had much idea of what it was doing to the economy. Government statistics like monthly unemployment numbers or the quarterly gross domestic product series couldn't keep up.

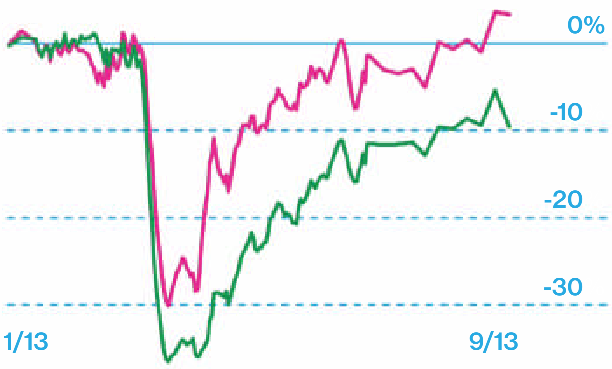
OI had started the year with a full plate of projects, including Chetty's most ambitious data effort yet: a collaboration with the Census to document the economic trajectory of every American ▶

THE PANDEMIC'S ALTERNATE REALITIES

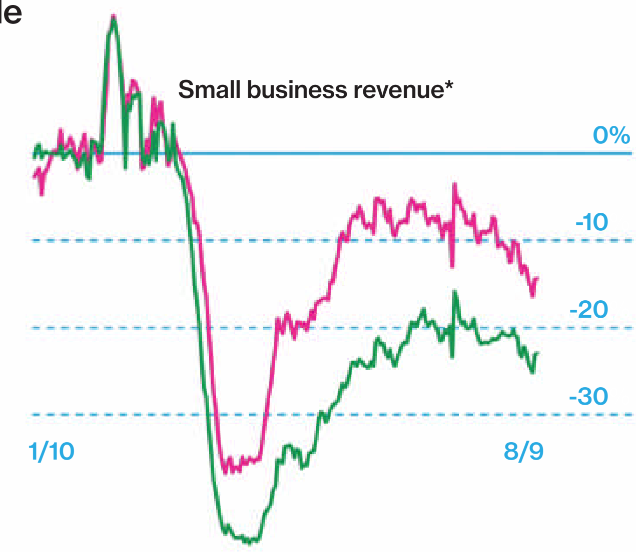
■ Highest earners ■ Lowest earners

Change from pre-Covid levels nationwide

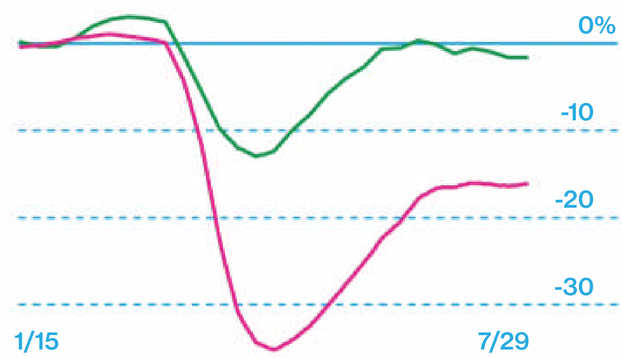
Consumer spending*



Small business revenue*

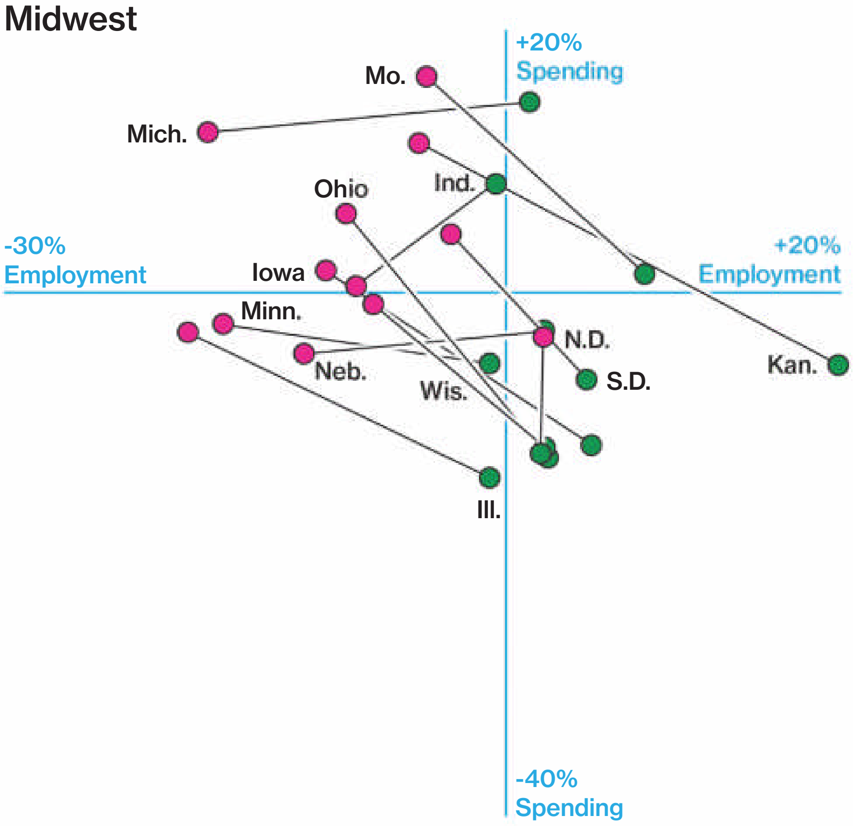


Employment

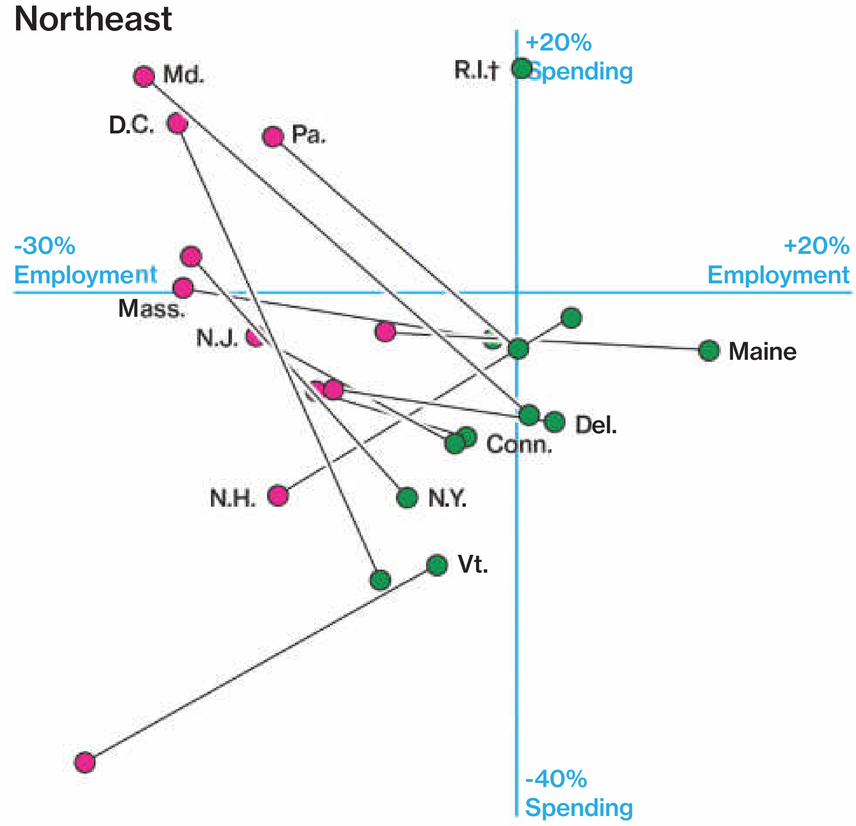


Change from pre-Covid levels by state

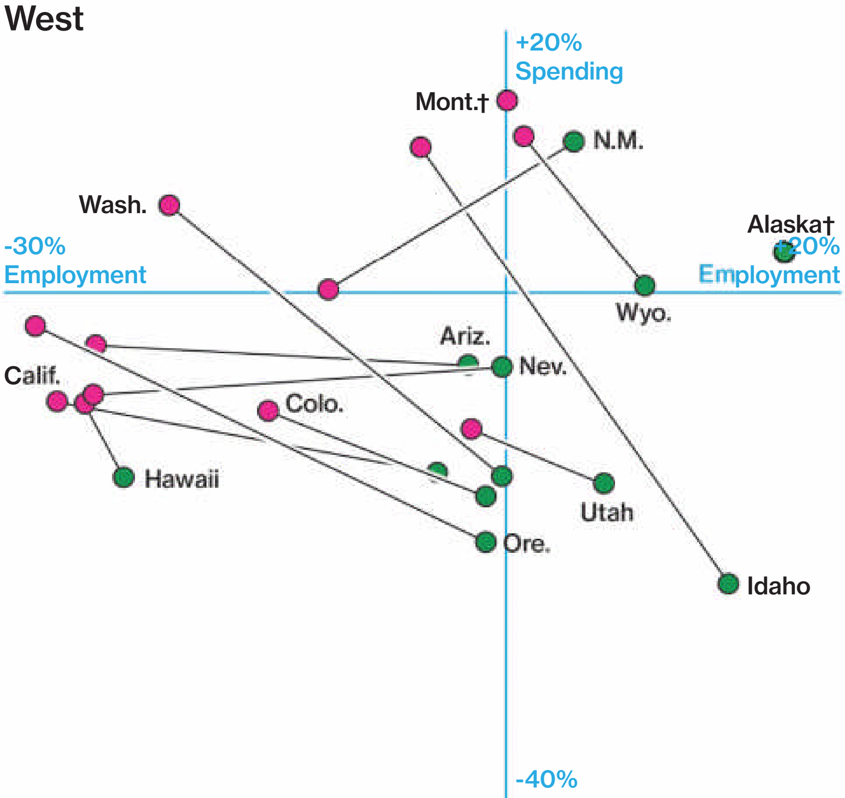
Midwest



Northeast



West



South

*BASED ON ZIP CODE LOCATIONS OF SPENDING AND BUSINESSES. †STATE DATA IS INCOMPLETE. DATA: OPPORTUNITY INSIGHTS

◀ alive over the past 70 years. Suddenly, most of the lab's work ground to a halt as government offices shut down.

With little else to keep their young researchers busy, Chetty and his team started playing around with the few real-time measures of the economy that were available. Homebase, a company that makes small-business software, was offering researchers access to daily internal numbers, for example.

During a meeting in early April, Chetty, Friedman, and others struck on an idea: What if they pulled together data from several private sources then put it all up on the web, so anyone could access it—an economic counterpart to Johns Hopkins University's coronavirus tracker, which has become one of the go-to sources for health statistics.

"We didn't realize just how big a project we were getting ourselves into," says Michael Stepner, a postdoctoral fellow at OI. At first, he planned to devote 10 hours a week to the effort. But eventually it sucked in the entire staff, with work progressing pretty much around the clock as night owls overlapped with early birds. "This just took over the lab, and it took over my life," says Stepner, who will decamp for a teaching job at the University of Toronto next year.

The team initially vetted a hodgepodge of data that might show Covid's effects on inequality, such as food pantry usage. Soon, though, they focused on building only the most rigorous and comprehensive metrics. Frequently cited as their inspiration is Simon Kuznets, the Nobel Prize-winning economist who, in the depths of Great Depression, developed ways to quantify gross domestic product and other metrics. His pioneering work supplied the foundation for how the U.S. and countries around the world measure their economies. Chetty set a similarly ambitious goal for his project: "Bring economic measurement into the age of Big Data."

In today's world, almost every economic transaction—a debit-card swipe, a direct deposit from an employer, an electronic bill of lading for a shipment of steel—has a digital fingerprint that's captured and stored somewhere. Pull enough of this data together and, in theory, you have a God's-eye view of the economy.

Imagine how useful that could be during a recession like this one. In place of the one-size-fits-most policies in the Cares Act, lawmakers would be able to target stimulus with precision to the industries and sectors of the population that need it most and get nearly instantaneous feedback on whether it's working. And of course there are applications beyond this pandemic. Using the tracker, a state hit by a natural disaster could pinpoint which communities were lagging in the recovery. A city trying to revive its downtown could get a rapid read on retail spending.

Using private data to study economics isn't a new idea, but the Covid crisis gave Chetty the confidence that he might be able to pull off something unprecedented. OI's major donors were enthusiastic. "We see it as something that has a great deal of potential for the future, well beyond the current crisis," says Ryan Rippel, who oversees the Gates Foundation's work on economic mobility and opportunity.

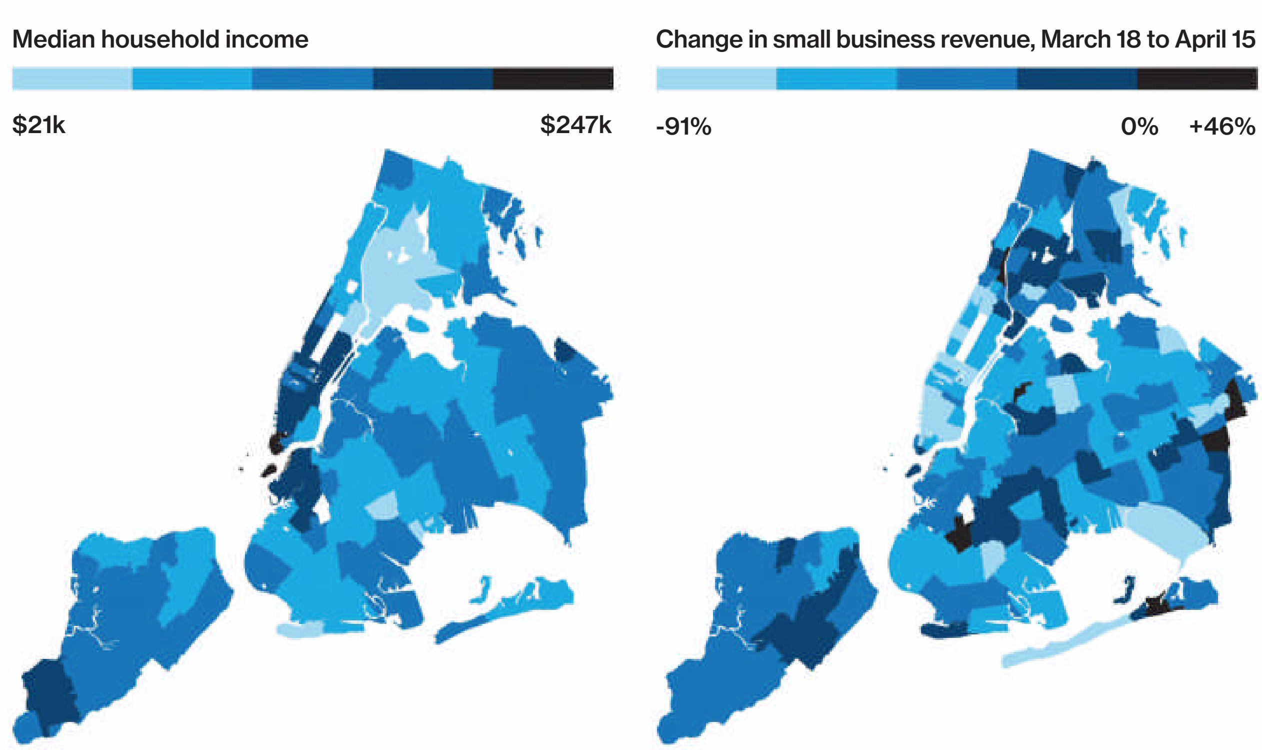
The first hurdle was persuading companies to part with as precious a possession as their internal data. "Normally I wouldn't have thought of approaching big companies like Intuit or Mastercard," Chetty says, but the virus made them much more willing to help. "If we can figure out how to revive the economy, obviously that's good for everyone."

Chetty's reputation, and his years of experience in handling supersecret government records, reassured providers their data would be properly aggregated, anonymized, and blended with other sets in ways that fully protected privacy. "Raj's group is pretty advanced," says Ram Palaniappan, chief executive officer of Earnin, which makes a financial app that's supplying information on wages of lower-income workers.

Ensuring that the individual streams of data could be pooled to render an accurate picture of the larger economy was its own challenge. "The main issue when you get data from these private companies is that you're learning something about their business and not something about the economy as a whole," says Friedman, a co-director of the center. Some sources, a debit-card issuer, for example, were rejected as unrepresentative. "Sometimes it worked and sometimes it didn't, and we tried to be creative about how to fill in the holes we needed."

In May, after a five-week marathon, OI launched the tracker, and the world got to see how jobs, spending, small business revenue, and other metrics responded to the onset of the pandemic in the U.S. Other academics started poring through the rich data sets, freely available for download, to study everything from inflation to partisanship. States and local governments started consulting the tracker to see which industries needed

THE COVID RECESSION SWEEPS NEW YORK CITY



CHETTY: COURTESY CHETTY FAMILY. DATA: OPPORTUNITY INSIGHTS help. "We literally use it every single day," says Rob Dixon, director of the Missouri Department of Economic Development.

On the tracker, you can see that back in March, when the lockdowns started, almost every household in America was reeling, with overall consumer spending plunging 33%. Then, around April 15, spending surges, with bigger jumps in low-income neighborhoods: That's the first round of stimulus payments landing in people's wallets. As jobless benefits kick in, including the $600 per week pandemic top-up that left many workers with more than they were earning before, spending kept rising. By late June, residents of low-income neighborhoods were spending a bit more than they had before the crisis.

Displayed on a map, though, the tracker data revealed some troubling patterns. In March and April, small businesses in affluent big-city neighborhoods saw their revenue drop 70%—more than twice the decline in the least affluent areas. Saddled with high rents, many of these shops, restaurants, and bars shut their doors for good.

Because high-income Americans make up such a large share of overall spending, the effects of their caution lingered even as cities and states allowed businesses to reopen. Using the tracker, you can compare neighboring states that reopened at different times, such as Colorado on May 1 and New Mexico on May 16, and see there's almost no difference in employment or consumer spending trajectories.

Chetty grew even more alarmed as the summer wore on. His conversations with senators about the best ways to do another round of stimulus hadn't borne fruit, with congressional Democrats insisting the economy needs far more support than Trump and Republicans have proposed. In early August, unemployed Americans stopped getting their extra $600 a week. The tracker didn't show activity plummeting right away, as Chetty worried it might. Instead, measures like spending and small business revenue flatlined. "We're basically stalled," he says.

After the tracker's debut, OI continued to sign up companies willing to share their data (there are 11 in total now). What emerged was an even clearer picture of the gaps opening between the most privileged Americans and everyone else. In August, payroll provider Paychex offered data that, combined with info from Intuit, Earnin, and Kronos, revealed that high-income workers had regained almost all the jobs lost in March and April. (The findings Chetty shared with Biden and Harris.) That "all the more heightens the need for targeted unemployment benefits," he says.

Chetty at 9

The virus's spread, and the lack of a national strategy to fight it, hobbled the economy in ways Chetty hadn't expected. After cases and deaths rose in places such as Florida and Arizona, key indicators like consumer spending and small business revenue dipped but didn't plunge.

Why? Chetty's working theory is that Sun Belt states' economic resilience might be a sign that they're not taking the disease seriously enough to get it under control. Trying to keep the economy humming while the virus runs rampant is a "short-term-ist perspective" with long-term costs, he says.

A scenario in which Covid is never corralled the way it has been in some countries in Europe and Asia haunts Chetty. "It's not going to be a sustained recovery. There's just no way," he says. "We're going to be stuck trying to go along and accept a fair number of Covid infections and deaths and muddle our way through until finally there's a vaccine."

This would be especially damaging for disadvantaged groups, children in particular. If schools can't reopen safely for in-person learning, low-income kids will fall even further behind their peers. The tracker includes one bit of noneconomic data, from Zearn Inc., a nonprofit online math platform, showing overall usage dropped when schools closed in March. Then, however, kids in high-income areas, prodded by well-educated parents who were working from home, started logging on again, completing more lessons in early May than they had before the crisis. By contrast, overall participation on Zearn had dropped almost 30%, and by more than half for children in low-income areas, possibly because they were in households where parents were more likely to be "essential" employees working outside the home. "Public schools were, to some extent, serving to level the playing field and increase social mobility," Chetty says. With the shift to mostly or only remote learning in many school districts, "you're going to have massive impacts on inequality."

Chetty doesn't pretend to have simple solutions to the Covid recession, or to America's worsening inequality gap. What he has to offer are smaller but often easier-to-implement fixes, like the program in Seattle. Because of his scientific bent, he likes to see policies tested in one particular locale before they're rolled out more widely. "A lot of the solutions that are going to have the greatest impacts are going to be locally led and community created," says Rippel of the Gates Foundation.

Unlike some high-profile economists who have strongly partisan viewpoints, Chetty doesn't ask elected leaders or their voters to abandon their political ideologies. He just tries to get them to pay attention to the people and places the economy has shunted aside. We'll only see their suffering if we obsess less about aggregate measures like GDP, and more about what's happening on street corners and in schoolyards where Americans are blocked from reaching their potential.

To figure out how to restore opportunity for the disadvantaged, Chetty will need lots more data. So he's still on the hunt for fresh inputs for his tracker: better ways to measure cash transactions, health-care spending, housing costs, and the balance sheets of businesses and households. The more data you have, the more "it brings to light the interconnected nature of the economy," he says.

A Radical Experiment In Financial Vaccination

In the summer of 2017, Tomas Vargas Jr. had a wife and two young children at home in Stockton, Calif., and a teenage son he hadn't seen in a decade. He had a $31,000-a-year position at UPS, side jobs repairing cars and carrying groceries, friends killed by gunfire, and night terrors. He was 33 years old. "In the morning, I would look dead in the mirror and tell myself, 'I know you hate it. I know you don't want to keep going. But what gives you the right to just be a piece of shit like that?' And after I looked at myself deeply in my eyes, I'd sit there and tell myself, 'Wash your face and get started and try.' "

One day that autumn, Vargas heard Michael Tubbs, the new mayor of Stockton, on television talking about giving away cash to his constituents, nearly a quarter of whom live below the poverty line. Vargas just laughed. Another year of work and dread followed. Then a postcard arrived in the mail, one of 4,200 sent to randomly selected residents of neighborhoods with a median annual income below the city's figure of $46,000. It included a request to complete an online survey of 100 questions covering such things as stress levels and the use of check-cashing services. Vargas answered them all. In January 2019 he was informed that he was one of about 125 people randomly chosen to receive a guaranteed income of $500 a month for 18 months. He'd be part of the Stockton Economic Empowerment Demonstration.

A mural in downtown Stockton celebrates the guaranteed income project

Vargas figured it had to be a con. But he went down to the SEED office near city hall, where Sukhi Samra, the program's director, assured him it wasn't. He would receive the money on a SEED debit card and could spend it however he chose. Researchers would record everyone's anonymized expenditures, which would then be published on the program's website for anyone to see. A control group of 200 people were also being studied, receiving small payments in exchange for answering questions about their financial well-being. "Damn, it's a pretty good scam if it is," Vargas thought. He signed up, and in mid-February $500 appeared on the debit card he'd received, as promised.

The idea of the government giving people money directly has been cycling in and out of favor in America for more than 200 years. It's the essence of Social Security and the annual dividend paid to Alaska residents, and it was gaining adherents again in 2016 when Stockton elected Tubbs as its first Black mayor. He was 26, born on the city's south side to a teenage mother and an incarcerated father, and educated at Stanford. A

One of America's most diverse cities was already testing guaranteed basic income when the pandemic struck

By Susan Berfield and Sarah Holder

Photographs by Andri Tambunan

cousin's murder had drawn him back home. He'd served a term on the city council before winning 71% of the mayoral vote. One of his priorities was finding ways to alleviate Stockton's deep poverty and economic inequality, which saw White families earn twice as much as Black families on average.

That same year, Chris Hughes, a co-founder of Facebook Inc., had helped start an organization called the Economic Security Project. Among its policy prescriptions is a guaranteed basic income, driven by the belief that today's economy is fundamentally unjust and frequently precarious. A guaranteed income wouldn't have to be enough to live on. It wouldn't fix every problem. But it could, the group hoped, make recipients less vulnerable. They were looking for a community to try out the concept and show that people could be trusted to spend money that came without restrictions.

By 2019 there was funding for the pilot, there were researchers and recipients, there were even three murals in downtown Stockton inspired by the idea. This year, the coronavirus pandemic brought hardship on a scale that both tested the experiment's limits and made it more urgent.

As a candidate to be the first U.S. city in a generation to experiment with a basic income, Stockton made a lot of sense. A modestly sized metropolis of some 300,000, situated along the San Joaquin River in California's Central Valley, it was founded during the gold rush, named after a commodore, and long ago became one of the country's most diverse cities. But diversity hasn't meant equality. The Crosstown Freeway divides the largely White and more prosperous north from the predominantly Hispanic, Asian, and Black south, where redlining, underinvestment, and aggressive policing have caused lasting harm. Life expectancy to the south is eight years lower, and the temperature is three degrees hotter. In 2007 no urban center had a higher rate of foreclosures than Stockton; five years later it became the first major U.S. city to declare bankruptcy.

When Tubbs took office, Stockton's finances were still constrained. Its poverty rate was twice the national average. At the time, labor experts, Silicon Valley executives, and soon-to-be presidential candidate Andrew Yang were pushing universal basic income as a way to address the expected job loss from increased automation. Tubbs came at it from a different angle. "I didn't learn this from the tech bros," he says. He knew that Martin Luther King Jr. had advocated for some form of basic income in the last year of his life. "In a country with so much, where Jeff Bezos can make $13 billion a day, 35 million people shouldn't be hungry. That seems like such a noncontroversial take."

Tubbs is speaking from his second-floor office at City Hall. Painted on the walls are Isaiah 1:17 ("Learn to do right; seek justice") and a lyric from the rapper J. Cole ("Dream like you never seen obstacles"). Tubbs is sporting a blue mask flecked with white polka dots. He's got an hour.

In 2017, during his first months as mayor, Tubbs met Natalie Foster, co-chair of the Economic Security Project, at a tech conference in San Francisco. When he learned she was seeking a city for a basic income pilot, he pitched Stockton. Foster was intrigued, but Hughes had to be convinced, and so did other potential funders. "It was, 'I've never heard of Stockton. He's only been mayor for a year. There's a bunch of mayors and a bunch of cities with a lot more cachet,'" Tubbs says.

He told Foster about programs already under way to help kids graduate from high school and go to college, to reduce homelessness, and to curb crime. Tubbs, by virtue of his age, background, and ambition, had also been attracting some cachet of his own–a documentary about his city council run had premiered at the Tribeca Film Festival. (In 2018 he graduated from a Harvard mayoral training program sponsored by Michael Bloomberg, founder and majority owner of Bloomberg LP, which owns *Bloomberg Businessweek*. The next year Bloomberg's foundation donated $500,000 to a Stockton education reform group. In 2020, Tubbs endorsed Bloomberg's bid to become the Democratic candidate for president.)

One July day in 2017, Hughes arrived at a cul-de-sac on a quiet street on Stockton's south side to meet residents from a low-income housing complex. He introduced himself as Chris and asked what they thought of a guaranteed income. It wasn't until after he left that anyone figured out who he was. That August the Economic Security Project contributed $1 million to Stockton's guaranteed income pilot, and over the next six months Foster and Tubbs persuaded a dozen other organizations and individuals to contribute an additional $2 million. They finally had enough to back the pledge Tubbs had made on TV.

Tubbs says he's imagined what extra money would have meant for his own mother, who worked retail and fast-food jobs while raising him. Less overtime and weekend work. Less stress. More breathing space. "I think it really would have meant a better parenting and adulthood experience for her," Tubbs says.

It had been almost five decades since the government last tested the benefits of no-strings-attached cash. In the late '60s and early '70s, following some failed gestures by the Nixon administration toward welfare reform, several local experiments in "income maintenance"–essentially a form of negative income tax, which guaranteed money to people below a certain income threshold–were launched in cities such as Denver, Seattle, Gary, Ind., and Trenton, N.J. Researchers combined cash payments and job-training programs, aiming to test the effects of a negative income tax on physical and mental health, family planning, and purchasing habits–but mostly to see whether recipients worked, and how much.

The experiments produced unintended effects. While the money helped keep some couples together, it also allowed some women to leave their husbands, which many people didn't think was a good thing. Even more ambiguous were the effects on employment. Some recipients worked more, while some, often mothers and college-age adults, worked less. Data from a more robust program that ran in Dauphin, Manitoba, from 1974 to 1979 showed more definitively that most recipients didn't stop working.

Eventually, priorities changed, the pilots were abandoned, and, in the U.S., welfare requirements grew ever more ▶

ILLUSTRATION BY JOONBUG

◀ stringent. The first significant guaranteed income pilot during the current renaissance of interest took place in Finland, where 2,000 unemployed people were given the equivalent of $600 a month for two years starting in 2017. Again, the money didn't decisively appear to help people find work, though it didn't keep them from looking, either. Perhaps the most interesting finding was that participants reported being happier.

To Samra, SEED's director, that's proof enough of the idea's worth. "I think the government's job is to care for the well-being of its people," she says. When SEED was being designed, Amy Castro Baker, an assistant professor at the University of Pennsylvania, and Stacia Martin-West, an assistant professor at the University of Tennessee, involved Stockton residents in discussions about how it should work. The researchers asked how best to select recipients, disburse the money, and present the results.

The experiment wasn't set up to encourage work—it assumed most residents were already working hard enough. And because only 125 people from Stockton's poorest communities were selected, the participants weren't expected to be representative of the city as a whole. Its population is 11% Black, while 28% of the recipients are; 28% of residents and 37% of recipients identify as Hispanic. Almost 70% of the participants were women (who apparently open the mail more regularly than men do). The breakdowns of employed to unemployed aren't perfectly representative, either: When the project began, just over 55% of Stockton's working-age population had jobs outside the home, while 43% of SEED recipients did.

The intent isn't to cure anyone's poverty or unemployment or housing insecurity, Castro Baker says. It's to help build resilience. The real question is: "To what degree does guaranteed income serve as a financial vaccine?"

Dentures, car repairs, prom dresses, birthday dinners, rent, and groceries—especially groceries. That was how Stockton's basic income recipients were spending their money in 2019. They reported that their stress was reduced, that they could work more easily and stay healthier, and that they had more time with their families. There was one caveat to the spending data: Each month about two-fifths of the money, on average, was withdrawn as cash, in part because of recipients' unfounded fears the program would end and they would no longer be able to access the funds. Information about how the cash was spent isn't yet available, but of the money that was tracked, people typically spent 40% on food each month and only about 2% on "self-care or recreation."

In March, as California was under lockdown, food came to account for 46.5% of spending as recipients tried to stock up as best they could. "You're talking about low-income people who were then able to prioritize the health of themselves and their families, and they wouldn't have been able to otherwise," Castro Baker says. She and her colleagues don't regard the pandemic as a confounding variable in the experiment, but rather a clarifying one. (They expect to release their analysis of the pre-pandemic months early next year and the results of the entire experiment in 2022.) "This is the third serious economic crisis in 12 years," Castro Baker says. "So understanding how people use cash in the context of shock is really, really key."

Zohna Everett's life started to come apart in 2018 when she found herself unemployed after eight years working in logistics for the Department of Defense. Her husband drove trucks on contract, and when he didn't have a job, they didn't have enough money to cover their expenses. She started driving for DoorDash, but that required cash for gas to deliver takeout orders, which sometimes meant delaying bill payments. She also took out loans to study accounting online at Grand Canyon University, a for-profit Christian school based in Phoenix.

And she received the postcard from SEED. Months later she was in the Phoenix airport, returning from a school-sponsored visit, when she got the call letting her know she'd been selected for the pilot. "I was sitting there trying to be all nonchalant, but everything in me was jumping up for joy," she says. "Later, I just cried and cried. It was so much of a relief. You don't know how hard it is to hustle like that." She cries again, sitting in the SEED office, remembering. She's wearing a black Puma hat and a pink mask, often tapping her long, pink-polished nails on the table as she talks. In her silver backpack is a Bible, thick with notes, that she carries with her everywhere.

With the SEED money, Everett was able to get a new checking account and stop using a check-cashing service. She arranged for her monthly bills to be paid automatically. She quit DoorDash and focused on her studies. She was able to tithe 10% of the $500 to her church. "Bam, bam, bam, bam, bam. It was just like, 'I can breathe,'" she says. "This is what freedom feels like."

At the start of the year she accepted a full-time job building cars at Tesla Inc.'s factory in Fremont. She figured that when the guaranteed income experiment ended, she'd be all set. There would be savings, maybe even a house at long last. That spring she left her husband and began divorce proceedings. She got sick with Covid-19. The job went on hold. And SEED was set to run out in July.

In late May, though, Tubbs and Samra called to tell her that SEED would continue through January 2021. Everett thanked them, thanked God, clasped her hands, pumped her fists, and said, "This is amazing." She was also able to keep her job at Tesla, going on unpaid leave and collecting unemployment as she continued to suffer shortness of breath and a persistent cough.

Vargas's experience of basic income, too, was marked by pre- and post-Covid periods. As the experiment began, he kept his job at UPS. He spent less time hustling for other work, though, and more time with his kids. He also bought himself some art materials so he could start etching glass and putting decals on shirts.

Eventually, he decided to look for a new job. "Before SEED, I would have stuck it out at UPS, being stressed out with no opportunities to advance after two years," he says. At the end of last year he applied to work as a freight supervisor at the local airport. He took the drug test and passed the background check—just in time for the pandemic to all but shut down the airport. "From January to April, I didn't have any income, only the SEED payment," he says. "That money gave me so much reassurance." His first unemployment check took months to arrive.

In June, Vargas became a facilitator at Fathers and Families of San Joaquin, a nonprofit that works with formerly incarcerated men and their children. He'd been introduced to the director, Sammy Nuñez, at a meeting where Vargas had agreed to discuss basic income with California Governor Gavin Newsom. Vargas loves pretty much everything about his new job. "Everybody is working together to try to help people in need. What better cause can you work for?" he says. With his monthly salary of about $3,200 and the extra $500, he's been able to keep his bills paid and his refrigerator full. He sent pizzas to a co-worker in distress. "There's a big-ass difference between when I first came here to where I am now," he says.

Everett

Few wanted to see the Stockton program end in the middle of a pandemic. The $400,000 to extend it came from Carol Tolan, a philanthropist in New York City who co-owns her family's food business. She met Tubbs in 2014 at a showing of that documentary about his first campaign. (Another film about Tubbs, *Stockton on My Mind*, aired on HBO this summer.) Tolan had provided some money to help publicize SEED early on, and she was motivated by the growing crisis to keep it going. "We have huge income inequality in this country," she says. "I don't have a platform. They are my platform."

Tolan also encouraged Tubbs to help spread the idea beyond Stockton. In July he announced the formation of the Mayors for a Guaranteed Income coalition, a group of leaders aiming to launch direct guaranteed income projects in their communities and advocate for policy change at the state and national level. The coalition started with 11 members; it now has 25. Jack Dorsey, chief executive officer of Twitter Inc., has pledged $3 million in support. Next year there could be three or more new pilots under way. Samra says they're even exploring a second one in Stockton. Protests against the country's persistent racism have heightened the sense of urgency, Tubbs says. "All these mayors would not have signed on without both Covid-19 and the George Floyd civil unrest, hearing from the people that we want real opportunity, real hope."

The country's interest in direct cash payments seems to have grown more urgent, too. In late March, Congress passed the Coronavirus Aid, Relief, and Economic Security Act—essentially a guaranteed income, albeit a finite one. Unemployment benefits increased, but the system was also exposed as bureaucratic, slow, and inequitable; Black applicants were granted assistance around half as often as White ones. Even given the drawbacks, studies suggest that the stimulus package prevented an estimated 12 million people from sliding into poverty. Six bills to extend or expand cash assistance have been introduced in Congress. If any pass, support for more permanent payments—with no applications required and no conditions attached—could increase. "When we have something and see it as our right, it's a lot harder to take that away," says Madeleine Neighly, who oversees the Economic Security Project's work on guaranteed income.

Supporters of a permanent guaranteed income say it's something the country can afford. It could be paid for by a wealth tax, a financial transaction tax, a carbon tax, or a data dividend. And poverty itself costs a lot of money, they say, in terms of health care and crime and lost opportunity. There isn't yet a single calculation of how much a guaranteed income designed for poorer Americans would cost. Instead, there's an estimate that relies on extending the earned income tax credit, which effectively serves as a guaranteed basic income. The nonpartisan Tax Policy Center figures it would cost about $2.5 trillion over 10 years to loosen eligibility requirements for the credit and increase it to as much as $4,000 annually for single workers and twice that for married couples.

Those who've done the math for a more expansive program, a truly universal basic income, have predictably produced even more challenging numbers: The cost of a $1,000 monthly dividend to every adult would exceed $3 trillion a year. Paying for that, skeptics note, would inevitably mean cuts to other safety net programs. And maybe that money would be better spent on providing good jobs, establishing universal health and child care, managing climate change, or properly funding Social Security and Medicare. "I love the spirit and philosophy behind UBI," says Robert Greenstein, president of the nonpartisan Center on Budget and Policy Priorities. But he argues there's not enough political will to make it happen. He doesn't believe that even a smaller guaranteed income program would get much attention in Washington. Stockton's program could be helpful in showing that people will continue to work, he says, but he thinks advocates would do better to focus on increasing the federal minimum wage and expanding compatible programs such as the earned income tax credit, the child tax credit, Social Security, and the Supplemental Nutrition Assistance Program. Changes like these could be implemented as soon as next year, he says.

As for the people who might object even to that—who believe the welfare system is already too generous, that the poor are undeserving, that any amount of free money would be misspent—the coronavirus has made it clear just how many Americans are vulnerable to sudden shocks. Everett saw it firsthand in Stockton. Some of the very same people who didn't believe it made sense to give out money suddenly had their hands extended. "That's my argument for a guaranteed income," she says. "What if it was you?" Jobs can disappear. Trouble can come. And money, well, "as quick as it's there, it can be gone. It can be gone just like that."

THE MILITARY'S WAR ON HIV-POSITIVE SOLDIERS

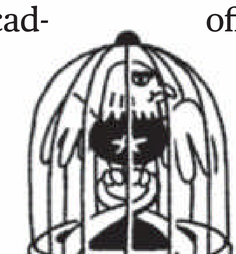
Don't ask, don't tell is dead. But America's armed services still bar Poz recruits from enlisting and can kick out those who contract the disease while serving

By Erik Larson

Photograph by Russel Daniels

Kevin Deese joined the U.S. Naval Academy in 2010 with dreams of becoming a distinguished military officer and giving back to the country he loves—just like his Navy pilot brother did. "I wanted to follow in his footsteps and serve our country," he says. "He was my role model, and I was inspired by his choice to be of service to others. I wanted that for my life, too."

Deese thrived at the storied academy, excelling in math, physics, and calculus while receiving medals for rifle and pistol marksmanship. As graduation neared he was selected for an elite training program for officers on nuclear-powered submarines, a track that would require additional training after graduation at the Navy's Nuclear Power School in Goose Creek, S.C. The plan, he says, was to learn how to command specialized crews and operate some of the most technologically advanced equipment in the world.



"I knew that's what I wanted to do," Deese says. "I had the grades, brains, and the mathematical abilities to do it." He even took steps to try to get certified as a Navy diver once he left the academy, one more way to stand out on a sub. Everything was going as planned.

But on April 1, 2014, about six weeks before graduation, a top academy official called Deese into his office to inform him that after getting his diploma he would be discharged instead of offered a commission as an officer. The reason? He tested HIV-positive. The result came from a voluntary blood test he took in his bid to join the diving program, he was told. Deese says the diagnosis left him too stunned to challenge the decision, which he was told was "black and white" and couldn't be appealed.

Deese still attended graduation, complete with a flyover by the Navy's Blue Angels and a military parade. But when his 1,100 fellow graduates stood to take the officer's oath, he couldn't take part. "I had to stay seated," he says. "I was just so embarrassed and ashamed that I wasn't going to be serving like all my classmates."

Deese's dream of protecting the nation had collided head-on with a longstanding military policy that many Americans may find surprising in 2020: People with HIV are banned from enlisting in the armed services, and those who contract the disease after they enlist are prohibited from commissioning as officers or serving in combat zones. As a Naval cadet, Deese wasn't technically enlisted; and with a commission off the table, he had nowhere to go. The Navy kicked him out with an honorable discharge. Deese says he was left adrift: "I had never even considered what I would do if I wasn't in the Navy."

Although the U.S. armed forces have tried to become more equitable over the years, improving opportunities for women and scrapping an outdated ban on service by openly gay Americans—the Cadet Chapel at the U.S. Military Academy in West Point, N.Y., has even hosted same-sex weddings—the story of inclusion isn't the same for people with HIV. Those who want to join the military after testing positive have no route to do so, and the careers of active duty personnel who contract the disease are constrained or cut short.

Deese, now 28 and working in corporate procurement at a bank in Buffalo, is trying to change that. He filed a lawsuit against the U.S. Department of Defense in 2018 that's one of three related potentially landmark cases aiming to force the military to let HIV-positive service members deploy and be commissioned. Depending on how the cases play out, the litigation could even force the military to let HIV-positive men and women enlist. After all, refusing employment based on HIV status in the private sector has been illegal since at least 1990, when the Americans With Disabilities Act was passed by Congress.

Deese is joined in the lawsuit by a U.S. Air Force Academy graduate whose hard-fought commission after graduation was rescinded because of his previously known HIV status, even though his superiors assured him that his diagnosis a few years earlier wouldn't get in the way. The airman, who enlisted and served three years before joining the academy in 2012 to become an officer, is participating in the case anonymously as John Doe. Both men contend that advancements in HIV treatment that became commonplace years ago make restrictions based on HIV status unfair and outdated.

"There's no longer a rational basis for these policies, and when you treat people differently based on a trait or ▶

ILLUSTRATION BY JOONBUG

Airman “Voe”

◀ characteristic that is essentially irrelevant, that is the definition of discrimination," says Scott Schoettes, their lawyer from the LGBTQ legal advocacy group Lambda Legal. "HIV treatment has advanced to a place where it's not really relevant to whether someone can deploy—as irrelevant as skin color or gender."

EVEN WHEN COMMANDING OFFICERS SUPPORTED HIV-POSITIVE SOLDIERS DEPLOYING, TOP BRASS SAID NO

Deese and Doe both had support from superior officers and high-ranking medical personnel who gave formal opinions that both men should receive waivers, a sign that bias against personnel with HIV may sometimes be the exception rather than the rule. Even so, top brass denied both requests, with the stated reason being that they weren't medically fit.

Crucially, the men argue that the Navy and Air Force routinely allow people with similarly chronic but manageable conditions including diabetes to enlist, commission as officers, and deploy worldwide, suggesting people with HIV are being singled out. "People living with HIV have suffered through a unique history of misinformation, stigma, and discrimination for decades, and continue to suffer such discrimination to this day," the suit says.

The military divides other chronic manageable illnesses into two categories: those that anyone can have and still deploy, and those that require a waiver to deploy. The former category includes hypertension and hyperlipidemia up to certain levels as well as asthma controlled by an inhaler. Diabetes and many other types of illnesses require a waiver for deployment—which are frequently granted for such illnesses, but never for HIV.

In a motion on Jan. 29 to dismiss the service academy grads' suit, the Defense Department acknowledged the value of HIV-positive service members but defended the current policies. The U.S. argues they're justified because HIV poses "an appreciable impact" on troop readiness and could cause problems in host nations where HIV-positive individuals may not be allowed to travel. The government also argues that the rules are justified because the infection is incurable, requires expensive lifelong therapy, and results in limits to duty assignments. Even more concerning, the government argues, is the risk of transmitting the disease in the heat of battle during emergency blood transfusions.

"The policies are based on the current medical evidence," the Defense Department said in the filing, as well as the ability of an HIV-positive service member "to continue service without exacerbating his or her condition or risking the military mission, the impact of having HIV-infected personnel on commands, and the safety of the military blood supply."

Schoettes says that argument is unfounded because it's much harder to contract the disease than people assume, including in cases in which tainted blood may be shared. Moreover, Schoettes argues, no job is riskw free, especially in the military. He notes that civilian health-care professionals are exposed to the same risk every day, because anyone who enters an emergency room in the U.S. could conceivably be HIV-positive, including patients who've experienced trauma and are bleeding from, say, car accidents or shootings. If hundreds of thousands of nonmilitary medical professionals can deal with the risk, he says, then why can't the military's top brass?


Deese

"Their opinion on that is really not supported at all by the science," Schoettes says. "What we know is the risk is incredibly small, if it exists at all. That's really the crux of our argument. They're demanding zero risk when it comes to HIV, and that's unreasonable. It's not a standard they apply to anything else or any other situation." The Defense Department declined to comment on the litigation.

About 2,000 people with HIV are serving in the military, court records show. Defense Department records say that from 2011 to 2016, the Navy diagnosed 388 sailors with HIV, while the Air Force diagnosed 181 airmen. In 2016 about 68% of affected sailors and 65% of airmen were still serving. In 2011 the U.S. Army counted 480 soldiers with HIV, the filing says.

Medical science is at the center of the dispute. Drugs developed in 1996 to prevent the virus from replicating "transformed the landscape of HIV treatment," according to Deese's complaint. The drugs reduce the number of copies of the virus that can be detected in a milliliter of a person's blood to lower than 20, making it technically undetectable. A milliliter of blood from someone in acute or secondary stages of infection may have 1 million or more. Although still incurable, the suit says, HIV is a manageable condition "rather than the terminal diagnosis it once was."

The servicemen's argument got a significant boost on Sept. 2 when the most important claims in their lawsuit survived the Defense Department's motion to have the cases dismissed. U.S. District Judge Richard Bennett in Baltimore said in a scathing decision that the men were likely to prevail on their claims of unconstitutional discrimination because there's "no rational basis" for denying them commissions just because they're HIV-positive.

"Both plaintiffs were exemplary military service academy graduates who, save for their HIV status, would have received commissions with the rest of their graduating class," Bennett wrote. "The military's policy of withholding officer commissions from HIV-positive service members renders those service members second-class citizens. That is precisely what the equal protection clause forbids."

The case is now headed for a potential

trial, which hasn't yet been scheduled. Deese says he's optimistic about the outcome, especially because a similar case has advanced even further, having survived a challenge before a federal appeals court. In that case, two Air Force airmen are challenging decisions to discharge them because they tested positive for HIV. The men, who are participating in the case under the pseudonyms Richard Roe and Victor Voe to protect their identities, were told their HIV status prevented them from deploying, and because deployment was a key part of their job, they had to go. The decisions represented a shift in the Air Force's treatment of HIV-positive personnel, they argue, because service members who contract the disease are usually allowed to remain and perform different duties, if necessary, or get waivers. But in both of their cases, the inability to deploy was deemed to be too detrimental to their job.

"Not in my wildest dreams did I ever think this would happen," says Voe, 28, a California native who's performing maintenance duties on a base in the Midwest. He's not using his real name to avoid any blowback while he fights to stay in the military. "Not many people know my current situation on this base."

The litigation has been stressful, says Roe, whose parents both served in the military, but he's pursued the case "to ensure no one else has to face this type of injustice." The military's current view toward HIV-positive soldiers is based on "politics and ignorance," he says. "There are so many people who think HIV is a death sentence and they don't realize the science and progress we've made."

Roe, who is in his 20s and serving in the southern U.S., says his commanders at the local level have been supportive and recommended his retention. Still, the uncertainty of his case's outcome is taking a toll. "Up until now I have always planned on and wanted to serve for 20 years, to follow in my parents' legacy of serving my country," he says. "Now I'm wondering if that's going to be possible."

The government lost its motion to dismiss the men's case in February 2019, when U.S. District Judge Leonie Brinkema in Alexandria, Va., issued an order blocking the Air Force from discharging Roe and Voe while the case proceeds. Voe says he was thrilled that the judge's decision meant he wouldn't have to line up another job right away. "She understood everything we were saying and why this doesn't make sense. That was very validating," Voe says. "I could tell I was on the right side of this fight."

The victory was reinforced when the U.S. Court of Appeals for the Fourth Circuit upheld the ruling, saying in a decision that the men were likely to succeed in their claims that the Air Force violated its own policy by failing to evaluate them for possible waivers that would have let them deploy. The court held that the government was unable to reconcile its policies with current medical evidence and that the military's HIV rules were based on "obsolete understandings" of a virus that isn't easily transmitted.

"A ban on deployment may have been justified at a time when HIV treatment was less effective at managing the virus and reducing transmission risks," the appeals court said. "But any understanding of HIV that could justify this ban is outmoded and at odds with current science."

Judge Brinkema is also overseeing a third Lambda Legal case filed by Washington, D.C., National Guard Sergeant Nick Harrison, who sued in 2018 alleging the military's HIV policy is illegally preventing him from becoming a military lawyer in the Judge Advocate General's Corps. The Oklahoma native, who joined the Army Reserves in 2003, was deployed in 2006 to Afghanistan and in 2011 to Kuwait. After returning home, he was diagnosed with HIV.

Harrison, 43, says there's a glaring disconnect between HIV research and the policymakers in the military. That suggests there's discrimination at play at the top, he says, especially after he'd won support for a waiver from his superior officers and military medical professionals.

"It's problematic because when someone already has it fixed in their mind that they can't deploy you because of HIV, and it's not based on any rational reason, then what you're basing the decision on is some kind of stereotype," Harrison says.

In 2018, Brinkema denied the government's motion to dismiss Harrison's case, rejecting its argument that the level of deference typically granted to the military by the courts barred the case from proceeding. "Even though the court must give due deference to the military, that doesn't mean the military is immune from a court's review," Brinkema said.


"Roe"

Lambda Legal's Schoettes says the military should abandon the cases, particularly after the victory on Sept. 2 in Deese's case. "By now, one would hope the administration would see the writing on the wall and stop defending policies that serve no purpose but to prevent these patriotic young men from serving their country," he says. "We will continue prosecuting these lawsuits until the military is forced to bring its HIV-related personnel policies into the 21st century."

A joint hearing in the suit brought by Harrison and the case filed by the two anonymous airmen was held on Sept. 14. A decision is forthcoming, but the plaintiffs were encouraged by one of the judge's comments. During the proceeding, Brinkema referred to HIV as being "for all practical purposes, except for the extreme issue of a blood transfusion, basically not transferable."

Deese's next hearing hasn't been set. While he waits for his case to wind through the courts, he's glad to have a job and enjoys using his skills in the private sector. But life in Buffalo isn't the same as being an officer on a submarine, where he says he could be helping command "superstealthy top-secret missions" to protect the homeland. A commitment to serve was "drilled into his head" after he joined the naval academy, he says. "I'm still trying to live up to that mission. That's why this case matters." B

DEESE: PHOTOGRAPH BY WILL CORNFIELD FOR BLOOMBERG BUSINESSWEEK. ROE: PHOTOGRAPH BY KATE JOYCE FOR BLOOMBERG BUSINESSWEEK

Black Hollywood's Latest Unicorn

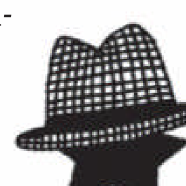
Once an outsider, Will Packer has produced films that have grossed $1 billion

By Kelly Gilblom

With the world in an upheaval in recent months, movie producer Will Packer has had a special sort of sanctuary he can visit in his own home. It looks like a cinema, with lush red drapes and movie posters lining the wall. But these posters, for films that Packer has produced including *Girls Trip* and *Stomp the Yard*, aren't just wall art. They're a reminder of just how far he's come over the past two decades. Back then, without industry connections or a film school degree, the graduate of an historically Black college on the other side of the country couldn't get studio execs to look at his proposals or even return his calls. Today, he's Hollywood's version of a unicorn: a person of color whose movies have made more than $1 billion at the box office.

"This is kind of my room of validation," he says over Zoom on a rainy Thursday in his hometown of Atlanta. "Because I've got my posters and I can screen movies and stuff, and it's like, OK, you know what? You've done all right."

Packer is ambitious, sharp, and ferociously competitive ("I will not be outhustled," he says), and he confidently declares he was always bound to succeed. He's not happy that it's still a rarity when a Black person can transform those ambitions into business success. But Packer says he's an optimist, and this year has made him more hopeful that things are changing. After George Floyd, an unarmed Black man, was killed by police in Minneapolis on camera in May, the wind shifted. White and Black people linked arms in protest across the nation, and Hollywood's gatekeepers started to look at systemic racial inequality with an unprecedented sense of urgency.



Cops—the reality television series that presented law enforcement's arrests of suspects, often people of color, as entertainment for the masses—was canceled after 31 years on air amid a backlash against police brutality. The Academy of Motion Picture Arts and Sciences, which awards the Oscars, declared it won't consider films for best picture that don't meet certain "inclusion thresholds," starting in 2024. And the entertainment industry has commissioned panels to investigate why only a quarter of lead characters last year were people of color and 93% of studio executives are White.

Packer's individual journey, from a college kid who had to look up what a movie producer does to a multimillionaire mogul, doesn't provide all the answers. But it does offer some lessons for a business finally ready to talk about equality.

It may have been math class that prepared Packer for a career in Hollywood. He has what he describes as an "analytical mind," and he usually found himself in honors courses in his St. Petersburg, Fla., high school. He was good with numbers, but he didn't need to be to calculate the number of Black kids usually in his company: zero. "My parents told me early on, 'Don't look at that as a bad thing,' " he says. " 'And don't use that as an excuse to say that everybody's against you or thinking something negative about you. It might be, but you got their attention, and you stand out. So now you've got an advantage that those other kids don't have.' "

Florida A&M University, an historically Black college in Tallahassee, definitely noticed and offered Packer a scholarship to study electrical engineering in 1991. He had his heart set on the University of Pennsylvania, believing its prominent Wharton business program could help him realize his entrepreneurial aspirations, but his parents urged him to take the money.

Packer wasn't thinking about a career in Hollywood, and he didn't have filmmaking idols growing up. However, his friend and fraternity brother Rob Hardy did. Hardy wanted to be the next Spike Lee, and he wanted Packer to help. Undeterred that they didn't know how they'd get a camera or how lighting was supposed to work on film, or that they'd have to go begging for $20,000 to finance a project, they made a movie.

Chocolate City starred their FAMU classmates and told the story of life on campus. Packer invited every Hollywood studio executive he could think of to a screening, none of whom came or even responded. But in Tallahassee, theaters sold out, raking in $100,000 in ticket sales. "I said, 'That's a five times multiple any way you count it.' I don't know what they're gonna teach me at Wharton, but this right here, you know, it's on-the-job training," he recalls. "And so I said, 'I'm gonna go for it.' "

Packer and Hardy decided to set up their shop, Rainforest Films, in Atlanta, where they wouldn't have to compete with the "big fish" of Los Angeles. That was, after all, "the place where whenever I sent something, it died," he explains. Plus, thanks to artists such as TLC, Outkast, and Toni Braxton, the Atlanta music scene was burgeoning. A film production company that could propel those artists to music video stardom was bound to succeed, he figured.

Wrong. Although fledgling, the music video industry in Atlanta already had its own big fish, and Rainforest didn't win a single contract. That led Packer and Hardy in 2000 to make

BEN ROLLINS. ILLUSTRATION BY JOONBUG

another independent film, this one targeting African-American movie lovers who weren't seeing their stories told in cinemas.

Their vehicle: *Trois*, an erotic thriller starring an all-Black cast. There was nothing else like it on the market. *Trois* became a minor hit, generating $1.3 million in ticket revenue on a $250,000 budget. More importantly, it outperformed some movies released at the same time by big Hollywood studios that had ignored Packer and his partners for years.

The low-budget release's success made Hollywood take notice. One day, in the corner of the three-bedroom house that contained Rainforest Films' global headquarters, a phone rang. Packer picked it up, and an executive from Sony Pictures Entertainment Inc. was on the other end, asking to speak to the producer of *Trois*, which he badly mispronounced. Packer was so taken aback that he pretended to be an administrative assistant, telling the caller, "Mr. Packer isn't available right now." After he and Hardy did a small victory dance, he called the executive back, surprised and pleased, but clear-eyed about why he'd finally made an inroad.

Packer

"Sony called because I was making money without them. That's how Hollywood works," he says. "If you want to get Hollywood's attention, you go out and make money without Hollywood."

Sony went on to distribute more films from Rainforest, including *Stomp the Yard*, a 2007 movie about step competitions set at a fictional historically black college. It opened at No. 1 at the box office on its opening weekend, ending a streak by 20th Century Fox's *Night at the Museum*. From there, Packer's career took off, and he continued to churn out hits with bigger and bigger stars. His films *Straight Outta Compton*, *Takers,* and *Obsessed* all were the nation's most popular releases on their opening weekends. And their success brought other people along for the ride, helping propel the careers of Tiffany Haddish, Kevin Hart, and Idris Elba.

Any notion of being quiet about politics and letting his financial success speak for itself is gone after the events of 2020, Packer says. When the Floyd video hit the internet, he got calls from practically every White person he knows, he says, only partly joking. The conversations, while welcome, were exhausting. But he says that he feels an additional responsibility compared to a White movie producer, who can more easily focus on the work itself, rather than also having to act as an ambassador for a whole race. "I can't go out and just be a producer that behaves recklessly and just says, 'Look, but I'm successful, look at me,' " he says. "No, because I may be the only Black producer that makes a movie for a particular studio or a financier that year. Maybe in the last few years."

He worries that his mistakes will slam the door shut on the next Black filmmaker, leaving him with the sense he has no room for either professional or personal missteps.

"That's being a high-achieving Black person in America," he says. "Any Black person that has achieved a certain level of success feels that way and feels that pressure."

Perhaps what Packer is most proud of is that there's a genuine Black community in Hollywood, and it's expanding. As Black Lives Matter protests filled the streets, he was one of more than 20 filmmakers and entertainers interviewed for a piece in the *Los Angeles Times*, including such notables as Ava DuVernay, Cynthia Erivo, and John Ridley. Brandon Lawrence, an agent at Creative Artists Agency, summarized the moment in his comment to the newspaper: "Going back to the prior days when we were taking it on the chin, frankly, that is not going to fly anymore."

Packer's latest work is a reflection of the shift. *Blackballed*, his docuseries released in May by mobile phone video service Quibi Holdings LLC, interviewed Los Angeles Clippers players and managers about the 2014 playoffs, when racist comments from team owner Donald Sterling were leaked. He's also producing a sports drama called *One and Done*, which imagines what it would have been like if one of the top high school basketball players attended an HBCU rather than a traditional Division 1 university.

He's happy that such content, unapologetically highlighting Black culture, is being more welcomed. "Even in a moment where our country is more polarized than perhaps ever before, and is in a dark place when it comes to the way that folks from marginalized communities are being treated, I still think this is an opportunity," he says, before adding, "if we don't let it go to waste." B

Williams

BANKING ON THE DELTA

Under Darrin Williams, Southern Bancorp is pitching traditional banking to people whose first choice is usually a payday lender

By Jeff Green and Peter Robison

Photographs by Rachel Boillot

Darrin Williams thinks it was probably a Fox News interview he did in early April that caught the eye of the White House and got him invited later that month to a videoconference with President Trump, his daughter Ivanka, and other top advisers. The pandemic was raging, and Trump had convened a lineup of financial luminaries to discuss how to save the economy. Treasury Secretary Steven Mnuchin took notes as Brian Moynihan, chief executive officer of Bank of America Corp., and Goldman Sachs Group Inc. CEO David Solomon opened the conversation. Then came Williams, who runs Southern Bancorp Inc. in Little Rock.

Williams is one of only a handful of Black CEOs at financial institutions with more than $1 billion in assets. At $1.6 billion, Southern Bancorp is a minnow next to the trillion-dollar-size whales that more commonly have access to Trump. But in this conversation, just four days after the federal government rolled out the Paycheck Protection Program to provide $350 billion in loans to keep small businesses alive, the little bank in Arkansas emerged as the most relevant.

Business owners at the time were complaining that many banks couldn't even accept their loan applications, let alone write them a check. Moynihan and Solomon told Trump the best way to get money quickly to the people who needed it most was to use a network of small lenders known as community development financial institutions, or CDFIs, modeled after Southern Bancorp. Williams had worked through the previous weekend to help review loans and send out 50 checks to customers in the Mississippi Delta. "These communities are hurting," he told Trump, urging the administration to rely more on CDFIs.

It was essentially the same thing Williams had been saying for years as larger banks abandoned places like the Delta. Growing inequality was leaving a huge chunk of the population behind, primarily those from Black and other minority communities. The pandemic finally made the scale of the crisis clear, with families lining up in cars at food banks within weeks of the first shelter-in-place orders. In the second round of PPP loans, the administration set aside $10 billion for CDFIs. "If you use channels that are themselves limited, you're going to have limited access to people," says Williams, whose bank ultimately issued $111 million in PPP loans to almost 1,300 customers. "That's not knocking traditional banks—they've left those communities. It's not their model."

Largely ignored for years, Southern Bancorp and other CDFIs are experiencing something of a rebirth, attracting hundreds of millions of dollars from technology and finance companies that have been some of the country's biggest economic winners. The funding includes both direct grants and low-interest loans that allow CDFIs to expand their own lending. Google, for instance, in March said it would provide $125 million in loans and added an additional $45 million in June. Bank of America committed $250 million in March and Goldman Sachs $500 million a month later. Hope Credit Union, based in Jackson, Miss., attracted a $10 million deposit from Netflix Inc., part of a plan the company announced in June to invest 2% of its cash holdings—up to $100 million—with banks that serve Black communities.

All of this was a result of the virus, but also of the outpouring of interest in issues of equality raised by the national protests of police killings of George Floyd, Breonna Taylor, and other Black people.

Williams appreciates the attention—but also finds it hard not to ask what took so long.

Even before the virus hit, Williams, driving on U.S. Route 278 through mile after mile of Delta cotton fields one day in late 2019, was anything but optimistic. At the time, Black unemployment had reached a record low of 5.4%. But he knew that Black adults were three times as likely as White adults not to have a bank account—the passport to buying a house, the largest source of wealth for most Americans. Some towns in the Delta operate almost entirely on cash, with few businesses accepting credit cards.

The depth of mistrust in the financial system came as a shock to Williams when he joined the bank in 2013, after first resisting the job offer. He was finishing up a term in the Arkansas House of Representatives and had a comfortable job as a partner at a Little Rock law firm, Carney Williams Bates Pulliam & Bowman. He told his wife it felt like a dead end to go into community banking when brick-and-mortar branches seemed to be on their way to obsolescence. She reminded him, " 'Darrin, years ago you told me if you could do what you wanted to do, you would help people—this sounds like God just gave you the offer,' " as he recalls it.

Southern Bancorp traces its history to an experiment in Arkansas. In 1986, Bill Clinton, then the state's governor, put together $10 million in local investments to form a development bank targeting rural, impoverished, and minority communities. Hillary Clinton, then a Little Rock lawyer, and Rob Walton, eldest son of Walmart Inc. founder Sam Walton, were on the first board. As president, Bill Clinton used Southern as one of his models for a 1994 law that extended federal support to community lenders. The law created a CDFI Fund to provide equity investments, capital grants, loans, and technical assistance. There are now about 1,100 CDFIs across the U.S., with more than $200 billion in assets; they also have access to bond guarantees and administrative support from the Treasury.

Systemic racism in banking has deep roots going back to the Freedman's Savings & Trust Co., a private corporation established by Congress in 1865, as the Civil War was ending, to accept deposits from freed slaves and Black soldiers. The bank grew to 37 branches in 17 states before self-dealing and reckless investments by its White trustees caused its collapse in 1874, says Tim Todd, an historian for the Federal Reserve Bank of Kansas City and author of *Let Us Put Our Money Together: The Founding of America's First Black Banks*. Some 61,000 people lost $3 million, equivalent to more than $65 million today. "That was the least of the loss—all the faith in saving went ▶

ILLUSTRATION BY JOONBUG

too, and much of the faith in men," W.E.B. Du Bois later wrote. More recent experience has echoed that betrayal, from redlining and other discriminatory lending practices to predatory subprime mortgages that contributed to the 2008 financial crisis.

When it comes to financial services, people in the Delta often rely on high-interest payday lenders. They're ubiquitous here—by Williams's count, Mississippi has more of them than it does Burger King, McDonald's, and Starbucks outlets combined. There are almost 20 payday lenders within a few miles of Southern's branch in Clarksdale, Miss. Their appeal is obvious, even if the financial benefit is one-sided. When people walk into a payday lender, employees welcome them warmly. They recall customers' birthdays and the names of family members.

By contrast, the national banks discourage poorer—and less profitable—clients through minimum-balance requirements and fees. And in many small towns around the Delta, good luck even finding a big traditional lender. From 2012 to 2017, low-income rural communities lost 14% of their bank branches, according to a Federal Reserve study. The number of banks defined as "minority deposit institutions"—either owned by people of color or serving those communities with a board also largely composed of people of color—fell from 215 before the 2008 financial crisis to 149 in 2018. Just 23 of those were Black-owned or served Black communities.

"PEOPLE ARE SAYING, 'I'M NOT WORRIED ABOUT NEXT YEAR. I'M WORRIED ABOUT RIGHT NOW' "

Southern Bancorp takes on payday lenders with what's known as a credit-building loan, at an annual interest rate of 9%, vs. rates as high as 400% at payday lenders. Half of the money advanced in a credit-building loan is given to the borrower to pay bills, and the rest is kept at the bank as a certificate of deposit. Once the loan is paid off, the certificate becomes a savings buffer. One such loan in 2015 helped a high school teacher in Cleveland, Miss., Jennifer Williams (no relation to Darrin), pay off nine payday loans in three different cities. It was costing her almost $800 a month just to keep current, without doing anything to cut the principal. The payday lenders still call just to check in, especially around the holidays, and they've been calling more regularly during the pandemic. "I politely decline them," she says.

Before the coronavirus, the bank's primary tool for attracting and educating potential customers was what it called financial boot camps, usually held in churches and community centers. That was the strategy in tiny Sidon, Miss., where Southern Bancorp was the only bank for miles around. But the company closed its lobbies to walk-in

Inside a Southern Bancorp branch in Shelby, Miss., pre-Covid customers in mid-March and had to call off the boot camps because of social distancing rules. It employs credit counselors to work with borrowers, and recently they've begun experimenting with Zoom calls. But it's hard to get people's attention when they're trying so hard just to survive, especially since the extra $600-a-week federal unemployment benefit ran out at the end of July. "People are saying, 'I'm not worried about next year. I'm worried about right now,' " says Charlestein Harris, one of the counselors.

Around the Delta, the $1,200 stimulus checks ($2,400 for families, plus $500 for each child 16 or younger) from the federal government helped people stay afloat early in the lockdown. It took weeks longer for those without bank accounts to get their checks via the mail. The stimulus was also a boon for payday lenders, check cashers, and others who reaped fees to cash them—usually 3% to 5%, but in some cases as high as 10%. From mid-April to mid-May, Southern waived fees to customers and noncustomers alike for cashing 4,620 stimulus checks with a total value of more than $7.5 million. Williams says he wishes the stimulus legislation had barred tacking on fees. "Those are things that should have been thought of on the front end," he says. "It just shows you how often the communities we serve are forgotten."

The coronavirus is a crisis within a crisis in the Delta. In death and infection rates, the region stands out in the brightest hues on a virus-tracking map of the U.S. from Johns Hopkins University. The Delta is also ranked near the bottom for its expected ability to recover financially and socially after the virus recedes, according to the COVID-19 Community Vulnerability Index from the Surgo Foundation, a nonprofit in Washington. The index looks at preexisting poverty, household income, health, density, and transportation capabilities. A score of 10 is the worst. Many of the counties around Southern Bancorp's primary areas in Arkansas and Mississippi are 9s and 10s. The bank uses the scores to help guide its lending and makes a point of approaching those in the hardest-hit areas, Williams says.

One loan went to A Healthy You Medical Clinic in Clarksdale, a down-at-the-heels town of 15,000 best known for revitalization efforts centered on a blues club owned by actor Morgan Freeman. Gregory Hoskins, the retired police chief in Clarksdale, opened the clinic in 2017 with his wife, Lula, a licensed nurse practitioner. He runs an auto detailing shop from the same building. As fears of the virus grew in March, patients stopped coming to the clinic. Hoskins called Southern and got a PPP loan to keep wages flowing to the three employees. The loan came through just as he, his wife, and their daughter, who's the office manager, had their own bout with the virus, forcing them to temporarily shut the clinic; all have recovered. "Had it not been for the PPP, man, I honestly think all the money we had invested in this business—it would have been a problem," Hoskins says.

Williams has had a bully pulpit since his star turn with Trump and the bank chiefs, and he's trying to make the most of it. He has a spot on the administration's Great American Economic Revival Industry Groups task force on banking. It's met only once since that first videoconference, but the role also gave him a connection to Tim Pataki, director of the White House's Office of Public Liaison. He's sent Pataki and members of Congress his policy recommendations, grouped into "now" (this year), "soon" (an additional 6 to 12 months after that), and "long-term."

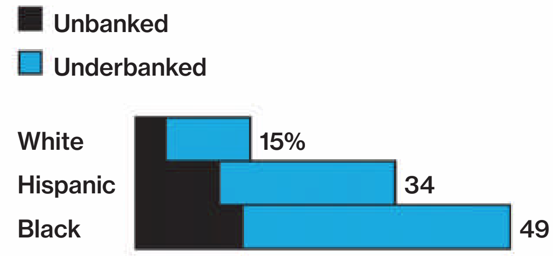
Among his ideas for now: Give $5 billion in unused funds from the Paycheck Protection Program to the CDFI Fund. After that, he says, the government should create a federal backstop for bad debt to protect banks if the fragile recovery sputters. And over the long term, the federal government should create a small-dollar loan program to help banks like Southern Bancorp underwrite emergency loans—something that could put the payday lenders and their triple-digit interest rates out of business.

Williams, a Democrat, is careful to avoid being overtly political. "I really appreciate you including the voice of small America," he said in the call with Trump in April, among several times he profusely thanked the president—whose administration before the pandemic proposed slashing CDFI funding. By Williams's reckoning, community lenders languished as much under Barack Obama as under Trump: Annual appropriations to the CDFI Fund were $221 million during Obama's second term in fiscal 2013 and $250 million in fiscal 2019. Williams says he's hopeful that the attention will mean more federal help no matter who wins the November election.

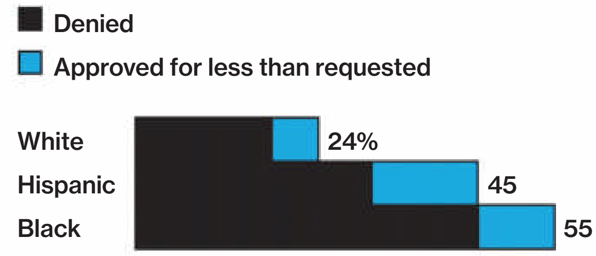
Still, when it comes to what's wrong with the communities his bank serves and why, he isn't mincing any words. Williams wrote a dozen drafts of an internal statement for employees addressing the death of George Floyd. He wanted the statement to be powerful but not shrill. It said the "systemic racism" long suffered by Black families at the hands of police is the "root cause" of disparities in other facets of life, from education to health care to banking. Floyd's death, in other words, shouldn't implicate only the police.

"The same disregard for someone that would allow you to put your knee on their neck for 8 minutes and 46 seconds is the same disregard you have for them every day—and whether they have access to services, whether they have access to lenders so they can build a business or they can buy homes where they can grow their family mobility," Williams says. "The frustration you are seeing is all part and parcel of the same thing." Ⓑ

Banking status by race/ethnicity

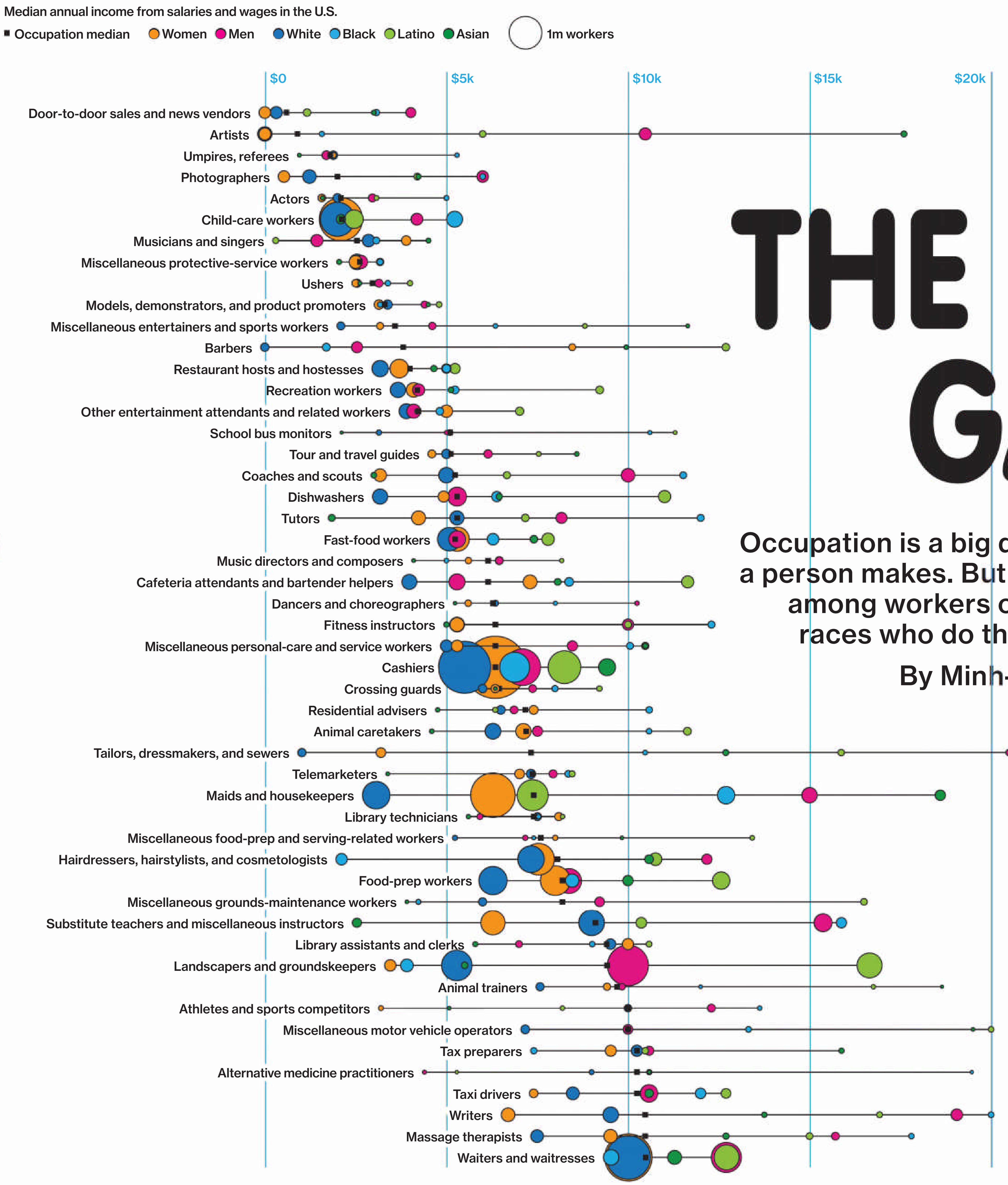


Credit applicants with adverse credit outcomes*



*AMONG ADULTS WHO APPLIED FOR SOME FORM OF CREDIT IN THE PAST 12 MONTHS. DATA: FEDERAL RESERVE

50 LOW-PAYING OCCUPATIONS



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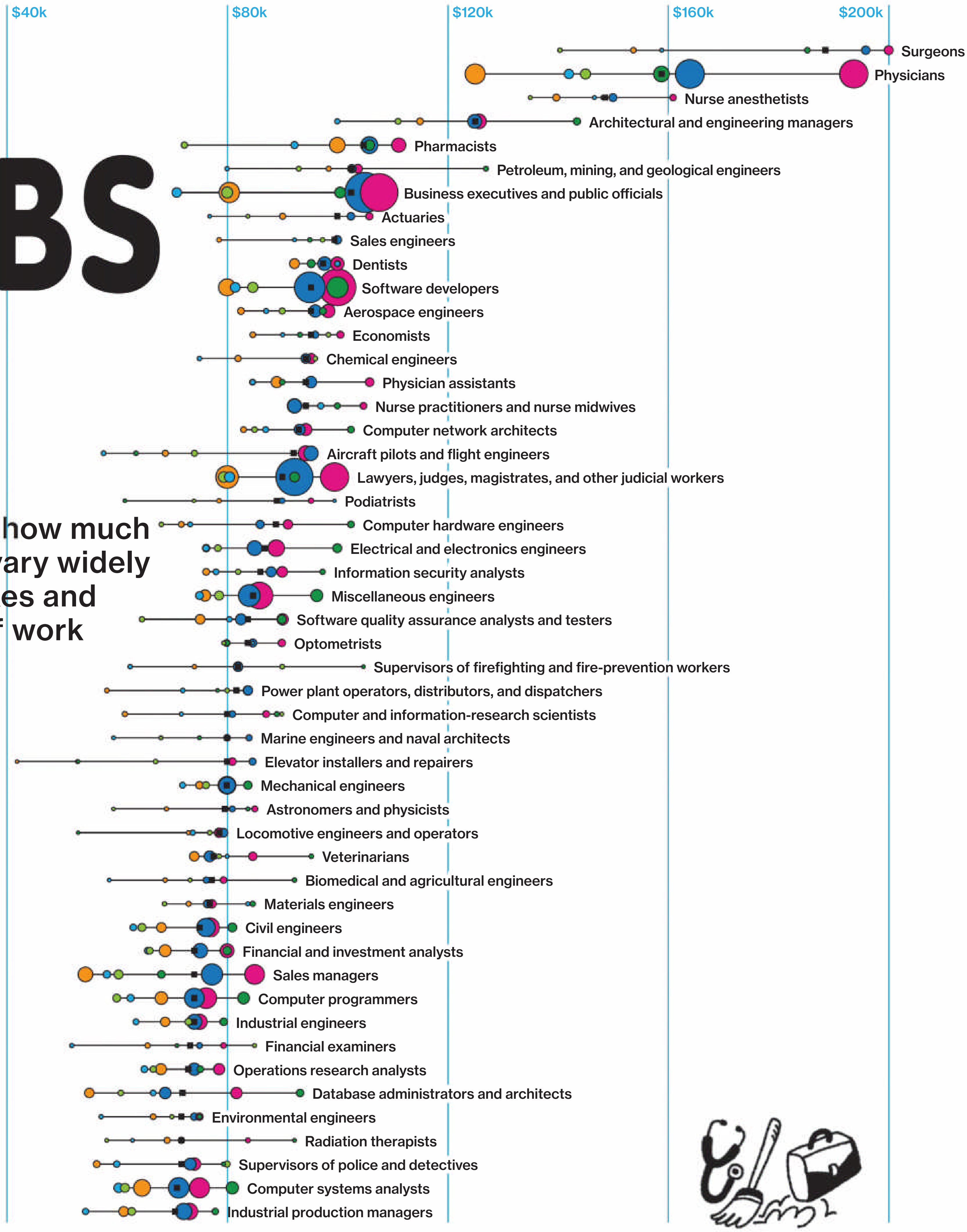
50 HIGH-PAYING OCCUPATIONS



NOTE: A PERSON IS COUNTED AS HAVING AN OCCUPATION IF THEY ARE CURRENTLY EMPLOYED, EMPLOYED PART TIME, EMPLOYED FOR ONLY PART OF THE YEAR, OR UNEMPLOYED BUT HELD THAT OCCUPATION AS THEIR MOST RECENT EMPLOYMENT WITHIN 5 YEARS. WHITE, BLACK, AND ASIAN CATEGORIES EXCLUDE LATINOS. LATINOS CAN BE OF ANY RACE. DATA: IPUMS USA

Women Take The Wheel

Virtually all taxi drivers are men, but growing numbers of entrepreneurial women are seeking to change that

By Ivan Levingston

Photograph by Tanya Habjouqa

Nina Mizrahi has grown accustomed to the insults and the mockery. When she queues for passengers at taxi stands in northern Israel, fellow drivers ask what she's doing in "their" business. At a local dispatch station, she frequently hears lewd comments about female passengers. A WhatsApp group for drivers brims with sexual innuendo. "I want women to know that there's an option, the choice to have a female driver," says Mizrahi, who in 2017 bought a taxi to offer rides to women and children. "A taxi is a very intimate place," she says. "It's you and the driver, usually closed windows. Many women don't feel comfortable."

The driver's seat of a taxi remains an almost exclusively male domain. In New York City, just 1% of yellow cab drivers are female. In England's black cab and private-hire market, that number is 2%. Gett Inc., a ride-hailing service in Britain, Israel, and Russia, says women account for about 4% of its drivers—but more than half its passengers. "The job has been perceived as being more 'male' for years," says Keren Fanan, Gett's chief commercial officer. "It's been this way forever."

With so many women depending on taxis to get around, more of them are starting to drive or are launching

Mizrahi in her taxi

ride-hailing services. Since 2018, women in Nairobi, Kenya, have been able to find female taxi drivers via an app called An Nisa. Cairo entrepreneur Reem Fawzi in 2015 launched Pink Taxi, which bills itself as Egypt's first transportation service solely for women, by women. In India, Sakha Consulting Wings, which has promoted the training of female drivers and offered cab services since 2008, is now available in Delhi, Kolkata, and Jaipur. And in Brazil, three-year-old startup Lady Driver has raised $2.5 million based on plans to connect women drivers and passengers. The company says it can differentiate itself from the likes of Uber Technologies Inc. and Lyft Inc. by offering better pay for drivers and a greater feeling of security for passengers. It says its app has been downloaded more than 1 million times.

A Sakha car in India

Lady Driver's focus on safety is typical of the new initiatives, as many women remain nervous about traditional taxis. Last December, Uber released a report that found more than 3,000 allegations of sexual assault involving its drivers or passengers in the U.S. in 2018. (Uber says safety issues are rare, and security features like knowing a driver's information in advance are key reasons women use its service.) Gett has encouraged its Israeli drivers not to pull away until female passengers are safely inside their homes during late-night drop-offs. Aisha Addo, founder of DriveHER in Toronto, a female-only ride-hailing app, says she was motivated by frequent reports of harassment among women who use cabs and car services. "For women who travel a lot, hearing stories of transportation issues and their transportation woes is not new," Addo says. "We're not just going to sit around waiting for another company to create a safe space for us."

Since its founding more than a decade ago, Sakha says it's provided more than a million rides to women and helped about 850 of them gain professional qualifications to work as a chauffeur. Almost 400 are now on the road. The jobs have given women greater financial and social independence, allowing some drivers to fund their children's education or walk out of abusive relationships.

The flexible hours offered by driving can be a big draw for women seeking to balance the demands of family and work. But Arianne Renan Barzilay, an associate professor at Israel's University of Haifa law school, who studies gender and the gig economy around the world, says there are still inequities in such jobs. Often they don't come with full legal benefits, and women can be disadvantaged, she says, without protections around issues like sexual discrimination. An analysis by the National Bureau of Economic Research in Cambridge, Mass., has documented a 7% gender pay gap for Uber drivers. "The way the gig economy works now, it doesn't necessarily provide for equality between men and women," Barzilay says.

The coronavirus outbreak has slowed efforts by women to get into the business. With less travel, taxi ridership is down. And many women who might consider driving face an increased child-care burden with their kids home from school due to lockdowns. Entrepreneurs have responded by trying to raise extra funding to survive the fallow period or delaying launches. Addo, for instance, had aimed to introduce DriveHER last spring, but delayed its opening.

Others have called it quits. Femitaxi, another Brazilian startup, ceased operations in June. And Tal BeRun, who drove a cab for more than seven years in Tel Aviv, shut down her meter for good because of the pandemic. "Work didn't return to what it was, so there was no reason to go back," says BeRun, 60. "I'm not so young anymore, and I can't make many changes."

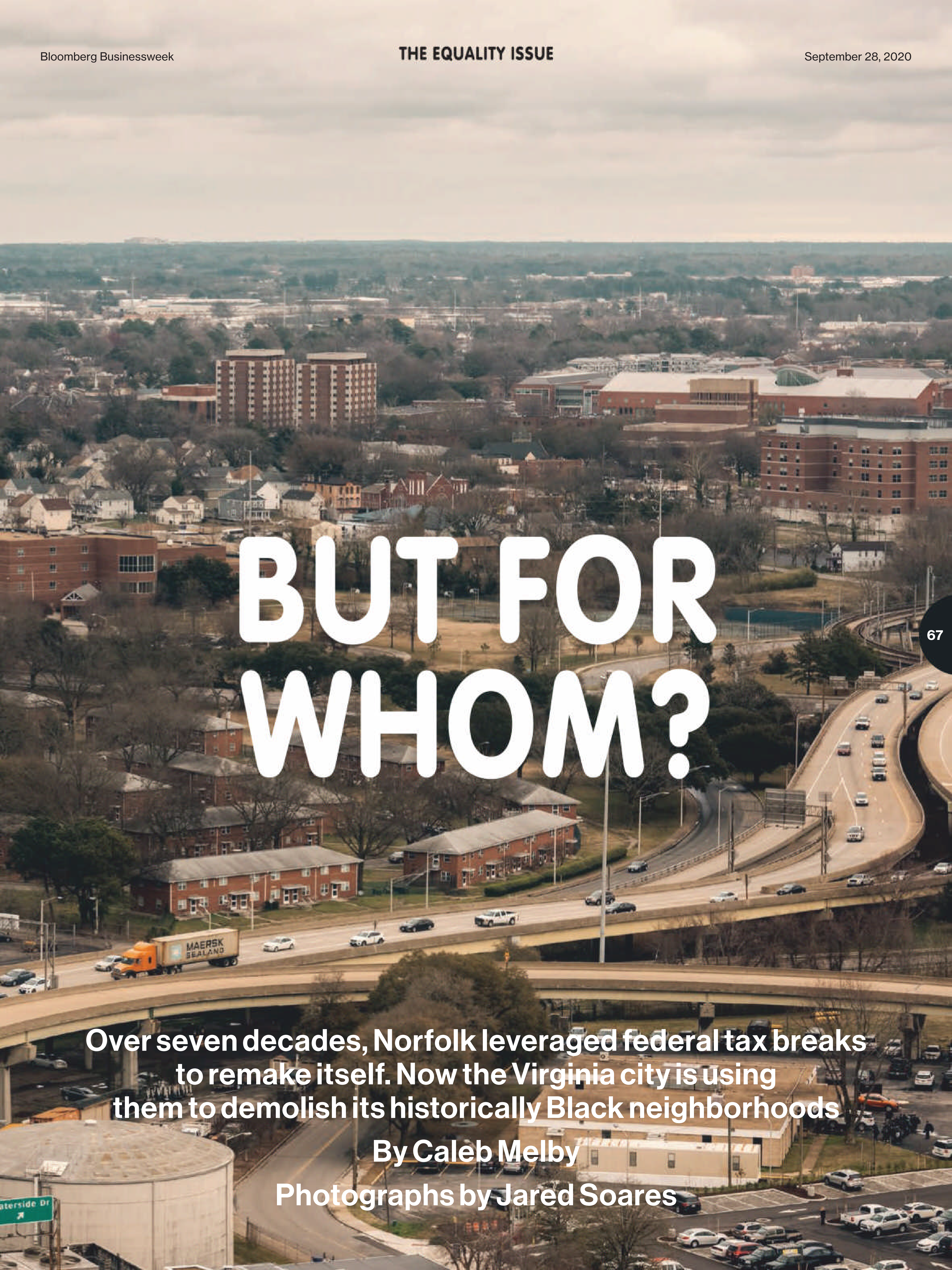
Many women aren't ready to give up on hacking, however. Mizrahi, 52, comes from a family of nine siblings and recalls the pleasure of car rides with her father during her childhood. One evening several years ago, while chatting with her girlfriends, she was struck that they'd all been harassed in cabs. That spurred her to start driving—and exposed her to the rampant sexism of the business. During a mandatory mechanics class to get her taxi license, her all-male fellow students told her women are more likely to get into accidents. And three times, vandals have smashed the windows of her taxi, a white Dacia Sandero with "For Women and Girls" written on the back and a small plastic Wonder Woman action figure dangling from the rearview mirror.

But she keeps on driving, ferrying children to school for busy parents, and for welfare officials, transporting victims of sexual or physical assault to shelters. Her ultimate goal is to start her own dispatching company for women. "I hear the male drivers say, 'Go back to the kitchen, go do laundry,'" Mizrahi says. "I just smile. There's nothing else I can do." B

MONEY SHARMA/AFP/GETTY IMAGES. ILLUSTRATION BY JOONBUG

A WEALTH OF OPPORTUNITY

A view of the row houses that make up the Tidewater Gardens public housing community



BUT FOR WHOM?

Over seven decades, Norfolk leveraged federal tax breaks to remake itself. Now the Virginia city is using them to demolish its historically Black neighborhoods

By Caleb Melby

Photographs by Jared Soares

The contours of inequality in Norfolk, Va., a city of 240,000-plus people at the mouth of Chesapeake Bay, are clearly visible from atop the 26-story Dominion Tower. The tallest building in town houses its economic development office, a choice spot for officials to show off their city and to encourage visitors to envision its future.

Look west, and you see a 300-room Hilton, a hockey arena, corporate offices for PNC Financial and payment processor ADP, restaurants and bars, a light rail station, and a 1 million-square-foot mall. To the east is St. Paul's, a 200-acre area that's home to three public housing developments dating from the 1950s. The pitch-roofed, two-story, cinder-block houses are arrayed in neat rows, like barracks. The two sides of the city are divided by a highway offramp that shoots suburban shoppers right into the parking garage of the MacArthur Center shopping mall and a six-lane boulevard that keeps St. Paul's residents, mostly Black and mostly poor, a world apart from the downtown.

Jared Chalk, the director of economic development, admits the detrimental effects. "We're working with the landlord to open up the mall a bit," he says, surveying the view on a dreary February morning. Chalk and other city officials say they've tried to correct for decades of inequity with jobs and education programs. Critics, seeing a dearth of local businesses and jobs, plus streets that frequently flood, say they haven't tried hard enough.

Officials in Norfolk began weighing plans to demolish St. Paul's public housing and replace it with mixed-use, mixed-income developments in the mid-1990s. But finding funds proved a challenge. Then came opportunity zones, a program that allows investors to defer taxes on capital gains by placing the money into a fund dedicated to investing in areas deemed distressed. Although it was enacted as part of President Trump's controversial Tax Cuts and Jobs Act of 2017, the provision enjoyed bipartisan support and bears the fingerprints of one of the economic advisers to Democratic presidential candidate Joe Biden.

Tidewater Gardens

Once the legislation passed, Norfolk's leaders wasted no time in reviving plans to remake St. Paul's, with the City Council in January 2018 voting 7-1 to raze the public housing developments. The next month, Mayor Kenny Alexander told Trump at a White House gathering that he hoped to use the opportunity zones program to transform the area. Virginia awarded Norfolk more zones than any other city in the state, meaning a "larger wealth of opportunity," says Sean Washington, senior business development manager for the city.

After U.S. Department of Housing and Urban Development Secretary Ben Carson visited in April, Norfolk was one of three cities in the country designated to receive a grant from the department to accelerate replacement of public housing. Norfolk hopes to leverage its $30 million haul into $150 million, including opportunity zone-eligible money. Out came the architect renderings of bustling, tree-lined streets, as well as promises that departing residents would be taken care of.

The first phase of the project calls for knocking down 618 homes in the Tidewater Gardens complex. About 220 units in the future development have been earmarked for families who want to return to the area, and 83 others will be available off-site. Construction is expected to take years, so in the meantime they'll need to find landlords who accept federal housing vouchers, not usually an easy task.

City representatives say they've assembled a robust plan that includes helping residents secure new homes and providing support services such as job training and assistance with financial planning.

"I'm confident that this will be the model of neighborhood revitalization going forward," says Susan Perry, who's leading the project for the city.

Paul Riddick, the only member of Norfolk's eight-member City Council to repeatedly vote against aspects of the redevelopment effort, has a different take. "Because of institutional and systemic racism, the African-American community is going to be pushed out again," he says. "This is nothing but gentrification." Riddick, whose ward includes St. Paul's, figures that if the plan goes through, the share of Norfolk's population that is Black will dwindle from more than 40% now into the mid-30% range over the next 10 years.

Tanisha Daniels was 13 when she became overwhelmed with fear that her home in Tidewater Gardens would be demolished. It was 1999, and Daniels could see the glowing signs of the newly constructed MacArthur Center from her yard. Norfolk hoped to turn the shopping center into an anchor for a broader redevelopment of the downtown, including St. Paul's. "I'm mostly concerned that my home will get torn down for a mall," Daniels wrote in her submission to a local essay contest. "This is the only home I can remember."

The long-heralded construction of the MacArthur Center had been yet another blow to the already shaky trust between the city's leaders and St. Paul's residents. Financing for the mall, built by billionaire tycoon A. Alfred Taubman, included an interesting perk: $33 million in loan guarantees from Bill Clinton's Department of Housing and Urban Development for a Nordstrom store.

The guarantees initially stipulated that the retailer would make a concerted effort to hire residents from the area. But

ILLUSTRATION BY JOONBUG

the arrangement was hardly ironclad: It required only that jobs be proffered, not that they be awarded. The local chapter of the NAACP was skeptical. "The use of anti-poverty money to underwrite an upscale, affluent department store does not normally fall within the realm of fighting poverty," the organization wrote in a 1994 letter to HUD.

The NAACP's concern was prescient. When HUD changed the rules so that Nordstrom would be required to hire 51% low-income workers, the retailer balked. "We simply can't allow someone else to usurp our hiring process," a high-placed executive at Nordstrom told the *Virginian-Pilot* newspaper in 1996. It was a huge blow to students attending the city's program for retail job training, made possible in part by a Clinton initiative called enterprise communities that offered tax breaks and federal grants to spur investment in blighted areas. But rather than tussle with Nordstrom, Norfolk made up the $33 million of federal money with local financing, no strings attached.

The MacArthur Center got built, with few benefits for the residents of St. Paul's, who mostly continued to shop at another shopping center 6 miles away. "I knew that was going to be a White mall," says Daniels's fiancé, Marco Madison, who also grew up in the area. Daniels, 34, moved out of Tidewater Gardens half a decade ago, after her parents died. But some of her relatives are still there, and she's worried about what the city's plans will mean for them. "At least it isn't a mall," she says through tears. "I guess this is progress?"


Marquitta White and her children

How Norfolk assumed its present form is a tidy CliffsNotes review of the history of federal economic development programs stretching to the end of World War II, when almost 700,000 people streamed off returning ships at nearby docks. For White soldiers, there was the GI Bill, with its low-cost mortgages and loans and free college tuition. But the programs, administered by local officials, discriminated against Black soldiers. Redlining forced many to settle in neighborhoods in downtown Norfolk, where the housing stock and infrastructure were poor.

When President Harry Truman passed the Housing Act of 1949, the city's all-White leadership volunteered to become a national test case for the program, razing the Black neighborhoods that they'd long maligned as squalid and rat-infested and replacing them with rows of identical homes set on tree-lined streets. The local chamber of commerce memorialized the transformation in an issue of its magazine, which included photographs of area residents collecting firewood or laundering clothes outdoors. "Scenes like this will soon be a thing of the past," one of the captions trumpeted.

Public housing developments such as the ones in St. Paul's were initially heralded as an historic opportunity to set low-income Americans on a path to middle-class prosperity. But the experiment was short-lived. By the 1970s, White residents in Norfolk and other American cities had begun fleeing to the suburbs, pushing metro areas into fiscal crisis. In Norfolk the loss of tax revenue was especially painful: About half the city's land was already tax-exempt because of the presence of the Norfolk Naval Station.

With the advent of the so-called Reagan revolution in the 1980s, the political discourse on poverty underwent a marked change. Government handouts engendered economic dependency and paralysis, conservatives argued. Instead the public and private sectors should team up to create opportunities for Americans at the bottom of the socioeconomic ladder to lift themselves up, rung by rung.

After Republicans lost their hold on the presidency, that sort of rhetoric found a new champion: Bill Clinton. In his 1996 State of the Union, Clinton boasted that his administration was cutting the country's welfare rolls, and he asked Congress to deliver a bill that ▶

◀ would make requirements even more stringent. “The era of big government is over,” he said.

In 1993 his administration had begun designating empowerment zones and enterprise communities, distressed cities and regions that were slated for a boost, using private capital lured with tax breaks. Empowerment zones would come to define the next quarter century of federal economic development, as public assistance to the poor plummeted and new “place-based” investment programs were drafted into being. After making it onto the inaugural list of enterprise communities, Norfolk lobbied hard for an empowerment zone designation, earning the title—and the enhanced tax breaks that came with it—in 1999.

Opportunity zones are the most souped-up place-based program yet. Where the Clinton programs offered employment credits and meager grants meant to act as catalysts for private investment, opportunity zones offer large breaks on capital-gains taxes for investors who build properties in the almost 9,000 areas that have been designated “distressed.”

The idea came from billionaire Sean Parker, who was sitting on a mound of founders stock in Facebook Inc. He was looking to sell and diversify, except doing that would trigger a huge tax bill. To help build support for his brainchild, he co-funded a think tank in 2015 called the Economic Innovation Group. Its advisory board includes Jared Bernstein, who’d been Biden’s counselor on economic matters during his years as vice president. EIG’s mission, according to its website, “is to advance solutions that empower entrepreneurs and investors to forge a more dynamic economy throughout America.”

In 2018, as the buzz about opportunity zones began to build, members of Norfolk’s economic development team struck up a relationship with Bruce Katz, a Clinton administration alum who led President Obama’s housing and urban development transition team. Katz is helping to drum up business in other areas of the city, says the development office’s Washington, including new plans for Military Circle, the mall that many St. Paul’s residents have long favored.

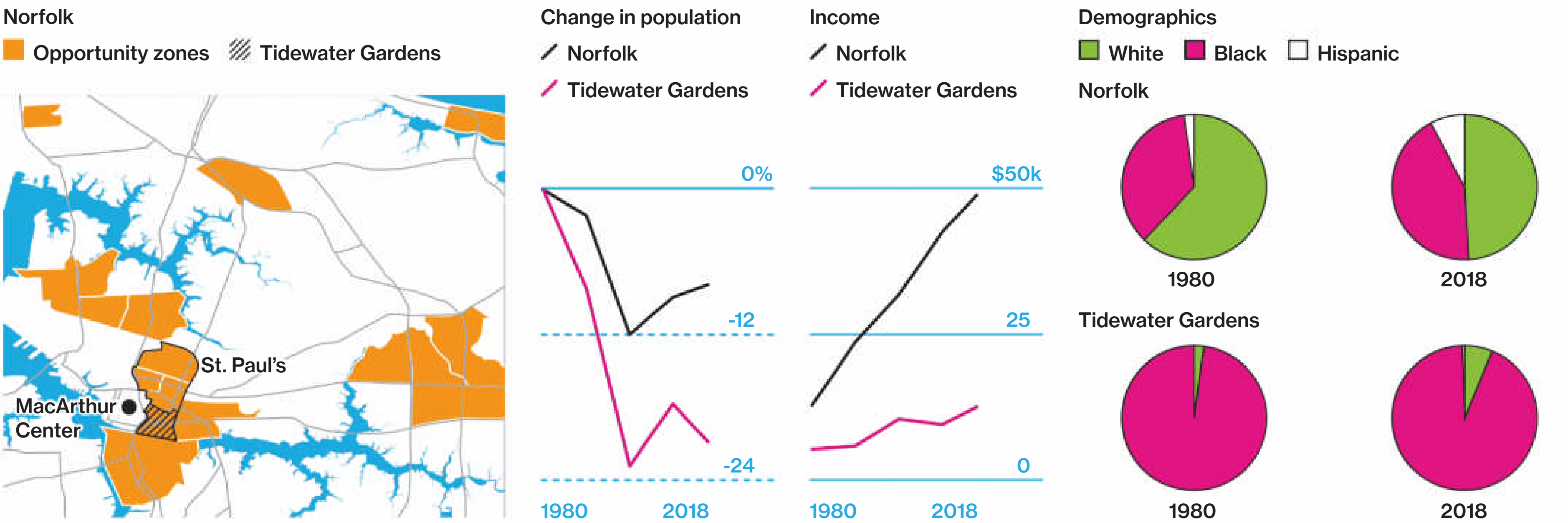
For the St. Paul’s project, Norfolk tapped Brinshore Development LLC, which had a hand in redeveloping the property in Chicago where the Cabrini-Green public housing development once stood. Richard Sciortino, a principal at the company, says Brinshore takes its duty to field input from the community seriously. “There’s racial mistrust that comes with these projects,” he says. “It takes time to get people to feel comfortable that you’re going to do what you say you’re going to do.”

Last September, Norfolk was one of five cities picked to partner with the Rockefeller Foundation to deploy opportunity zones in sustainable and socially inclusive ways. The city is hoping to train residents for jobs in the construction phase, with the expectation that those skills will transfer over to the city’s other industries,

MacArthur Center mall

THE CHANGING FACE OF NORFOLK

Efforts to bridge economic and racial divides with the help of federal programs could wind up boosting inequality



DATA: NORFOLK DEPARTMENT OF ECONOMIC DEVELOPMENT, U.S. CENSUS BUREAU

such as shipbuilding, afterward. "We don't want people to think this is just a real estate play," Washington says.

After Norfolk began the process of moving residents out of Tidewater Gardens in August 2018, tenant group President Marquitta White found herself doling out unsentimental advice about the arcane processes that govern the distribution and use of housing vouchers. "If you don't know anything, it doesn't mean you're not going to move. It just means you're not ready," she says.

In February this year, as the number of vacated homes eclipsed 100, residents began noticing that some were getting broken into and squatters were moving in. Suddenly some who'd been in no hurry to leave were looking to do so as soon as possible. The process of emptying out the community carried on even as the pandemic raged, until the city imposed a six-month moratorium on forced moves in May.

White, a trained chef, was running her own catering business when, in August 2017, she broke both legs and fractured her neck in a car accident. She recovered, but it was a lengthy process that weighed on her finances, which is how she and her two daughters wound up in Tidewater Gardens. The end of St. Paul's, she says, is part of a broader trend: the methodical dismantling of what's left of the U.S. welfare state. "Public housing, Social Security, Medicaid—all that is going away," she says, as she organizes supplies in the Tidewater Gardens tenants office.

White is a meticulous record-keeper, diligently logging phone calls with officials and document filings, and she encourages her fellow tenants to do the same. "The Bible says, 'Trust no man,'" she says. By April, White's work at Tidewater Gardens had garnered the attention of the city, and she was added to the community outreach team of Urban Strategies Inc., the third-party outfit the city hired to manage the move-out process. "That was smart of them," she says with a laugh.

What ultimately rises up from the ashes of Tidewater Gardens is of little concern to White, who has no plans to return. "I don't know anything about the project," she says. "All I know is I am the project."

East Ghent. Broad Creek. Church Street. Councilman Riddick rattles off the names of the various parts of town that Norfolk has "revitalized"—the result in each case being fewer Black residents. "They were told they were going to be allowed to come back," Riddick says of residents who were displaced in East Ghent, where the city bulldozed Black neighborhoods in the 1960s, a process some still call "Ghentrification."

In January a progressive group called New Virginia Majority filed a lawsuit seeking to halt evictions from Tidewater Gardens, alleging Norfolk had a "long and indisputable history of racial segregation in housing." When the city halted evictions in May, New Virginia Majority's lawyers worked with city officials to hammer out the terms: no move requirements for 180 days, extensions to use already issued vouchers, and acknowledgment that the city still needs to maintain the remaining homes.

Residents are grateful for the pause, but Riddick argues that a true victory would be getting city officials to approve the construction of public housing elsewhere in the city before the demolition work begins. "We have enough land in Norfolk to house everyone in Norfolk right now," he says.

Earlier this month, Norfolk received another federal grant: $14.4 million from the Department of Transportation to redevelop the roads that have cut off St. Paul's for so long. It will help connect the redeveloped neighborhood to the rest of the city.

Meanwhile, St. Paul's as it exists is quite literally set to become history. A planned greenway to curb flooding will include a "cultural trail" highlighting the neighborhood and the contributions of its residents. "They want to make Norfolk look like Virginia Beach," Daniels says, referring to the neighboring city across the water, which is one-fifth Black. "Plow our history over." B

KEEPING IT REAL

Hip-hop icon LL Cool J about protesting social injustice, running a business, and remaining true to his roots

Circa 1985

How have recent events affected you as a Black man in America?

I'm encouraged by so many people that are on the right side of history and looking at these times in the right way. And it has gotten better over the years, and it will continue to get better. But better doesn't always mean good enough, I think. But the best is yet to come.

How would you describe the role of hip-hop at such a critical time?

Hip-hop has always been at the forefront of social justice, whether it's songs I made like *Illegal Search*, or you have Public Enemy or Ice Cube. So many artists have done such a great job in that area. I think hip-hop has always been at the forefront.

Your Black Lives Matter freestyle went viral a couple of months ago. What compelled you to do it?

I felt like people had to know where I stand. Me being successful in America, a lot of times people try to point and say, "See, there's no racism." But I'm an anomaly. I'm not the rule. And I can't allow the things that have gone well in my life to cause me to forget or pretend that there aren't other people that are really being treated unjustly.

You started with Rock the Bells Radio in 2018 on SiriusXM and expanded to a platform with content and merchandise. What made you see this as an opportunity to build something for classic hip-hop?

Generation X has $2.4 trillion in spending power. A huge portion of Generation X are huge classic and timeless hip-hop fans. And they've been ignored, basically. In doing Rock the Bells on SiriusXM, I learned a lot about what Generation X was missing when it comes to hip-hop.

People are so focused on the millennial audience, which I have no problem with, but they're so focused on artists that appeal to the millennial audience that they forgot about the LL Cool Js and the Run DMCs and the Beastie Boys and the Eric B. & Rakims and the Big Daddy Kanes and the Salt-N-Pepas and the Queen Latifahs, the early Eminem and Dr. Dre.

And here's the beauty of it. Because we appeal to Generation X so much, they're introducing Gen Z to what we're doing. So we actually overindex with Gen Z without trying or chasing. So I just found out that Generation X was starving for something, and I knew that classic hip-hop is a big part of it, because classic hip-hop gives you the underpinnings of all pop culture.

So what we have is we have three pillars: content, commerce, and the community, or experiential. And the content, we tell the stories. With the commerce, we have a curated shop. It's not like some superstore. It's a curated shop with all things closely connected to hip-hop. And then we have our experiential, which will come in due time, post-Covid.

Are there any concerns about whether your speaking out may deter future investors or turn away some fans or customers?

We don't demonize, and we don't try to point fingers and say, "You're all bad," and paint with a really broad brush. So it's not like you can never get a negative rub rocking with LL Cool J or rocking with Rock the Bells. But it comes from a place of truth. And we're speaking to the goodness and the righteousness in human beings. We're speaking from the POV of a company that's been there and that's immersed deeply in this culture and understands what the community has been going through. So, no, I'm not concerned with that. Ⓑ

—*Shartia Brantley*

Edited for space and clarity.

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